



Building knowledge

# Job Order Contract Construction Task Catalog®

Book 1 CSI Divisions 01 - 50 2022

County of Santa Clara  
Road and Airports Department  
JOC-RAD-2022-01



**GORDIAN®**

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## About the CTC:

- ☑ This Construction Task Catalog® (CTC) was developed and customized by The Gordian Group, Inc. specifically for **County of Santa Clara Roads and Airports Department**, priced locally using current labor, material and equipment costs, and published in July 2022.
- ☑ The Gordian Group, Inc. licenses the use of this CTC and other proprietary information and software for the sole purpose of providing Job Order Contracting services to **County of Santa Clara Roads and Airports Department**. Use of this CTC and other proprietary information and software for any other purpose, or for any other entity, is expressly prohibited without the express written consent of The Gordian Group, Inc.

## MasterFormat™

- ☑ The Tasks in this CTC are organized using CSI's *MasterFormat*.



## The Unit Prices Include:

### LABOR COSTS:

- ☑ Labor costs include direct labor through the working foreperson level at straight-time prevailing wage rates including fringe benefits and an allowance for Social Security, Medicare taxes, worker's compensation, unemployment insurance, and employee benefits.
- ☑ Labor costs include unloading equipment, materials, and tools, and transporting the same up or down 2 stories and 125' to reach the project site; layout; measuring and cutting to fit; performing the Task;

disposal of excess material; and time for lunch and breaks.

### EQUIPMENT COSTS:

- ☑ Equipment costs include all equipment required to accomplish the Task.
- ☑ Mobilization is included for all equipment except large equipment (e.g. cranes, bulldozers, excavators, backhoes, bobcats etc.), which exclude mobilization.
- ☑ Equipment costs include all operating expenses such as fuel, electricity, lubricants, etc.

### MATERIAL COSTS:

- ☑ Material costs include the cost of the material, delivery, and all incidentals and accessories integral to the installation.
- ☑ Material costs include manufacturer's and/or fabricator's shop drawings.
- ☑ Material costs for roofing, drywall, VCT, carpet, wall covering, ceiling tile, pipe, conduit, concrete, etc. include an allowance for waste. This list is not intended to be all inclusive, but descriptive of the types of construction materials that are typically sold in standard lengths, sizes and weights.
- ☑ Material costs for imported materials (e.g. aggregate, sand, soil, etc.) include delivery up to 15 miles from the closest approved source.

## The Adjustment Factors Include:

The Adjustment Factors include the following costs, unless specifically excluded by the terms of the Contract Documents:

### BUSINESS COSTS:

- ☑ Office overhead, including, but not limited to, office space, office equipment, office and management personnel, office supplies, and employee transportation.

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- ☒ Insurance and bonding.
- ☒ Profit.
- ☒ Job Order development services, Owner meetings, and other administrative services required by the Contract Documents.
- ☒ Subcontractor's overhead and profit.
- ☒ Cost of financing the work.
- ☒ Business risks such as the risk of a lower than expected volume of work, smaller than anticipated Job Orders, poor Subcontractor performance, and inflation or material cost fluctuations.

### PROJECT RELATED COSTS:

- ☒ Project trailer, equipment and supplies, and portable toilets for Contractor's use.
- ☒ Project management and project supervision.
- ☒ Services required to complete project filings and obtain permits.
- ☒ Preparation and modification of sketches, drawings, submittals, as-built drawings, project photographs and other project records.
- ☒ Incidental engineering and architectural services.
- ☒ Gang boxes and storage containers for Contractor's tools, equipment and materials.
- ☒ Basic safety and warning signage, minor barricades (e.g., construction tape, etc.) and personnel safety equipment (e.g., hard hats, safety harnesses with lifeline or cabling, protective clothing, safety glasses, face shields, etc.).
- ☒ Meeting Owner's security requirements.
- ☒ All taxes for which a waiver is not available including material sales tax and equipment rental.
- ☒ Removing and returning Owner's furniture and furnishings (e.g. chairs, tables, pictures, etc. but excluding modular furniture, furnishings fastened to the wall or floor, safes and other furniture requiring disassembly).
- ☒ Sealing windows, doors and other openings with plastic to contain construction dust and debris within the work area, or to protect existing surfaces.

- ☒ Working in extreme temperatures (below or above normal) or adverse conditions such as rain, wind, sleet or snow.
- ☒ Costs resulting from inadequate supply of building materials, fuel, electricity, or skilled labor.
- ☒ Daily clean-up.
- ☒ Final professional clean-up.

### PRICE VARIATIONS:

- ☒ Contractors may experience direct costs that are different than the unit prices set forth in the CTC. While diligent effort was made to provide accurate, unit prices, it is the Contractor's responsibility to review and analyze the unit prices, and to calculate, prior to bidding, the Adjustment Factors accordingly.

### SUMMARY:

- ☒ This list is not exhaustive and is intended to provide general examples of costs to be included in the Contractor's Adjustment Factors.
- ☒ The only compensation to be paid to the Contractor for Tasks will be:

Unit Price	X	Quantity	X	Adjustment Factor
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- ☒ No additional payments of any kind whatsoever will be made.
- ☒ All costs in excess of the unit prices, must be included in the Adjustment Factors.

### General Rules:

- ☒ Unit prices are for complete and in-place construction and include all labor, equipment and material required to complete the Task as described in the CTC.
- ☒ All labor, material, equipment, spare parts, and documents required by a Technical Specification



shall be considered included in the unit price, unless the Task description states otherwise.

- ☑ If the Contractor uses a crane or other lifting equipment (except a truck mounted boom lift or other equipment as part of the delivery process) to lift material onto a roof, even if that roof is less than 2 stories, the Contractor will be paid for such crane or lifting equipment as a separate Task.
- ☑ Unit prices include all fasteners such as anchor bolts, lag bolts, screws, adhesive, wedge anchors, expansion bolts, roofing clips (excluding hurricane clips) required. Fasteners listed separately in the CTC are for use with Owner furnished material and equipment or for relocating or reinstalling existing material and equipment.
- ☑ Unit prices exclude more substantial mounting material such as threaded rod or angle iron unless the Task description states otherwise.
- ☑ Unit prices for doors and windows, duct work, plumbing fixtures, seamless floors, countertops, roof flashing, pitch pockets, skylights, roof curbs, exterior trim, etc. include sealant and caulking.
- ☑ Unit prices include testing, calibrating, balancing, start-up services and the like required to ensure proper installation, construction and performance of the work (e.g. compaction test for backfill, balancing of heating ventilation and air conditioning, pneumatic or hydrostatic testing, soaping of joints, disinfection and flushing of water lines, etc.). Contractor may be paid for testing, calibrating, balancing, start-up services and the like for Owner supplied materials and equipment, or when working on or tying into existing materials and equipment.
- ☑ For the purpose of calculating the quantity of a Task, quantities are calculated on a per project basis. The quantity so determined shall be used for the Task and all appropriate modifiers, unless the Task states otherwise.
- ☑ Whenever there are alternative Tasks that may be selected to complete work, the Contractor shall select the most practical and economical Tasks available (e.g. rental of equipment by weeks or months rather than days, or painting by roller or spray rather than brush).

## DEMOLITION:

- ☑ Unit prices for demolition include all labor, equipment and material required for the complete removal of the items; clean-up of the area; and transporting the demolished items up or down 2 stories into a truck, dumpster, or to an Owner designated area, located within 125' of the project site.
- ☑ Unit prices for demolition exclude costs for hauling (See 01741900), dump fees (See 01741900), dumpsters (See 01741900), and trash chutes (See 01741900).
- ☑ If the item being demolished is attached to another item being removed and can be removed as one item, then that item shall not be priced as a separate demolition Task, unless the component must be demolished separately to accomplish the work (e.g. demolition of pipe includes pipe fittings unless the fitting must be demolished separately to accomplish the work; demolition of a wood door includes hinges, hardware, closures, kick plates, etc.).
- ☑ The word "replace" includes removal of the existing item and installation of the new item.
- ☑ The words "remove and relocate" or "remove and reinstall" include removal, cleaning, and installation of the existing item in either the same location or another location.
- ☑ Salvageable materials are the property of the Owner and shall, if directed, be turned over to the Owner.

## WORKING HEIGHT:

- ☑ Typical working height for work other than masonry is up to 14' above the finished floor or stationary working surface. The Contractor will not be paid for scaffolding, lifts, or similar equipment for work below 14'.
- ☑ Typical working height for masonry work is up to 4' above the finished floor or stationary working surface. The Contractor will not be paid for scaffolding, lifts, or similar equipment for masonry work below 4'.

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### FIELD ENGINEERING:

- ☑ Surveying Tasks shall be used only when the Owner requests the Contractor to perform topographic surveys, property line surveys or to establish horizontal and vertical control points. If the Owner provides horizontal and vertical control points within or adjacent to the project site, all other surveying required to complete the work shall be considered construction staking or layout, and the cost thereof is included in the appropriate Tasks.

### ASSEMBLIES:

- ☑ Assembly Tasks take precedence over individual component Tasks.

### RESTRICTED AND CONFINED SPACES:

- ☑ Restricted Working Space is defined as any area with less than 3' vertical or horizontal clearance and includes areas such as crawl spaces, ceiling plenums where the grid is not removed, narrow piping tunnels, and equipment rooms where the space to install the new work is congested as a result of equipment and piping placement that meet these dimensional restrictions. A Restricted Working Space modifier is available for certain mechanical piping and piping accessories Tasks and for certain electrical conduit and conduit accessories Tasks. Only those Tasks with a modifier for Restricted Working Space are eligible for a price adjustment, and then only if the modifier applies to the contemplated Tasks. A Non-Prepriced Task will not be allowed because of Restricted Working Space for any Task.
- ☑ The Code of Federal Regulations (29 CFR part 1926, Subpart AA) define confined spaces and permit-required confined spaces for construction and set forth requirements, procedures and safety precautions for working in such spaces. If the Contractor must work in a confined space or a permit-required confined space and must provide ventilation equipment, air monitoring equipment and services, entry attendants, entry supervisors, site-specific training for workers, or other equipment and

services required by the regulations, then the Contractor shall be paid for such equipment, services and training. Those costs shall not be included in the Adjustment Factors.

### Or Equals:

- ☑ Whenever material, products, or equipment is identified in the CTC, or in the Technical Specifications, by reference to a manufacturer's name, make or model number, the identification is intended to establish a standard. Any material, product, or equipment of another manufacturer may be considered an or-equal provided that, in the opinion of the Owner, the material, product, or equipment so proposed is of equal quality, substance and function to the named item. The Contractor shall not install any proposed material, product, or equipment without the prior written approval of the Owner. The burden of proof, and all costs related thereto, concerning whether the proposed material, product, or equipment is an or-equal, shall be borne by the Contractor.

### Useful Information:

#### UNIT OF MEASURE DEFINITIONS:

**ACR** – Acre, **BAG** – Bag, **BBL** – Barrel, **BCY** – Bank (In-place) Cubic Yards, **BF** – Board Foot, **BOX** – Box (each), **BTU** – British Thermal Unit, **C** – One Hundred, **CCF** – One Hundred Cubic Feet, **CCY** – Compacted Cubic Yards, **CF** – Cubic Foot, **CFM** – Cubic Feet Per Minute, **CI** – Cubic Inch, **CLF** – One Hundred Linear Feet, **CSF** – One Hundred Square Feet, **CSY** – Hundred Square Yards, **CWT** – Hundred Weight, **CY** – Cubic Yard, **CYM** – Cubic Yard Mile, **DAY** – Day, **DRM** – Drum (each), **EA** – Each, **FLR** – Floor (Per Floor), **FT** – Foot, **GAL** – Gallon, **GSF** – Ground Square Foot, **HR** – Hour, **HWT** – Hundred Carton Weight, **HYR** – Half Year, **IN** – Inch, **JOB** – Job, **LAN** – Lane, **LB** – Pound, **LCY** – Loose (Excavated) Cubic Yards, **LF** – Linear Foot, **LFD**

- Linear Feet Per Day, **LIT** – Liter, **LOT** – Lot, **MBF** – One Thousand Board Feet, **MBH** – One Thousand British Thermal Units, **MCF** – One Thousand Cubic Feet, **MF3** – One Thousand Cubic Feet Per Minute, **MGL** – One Thousand Gallons, **MI** – Mile, **MLF** – One Thousand Linear Feet, **MO** – Month, **MSF** – One Thousand Square Feet, **MSY** – One Thousand Square Yards, **MT** – Metric Ton, **MTK** – Metric Ton Kilometer, **M2** – Square Meter, **M3K** – Cubic Meter Kilometer, **NTE** – Note, **OPN** – Opening, **OUT** – Outlet or Output (each), **OZ** – Ounce, **PKG** – Package, **PNT** – Point, **PR** – Pair, **QT** – Quart, **ROL** – Roll (each), **ROM** – Room, **ROW** – Row, **RSR** – Riser (Per Rise), **SEA** – Seat, **SET** – Set, **SF** – Square Foot, **SHT** – Sheet, **SI** – Square Inch, **STP** – Stop (each), **SQ** – Square or One Hundred Square Feet, **SY** – Square Yard, **SYI** – Inches per Square Yard, **TNM** – Tons per Mile, **TON** – Ton, **TRK** – Truck Load, **UI** – United Inch, **UNT** – Unit, **VLF** – Vertical Linear Foot, **WK** – Week, **YD** – Yard, **YR** – Year

## MATERIAL WEIGHTS:

### EARTHEN MATERIAL

- ☒ The following engineering values for establishing shrink/swell factors shall be used unless otherwise directed by the Owner.

Material	Material Weight (Lbs Per CY)		
	In-place (Bank)	Loose (Excavated Materials)	Compacted
Earth, Common (Average)	3170	2536	3520
Sand	2880	2590	3240
Earth, Rock Mix. (75% E/ 25% R)	3380	2370	3720
Earth, Rock Mix. (50% E/50% R)	3750	2710	4000
Earth, Rock Mix. (25% E/ 75% R)	4120	3140	3680
Gravel (Average)	3280	2730	3570
Limestone	4380	2690	3220
Riprap Rock (Average)	4500	2610	3150
Granite	4540	2640	3170
Basalt	4950	3020	3640

Clay	3220	2150	3570
Gneiss	4550	2720	3180

## BULK FACTORS FOR DEMOLITION:

- ☒ The following bulk factors shall be used to calculate the volume of demolished material to be transported from the project site.

- **Asphalt** = 1.25
- **Concrete** = 1.40

## CONVERSIONS:

**1 Acre** = 43,560 Square Feet = 4046.8 Square Meters

**1 Board Foot** = 12" x 12" x 1" = 144 Cubic Inches

**1 Centimeter** = 0.3937 Inches = 0.0328 Feet

**1 Cubic Foot** = 0.03704 Cubic Yards = 0.02832 Cubic Meters

**1 Cubic Meter** = 1.3080 Cubic Yards = 35.3147 Cubic Feet

**1 Cubic Yard** = 27 Cubic Feet = 0.7646 Cubic Meters

**1 Foot** = 12 Inches = 0.3048 Meters

**1 Inch** = 2.54 Centimeters = 0.0254 Meters

**1 Kilogram** = 2.2046 Pounds

**1 Kilometer** = 0.6214 Miles = 3280 Feet

**1 Meter** = 100 Centimeters = 3.2808 Feet

**1 Mile** = 5280 Feet = 1.6093 Kilometers

**1 Pound** = 0.4536 Kilograms

**1 Square Foot** = 144 Square Inches = .0929 Square Meters

**1 Square Meter** = 1.1960 Square Yards = 10.7639 Square Feet

**1 Square Yard** = 9 Square Feet = 0.8361 Square Meters

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**1 Ton =** 2000 Pounds = 907.185 Kilograms

**1 Yard =** 3 Feet = 0.9144 Meters

## TRADEMARKS

- ☑ Job Order Contracting Advanced, Job Order Contracting Complete, Job Order Contracting Complete Management, PROGEN, eGordian, ezlQC, Construction Task Catalog, Catalog of Construction Tasks, and DMAP are either registered trademarks or trademarks of The Gordian Group, Inc. The names of actual companies and products mentioned herein may be the trademarks of their respective owners.

Sheet Metal Thickness (inches)				
Gage No.	Steel Sheet	Galvanized Steel Sheet	Stainless Steel Sheet	Aluminum Sheet
10	.135	.138	.141	
11	.120	.123	.125	
12	.105	.108	.109	
13	.090	.093	.094	.072
14	.075	.079	.078	.064
15	.067	.071	.070	.057
16	.060	.064	.063	.051
17	.054	.058	.056	.045
18	.048	.052	.050	.040
19	.042	.046	.044	.036
20	.036	.040	.038	.032
21	.033	.037	.034	.028
22	.030	.034	.031	.025
23	.027	.031	.028	.023
24	.024	.028	.025	.020
25	.021	.025	.022	.018
26	.018	.022	.019	.017

## STANDARD GEOMETRY:

### Circle

- Circumference =  $2 \pi \text{ radius} = \pi \text{ diameter}$
- Area =  $\pi \text{ radius}^2 = \pi (\text{diameter}^2 / 4)$

### Cylinder

- Volume =  $(\pi \text{ radius}^2) \text{ height}$
- Surface Area =  $2 \pi \text{ radius}^2 + (2 \pi \text{ radius}) \text{ height}$

### Sphere

- Volume =  $(4 \pi \text{ radius}^3) / 3$
- Surface Area =  $4 \pi \text{ radius}^2$

**$\pi = 3.14159$**

### United Inch

- The industry standard for measuring windows is the United Inch or UI. The UI is determined by adding the width and the height in inches.



<b>General Requirements</b>		<b>01</b>
<b>Price and Payment Procedures</b>		<b>01 20</b>
<b>Unit Prices</b>		<b>01 22</b>

MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
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## 01 General Requirements

### 01 20 Price and Payment Procedures <sup>(01)</sup>

#### 01 22 Unit Prices <sup>(01 20)</sup>

##### 01 22 16 Unit Price Payment <sup>(01 22)</sup>

###### 01 22 16 00-0001

###### Reimbursable Fees <sup>(01 22 16)</sup>

Note: Reimbursable fees include but are not limited to permits, special inspections, special insurance, additional warranties, tolls, expedited shipping costs, etc, which are not included in a task or an Adjustment Factor as explained in the Contract or The Construction Task Catalog®.

01 22 16 00-0002 EA Reimbursable Fees..... 1.00

Note: Reimbursable Fees will be paid to the contractor for eligible costs as directed by Owner. Insert the appropriate quantity to adjust the base cost to the actual Reimbursable Fee. If there are multiple Reimbursable Fees, list each one separately and add a comment in the "note" block to identify the Reimbursable Fee (e.g. sidewalk closure, road cut, various permits, extended warranty, expedited shipping costs, etc.). A copy of each receipt, invoice, or proof of payment shall be submitted with the Price Proposal.

##### 01 22 20 Wage Rates <sup>(01 22)</sup>

###### 01 22 20 00-0001

###### Local Labor/Wage Rates <sup>(01 22 20)</sup>

Note: Welders receive the rate prescribed for the craft performing the operation to which the welding is incidental.

01 22 20 00-0002 HR Carpenter..... 118.78

Note: For tasks not included in the Construction Task Catalog® and as directed by owner only.

For Apprentice, Deduct -23.76

01 22 20 00-0003 HR Carpenter, Bridge Builder ..... 124.26

Note: For tasks not included in the Construction Task Catalog® and as directed by owner only.

For Apprentice, Deduct -24.85

For Foreperson, Add 6.21

01 22 20 00-0004 HR Cement Mason ..... 85.56

Note: For tasks not included in the Construction Task Catalog® and as directed by owner only.

For Apprentice, Deduct -17.11

01 22 20 00-0005 HR Electrician, (Inside Wireman) ..... 149.65

Note: For tasks not included in the Construction Task Catalog® and as directed by owner only.

For Apprentice, Deduct -29.93

01 22 20 00-0006 HR Electrician, Cable Splicer..... 165.36

Note: For tasks not included in the Construction Task Catalog® and as directed by owner only.

For Apprentice, Deduct -33.07

For Foreperson, Add 8.27

01 22 20 00-0007 HR High Voltage Electrician, (Utility Lineman) ..... 104.45

Note: For tasks not included in the Construction Task Catalog® and as directed by owner only.

For Apprentice, Deduct -20.89

01 22 20 00-0008 HR Communication And System Technician ..... 99.79

Note: For tasks not included in the Construction Task Catalog® and as directed by owner only.

For Apprentice, Deduct -19.96

01 22 20 00-0009 HR Equipment Operator, Crane (Group 1-A)..... 108.50

Note: For tasks not included in the Construction Task Catalog® and as directed by owner only.

01 22 20 00-0010 HR Equipment Operator, Crane (Group 2-A) ..... 106.17

Note: For tasks not included in the Construction Task Catalog® and as directed by owner only.

For Apprentice, Deduct -21.23

01 22 20 00-0011 HR Equipment Operator, Crane (Group 3-A) ..... 103.90

Note: For tasks not included in the Construction Task Catalog® and as directed by owner only.

01 22 20 00-0012 HR Equipment Operator, Medium (Group 3) ..... 103.39

Note: For tasks not included in the Construction Task Catalog® and as directed by owner only.

For Apprentice, Deduct -20.68

01 22 20 00-0013 HR Equipment Operator, Medium (Group 4) ..... 101.55

Note: For tasks not included in the Construction Task Catalog® and as directed by owner only.

01 22 20 00-0014 HR Equipment Operator, Medium (Group 5) ..... 99.87

Note: For tasks not included in the Construction Task Catalog® and as directed by owner only.

01 22 20 00-0015 HR Equipment Operator, Light (Group 6) ..... 98.12

Note: For tasks not included in the Construction Task Catalog® and as directed by owner only.

For Apprentice, Deduct -19.62

01 22 20 00-0016 HR Equipment Operator, Light (Group 7) ..... 96.61

Note: For tasks not included in the Construction Task Catalog® and as directed by owner only.

01 22 20 00-0017 HR Equipment Operator, Light (Group 8) ..... 95.12

Note: For tasks not included in the Construction Task Catalog® and as directed by owner only.

01 22 20 00-0018 HR Mold Removal Worker ..... 84.26

Note: For tasks not included in the Construction Task Catalog® and as directed by owner only.

For Apprentice, Deduct -16.85

For Foreperson, Add 4.21

01 22 20 00-0019 HR Painter, Ordinary..... 93.65

Note: For tasks not included in the Construction Task Catalog® and as directed by owner only.

For Apprentice, Deduct -18.73

01 22 20 00-0020 HR Painter, Structural Steel ..... 97.99

Note: For tasks not included in the Construction Task Catalog® and as directed by owner only.

For Apprentice, Deduct -19.60

01 22 20 00-0021 HR Pile Drivers ..... 124.17

Note: For tasks not included in the Construction Task Catalog® and as directed by owner only.

For Apprentice, Deduct -24.83

<b>01</b>	<b>General Requirements</b>
<b>01 20</b>	<b>Price and Payment Procedures</b>
<b>01 22</b>	<b>Unit Prices</b>



MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
01 22 20 00-0022 HR Plumber ..... Note: For tasks not included in the Construction Task Catalog® and as directed by owner only.	146.43	
For Apprentice, Deduct	-29.29	
01 22 20 00-0023 HR Powderman..... Note: For tasks not included in the Construction Task Catalog® and as directed by owner only.	84.41	
For Apprentice, Deduct	-16.88	
01 22 20 00-0024 HR Iron Worker (Structural) ..... Note: For tasks not included in the Construction Task Catalog® and as directed by owner only.	104.50	
For Apprentice, Deduct	-20.90	
01 22 20 00-0025 HR Truck Driver, Light (Group 1) ..... Note: For tasks not included in the Construction Task Catalog® and as directed by owner only.	83.85	
For Apprentice, Deduct	-16.77	
01 22 20 00-0026 HR Truck Driver, Medium (Group 2) ..... Note: For tasks not included in the Construction Task Catalog® and as directed by owner only.	84.28	
01 22 20 00-0027 HR Truck Driver, Heavy (Group 3) ..... Note: For tasks not included in the Construction Task Catalog® and as directed by owner only.	84.71	
For Apprentice, Deduct	-16.94	
01 22 20 00-0028 HR Truck Driver, Heavy (Group 4) ..... Note: For tasks not included in the Construction Task Catalog® and as directed by owner only.	85.21	
01 22 20 00-0029 HR Laborer, (Construction Specialist)..... Note: For tasks not included in the Construction Task Catalog® and as directed by owner only.	80.26	
01 22 20 00-0030 HR Landscape Maintenance Laborer..... Note: For tasks not included in the Construction Task Catalog® and as directed by owner only.	80.26	
01 22 20 00-0031 HR D1 Certified Welder..... Note: For tasks not included in the Construction Task Catalog® and as directed by owner only.	112.21	
<b>01 22 20 00-0032 Rates For Services (01 22 20)</b>		
01 22 20 00-0033 HR Certified Industrial Hygienist .....	135.95	
01 22 20 00-0034 HR Senior Surveyor (Party Chief) .....	113.31	
01 22 20 00-0035 HR Surveyor (Instrument person) .....	107.81	
01 22 20 00-0036 HR Surveyor (Rod Person) .....	103.40	
01 22 20 00-0037 HR On-Site Certified Materials Testing Technician .....	97.45	
01 22 20 00-0038 MI Mileage For Professional Services (Engineering, Surveying, Etcetera)..... Note: For use only when the Owner directs the contractor to use personnel whose base of operations is more than 100 miles from the site. Quantity shall be miles that exceed 100.	0.56	
01 22 20 00-0039 HR Fire Watch Laborer ..... Note: Fire watchers shall be required whenever welding or cutting is performed in locations where other than a minor fire might develop, or any of the following conditions exist: (1) Appreciable combustible material, in building construction or contents, closer than 35 feet (10.7 m) to the point of operation. (2) Appreciable combustibles are more than 35 feet (10.7 m) away but are easily ignited by sparks. (3) Wall or floor openings within a 35-foot (10.7 m) radius expose combustible material in adjacent areas including concealed spaces in walls or floors. (4) Combustible materials are adjacent to the opposite side of metal partitions, walls, ceilings, or roofs and are likely to be ignited by conduction or radiation.	80.26	
<b>01 22 20 00-0040 Rates For Project Management Services (01 22 20)</b>		
01 22 20 00-0041 HR Project Manager.....	151.80	
<b>01 22 20 00-0042 Rates For Architectural And Engineering Services (01 22 20)</b>		
Note: For preparation of contract documents, structural and/or design drawings, special investigating requirements or services outside required architectural and engineering services.		
01 22 20 00-0043 HR Principal Architect .....	212.52	
01 22 20 00-0044 HR Senior Architect.....	187.22	
01 22 20 00-0045 HR Architect.....	142.94	
01 22 20 00-0046 HR Principal Engineer.....	212.52	
01 22 20 00-0047 HR Senior Engineer .....	161.92	
01 22 20 00-0048 HR Engineer .....	129.03	
01 22 20 00-0049 HR Draft Person.....	76.53	
<b>01 22 20 00-0050 Rates For Traffic Control (01 22 20)</b>		
01 22 20 00-0051 DAY Pilot Vehicle With Driver ..... Note: Includes radio, "Follow Me" sign, "Wait For Pilot Car" signs on barricades where required.	1,012.14	
01 22 20 00-0052 HR California Highway Patrol Officer With Car .....	50.70	
For Each Mile, Add	0.56	
01 22 20 00-0053 HR California Highway Patrol Officer With Motorcycle..... For Each Mile, Add	51.22	
01 22 20 00-0054 HR California Highway Patrol Sergeant Officer With Car..... For Each Mile, Add	62.13	
01 22 20 00-0055 HR California Highway Patrol Sergeant Officer With Motorcycle ..... For Each Mile, Add	62.28	
01 22 20 00-0056 HR Flagperson For Traffic Control .....	80.26	
<b>01 22 20 00-0057 Mobilize Equipment (01 22 20)</b>		
01 22 20 00-0058 HR Escort Vehicle With Driver .....	93.42	
01 22 20 00-0059 HR Transport Vehicle With Driver .....	136.91	

**01 22 23 Equipment Usage (01 22)**

Note: Includes fuel costs unless otherwise stated. These tasks shall be used for owned, leased or rented equipment. See CSI



General Requirements		01
Price and Payment Procedures		01 20
Unit Prices		01 22

MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
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section 01 22 20 00-0050 for traffic control (where required), 01 71 13 00-0000 for equipment delivery, pickup, mobilization and demobilization.

01 22 23 00-0001	Aerial Equipment (01 22 23)	
01 22 23 00-0002	Man Lifts (01 22 23 00-0001) Note: Excludes operator, delivery, set-up, and removal.	
01 22 23 00-0003	Telescoping Boom Man Lifts With Platform (01 22 23 00-0002)	
01 22 23 00-0004	Engine Powered, Telescoping Boom Man Lifts With Platform (01 22 23 00-0003) Note: Diesel or dual fuel (gasoline or liquid propane gas). Two-wheel drive. For use on unpaved or paved surfaces.	
01 22 23 00-0005	DAY 40' Engine Powered, Telescoping Boom Man Lift With Platform ..... For Four-Wheel Drive, Add	454.99 102.37
01 22 23 00-0006	WK 40' Engine Powered, Telescoping Boom Man Lift With Platform ..... For Four-Wheel Drive, Add	1,144.81 257.58
01 22 23 00-0007	MO 40' Engine Powered, Telescoping Boom Man Lift With Platform ..... For Four-Wheel Drive, Add	2,568.48 577.91
01 22 23 00-0008	DAY 60' Engine Powered, Telescoping Boom Man Lift With Platform ..... For Four-Wheel Drive, Add	667.80 150.26
01 22 23 00-0009	WK 60' Engine Powered, Telescoping Boom Man Lift With Platform ..... For Four-Wheel Drive, Add	1,592.45 358.30
01 22 23 00-0010	MO 60' Engine Powered, Telescoping Boom Man Lift With Platform ..... For Four-Wheel Drive, Add	3,485.79 784.30
01 22 23 00-0011	DAY 80' Engine Powered, Telescoping Boom Man Lift With Platform ..... For Four-Wheel Drive, Add	1,298.91 292.25
01 22 23 00-0012	WK 80' Engine Powered, Telescoping Boom Man Lift With Platform ..... For Four-Wheel Drive, Add	3,148.22 708.35
01 22 23 00-0013	MO 80' Engine Powered, Telescoping Boom Man Lift With Platform ..... For Four-Wheel Drive, Add	6,604.65 1,486.05
01 22 23 00-0014	DAY 110' Engine Powered, Telescoping Boom Man Lift With Platform ..... For Four-Wheel Drive, Add	1,849.30 416.09
01 22 23 00-0015	WK 110' Engine Powered, Telescoping Boom Man Lift With Platform ..... For Four-Wheel Drive, Add	4,453.00 1,001.93
01 22 23 00-0016	MO 110' Engine Powered, Telescoping Boom Man Lift With Platform ..... For Four-Wheel Drive, Add	11,095.81 2,496.56
01 22 23 00-0017	DAY 120' Engine Powered, Telescoping Boom Man Lift With Platform ..... For Four-Wheel Drive, Add	2,252.92 506.91
01 22 23 00-0018	WK 120' Engine Powered, Telescoping Boom Man Lift With Platform ..... For Four-Wheel Drive, Add	5,746.05 1,292.86
01 22 23 00-0019	MO 120' Engine Powered, Telescoping Boom Man Lift With Platform ..... For Four-Wheel Drive, Add	13,062.53 2,939.07

01 22 23 00-0020	Articulating (Up/Over) Boom Man Lifts With Platform (01 22 23 00-0002)	
01 22 23 00-0021	Engine Powered, Articulating (Up/Over) Boom Man Lifts With Platform (01 22 23 00-0020) Note: Diesel or dual fuel (gasoline or liquid propane gas). Four-wheel drive. For use on unpaved or paved surfaces.	
01 22 23 00-0022	DAY 34' Engine Powered, Articulating (Up/Over) Boom Man Lift With Platform.....	395.92
01 22 23 00-0023	WK 34' Engine Powered, Articulating (Up/Over) Boom Man Lift With Platform.....	993.39
01 22 23 00-0024	MO 34' Engine Powered, Articulating (Up/Over) Boom Man Lift With Platform.....	2,389.90
01 22 23 00-0025	DAY 45' Engine Powered, Articulating (Up/Over) Boom Man Lift With Platform.....	503.90
01 22 23 00-0026	WK 45' Engine Powered, Articulating (Up/Over) Boom Man Lift With Platform.....	1,101.37
01 22 23 00-0027	MO 45' Engine Powered, Articulating (Up/Over) Boom Man Lift With Platform.....	2,733.99
01 22 23 00-0028	DAY 60' Engine Powered, Articulating (Up/Over) Boom Man Lift With Platform.....	647.86
01 22 23 00-0029	WK 60' Engine Powered, Articulating (Up/Over) Boom Man Lift With Platform.....	1,497.29
01 22 23 00-0030	MO 60' Engine Powered, Articulating (Up/Over) Boom Man Lift With Platform.....	3,347.30
01 22 23 00-0031	DAY 80' Engine Powered, Articulating (Up/Over) Boom Man Lift With Platform.....	1,130.16
01 22 23 00-0032	WK 80' Engine Powered, Articulating (Up/Over) Boom Man Lift With Platform.....	2,663.44
01 22 23 00-0033	MO 80' Engine Powered, Articulating (Up/Over) Boom Man Lift With Platform.....	6,477.21
01 22 23 00-0034	DAY 125' Engine Powered, Articulating (Up/Over) Boom Man Lift With Platform.....	2,195.54
01 22 23 00-0035	WK 125' Engine Powered, Articulating (Up/Over) Boom Man Lift With Platform.....	5,182.92
01 22 23 00-0036	MO 125' Engine Powered, Articulating (Up/Over) Boom Man Lift With Platform.....	12,669.36

01 22 23 00-0037	Electric, Articulating (Up/Over) Boom Man Lifts With Platform (01 22 23 00-0020) Note: For use on paved surfaces.	
01 22 23 00-0038	DAY 30' Electric, Articulating (Up/Over) Boom Man Lift With Platform .....	395.92
01 22 23 00-0039	WK 30' Electric, Articulating (Up/Over) Boom Man Lift With Platform .....	993.39
01 22 23 00-0040	MO 30' Electric, Articulating (Up/Over) Boom Man Lift With Platform .....	2,389.90
01 22 23 00-0041	DAY 35' Electric, Articulating (Up/Over) Boom Man Lift With Platform .....	395.92
01 22 23 00-0042	WK 35' Electric, Articulating (Up/Over) Boom Man Lift With Platform .....	993.39
01 22 23 00-0043	MO 35' Electric, Articulating (Up/Over) Boom Man Lift With Platform .....	2,389.90
01 22 23 00-0044	DAY 40' Electric, Articulating (Up/Over) Boom Man Lift With Platform .....	489.50
01 22 23 00-0045	WK 40' Electric, Articulating (Up/Over) Boom Man Lift With Platform .....	1,058.18
01 22 23 00-0046	MO 40' Electric, Articulating (Up/Over) Boom Man Lift With Platform .....	2,627.45
01 22 23 00-0047	DAY 45' Electric, Articulating (Up/Over) Boom Man Lift With Platform .....	489.50
01 22 23 00-0048	WK 45' Electric, Articulating (Up/Over) Boom Man Lift With Platform .....	1,058.18
01 22 23 00-0049	MO 45' Electric, Articulating (Up/Over) Boom Man Lift With Platform .....	2,627.45

<b>01</b>	<b>General Requirements</b>
<b>01 20</b>	<b>Price and Payment Procedures</b>
<b>01 22</b>	<b>Unit Prices</b>



MINOR  
CSI UOM DESCRIPTION

TOTAL DIRECT DEMOLITION  
UNIT COST UNIT COST

01 22 23 00-0050	<b>Platform Lifts</b> (01 22 23 00-0001) Note: Excludes operator, delivery, set-up, and removal.		
01 22 23 00-0051	<b>Electric, Scissor Platform Lifts</b> (01 22 23 00-0050) Note: For use on paved surfaces.		
01 22 23 00-0052	DAY 17' Electric, Scissor Platform Lift.....	168.20	
01 22 23 00-0053	WK 17' Electric, Scissor Platform Lift.....	336.40	
01 22 23 00-0054	MO 17' Electric, Scissor Platform Lift.....	688.10	
01 22 23 00-0055	DAY 20' Electric, Scissor Platform Lift.....	183.49	
01 22 23 00-0056	WK 20' Electric, Scissor Platform Lift.....	366.98	
01 22 23 00-0057	MO 20' Electric, Scissor Platform Lift.....	733.97	
01 22 23 00-0058	DAY 25' Electric, Scissor Platform Lift.....	237.01	
01 22 23 00-0059	WK 25' Electric, Scissor Platform Lift.....	474.02	
01 22 23 00-0060	MO 25' Electric, Scissor Platform Lift.....	1,016.85	
01 22 23 00-0061	DAY 30' Electric, Scissor Platform Lift.....	305.82	
01 22 23 00-0062	WK 30' Electric, Scissor Platform Lift.....	603.99	
01 22 23 00-0063	MO 30' Electric, Scissor Platform Lift.....	1,337.96	
01 22 23 00-0064	DAY 33' Electric, Scissor Platform Lift.....	328.76	
01 22 23 00-0065	WK 33' Electric, Scissor Platform Lift.....	642.22	
01 22 23 00-0066	MO 33' Electric, Scissor Platform Lift.....	1,452.64	
01 22 23 00-0067	DAY 40' Electric, Scissor Platform Lift.....	428.15	
01 22 23 00-0068	WK 40' Electric, Scissor Platform Lift.....	1,062.72	
01 22 23 00-0069	MO 40' Electric, Scissor Platform Lift.....	2,958.81	
01 22 23 00-0070	<b>Engine Powered, Scissor Platform Lifts</b> (01 22 23 00-0050) Note: Diesel or dual fuel (gasoline or liquid propane gas). Two-wheel drive. For use on unpaved or paved surfaces.		
01 22 23 00-0071	DAY 25' Engine Powered, Scissor Platform Lift..... For Four-Wheel Drive, Add	414.52 82.90	
01 22 23 00-0072	WK 25' Engine Powered, Scissor Platform Lift..... For Four-Wheel Drive, Add	810.61 162.12	
01 22 23 00-0073	MO 25' Engine Powered, Scissor Platform Lift..... For Four-Wheel Drive, Add	1,980.47 396.09	
01 22 23 00-0074	DAY 33' Engine Powered, Scissor Platform Lift..... For Four-Wheel Drive, Add	423.73 84.75	
01 22 23 00-0075	WK 33' Engine Powered, Scissor Platform Lift..... For Four-Wheel Drive, Add	967.21 193.44	
01 22 23 00-0076	MO 33' Engine Powered, Scissor Platform Lift..... For Four-Wheel Drive, Add	2,118.64 423.73	
01 22 23 00-0077	DAY 40' Engine Powered, Scissor Platform Lift..... For Four-Wheel Drive, Add	469.79 93.96	
01 22 23 00-0078	WK 40' Engine Powered, Scissor Platform Lift..... For Four-Wheel Drive, Add	1,077.75 215.55	
01 22 23 00-0079	MO 40' Engine Powered, Scissor Platform Lift..... For Four-Wheel Drive, Add	2,394.99 479.00	
01 22 23 00-0080	DAY 43' Engine Powered, Scissor Platform Lift..... For Four-Wheel Drive, Add	497.42 99.48	
01 22 23 00-0081	WK 43' Engine Powered, Scissor Platform Lift..... For Four-Wheel Drive, Add	1,160.65 232.13	
01 22 23 00-0082	MO 43' Engine Powered, Scissor Platform Lift..... For Four-Wheel Drive, Add	2,855.56 571.11	
01 22 23 00-0083	DAY 50' Engine Powered, Scissor Platform Lift..... For Four-Wheel Drive, Add	930.36 186.07	
01 22 23 00-0084	WK 50' Engine Powered, Scissor Platform Lift..... For Four-Wheel Drive, Add	2,044.95 408.99	
01 22 23 00-0085	MO 50' Engine Powered, Scissor Platform Lift..... For Four-Wheel Drive, Add	5,029.48 1,005.90	
01 22 23 00-0086	<b>Personnel Lifts</b> (01 22 23 00-0001) Note: Includes delivery to job site and pick-up when complete. Excludes operator. For use on paved surfaces.		
01 22 23 00-0087	DAY 24', Push-Type, Electric Single Man Personnel Lift.....	150.80	
01 22 23 00-0088	WK 24', Push-Type, Electric Single Man Personnel Lift.....	427.25	
01 22 23 00-0089	MO 24', Push-Type, Electric Single Man Personnel Lift.....	862.88	
01 22 23 00-0090	DAY 30', Push-Type, Electric Single Man Personnel Lift.....	209.44	
01 22 23 00-0091	WK 30', Push-Type, Electric Single Man Personnel Lift.....	444.01	
01 22 23 00-0092	MO 30', Push-Type, Electric Single Man Personnel Lift.....	1,507.95	
01 22 23 00-0093	DAY 36', Push-Type, Electric Single Man Personnel Lift.....	351.86	
01 22 23 00-0094	WK 36', Push-Type, Electric Single Man Personnel Lift.....	854.50	
01 22 23 00-0095	MO 36', Push-Type, Electric Single Man Personnel Lift.....	2,496.50	
01 22 23 00-0096	DAY 40', Push-Type, Electric Single Man Personnel Lift.....	376.99	
01 22 23 00-0097	WK 40', Push-Type, Electric Single Man Personnel Lift.....	938.28	
01 22 23 00-0098	MO 40', Push-Type, Electric Single Man Personnel Lift.....	2,823.22	
01 22 23 00-0099	DAY 15', Self-Propelled, Electric Single Man Personnel Lift.....	201.06	
01 22 23 00-0100	WK 15', Self-Propelled, Electric Single Man Personnel Lift.....	402.12	
01 22 23 00-0101	MO 15', Self-Propelled, Electric Single Man Personnel Lift.....	804.24	
01 22 23 00-0102	DAY 20', Self-Propelled, Electric Single Man Personnel Lift.....	201.06	
01 22 23 00-0103	WK 20', Self-Propelled, Electric Single Man Personnel Lift.....	402.12	
01 22 23 00-0104	MO 20', Self-Propelled, Electric Single Man Personnel Lift.....	836.07	





General Requirements			01
Price and Payment Procedures			01 20
Unit Prices			01 22

MINOR CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
01 22 23 00-0105		<b>Bucket Trucks</b> (01 22 23 00-0001) Note: Includes full-time operator, delivery, and removal.		
01 22 23 00-0106	DAY	29' Bucket Truck With Full-Time Operator .....	1,213.44	
		For Equipment Without Operator, Deduct .....	-677.68	
01 22 23 00-0107	WK	29' Bucket Truck With Full-Time Operator .....	4,995.67	
		For Equipment Without Operator, Deduct .....	-3,388.41	
01 22 23 00-0108	MO	29' Bucket Truck With Full-Time Operator .....	18,774.34	
		For Equipment Without Operator, Deduct .....	-14,683.12	
01 22 23 00-0109	DAY	38' Bucket Truck With Full-Time Operator .....	1,281.62	
		For Equipment Without Operator, Deduct .....	-677.68	
01 22 23 00-0110	WK	38' Bucket Truck With Full-Time Operator .....	5,214.85	
		For Equipment Without Operator, Deduct .....	-3,388.41	
01 22 23 00-0111	MO	38' Bucket Truck With Full-Time Operator .....	19,358.80	
		For Equipment Without Operator, Deduct .....	-14,683.12	
01 22 23 00-0112	DAY	48' Bucket Truck With Full-Time Operator .....	1,456.96	
		For Equipment Without Operator, Deduct .....	-677.68	
01 22 23 00-0113	WK	48' Bucket Truck With Full-Time Operator .....	5,531.43	
		For Equipment Without Operator, Deduct .....	-3,388.41	
01 22 23 00-0114	MO	48' Bucket Truck With Full-Time Operator .....	20,040.67	
		For Equipment Without Operator, Deduct .....	-14,683.12	
01 22 23 00-0115	DAY	62' Bucket Truck With Full-Time Operator .....	1,846.60	
		For Equipment Without Operator, Deduct .....	-677.68	
01 22 23 00-0116	WK	62' Bucket Truck With Full-Time Operator .....	6,797.76	
		For Equipment Without Operator, Deduct .....	-3,388.41	
01 22 23 00-0117	MO	62' Bucket Truck With Full-Time Operator .....	23,450.02	
		For Equipment Without Operator, Deduct .....	-14,683.12	
01 22 23 00-0118	DAY	85' Bucket Truck With Full-Time Operator .....	2,041.42	
		For Equipment Without Operator, Deduct .....	-677.68	
01 22 23 00-0119	WK	85' Bucket Truck With Full-Time Operator .....	7,479.63	
		For Equipment Without Operator, Deduct .....	-3,388.41	
01 22 23 00-0120	MO	85' Bucket Truck With Full-Time Operator .....	25,885.27	
		For Equipment Without Operator, Deduct .....	-14,683.12	
01 22 23 00-0121	Day	105' Bucket Truck With Full-Time Operator .....	2,138.83	
		For Equipment Without Operator, Deduct .....	-677.68	
01 22 23 00-0122	WK	105' Bucket Truck With Full-Time Operator .....	7,771.86	
		For Equipment Without Operator, Deduct .....	-3,388.41	
01 22 23 00-0123	MO	105' Bucket Truck With Full-Time Operator .....	26,119.05	
		For Equipment Without Operator, Deduct .....	-14,683.12	
01 22 23 00-0124		<b>Air Equipment</b> (01 22 23)		
01 22 23 00-0125		<b>Air Compressors</b> (01 22 23 00-0124) Note: Includes delivery, set-up, and removal. Excludes operator.		
01 22 23 00-0126	DAY	100 CFM Diesel Powered Portable Air Compressor .....	167.64	
01 22 23 00-0127	WK	100 CFM Diesel Powered Portable Air Compressor .....	502.92	
01 22 23 00-0128	MO	100 CFM Diesel Powered Portable Air Compressor .....	1,397.00	
01 22 23 00-0129	DAY	130 CFM Diesel Powered Portable Air Compressor .....	201.17	
01 22 23 00-0130	WK	130 CFM Diesel Powered Portable Air Compressor .....	592.33	
01 22 23 00-0131	MO	130 CFM Diesel Powered Portable Air Compressor .....	1,676.40	
01 22 23 00-0132	DAY	185 CFM Diesel Powered Portable Air Compressor .....	268.22	
01 22 23 00-0133	WK	185 CFM Diesel Powered Portable Air Compressor .....	603.50	
01 22 23 00-0134	MO	185 CFM Diesel Powered Portable Air Compressor .....	1,329.94	
01 22 23 00-0135	DAY	375 CFM Diesel Powered Portable Air Compressor .....	379.98	
01 22 23 00-0136	WK	375 CFM Diesel Powered Portable Air Compressor .....	961.14	
01 22 23 00-0137	MO	375 CFM Diesel Powered Portable Air Compressor .....	2,291.08	
01 22 23 00-0138	DAY	600 CFM Diesel Powered Portable Air Compressor .....	844.91	
01 22 23 00-0139	WK	600 CFM Diesel Powered Portable Air Compressor .....	2,034.03	
01 22 23 00-0140	MO	600 CFM Diesel Powered Portable Air Compressor .....	5,069.43	
01 22 23 00-0141	DAY	750 CFM Diesel Powered Portable Air Compressor .....	1,017.02	
01 22 23 00-0142	WK	750 CFM Diesel Powered Portable Air Compressor .....	2,503.42	
01 22 23 00-0143	MO	750 CFM Diesel Powered Portable Air Compressor .....	6,146.80	
01 22 23 00-0144	DAY	825 CFM Diesel Powered Portable Air Compressor .....	1,017.02	
01 22 23 00-0145	WK	825 CFM Diesel Powered Portable Air Compressor .....	2,503.42	
01 22 23 00-0146	MO	825 CFM Diesel Powered Portable Air Compressor .....	6,146.80	
01 22 23 00-0147	DAY	1,300 CFM Diesel Powered Portable Air Compressor .....	1,184.66	
01 22 23 00-0148	WK	1,300 CFM Diesel Powered Portable Air Compressor .....	2,655.42	
01 22 23 00-0149	MO	1,300 CFM Diesel Powered Portable Air Compressor .....	7,081.11	
01 22 23 00-0150	DAY	1,600 CFM Diesel Powered Portable Air Compressor .....	1,475.23	
01 22 23 00-0151	WK	1,600 CFM Diesel Powered Portable Air Compressor .....	3,319.27	
01 22 23 00-0152	MO	1,600 CFM Diesel Powered Portable Air Compressor .....	8,851.39	
01 22 23 00-0153		<b>Compaction And Paving Equipment</b> (01 22 23)		
01 22 23 00-0154		<b>Pavers And Rollers</b> (01 22 23 00-0153) Note: Includes full-time operator. Excludes delivery, set-up, and removal.		
01 22 23 00-0155		<b>Pavers</b> (01 22 23 00-0154)		
01 22 23 00-0156	DAY	10' Wide Paving Machine With Full-Time Operator .....	3,242.08	
		For Equipment Without Operator, Deduct .....	-827.09	
01 22 23 00-0157	WK	10' Wide Paving Machine With Full-Time Operator .....	13,795.42	
		For Equipment Without Operator, Deduct .....	-4,135.44	

<b>01</b>	<b>General Requirements</b>
<b>01 20</b>	<b>Price and Payment Procedures</b>
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MINOR CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
01 22 23 00-0158	MO	10' Wide Paving Machine With Full-Time Operator ..... <i>For Equipment Without Operator, Deduct</i>	52,420.76 -17,920.24	
<b>01 22 23 00-0159</b>		<b>Ride-On Self-Propelled, Rubber Tire Rollers</b> (01 22 23 00-0154)		
01 22 23 00-0160	DAY	10 To 12 Ton, Ride-On Self Propelled, 9 Wheel Rubber-Tire Roller With Full-Time Operator ..... <i>For Equipment Without Operator, Deduct</i>	1,216.60 -827.09	
01 22 23 00-0161	WK	10 To 12 Ton, Ride-On Self Propelled, 9 Wheel Rubber-Tire Roller With Full-Time Operator ..... <i>For Equipment Without Operator, Deduct</i>	5,313.54 -4,135.44	
01 22 23 00-0162	MO	10 To 12 Ton, Ride-On Self Propelled, 9 Wheel Rubber-Tire Roller With Full-Time Operator ..... <i>For Equipment Without Operator, Deduct</i>	21,118.32 -17,920.24	
01 22 23 00-0163	DAY	15 Ton, Ride-On Self Propelled, 9 Wheel Rubber-Tire Roller With Full-Time Operator..... <i>For Equipment Without Operator, Deduct</i>	1,366.94 -827.09	
01 22 23 00-0164	WK	15 Ton, Ride-On Self Propelled, 9 Wheel Rubber-Tire Roller With Full-Time Operator..... <i>For Equipment Without Operator, Deduct</i>	6,431.50 -4,135.44	
01 22 23 00-0165	MO	15 Ton, Ride-On Self Propelled, 9 Wheel Rubber-Tire Roller With Full-Time Operator..... <i>For Equipment Without Operator, Deduct</i>	22,806.19 -17,920.24	
01 22 23 00-0166	DAY	30 Ton, Ride-On Self Propelled, 11 Wheel Rubber-Tire Roller With Full-Time Operator..... <i>For Equipment Without Operator, Deduct</i>	1,373.77 -827.09	
01 22 23 00-0167	WK	30 Ton, Ride-On Self Propelled, 11 Wheel Rubber-Tire Roller With Full-Time Operator..... <i>For Equipment Without Operator, Deduct</i>	5,987.32 -4,135.44	
01 22 23 00-0168	MO	30 Ton, Ride-On Self Propelled, 11 Wheel Rubber-Tire Roller With Full-Time Operator..... <i>For Equipment Without Operator, Deduct</i>	23,134.20 -17,920.24	
<b>01 22 23 00-0169</b>		<b>Ride-On Self-Propelled, Padfoot Rollers</b> (01 22 23 00-0154)		
01 22 23 00-0170	DAY	5 Ton, Single Padfoot Drum, Ride-On Self-Propelled Vibratory Roller With Full-Time Operator ..... <i>For Equipment Without Operator, Deduct</i>	1,278.10 -827.09	
01 22 23 00-0171	WK	5 Ton, Single Padfoot Drum, Ride-On Self-Propelled Vibratory Roller With Full-Time Operator ..... <i>For Equipment Without Operator, Deduct</i>	5,385.97 -4,135.44	
01 22 23 00-0172	MO	5 Ton, Single Padfoot Drum, Ride-On Self-Propelled Vibratory Roller With Full-Time Operator ..... <i>For Equipment Without Operator, Deduct</i>	21,535.16 -17,920.24	
01 22 23 00-0173	DAY	8 Ton, Single Padfoot Drum, Ride-On Self-Propelled Vibratory Roller With Full-Time Operator ..... <i>For Equipment Without Operator, Deduct</i>	1,565.11 -827.09	
01 22 23 00-0174	WK	8 Ton, Single Padfoot Drum, Ride-On Self-Propelled Vibratory Roller With Full-Time Operator ..... <i>For Equipment Without Operator, Deduct</i>	5,966.82 -4,135.44	
01 22 23 00-0175	MO	8 Ton, Single Padfoot Drum, Ride-On Self-Propelled Vibratory Roller With Full-Time Operator ..... <i>For Equipment Without Operator, Deduct</i>	23,366.54 -17,920.24	
01 22 23 00-0176	DAY	10 To 12 Ton, Single Padfoot Drum, Ride-On Self-Propelled Vibratory Roller With Full-Time Operator ..... <i>For Equipment Without Operator, Deduct</i>	1,633.44 -827.09	
01 22 23 00-0177	WK	10 To 12 Ton, Single Padfoot Drum, Ride-On Self-Propelled Vibratory Roller With Full-Time Operator ..... <i>For Equipment Without Operator, Deduct</i>	6,397.33 -4,135.44	
01 22 23 00-0178	MO	10 To 12 Ton, Single Padfoot Drum, Ride-On Self-Propelled Vibratory Roller With Full-Time Operator ..... <i>For Equipment Without Operator, Deduct</i>	24,569.24 -17,920.24	
<b>01 22 23 00-0179</b>		<b>Towed, Padfoot Rollers</b> (01 22 23 00-0154)		
01 22 23 00-0180	DAY	48" Wide, 40" Diameter, Towed Padfoot Roller ..... <i>For Equipment Without Operator, Deduct</i>	129.84 -827.09	
01 22 23 00-0181	WK	48" Wide, 40" Diameter, Towed Padfoot Roller ..... <i>For Equipment Without Operator, Deduct</i>	375.84 -4,135.44	
01 22 23 00-0182	MO	48" Wide, 40" Diameter, Towed Padfoot Roller ..... <i>For Equipment Without Operator, Deduct</i>	1,107.03 -17,920.24	
01 22 23 00-0183	DAY	60" Wide, 60" Diameter, Towed Padfoot Roller ..... <i>For Equipment Without Operator, Deduct</i>	164.00 -827.09	
01 22 23 00-0184	WK	60" Wide, 60" Diameter, Towed Padfoot Roller ..... <i>For Equipment Without Operator, Deduct</i>	457.84 -4,135.44	
01 22 23 00-0185	MO	60" Wide, 60" Diameter, Towed Padfoot Roller ..... <i>For Equipment Without Operator, Deduct</i>	1,947.55 -17,920.24	
<b>01 22 23 00-0186</b>		<b>Static Rollers</b> (01 22 23 00-0154)		
01 22 23 00-0187	DAY	5 Ton, 2 Drum Articulated Roller With Full-Time Operator..... <i>For Equipment Without Operator, Deduct</i>	1,312.27 -827.09	
01 22 23 00-0188	WK	5 Ton, 2 Drum Articulated Roller With Full-Time Operator..... <i>For Equipment Without Operator, Deduct</i>	5,679.81 -4,135.44	
01 22 23 00-0189	MO	5 Ton, 2 Drum Articulated Roller With Full-Time Operator..... <i>For Equipment Without Operator, Deduct</i>	22,498.68 -17,920.24	
01 22 23 00-0190	DAY	8 To 10 Ton, 2 Drum Articulated Roller With Full-Time Operator..... <i>For Equipment Without Operator, Deduct</i>	1,462.61 -827.09	
01 22 23 00-0191	WK	8 To 10 Ton, 2 Drum Articulated Roller With Full-Time Operator..... <i>For Equipment Without Operator, Deduct</i>	6,089.82 -4,135.44	
01 22 23 00-0192	MO	8 To 10 Ton, 2 Drum Articulated Roller With Full-Time Operator..... <i>For Equipment Without Operator, Deduct</i>	23,633.05 -17,920.24	
<b>01 22 23 00-0193</b>		<b>Ride-On Self-Propelled, Smooth Drum Vibratory Rollers</b> (01 22 23 00-0154)		
01 22 23 00-0194	DAY	5 Ton, Single Smooth Drum, Ride-On Self-Propelled Vibratory Roller With Full-Time Operator ..... <i>For Equipment Without Operator, Deduct</i>	1,264.43 -827.09	
01 22 23 00-0195	WK	5 Ton, Single Smooth Drum, Ride-On Self-Propelled Vibratory Roller With Full-Time Operator ..... <i>For Equipment Without Operator, Deduct</i>	5,426.97 -4,135.44	
01 22 23 00-0196	MO	5 Ton, Single Smooth Drum, Ride-On Self-Propelled Vibratory Roller With Full-Time Operator ..... <i>For Equipment Without Operator, Deduct</i>	21,336.99 -17,920.24	
01 22 23 00-0197	DAY	8 Ton, Single Smooth Drum, Ride-On Self-Propelled Vibratory Roller With Full-Time Operator ..... <i>For Equipment Without Operator, Deduct</i>	1,353.27 -827.09	
01 22 23 00-0198	WK	8 Ton, Single Smooth Drum, Ride-On Self-Propelled Vibratory Roller With Full-Time Operator ..... <i>For Equipment Without Operator, Deduct</i>	5,686.64 -4,135.44	



<b>General Requirements</b>		<b>01</b>
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<b>Unit Prices</b>		<b>01 22</b>

MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
01 22 23 00-0199 MO 8 Ton, Single Smooth Drum, Ride-On Self-Propelled Vibratory Roller With Full-Time Operator ..... <i>For Equipment Without Operator, Deduct</i>	22,013.51 -17,920.24	
01 22 23 00-0200 DAY 11 To 12 Ton, Single Smooth Drum, Ride-On Self-Propelled Vibratory Roller With Full-Time Operator ..... <i>For Equipment Without Operator, Deduct</i>	1,530.94 -827.09	
01 22 23 00-0201 WK 11 To 12 Ton, Single Smooth Drum, Ride-On Self-Propelled Vibratory Roller With Full-Time Operator ..... <i>For Equipment Without Operator, Deduct</i>	6,205.99 -4,135.44	
01 22 23 00-0202 MO 11 To 12 Ton, Single Smooth Drum, Ride-On Self-Propelled Vibratory Roller With Full-Time Operator ..... <i>For Equipment Without Operator, Deduct</i>	23,387.04 -17,920.24	
<b>01 22 23 00-0203 Steel Roadway Plates</b> (01 22 23 00-0153) Note: 3 day minimum. Excludes delivery. See CSI section 01 71 13 00-0001 for material delivery on truck.		
01 22 23 00-0204 EA Placement And Removal Of Steel Roadway Plates.....	52.99	
01 22 23 00-0205 DAY 1" x 4' x 8' Steel Plate .....	37.51	
01 22 23 00-0206 WK 1" x 4' x 8' Steel Plate .....	88.56	
01 22 23 00-0207 MO 1" x 4' x 8' Steel Plate .....	116.55	
01 22 23 00-0208 DAY 1" x 4' x 10' Steel Plate .....	50.01	
01 22 23 00-0209 WK 1" x 4' x 10' Steel Plate .....	112.53	
01 22 23 00-0210 MO 1" x 4' x 10' Steel Plate .....	137.53	
01 22 23 00-0211 DAY 1" x 5' x 10' Steel Plate .....	52.10	
01 22 23 00-0212 WK 1" x 5' x 10' Steel Plate .....	117.73	
01 22 23 00-0213 MO 1" x 5' x 10' Steel Plate .....	312.57	
01 22 23 00-0214 DAY 1" x 6' x 8' Steel Plate .....	33.34	
01 22 23 00-0215 WK 1" x 6' x 8' Steel Plate .....	75.02	
01 22 23 00-0216 MO 1" x 6' x 8' Steel Plate .....	200.04	
01 22 23 00-0217 DAY 1" x 6' x 10' Steel Plate .....	62.51	
01 22 23 00-0218 WK 1" x 6' x 10' Steel Plate .....	82.31	
01 22 23 00-0219 MO 1" x 6' x 10' Steel Plate .....	219.84	
01 22 23 00-0220 DAY 1" x 6' x 12' Steel Plate .....	87.52	
01 22 23 00-0221 WK 1" x 6' x 12' Steel Plate .....	112.00	
01 22 23 00-0222 MO 1" x 6' x 12' Steel Plate .....	303.19	
01 22 23 00-0223 DAY 1" x 8' x 10' Steel Plate .....	55.22	
01 22 23 00-0224 WK 1" x 8' x 10' Steel Plate .....	123.99	
01 22 23 00-0225 MO 1" x 8' x 10' Steel Plate .....	330.28	
01 22 23 00-0226 DAY 1" x 8' x 12' Steel Plate .....	100.02	
01 22 23 00-0227 WK 1" x 8' x 12' Steel Plate .....	123.99	
01 22 23 00-0228 MO 1" x 8' x 12' Steel Plate .....	600.13	
01 22 23 00-0229 DAY 1" x 8' x 16' Steel Plate .....	133.36	
01 22 23 00-0230 WK 1" x 8' x 16' Steel Plate .....	300.07	
01 22 23 00-0231 MO 1" x 8' x 16' Steel Plate .....	800.18	
01 22 23 00-0232 DAY 1-1/4" x 8' x 10' Steel Plate .....	66.26	
01 22 23 00-0233 WK 1-1/4" x 8' x 10' Steel Plate .....	148.78	
01 22 23 00-0234 MO 1-1/4" x 8' x 10' Steel Plate .....	396.34	
01 22 23 00-0235 DAY 1-1/2" x 8' x 15' Steel Plate .....	153.37	
01 22 23 00-0236 WK 1-1/2" x 8' x 15' Steel Plate .....	345.08	
01 22 23 00-0237 MO 1-1/2" x 8' x 15' Steel Plate .....	920.21	
01 22 23 00-0238 EA Removal And Resetting Of Steel Roadway Plate .....	29.44	
<b>01 22 23 00-0239 Street Sweepers</b> (01 22 23 00-0153) Note: Includes full-time operator. Excludes delivery, set-up, and removal.		
01 22 23 00-0240 DAY 8' Road Broom, Self Propelled Street Sweeper With Full-Time Operator ..... <i>For Equipment Without Operator, Deduct</i>	978.02 -784.94	
01 22 23 00-0241 WK 8' Road Broom, Self Propelled Street Sweeper With Full-Time Operator ..... <i>For Equipment Without Operator, Deduct</i>	4,689.82 -3,924.70	
01 22 23 00-0242 MO 8' Road Broom, Self Propelled Street Sweeper With Full-Time Operator ..... <i>For Equipment Without Operator, Deduct</i>	19,733.02 -17,007.05	
01 22 23 00-0243 DAY Self-Propelled Street Sweeper With Hopper And Full-Time Operator ..... Note: Truck with main and gutter brooms, elevator, debris hopper and water tank. <i>For Equipment Without Operator, Deduct</i>	1,706.35 -784.94	
01 22 23 00-0244 WK Self-Propelled Street Sweeper With Hopper And Full-Time Operator ..... Note: Truck with main and gutter brooms, elevator, debris hopper and water tank. <i>For Equipment Without Operator, Deduct</i>	7,615.44 -3,924.70	
01 22 23 00-0245 MO Self-Propelled Street Sweeper With Hopper And Full-Time Operator ..... Note: Truck with main and gutter brooms, elevator, debris hopper and water tank. <i>For Equipment Without Operator, Deduct</i>	30,178.40 -17,007.05	
<b>01 22 23 00-0246 Earthmoving Equipment</b> (01 22 23)		
<b>01 22 23 00-0247 Skid-Steer Loaders</b> (01 22 23 00-0246) Note: Includes full-time operator and combination bucket and dozer blade attachments. Add extra attachments where necessary. Excludes delivery, set-up, and removal.		
01 22 23 00-0248 DAY 700 LB Capacity, 36" Wide, Skid-Steer Loader With Full-Time Operator ..... <i>For Equipment Without Operator, Deduct</i>	1,168.58 -784.94	
01 22 23 00-0249 WK 700 LB Capacity, 36" Wide, Skid-Steer Loader With Full-Time Operator ..... <i>For Equipment Without Operator, Deduct</i>	4,931.16 -3,924.70	
01 22 23 00-0250 MO 700 LB Capacity, 36" Wide, Skid-Steer Loader With Full-Time Operator ..... <i>For Equipment Without Operator, Deduct</i>	19,430.90 -17,007.05	
01 22 23 00-0251 DAY 1,500 LB Capacity, 60" Wide, Skid-Steer Loader With Full-Time Operator ..... <i>For Equipment Without Operator, Deduct</i>	1,269.71 -784.94	
01 22 23 00-0252 WK 1,500 LB Capacity, 60" Wide, Skid-Steer Loader With Full-Time Operator ..... <i>For Equipment Without Operator, Deduct</i>	5,114.15 -3,924.70	

<b>01</b>	<b>General Requirements</b>
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MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
01 22 23 00-0253 MO 1,500 LB Capacity, 60" Wide, Skid-Steer Loader With Full-Time Operator .....	19,832.20	
For Equipment Without Operator, Deduct .....	-17,007.05	
01 22 23 00-0254 DAY 2,400 LB Capacity, 72" Wide, Skid-Steer Loader With Full-Time Operator .....	1,298.60	
For Equipment Without Operator, Deduct .....	-784.94	
01 22 23 00-0255 WK 2,400 LB Capacity, 72" Wide, Skid-Steer Loader With Full-Time Operator .....	5,377.41	
For Equipment Without Operator, Deduct .....	-3,924.70	
01 22 23 00-0256 MO 2,400 LB Capacity, 72" Wide, Skid-Steer Loader With Full-Time Operator .....	20,530.46	
For Equipment Without Operator, Deduct .....	-17,007.05	
01 22 23 00-0257 DAY 2,500 LB Capacity, 78" Wide, Tracked Skid-Steer Loader With Full-Time Operator .....	1,410.97	
For Equipment Without Operator, Deduct .....	-784.94	
01 22 23 00-0258 WK 2,500 LB Capacity, 78" Wide, Tracked Skid-Steer Loader With Full-Time Operator .....	5,746.60	
For Equipment Without Operator, Deduct .....	-3,924.70	
01 22 23 00-0259 MO 2,500 LB Capacity, 78" Wide, Tracked Skid-Steer Loader With Full-Time Operator .....	21,750.42	
For Equipment Without Operator, Deduct .....	-17,007.05	
01 22 23 00-0260 DAY 3,000 LB Capacity, 78" Wide, Tracked Skid-Steer Loader With Full-Time Operator .....	1,603.59	
For Equipment Without Operator, Deduct .....	-784.94	
01 22 23 00-0261 WK 3,000 LB Capacity, 78" Wide, Tracked Skid-Steer Loader With Full-Time Operator .....	6,476.97	
For Equipment Without Operator, Deduct .....	-3,924.70	
01 22 23 00-0262 MO 3,000 LB Capacity, 78" Wide, Tracked Skid-Steer Loader With Full-Time Operator .....	23,548.24	
For Equipment Without Operator, Deduct .....	-17,007.05	
01 22 23 00-0263 DAY Hydraulic Hammer Attachment For Skid-Steer Loaders .....	321.04	
01 22 23 00-0264 WK Hydraulic Hammer Attachment For Skid-Steer Loaders .....	1,067.46	
01 22 23 00-0265 MO Hydraulic Hammer Attachment For Skid-Steer Loaders .....	2,841.20	
01 22 23 00-0266 DAY Forklift Attachment For Skid-Steer Loaders .....	69.02	
01 22 23 00-0267 WK Forklift Attachment For Skid-Steer Loaders .....	184.60	
01 22 23 00-0268 MO Forklift Attachment For Skid-Steer Loaders .....	521.69	
01 22 23 00-0269 DAY Backhoe Attachment For Skid-Steer Loaders .....	152.49	
01 22 23 00-0270 WK Backhoe Attachment For Skid-Steer Loaders .....	365.99	
01 22 23 00-0271 MO Backhoe Attachment For Skid-Steer Loaders .....	910.15	
01 22 23 00-0272 DAY Broom Attachment For Skid-Steer Loaders .....	150.89	
01 22 23 00-0273 WK Broom Attachment For Skid-Steer Loaders .....	409.33	
01 22 23 00-0274 MO Broom Attachment For Skid-Steer Loaders .....	1,083.51	
01 22 23 00-0275 DAY Auger Attachment (Excludes Bits And Extensions) For Skid-Steer Loaders .....	131.63	
01 22 23 00-0276 WK Auger Attachment (Excludes Bits And Extensions) For Skid-Steer Loaders .....	362.78	
01 22 23 00-0277 MO Auger Attachment (Excludes Bits And Extensions) For Skid-Steer Loaders .....	990.41	
01 22 23 00-0278 DAY Up To 18" Diameter, 4' Length, Auger Bit For Skid-Steer Mounted Augers (Excludes Auger) .....	36.28	
01 22 23 00-0279 WK Up To 18" Diameter, 4' Length, Auger Bit For Skid-Steer Mounted Augers (Excludes Auger) .....	94.92	
01 22 23 00-0280 MO Up To 18" Diameter, 4' Length, Auger Bit For Skid-Steer Mounted Augers (Excludes Auger) .....	279.16	
01 22 23 00-0281 DAY >18" To 48" Diameter, 4' Length, Auger Bit For Skid-Steer Mounted Augers (Excludes Auger) .....	48.85	
01 22 23 00-0282 WK >18" To 48" Diameter, 4' Length, Auger Bit For Skid-Steer Mounted Augers (Excludes Auger) .....	121.43	
01 22 23 00-0283 MO >18" To 48" Diameter, 4' Length, Auger Bit For Skid-Steer Mounted Augers (Excludes Auger) .....	362.92	
01 22 23 00-0284 DAY Up To 24" Diameter, 4' Length, Rock Tip Auger Bit For Skid-Steer Mounted Augers (Excludes Auger) .....	71.17	
01 22 23 00-0285 WK Up To 24" Diameter, 4' Length, Rock Tip Auger Bit For Skid-Steer Mounted Augers (Excludes Auger) .....	216.36	
01 22 23 00-0286 MO Up To 24" Diameter, 4' Length, Rock Tip Auger Bit For Skid-Steer Mounted Augers (Excludes Auger) .....	642.08	
01 22 23 00-0287 DAY 2' Length, Auger Bit Extension For Skid-Steer Mounted Augers (Excludes Auger) .....	14.45	
01 22 23 00-0288 WK 2' Length, Auger Bit Extension For Skid-Steer Mounted Augers (Excludes Auger) .....	33.71	
01 22 23 00-0289 MO 2' Length, Auger Bit Extension For Skid-Steer Mounted Augers (Excludes Auger) .....	89.89	
<b>01 22 23 00-0290 Bulldozers (01 22 23 00-0246)</b>		
Note: Includes full-time operator. Excludes delivery, set-up, and removal.		
01 22 23 00-0291 DAY 70 HP, D3 Bulldozer With Full-Time Operator .....	1,235.08	
For Equipment Without Operator, Deduct .....	-827.09	
01 22 23 00-0292 WK 70 HP, D3 Bulldozer With Full-Time Operator .....	5,744.32	
For Equipment Without Operator, Deduct .....	-4,135.44	
01 22 23 00-0293 MO 70 HP, D3 Bulldozer With Full-Time Operator .....	22,693.00	
For Equipment Without Operator, Deduct .....	-17,920.24	
01 22 23 00-0294 DAY 90 To 105 HP, D4 Or D5 Bulldozer With Full-Time Operator .....	1,427.53	
For Equipment Without Operator, Deduct .....	-827.09	
01 22 23 00-0295 WK 90 To 105 HP, D4 Or D5 Bulldozer With Full-Time Operator .....	6,521.82	
For Equipment Without Operator, Deduct .....	-4,135.44	
01 22 23 00-0296 MO 90 To 105 HP, D4 Or D5 Bulldozer With Full-Time Operator .....	25,079.38	
For Equipment Without Operator, Deduct .....	-17,920.24	
01 22 23 00-0297 DAY 140 HP, D6 Bulldozer With Full-Time Operator .....	1,974.09	
For Equipment Without Operator, Deduct .....	-827.09	
01 22 23 00-0298 WK 140 HP, D6 Bulldozer With Full-Time Operator .....	8,708.05	
For Equipment Without Operator, Deduct .....	-4,135.44	
01 22 23 00-0299 MO 140 HP, D6 Bulldozer With Full-Time Operator .....	31,622.68	
For Equipment Without Operator, Deduct .....	-17,920.24	
01 22 23 00-0300 DAY 200 HP, D7 Bulldozer With Full-Time Operator .....	2,459.07	
For Equipment Without Operator, Deduct .....	-827.09	
01 22 23 00-0301 WK 200 HP, D7 Bulldozer With Full-Time Operator .....	10,655.65	
For Equipment Without Operator, Deduct .....	-4,135.44	
01 22 23 00-0302 MO 200 HP, D7 Bulldozer With Full-Time Operator .....	37,473.16	
For Equipment Without Operator, Deduct .....	-17,920.24	
01 22 23 00-0303 DAY 335 HP, D8 Bulldozer With Full-Time Operator .....	3,036.42	
For Equipment Without Operator, Deduct .....	-827.09	
01 22 23 00-0304 WK 335 HP, D8 Bulldozer With Full-Time Operator .....	12,965.05	
For Equipment Without Operator, Deduct .....	-4,135.44	
01 22 23 00-0305 MO 335 HP, D8 Bulldozer With Full-Time Operator .....	44,401.36	
For Equipment Without Operator, Deduct .....	-17,920.24	
01 22 23 00-0306 DAY 460 HP, D9 Bulldozer With Full-Time Operator .....	3,359.73	
For Equipment Without Operator, Deduct .....	-827.09	



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MINOR CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
01 22 23 00-0307	WK	460 HP, D9 Bulldozer With Full-Time Operator .....	14,250.61	
		For Equipment Without Operator, Deduct .....	-4,135.44	
01 22 23 00-0308	MO	460 HP, D9 Bulldozer With Full-Time Operator .....	48,250.36	
		For Equipment Without Operator, Deduct .....	-17,920.24	
<b>01 22 23 00-0309 Motor Scraper</b> (01 22 23 00-0246)				
Note: Includes full-time operator. Excludes delivery, set-up, and removal.				
01 22 23 00-0310	DAY	11 CY Motor Scraper-Hauler With Full-Time Operator .....	2,088.09	
		For Equipment Without Operator, Deduct .....	-827.09	
01 22 23 00-0311	WK	11 CY Motor Scraper-Hauler With Full-Time Operator .....	9,179.45	
		For Equipment Without Operator, Deduct .....	-4,135.44	
01 22 23 00-0312	MO	11 CY Motor Scraper-Hauler With Full-Time Operator .....	33,034.99	
		For Equipment Without Operator, Deduct .....	-17,920.24	
01 22 23 00-0313	DAY	18 CY Motor Scraper-Hauler With Full-Time Operator .....	2,597.67	
		For Equipment Without Operator, Deduct .....	-827.09	
01 22 23 00-0314	WK	18 CY Motor Scraper-Hauler With Full-Time Operator .....	11,217.78	
		For Equipment Without Operator, Deduct .....	-4,135.44	
01 22 23 00-0315	MO	18 CY Motor Scraper-Hauler With Full-Time Operator .....	39,167.26	
		For Equipment Without Operator, Deduct .....	-17,920.24	
01 22 23 00-0316	DAY	24 CY Motor Scraper-Hauler With Full-Time Operator .....	3,089.98	
		For Equipment Without Operator, Deduct .....	-827.09	
01 22 23 00-0317	WK	24 CY Motor Scraper-Hauler With Full-Time Operator .....	13,178.38	
		For Equipment Without Operator, Deduct .....	-4,135.44	
01 22 23 00-0318	MO	24 CY Motor Scraper-Hauler With Full-Time Operator .....	45,040.42	
		For Equipment Without Operator, Deduct .....	-17,920.24	
<b>01 22 23 00-0319 Hydraulic Excavators</b> (01 22 23 00-0246)				
Note: Includes full-time operator. Excludes delivery, set-up, and removal.				
01 22 23 00-0320	DAY	3/8 CY Hydraulic Excavator With Full-Time Operator .....	1,191.73	
		For Equipment Without Operator, Deduct .....	-827.09	
01 22 23 00-0321	WK	3/8 CY Hydraulic Excavator With Full-Time Operator .....	5,425.17	
		For Equipment Without Operator, Deduct .....	-4,135.44	
01 22 23 00-0322	MO	3/8 CY Hydraulic Excavator With Full-Time Operator .....	22,241.84	
		For Equipment Without Operator, Deduct .....	-17,920.24	
01 22 23 00-0323	DAY	1/2 CY Hydraulic Excavator With Full-Time Operator .....	1,294.36	
		For Equipment Without Operator, Deduct .....	-827.09	
01 22 23 00-0324	WK	1/2 CY Hydraulic Excavator With Full-Time Operator .....	5,877.58	
		For Equipment Without Operator, Deduct .....	-4,135.44	
01 22 23 00-0325	MO	1/2 CY Hydraulic Excavator With Full-Time Operator .....	24,051.51	
		For Equipment Without Operator, Deduct .....	-17,920.24	
01 22 23 00-0326	DAY	5/8 CY Hydraulic Excavator With Full-Time Operator .....	1,326.77	
		For Equipment Without Operator, Deduct .....	-827.09	
01 22 23 00-0327	WK	5/8 CY Hydraulic Excavator With Full-Time Operator .....	6,046.40	
		For Equipment Without Operator, Deduct .....	-4,135.44	
01 22 23 00-0328	MO	5/8 CY Hydraulic Excavator With Full-Time Operator .....	24,348.62	
		For Equipment Without Operator, Deduct .....	-17,920.24	
01 22 23 00-0329	DAY	3/4 CY Hydraulic Excavator With Full-Time Operator .....	1,360.54	
		For Equipment Without Operator, Deduct .....	-827.09	
01 22 23 00-0330	WK	3/4 CY Hydraulic Excavator With Full-Time Operator .....	6,201.70	
		For Equipment Without Operator, Deduct .....	-4,135.44	
01 22 23 00-0331	MO	3/4 CY Hydraulic Excavator With Full-Time Operator .....	24,645.73	
		For Equipment Without Operator, Deduct .....	-17,920.24	
01 22 23 00-0332	DAY	7/8 To 1 CY Hydraulic Excavator With Full-Time Operator .....	1,387.55	
		For Equipment Without Operator, Deduct .....	-827.09	
01 22 23 00-0333	WK	7/8 To 1 CY Hydraulic Excavator With Full-Time Operator .....	6,363.76	
		For Equipment Without Operator, Deduct .....	-4,135.44	
01 22 23 00-0334	MO	7/8 To 1 CY Hydraulic Excavator With Full-Time Operator .....	24,942.84	
		For Equipment Without Operator, Deduct .....	-17,920.24	
01 22 23 00-0335	DAY	1-1/8 To 1-1/4 CY Hydraulic Excavator With Full-Time Operator .....	1,752.18	
		For Equipment Without Operator, Deduct .....	-827.09	
01 22 23 00-0336	WK	1-1/8 To 1-1/4 CY Hydraulic Excavator With Full-Time Operator .....	7,815.55	
		For Equipment Without Operator, Deduct .....	-4,135.44	
01 22 23 00-0337	MO	1-1/8 To 1-1/4 CY Hydraulic Excavator With Full-Time Operator .....	28,960.58	
		For Equipment Without Operator, Deduct .....	-17,920.24	
01 22 23 00-0338	DAY	1-3/8 To 1-1/2 CY Hydraulic Excavator With Full-Time Operator .....	1,806.20	
		For Equipment Without Operator, Deduct .....	-827.09	
01 22 23 00-0339	WK	1-3/8 To 1-1/2 CY Hydraulic Excavator With Full-Time Operator .....	8,051.89	
		For Equipment Without Operator, Deduct .....	-4,135.44	
01 22 23 00-0340	MO	1-3/8 To 1-1/2 CY Hydraulic Excavator With Full-Time Operator .....	29,669.59	
		For Equipment Without Operator, Deduct .....	-17,920.24	
01 22 23 00-0341	DAY	1-5/8 To 1-7/8 CY Hydraulic Excavator With Full-Time Operator .....	1,907.49	
		For Equipment Without Operator, Deduct .....	-827.09	
01 22 23 00-0342	WK	1-5/8 To 1-7/8 CY Hydraulic Excavator With Full-Time Operator .....	8,457.04	
		For Equipment Without Operator, Deduct .....	-4,135.44	
01 22 23 00-0343	MO	1-5/8 To 1-7/8 CY Hydraulic Excavator With Full-Time Operator .....	30,885.04	
		For Equipment Without Operator, Deduct .....	-17,920.24	
01 22 23 00-0344	DAY	2 To 2-3/8 CY Hydraulic Excavator With Full-Time Operator .....	2,022.28	
		For Equipment Without Operator, Deduct .....	-827.09	
01 22 23 00-0345	WK	2 To 2-3/8 CY Hydraulic Excavator With Full-Time Operator .....	8,909.46	
		For Equipment Without Operator, Deduct .....	-4,135.44	
01 22 23 00-0346	MO	2 To 2-3/8 CY Hydraulic Excavator With Full-Time Operator .....	32,235.54	
		For Equipment Without Operator, Deduct .....	-17,920.24	

<b>01</b>	<b>General Requirements</b>
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MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
01 22 23 00-0347 DAY 2-1/2 To 2-7/8 CY Hydraulic Excavator With Full-Time Operator.....	2,056.05	
For Equipment Without Operator, Deduct	-827.09	
01 22 23 00-0348 WK 2-1/2 To 2-7/8 CY Hydraulic Excavator With Full-Time Operator.....	9,044.51	
For Equipment Without Operator, Deduct	-4,135.44	
01 22 23 00-0349 MO 2-1/2 To 2-7/8 CY Hydraulic Excavator With Full-Time Operator.....	32,640.69	
For Equipment Without Operator, Deduct	-17,920.24	
01 22 23 00-0350 DAY 3 To 3-3/4 CY Hydraulic Excavator With Full-Time Operator.....	2,380.17	
For Equipment Without Operator, Deduct	-827.09	
01 22 23 00-0351 WK 3 To 3-3/4 CY Hydraulic Excavator With Full-Time Operator.....	10,347.74	
For Equipment Without Operator, Deduct	-4,135.44	
01 22 23 00-0352 MO 3 To 3-3/4 CY Hydraulic Excavator With Full-Time Operator.....	36,557.14	
For Equipment Without Operator, Deduct	-17,920.24	
01 22 23 00-0353 DAY 4 To 5-3/4 CY Hydraulic Excavator With Full-Time Operator.....	2,846.09	
For Equipment Without Operator, Deduct	-827.09	
01 22 23 00-0354 WK 4 To 5-3/4 CY Hydraulic Excavator With Full-Time Operator.....	12,197.92	
For Equipment Without Operator, Deduct	-4,135.44	
01 22 23 00-0355 MO 4 To 5-3/4 CY Hydraulic Excavator With Full-Time Operator.....	42,094.19	
For Equipment Without Operator, Deduct	-17,920.24	
01 22 23 00-0356 DAY Thumbs Or Grapple Attachment For Hydraulic Excavators .....	94.54	
01 22 23 00-0357 WK Thumbs Or Grapple Attachment For Hydraulic Excavators .....	364.64	
01 22 23 00-0358 MO Thumbs Or Grapple Attachment For Hydraulic Excavators .....	1,080.40	
01 22 23 00-0359 DAY 1,000 Ft-Lb Hydraulic Hammer Attachment For Hydraulic Excavators .....	418.66	
01 22 23 00-0360 WK 1,000 Ft-Lb Hydraulic Hammer Attachment For Hydraulic Excavators .....	1,107.41	
01 22 23 00-0361 MO 1,000 Ft-Lb Hydraulic Hammer Attachment For Hydraulic Excavators .....	3,099.40	
01 22 23 00-0362 DAY 1,500 Ft-Lb Hydraulic Hammer Attachment For Hydraulic Excavators .....	648.24	
01 22 23 00-0363 WK 1,500 Ft-Lb Hydraulic Hammer Attachment For Hydraulic Excavators .....	1,654.36	
01 22 23 00-0364 MO 1,500 Ft-Lb Hydraulic Hammer Attachment For Hydraulic Excavators .....	4,301.34	
01 22 23 00-0365 DAY 3,000 Ft-Lb Hydraulic Hammer Attachment For Hydraulic Excavators .....	904.84	
01 22 23 00-0366 WK 3,000 Ft-Lb Hydraulic Hammer Attachment For Hydraulic Excavators .....	2,437.65	
01 22 23 00-0367 MO 3,000 Ft-Lb Hydraulic Hammer Attachment For Hydraulic Excavators .....	6,833.53	
01 22 23 00-0368 DAY 24" Compaction Wheel Attachment For Hydraulic Excavators .....	189.07	
01 22 23 00-0369 WK 24" Compaction Wheel Attachment For Hydraulic Excavators .....	756.28	
01 22 23 00-0370 MO 24" Compaction Wheel Attachment For Hydraulic Excavators .....	2,268.84	
01 22 23 00-0371 DAY 36" Compaction Wheel Attachment For Hydraulic Excavators .....	270.10	
01 22 23 00-0372 WK 36" Compaction Wheel Attachment For Hydraulic Excavators .....	1,080.40	
01 22 23 00-0373 MO 36" Compaction Wheel Attachment For Hydraulic Excavators .....	3,241.20	
01 22 23 00-0374 DAY 48" Compaction Wheel Attachment For Hydraulic Excavators .....	297.11	
01 22 23 00-0375 WK 48" Compaction Wheel Attachment For Hydraulic Excavators .....	1,174.94	
01 22 23 00-0376 MO 48" Compaction Wheel Attachment For Hydraulic Excavators .....	3,511.30	
<b>01 22 23 00-0377 Mini-Excavators (01 22 23 00-0246)</b>		
Note: Includes full-time operator. Excludes delivery, set-up, and removal.		
01 22 23 00-0378 DAY 2,000 LB Mini-Excavator With Full-Time Operator.....	1,110.69	
For Equipment Without Operator, Deduct	-827.09	
01 22 23 00-0379 WK 2,000 LB Mini-Excavator With Full-Time Operator.....	4,938.99	
For Equipment Without Operator, Deduct	-4,135.44	
01 22 23 00-0380 MO 2,000 LB Mini-Excavator With Full-Time Operator.....	19,689.40	
For Equipment Without Operator, Deduct	-17,920.24	
01 22 23 00-0381 DAY 3,500 LB Mini-Excavator With Full-Time Operator.....	1,117.45	
For Equipment Without Operator, Deduct	-827.09	
01 22 23 00-0382 WK 3,500 LB Mini-Excavator With Full-Time Operator.....	4,959.24	
For Equipment Without Operator, Deduct	-4,135.44	
01 22 23 00-0383 MO 3,500 LB Mini-Excavator With Full-Time Operator.....	20,114.80	
For Equipment Without Operator, Deduct	-17,920.24	
01 22 23 00-0384 DAY 6,000 LB Mini-Excavator With Full-Time Operator.....	1,151.21	
For Equipment Without Operator, Deduct	-827.09	
01 22 23 00-0385 WK 6,000 LB Mini-Excavator With Full-Time Operator.....	5,053.78	
For Equipment Without Operator, Deduct	-4,135.44	
01 22 23 00-0386 MO 6,000 LB Mini-Excavator With Full-Time Operator.....	20,175.58	
For Equipment Without Operator, Deduct	-17,920.24	
01 22 23 00-0387 DAY 7,500 LB Mini-Excavator With Full-Time Operator.....	1,164.71	
For Equipment Without Operator, Deduct	-827.09	
01 22 23 00-0388 WK 7,500 LB Mini-Excavator With Full-Time Operator.....	5,101.05	
For Equipment Without Operator, Deduct	-4,135.44	
01 22 23 00-0389 MO 7,500 LB Mini-Excavator With Full-Time Operator.....	20,202.58	
For Equipment Without Operator, Deduct	-17,920.24	
01 22 23 00-0390 DAY 9,500 LB Mini-Excavator With Full-Time Operator.....	1,245.75	
For Equipment Without Operator, Deduct	-827.09	
01 22 23 00-0391 WK 9,500 LB Mini-Excavator With Full-Time Operator.....	5,168.57	
For Equipment Without Operator, Deduct	-4,135.44	
01 22 23 00-0392 MO 9,500 LB Mini-Excavator With Full-Time Operator.....	20,985.88	
For Equipment Without Operator, Deduct	-17,920.24	
01 22 23 00-0393 DAY 11,000 LB Mini-Excavator With Full-Time Operator.....	1,252.50	
For Equipment Without Operator, Deduct	-827.09	
01 22 23 00-0394 WK 11,000 LB Mini-Excavator With Full-Time Operator.....	5,506.20	
For Equipment Without Operator, Deduct	-4,135.44	
01 22 23 00-0395 MO 11,000 LB Mini-Excavator With Full-Time Operator.....	21,019.64	
For Equipment Without Operator, Deduct	-17,920.24	

**01 22 23 00-0396 Gradall, Telescopic Hydraulic Excavators (01 22 23 00-0246)**  
Note: Includes full-time operator. Excludes delivery, set-up, and removal.



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MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
01 22 23 00-0397 DAY Gradall, Telescopic Hydraulic Excavator With Full-Time Operator ..... For Equipment Without Operator, Deduct	2,755.13 -827.09	
01 22 23 00-0398 WK Gradall, Telescopic Hydraulic Excavator With Full-Time Operator ..... For Equipment Without Operator, Deduct	11,838.97 -4,135.44	
01 22 23 00-0399 MO Gradall, Telescopic Hydraulic Excavator With Full-Time Operator ..... For Equipment Without Operator, Deduct	45,415.23 -17,920.24	
<b>01 22 23 00-0400 Road Graders</b> (01 22 23 00-0246) Note: Includes full-time operator. Excludes delivery, set-up, and removal.		
01 22 23 00-0401 DAY 60 HP Road Grader With Full-Time Operator ..... For Equipment Without Operator, Deduct	1,541.20 -827.09	
01 22 23 00-0402 WK 60 HP Road Grader With Full-Time Operator ..... For Equipment Without Operator, Deduct	6,067.19 -4,135.44	
01 22 23 00-0403 MO 60 HP Road Grader With Full-Time Operator ..... For Equipment Without Operator, Deduct	23,697.18 -17,920.24	
01 22 23 00-0404 DAY 80 HP Road Grader With Full-Time Operator ..... For Equipment Without Operator, Deduct	1,751.77 -827.09	
01 22 23 00-0405 WK 80 HP Road Grader With Full-Time Operator ..... For Equipment Without Operator, Deduct	6,653.13 -4,135.44	
01 22 23 00-0406 MO 80 HP Road Grader With Full-Time Operator ..... For Equipment Without Operator, Deduct	25,473.30 -17,920.24	
01 22 23 00-0407 DAY 130 HP Road Grader With Full-Time Operator ..... For Equipment Without Operator, Deduct	1,609.17 -827.09	
01 22 23 00-0408 WK 130 HP Road Grader With Full-Time Operator ..... For Equipment Without Operator, Deduct	7,263.78 -4,135.44	
01 22 23 00-0409 MO 130 HP Road Grader With Full-Time Operator ..... For Equipment Without Operator, Deduct	29,099.94 -17,920.24	
<b>01 22 23 00-0410 Loader-Backhoes With Standard Bucket</b> (01 22 23 00-0246) Note: Includes full-time operator. Excludes delivery, set-up, and removal.		
01 22 23 00-0411 DAY 1/2 To 5/8 CY, 65 HP, Loader-Backhoe With Standard Bucket And Full-Time Operator ..... For Equipment Without Operator, Deduct	1,310.76 -827.09	
01 22 23 00-0412 WK 1/2 To 5/8 CY, 65 HP, Loader-Backhoe With Standard Bucket And Full-Time Operator ..... For Equipment Without Operator, Deduct	5,284.16 -4,135.44	
01 22 23 00-0413 MO 1/2 To 5/8 CY, 65 HP, Loader-Backhoe With Standard Bucket And Full-Time Operator ..... For Equipment Without Operator, Deduct	20,623.62 -17,920.24	
01 22 23 00-0414 DAY 1 CY, 24" Bucket, 14'-4" Deep, 75 HP, Loader-Backhoe With Full-Time Operator ..... For Equipment Without Operator, Deduct	1,362.58 -827.09	
01 22 23 00-0415 WK 1 CY, 24" Bucket, 14'-4" Deep, 75 HP, Loader-Backhoe With Full-Time Operator ..... For Equipment Without Operator, Deduct	5,465.54 -4,135.44	
01 22 23 00-0416 MO 1 CY, 24" Bucket, 14'-4" Deep, 75 HP, Loader-Backhoe With Full-Time Operator ..... For Equipment Without Operator, Deduct	21,729.16 -17,920.24	
01 22 23 00-0417 DAY 1-1/2 CY, 24" Bucket, 16'-6" Deep, 90 HP, Loader-Backhoe With Full-Time Operator ..... For Equipment Without Operator, Deduct	1,442.48 -827.09	
01 22 23 00-0418 WK 1-1/2 CY, 24" Bucket, 16'-6" Deep, 90 HP, Loader-Backhoe With Full-Time Operator ..... For Equipment Without Operator, Deduct	5,664.19 -4,135.44	
01 22 23 00-0419 MO 1-1/2 CY, 24" Bucket, 16'-6" Deep, 90 HP, Loader-Backhoe With Full-Time Operator ..... For Equipment Without Operator, Deduct	22,299.20 -17,920.24	
01 22 23 00-0420 DAY 1-3/4 CY, 30" Bucket, 18'-0" Deep, 112 HP, Loader-Backhoe With Full-Time Operator ..... For Equipment Without Operator, Deduct	1,798.75 -827.09	
01 22 23 00-0421 WK 1-3/4 CY, 30" Bucket, 18'-0" Deep, 112 HP, Loader-Backhoe With Full-Time Operator ..... For Equipment Without Operator, Deduct	6,726.54 -4,135.44	
01 22 23 00-0422 MO 1-3/4 CY, 30" Bucket, 18'-0" Deep, 112 HP, Loader-Backhoe With Full-Time Operator ..... For Equipment Without Operator, Deduct	25,339.42 -17,920.24	
<b>01 22 23 00-0423 Heavy Duty Construction Loaders</b> (01 22 23 00-0246) Note: Includes full-time operator. Excludes delivery, set-up, and removal.		
01 22 23 00-0424 DAY 2-1/2 CY, 119 HP, Heavy Duty Construction Loader With Full-Time Operator ..... For Equipment Without Operator, Deduct	1,379.82 -827.09	
01 22 23 00-0425 WK 2-1/2 CY, 119 HP, Heavy Duty Construction Loader With Full-Time Operator ..... For Equipment Without Operator, Deduct	6,320.84 -4,135.44	
01 22 23 00-0426 MO 2-1/2 CY, 119 HP, Heavy Duty Construction Loader With Full-Time Operator ..... For Equipment Without Operator, Deduct	24,467.94 -17,920.24	
01 22 23 00-0427 DAY 3 CY, 135 HP, Heavy Duty Construction Loader With Full-Time Operator ..... For Equipment Without Operator, Deduct	1,839.01 -827.09	
01 22 23 00-0428 WK 3 CY, 135 HP, Heavy Duty Construction Loader With Full-Time Operator ..... For Equipment Without Operator, Deduct	6,822.55 -4,135.44	
01 22 23 00-0429 MO 3 CY, 135 HP, Heavy Duty Construction Loader With Full-Time Operator ..... For Equipment Without Operator, Deduct	24,723.04 -17,920.24	
01 22 23 00-0430 DAY 3-1/2 CY, 198 HP, Heavy Duty Construction Loader With Full-Time Operator ..... For Equipment Without Operator, Deduct	1,941.05 -827.09	
01 22 23 00-0431 WK 3-1/2 CY, 198 HP, Heavy Duty Construction Loader With Full-Time Operator ..... For Equipment Without Operator, Deduct	7,094.66 -4,135.44	
01 22 23 00-0432 MO 3-1/2 CY, 198 HP, Heavy Duty Construction Loader With Full-Time Operator ..... For Equipment Without Operator, Deduct	25,403.32 -17,920.24	
01 22 23 00-0433 DAY 4-1/2 CY, 215 HP, Heavy Duty Construction Loader With Full-Time Operator ..... For Equipment Without Operator, Deduct	2,221.66 -827.09	
01 22 23 00-0434 WK 4-1/2 CY, 215 HP, Heavy Duty Construction Loader With Full-Time Operator ..... For Equipment Without Operator, Deduct	7,834.46 -4,135.44	
01 22 23 00-0435 MO 4-1/2 CY, 215 HP, Heavy Duty Construction Loader With Full-Time Operator ..... For Equipment Without Operator, Deduct	27,274.09 -17,920.24	

<b>01</b>	<b>General Requirements</b>
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MINOR CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
01 22 23 00-0436	DAY	7-1/3 CY, 330 HP, Heavy Duty Construction Loader With Full-Time Operator ..... <i>For Equipment Without Operator, Deduct</i>	2,944.46 -827.09	
01 22 23 00-0437	WK	7-1/3 CY, 330 HP, Heavy Duty Construction Loader With Full-Time Operator ..... <i>For Equipment Without Operator, Deduct</i>	12,587.92 -4,135.44	
01 22 23 00-0438	MO	7-1/3 CY, 330 HP, Heavy Duty Construction Loader With Full-Time Operator ..... <i>For Equipment Without Operator, Deduct</i>	43,260.67 -17,920.24	
01 22 23 00-0439	DAY	13-1/2 CY, 690 HP, Heavy Duty Construction Loader With Full-Time Operator ..... <i>For Equipment Without Operator, Deduct</i>	7,706.34 -827.09	
01 22 23 00-0440	WK	13-1/2 CY, 690 HP, Heavy Duty Construction Loader With Full-Time Operator ..... <i>For Equipment Without Operator, Deduct</i>	26,473.90 -4,135.44	
01 22 23 00-0441	MO	13-1/2 CY, 690 HP, Heavy Duty Construction Loader With Full-Time Operator ..... <i>For Equipment Without Operator, Deduct</i>	78,798.58 -17,920.24	
01 22 23 00-0442		<b>Shoring</b> (01 22 23 00-0246) Note: Includes delivery to job site and pick-up when complete.		
01 22 23 00-0443		<b>Aluminum Hydraulic Shoring</b> (01 22 23 00-0442) Note: Includes delivery to job site and pick-up when complete. Excludes sheeting.		
01 22 23 00-0444	WK	2' Rails, 1 Cylinder, Aluminum Hydraulic Shoring ..... Note: Up to 88" spread width.	83.77	
01 22 23 00-0445	MO	2' Rails, 1 Cylinder, Aluminum Hydraulic Shoring ..... Note: Up to 88" spread width.	247.09	
01 22 23 00-0446	WK	Up To 12' Rails, 2 Cylinders, Aluminum Hydraulic Shoring ..... Note: Up to 88" spread width.	112.38	
01 22 23 00-0447	MO	Up To 12' Rails, 2 Cylinders, Aluminum Hydraulic Shoring ..... Note: Up to 88" spread width.	331.46	
01 22 23 00-0448	WK	Up To 16' Rails, 3 Cylinders, Aluminum Hydraulic Shoring ..... Note: Up to 88" spread width.	208.38	
01 22 23 00-0449	MO	Up To 16' Rails, 3 Cylinders, Aluminum Hydraulic Shoring ..... Note: Up to 88" spread width.	614.70	
01 22 23 00-0450	EA	Set-up And Removal Of 1 Cylinder Aluminum Hydraulic Shores .....	25.28	
01 22 23 00-0451	EA	Set-up And Removal Of 2 Cylinders Aluminum Hydraulic Shores .....	40.44	
01 22 23 00-0452	EA	Set-up And Removal Of 3 Cylinders Aluminum Hydraulic Shores .....	67.40	
01 22 23 00-0453		<b>Trench Boxes/Trench Shields</b> (01 22 23 00-0246) Note: Trenching tasks include moving the trench box in excavation as trenching proceeds. Includes delivery to job site and pick-up when complete. For stackable units, combine multiple units for depth required.		
01 22 23 00-0454	WK	4' x 6' Trench Box With Up To 48" Spreaders .....	136.40	
01 22 23 00-0455	MO	4' x 6' Trench Box With Up To 48" Spreaders .....	409.20	
01 22 23 00-0456	WK	6' x 6' Trench Box With Up To 48" Spreaders .....	154.00	
01 22 23 00-0457	MO	6' x 6' Trench Box With Up To 48" Spreaders .....	462.00	
01 22 23 00-0458	WK	8' x 6' Trench Box With Up To 48" Spreaders .....	162.80	
01 22 23 00-0459	MO	8' x 6' Trench Box With Up To 48" Spreaders .....	488.40	
01 22 23 00-0460	WK	4' x 8' Trench Box With Up To 48" Spreaders .....	149.60	
01 22 23 00-0461	MO	4' x 8' Trench Box With Up To 48" Spreaders .....	448.80	
01 22 23 00-0462	WK	6' x 8' Trench Box With Up To 48" Spreaders .....	176.00	
01 22 23 00-0463	MO	6' x 8' Trench Box With Up To 48" Spreaders .....	528.00	
01 22 23 00-0464	WK	8' x 8' Trench Box With Up To 48" Spreaders .....	198.00	
01 22 23 00-0465	MO	8' x 8' Trench Box With Up To 48" Spreaders .....	594.00	
01 22 23 00-0466	WK	4' x 10' Trench Box With Up To 48" Spreaders .....	167.20	
01 22 23 00-0467	MO	4' x 10' Trench Box With Up To 48" Spreaders .....	501.60	
01 22 23 00-0468	WK	6' x 10' Trench Box With Up To 48" Spreaders .....	198.00	
01 22 23 00-0469	MO	6' x 10' Trench Box With Up To 48" Spreaders .....	594.00	
01 22 23 00-0470	WK	8' x 10' Trench Box With Up To 48" Spreaders .....	242.00	
01 22 23 00-0471	MO	8' x 10' Trench Box With Up To 48" Spreaders .....	721.60	
01 22 23 00-0472	WK	4' x 12' Trench Box With Up To 48" Spreaders .....	198.00	
01 22 23 00-0473	MO	4' x 12' Trench Box With Up To 48" Spreaders .....	594.00	
01 22 23 00-0474	WK	6' x 12' Trench Box With Up To 48" Spreaders .....	242.00	
01 22 23 00-0475	MO	6' x 12' Trench Box With Up To 48" Spreaders .....	726.00	
01 22 23 00-0476	WK	8' x 12' Trench Box With Up To 48" Spreaders .....	308.00	
01 22 23 00-0477	MO	8' x 12' Trench Box With Up To 48" Spreaders .....	924.00	
01 22 23 00-0478	WK	4' x 14' Trench Box With Up To 48" Spreaders .....	220.00	
01 22 23 00-0479	MO	4' x 14' Trench Box With Up To 48" Spreaders .....	660.00	
01 22 23 00-0480	WK	6' x 14' Trench Box With Up To 48" Spreaders .....	286.00	
01 22 23 00-0481	MO	6' x 14' Trench Box With Up To 48" Spreaders .....	858.00	
01 22 23 00-0482	WK	8' x 14' Trench Box With Up To 48" Spreaders .....	352.00	
01 22 23 00-0483	MO	8' x 14' Trench Box With Up To 48" Spreaders .....	1,056.00	
01 22 23 00-0484	WK	4' x 16' Trench Box With Up To 48" Spreaders .....	242.00	
01 22 23 00-0485	MO	4' x 16' Trench Box With Up To 48" Spreaders .....	726.00	
01 22 23 00-0486	WK	6' x 16' Trench Box With Up To 48" Spreaders .....	330.00	
01 22 23 00-0487	MO	6' x 16' Trench Box With Up To 48" Spreaders .....	990.00	
01 22 23 00-0488	WK	8' x 16' Trench Box With Up To 48" Spreaders .....	396.00	
01 22 23 00-0489	MO	8' x 16' Trench Box With Up To 48" Spreaders .....	1,188.00	
01 22 23 00-0490	WK	4' x 20' Trench Box With Up To 48" Spreaders .....	286.00	
01 22 23 00-0491	MO	4' x 20' Trench Box With Up To 48" Spreaders .....	858.00	
01 22 23 00-0492	WK	6' x 20' Trench Box With Up To 48" Spreaders .....	396.00	
01 22 23 00-0493	MO	6' x 20' Trench Box With Up To 48" Spreaders .....	1,188.00	
01 22 23 00-0494	WK	8' x 20' Trench Box With Up To 48" Spreaders .....	462.00	
01 22 23 00-0495	MO	8' x 20' Trench Box With Up To 48" Spreaders .....	1,386.00	
01 22 23 00-0496	WK	4' x 24' Trench Box With Up To 48" Spreaders .....	396.00	
01 22 23 00-0497	MO	4' x 24' Trench Box With Up To 48" Spreaders .....	1,188.00	





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01 22 23 00-0498 WK 6' x 24' Trench Box With Up To 48" Spreaders.....	484.00	
01 22 23 00-0499 MO 6' x 24' Trench Box With Up To 48" Spreaders.....	1,452.00	
01 22 23 00-0500 WK 8' x 24' Trench Box With Up To 48" Spreaders.....	528.00	
01 22 23 00-0501 MO 8' x 24' Trench Box With Up To 48" Spreaders.....	1,584.00	
01 22 23 00-0502 WK For Spreaders >48" To 84", Add.....	13.20	
01 22 23 00-0503 MO For Spreaders >48" To 84", Add.....	39.60	
01 22 23 00-0504 WK For Spreaders >84" To 120", Add.....	79.20	
01 22 23 00-0505 MO For Spreaders >84" To 120", Add.....	237.60	
01 22 23 00-0506 WK For Spreaders >120", Add.....	167.20	
01 22 23 00-0507 MO For Spreaders >120", Add.....	501.60	
01 22 23 00-0508 WK 8' x 4' Manhole Box.....	207.90	
01 22 23 00-0509 MO 8' x 4' Manhole Box.....	623.70	
01 22 23 00-0510 WK 8' x 8' Manhole Box.....	297.00	
01 22 23 00-0511 MO 8' x 8' Manhole Box.....	891.00	
<b>01 22 23 00-0512 Trenchers (01 22 23 00-0246)</b>		
Note: Includes full-time operator. Excludes delivery, set-up, and removal.		
01 22 23 00-0513 DAY 4' Maximum Trench Depth, Ride-On Trencher With Full-Time Operator.....	1,182.27	
For Equipment Without Operator, Deduct	-784.94	
01 22 23 00-0514 WK 4' Maximum Trench Depth, Ride-On Trencher With Full-Time Operator.....	5,278.10	
For Equipment Without Operator, Deduct	-3,924.70	
01 22 23 00-0515 MO 4' Maximum Trench Depth, Ride-On Trencher With Full-Time Operator.....	20,732.00	
For Equipment Without Operator, Deduct	-17,007.05	
01 22 23 00-0516 DAY 5' Maximum Trench Depth, Ride-On Trencher With Full-Time Operator.....	1,852.76	
For Equipment Without Operator, Deduct	-784.94	
01 22 23 00-0517 WK 5' Maximum Trench Depth, Ride-On Trencher With Full-Time Operator.....	7,537.90	
For Equipment Without Operator, Deduct	-3,924.70	
01 22 23 00-0518 MO 5' Maximum Trench Depth, Ride-On Trencher With Full-Time Operator.....	26,940.25	
For Equipment Without Operator, Deduct	-17,007.05	
<b>01 22 23 00-0519 Portable Sediment Tank (01 22 23 00-0246)</b>		
Note: Includes delivery to job site and pick-up when complete.		
01 22 23 00-0520 WK Portable Sediment Tank.....	190.65	
01 22 23 00-0521 MO Portable Sediment Tank.....	559.24	
<b>01 22 23 00-0522 Heavy Equipment (Ground Protection) Mats (01 22 23 00-0246)</b>		
Note: Rental price per mat. Excludes placement, moving, mobilization and demobilization. See CSI section 01 22 23 00-0246 for equipment for offloading/reloading from delivery vehicle, placing, and moving mats, 01 71 13 00-0001 for equipment delivery, pickup, mobilization and demobilization.		
01 22 23 00-0523 DAY 14' Width x 8' Length, 6" Thick, 3-Ply Laminated Heavy Equipment Mat.....	56.32	
01 22 23 00-0524 WK 14' Width x 8' Length, 6" Thick, 3-Ply Laminated Heavy Equipment Mat.....	134.10	
01 22 23 00-0525 MO 14' Width x 8' Length, 6" Thick, 3-Ply Laminated Heavy Equipment Mat.....	281.60	
01 22 23 00-0526 DAY 16' Width x 8' Length, 6" Thick, 3-Ply Laminated Heavy Equipment Mat.....	59.14	
01 22 23 00-0527 WK 16' Width x 8' Length, 6" Thick, 3-Ply Laminated Heavy Equipment Mat.....	140.80	
01 22 23 00-0528 MO 16' Width x 8' Length, 6" Thick, 3-Ply Laminated Heavy Equipment Mat.....	295.68	
01 22 23 00-0529 Day 16' Width x 4' Length, 8" Thick Hardwood Timbers, Dragline/Excavator Mat.....	47.87	
01 22 23 00-0530 WK 16' Width x 4' Length, 8" Thick Hardwood Timbers, Dragline/Excavator Mat.....	112.64	
01 22 23 00-0531 MO 16' Width x 4' Length, 8" Thick Hardwood Timbers, Dragline/Excavator Mat.....	239.36	
01 22 23 00-0532 Day 18' Width x 4' Length, 8" Thick Hardwood Timbers, Dragline/Excavator Mat.....	53.50	
01 22 23 00-0533 WK 18' Width x 4' Length, 8" Thick Hardwood Timbers, Dragline/Excavator Mat.....	126.72	
01 22 23 00-0534 MO 18' Width x 4' Length, 8" Thick Hardwood Timbers, Dragline/Excavator Mat.....	267.52	
01 22 23 00-0535 Day 20' Width x 4' Length, 8" Thick Hardwood Timbers, Dragline/Excavator Mat.....	59.14	
01 22 23 00-0536 WK 20' Width x 4' Length, 8" Thick Hardwood Timbers, Dragline/Excavator Mat.....	140.80	
01 22 23 00-0537 MO 20' Width x 4' Length, 8" Thick Hardwood Timbers, Dragline/Excavator Mat.....	295.68	
01 22 23 00-0538 Day 24' Width x 4' Length, 8" Thick Hardwood Timbers, Dragline/Excavator Mat.....	64.77	
01 22 23 00-0539 WK 24' Width x 4' Length, 8" Thick Hardwood Timbers, Dragline/Excavator Mat.....	154.21	
01 22 23 00-0540 MO 24' Width x 4' Length, 8" Thick Hardwood Timbers, Dragline/Excavator Mat.....	323.84	
01 22 23 00-0541 Day 12' Width x 4' Length, 12" Thick Hardwood Timbers, Crane Mat.....	50.69	
01 22 23 00-0542 WK 12' Width x 4' Length, 12" Thick Hardwood Timbers, Crane Mat.....	140.80	
01 22 23 00-0543 MO 12' Width x 4' Length, 12" Thick Hardwood Timbers, Crane Mat.....	253.44	
01 22 23 00-0544 Day 16' Width x 4' Length, 12" Thick Hardwood Timbers, Crane Mat.....	59.14	
01 22 23 00-0545 WK 16' Width x 4' Length, 12" Thick Hardwood Timbers, Crane Mat.....	140.80	
01 22 23 00-0546 MO 16' Width x 4' Length, 12" Thick Hardwood Timbers, Crane Mat.....	295.68	
01 22 23 00-0547 Day 20' Width x 4' Length, 12" Thick Hardwood Timbers, Crane Mat.....	70.40	
01 22 23 00-0548 WK 20' Width x 4' Length, 12" Thick Hardwood Timbers, Crane Mat.....	154.88	
01 22 23 00-0549 MO 20' Width x 4' Length, 12" Thick Hardwood Timbers, Crane Mat.....	352.00	
01 22 23 00-0550 Day 24' Width x 4' Length, 12" Thick Hardwood Timbers, Crane Mat.....	76.03	
01 22 23 00-0551 WK 24' Width x 4' Length, 12" Thick Hardwood Timbers, Crane Mat.....	181.03	
01 22 23 00-0552 MO 24' Width x 4' Length, 12" Thick Hardwood Timbers, Crane Mat.....	380.16	
01 22 23 00-0553 Day 28' Width x 4' Length, 12" Thick Hardwood Timbers, Crane Mat.....	81.66	
01 22 23 00-0554 WK 28' Width x 4' Length, 12" Thick Hardwood Timbers, Crane Mat.....	194.44	
01 22 23 00-0555 MO 28' Width x 4' Length, 12" Thick Hardwood Timbers, Crane Mat.....	408.32	
01 22 23 00-0556 Day 30' Width x 4' Length, 12" Thick Hardwood Timbers, Crane Mat.....	84.48	
01 22 23 00-0557 WK 30' Width x 4' Length, 12" Thick Hardwood Timbers, Crane Mat.....	201.14	
01 22 23 00-0558 MO 30' Width x 4' Length, 12" Thick Hardwood Timbers, Crane Mat.....	422.40	
01 22 23 00-0559 Day 14' Width x 8' Length, 2-3/4" Thick, Laminated Heavy Equipment Mat (Emtek™).....	27.09	
01 22 23 00-0560 WK 14' Width x 8' Length, 2-3/4" Thick, Laminated Heavy Equipment Mat (Emtek™).....	67.72	
01 22 23 00-0561 MO 14' Width x 8' Length, 2-3/4" Thick, Laminated Heavy Equipment Mat (Emtek™).....	203.17	
01 22 23 00-0562 Day 14' Width x 8' Length, 3-1/2" Thick, Laminated Heavy Equipment Mat (Emtek™).....	32.38	

<b>01</b>	<b>General Requirements</b>
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01 22 23 00-0563 WK 14' Width x 8' Length, 3-1/2" Thick, Laminated Heavy Equipment Mat (Emtek™) .....	80.96	
01 22 23 00-0564 MO 14' Width x 8' Length, 3-1/2" Thick, Laminated Heavy Equipment Mat (Emtek™) .....	242.88	
01 22 23 00-0565 Day 16' Width x 8' Length, 3-1/2" Thick, Laminated Heavy Equipment Mat (Emtek™) .....	36.98	
01 22 23 00-0566 WK 16' Width x 8' Length, 3-1/2" Thick, Laminated Heavy Equipment Mat (Emtek™) .....	92.46	
01 22 23 00-0567 MO 16' Width x 8' Length, 3-1/2" Thick, Laminated Heavy Equipment Mat (Emtek™) .....	277.38	
01 22 23 00-0568 Day 14' Width x 8' Length, 4-1/2" Thick, Laminated Heavy Equipment Mat (Emtek™) .....	39.42	
01 22 23 00-0569 WK 14' Width x 8' Length, 4-1/2" Thick, Laminated Heavy Equipment Mat (Emtek™) .....	98.56	
01 22 23 00-0570 MO 14' Width x 8' Length, 4-1/2" Thick, Laminated Heavy Equipment Mat (Emtek™) .....	295.68	
01 22 23 00-0571 Day 16' Width x 8' Length, 4-1/2" Thick, Laminated Heavy Equipment Mat (Emtek™) .....	45.06	
01 22 23 00-0572 WK 16' Width x 8' Length, 4-1/2" Thick, Laminated Heavy Equipment Mat (Emtek™) .....	112.64	
01 22 23 00-0573 MO 16' Width x 8' Length, 4-1/2" Thick, Laminated Heavy Equipment Mat (Emtek™) .....	337.92	
01 22 23 00-0574 Day 16' Width x 8' Length, 5-1/2" Thick, Laminated Heavy Equipment Mat (Emtek™) .....	51.78	
01 22 23 00-0575 WK 16' Width x 8' Length, 5-1/2" Thick, Laminated Heavy Equipment Mat (Emtek™) .....	129.44	
01 22 23 00-0576 MO 16' Width x 8' Length, 5-1/2" Thick, Laminated Heavy Equipment Mat (Emtek™) .....	388.33	
01 22 23 00-0577 Day 24' Width x 4' Length, 6" Thick, Laminated Heavy Equipment Mat (Emtek™) .....	39.84	
01 22 23 00-0578 WK 24' Width x 4' Length, 6" Thick, Laminated Heavy Equipment Mat (Emtek™) .....	99.59	
01 22 23 00-0579 MO 24' Width x 4' Length, 6" Thick, Laminated Heavy Equipment Mat (Emtek™) .....	298.78	
01 22 23 00-0580 Day 30' Width x 4' Length, 6-1/2" Thick, Laminated Heavy Equipment Mat (Emtek™) .....	53.94	
01 22 23 00-0581 WK 30' Width x 4' Length, 6-1/2" Thick, Laminated Heavy Equipment Mat (Emtek™) .....	134.84	
01 22 23 00-0582 MO 30' Width x 4' Length, 6-1/2" Thick, Laminated Heavy Equipment Mat (Emtek™) .....	404.52	
01 22 23 00-0583 Day 24' Width x 4' Length, 7-1/2" Thick, Laminated Heavy Equipment Mat (Emtek™) .....	46.63	
01 22 23 00-0584 WK 24' Width x 4' Length, 7-1/2" Thick, Laminated Heavy Equipment Mat (Emtek™) .....	116.58	
01 22 23 00-0585 MO 24' Width x 4' Length, 7-1/2" Thick, Laminated Heavy Equipment Mat (Emtek™) .....	349.75	
01 22 23 00-0586 Day 40' Width x 4' Length, 7-1/2" Thick, Laminated Heavy Equipment Mat (Emtek™) .....	77.77	
01 22 23 00-0587 WK 40' Width x 4' Length, 7-1/2" Thick, Laminated Heavy Equipment Mat (Emtek™) .....	194.44	
01 22 23 00-0588 MO 40' Width x 4' Length, 7-1/2" Thick, Laminated Heavy Equipment Mat (Emtek™) .....	583.31	
01 22 23 00-0589 Day 40' Width x 4' Length, 8" Thick, Laminated Heavy Equipment Mat (Emtek™) .....	82.90	
01 22 23 00-0590 WK 40' Width x 4' Length, 8" Thick, Laminated Heavy Equipment Mat (Emtek™) .....	207.26	
01 22 23 00-0591 MO 40' Width x 4' Length, 8" Thick, Laminated Heavy Equipment Mat (Emtek™) .....	621.77	
 01 22 23 00-0592 <b>Electrical Equipment</b> (01 22 23)		
01 22 23 00-0593 <b>Tripod Mounted Floodlights</b> (01 22 23 00-0592)		
Note: Includes delivery to job site and pick-up when complete.		
01 22 23 00-0594 DAY 500 Watt, 115 Volt, 2 Lamp, Portable Light Stand With Tripod .....	61.87	
01 22 23 00-0595 WK 500 Watt, 115 Volt, 2 Lamp, Portable Light Stand With Tripod .....	146.37	
01 22 23 00-0596 MO 500 Watt, 115 Volt, 2 Lamp, Portable Light Stand With Tripod .....	309.34	
01 22 23 00-0597 DAY 1,000 Watt, 115 Volt, 2 Lamp, Portable Light Stand With Tripod .....	61.87	
01 22 23 00-0598 WK 1,000 Watt, 115 Volt, 2 Lamp, Portable Light Stand With Tripod .....	181.08	
01 22 23 00-0599 MO 1,000 Watt, 115 Volt, 2 Lamp, Portable Light Stand With Tripod .....	535.70	
01 22 23 00-0600 DAY 2,000 Watt, 115 Volt, 2 Lamp, Portable Light Stand With Tripod .....	69.41	
01 22 23 00-0601 WK 2,000 Watt, 115 Volt, 2 Lamp, Portable Light Stand With Tripod .....	188.62	
01 22 23 00-0602 MO 2,000 Watt, 115 Volt, 2 Lamp, Portable Light Stand With Tripod .....	460.24	
 01 22 23 00-0603 <b>Trailer Mounted Floodlights</b> (01 22 23 00-0592)		
Note: Includes delivery to job site and pick-up when complete. Excludes operator.		
01 22 23 00-0604 DAY 4 x 1,000 Watt Floodlights, 30' Telescoping Tower, Diesel Power Trailer Mounted Light Tower .....	173.54	
01 22 23 00-0605 WK 4 x 1,000 Watt Floodlights, 30' Telescoping Tower, Diesel Power Trailer Mounted Light Tower .....	384.80	
01 22 23 00-0606 MO 4 x 1,000 Watt Floodlights, 30' Telescoping Tower, Diesel Power Trailer Mounted Light Tower .....	829.95	
 01 22 23 00-0607 <b>Generator Sets</b> (01 22 23 00-0592)		
01 22 23 00-0608 <b>Portable, Gas Or Diesel Powered Generator Sets</b> (01 22 23 00-0607)		
Note: With 24 hour day-tank. Includes delivery to job site and pick-up when complete. Excludes cables, operator and fuel costs. See CSI section 01 22 23 00-0715 for reimbursable fuel fees.		
01 22 23 00-0609 DAY 3.6 KW, 8 HP Gas Powered Generator Set .....	52.21	
For LP Or NG Gas, Add .....	6.53	
For >160 To 320 Hours Usage Per Month, Add .....	26.11	
01 22 23 00-0610 WK 3.6 KW, 8 HP Gas Powered Generator Set .....	188.19	
For LP Or NG Gas, Add .....	23.52	
01 22 23 00-0611 MO 3.6 KW, 8 HP Gas Powered Generator Set .....	522.06	
For LP Or NG Gas, Add .....	65.26	
01 22 23 00-0612 DAY 5 KW, 11 HP Gas Powered Generator Set .....	74.06	
For LP Or NG Gas, Add .....	9.26	
01 22 23 00-0613 WK 5 KW, 11 HP Gas Powered Generator Set .....	236.75	
For LP Or NG Gas, Add .....	29.59	
01 22 23 00-0614 MO 5 KW, 11 HP Gas Powered Generator Set .....	540.27	
For LP Or NG Gas, Add .....	67.53	
01 22 23 00-0615 DAY 6.5 KW, 13 HP Gas Powered Generator Set .....	94.70	
For LP Or NG Gas, Add .....	11.84	
01 22 23 00-0616 WK 6.5 KW, 13 HP Gas Powered Generator Set .....	254.96	
For LP Or NG Gas, Add .....	31.87	
01 22 23 00-0617 MO 6.5 KW, 13 HP Gas Powered Generator Set .....	704.18	
For LP Or NG Gas, Add .....	88.02	
01 22 23 00-0618 DAY 10 KW, 18 HP Gas Powered Generator Set .....	105.63	
For LP Or NG Gas, Add .....	13.20	
01 22 23 00-0619 WK 10 KW, 18 HP Gas Powered Generator Set .....	285.31	
For LP Or NG Gas, Add .....	35.66	
01 22 23 00-0620 MO 10 KW, 18 HP Gas Powered Generator Set .....	819.52	
For LP Or NG Gas, Add .....	102.44	



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01 22 23 00-0621		<b>Towable, Diesel Powered Generator Sets</b> <small>(01 22 23 00-0607)</small> Note: Includes 24 hour day-tank on sizes up to 180KW, 40 hour day-tank for sizes greater than 180KW To 300 KW and 1000 gallon for sizes greater than 300KW. Multi-voltage transformer unless stated otherwise, trailer mounted including sound attenuation and control panel. Excludes cables, operator and fuel costs. See CSI section 01 22 23 00-0715 for reimbursable fuel fees.		
01 22 23 00-0622	DAY	20 KW, 60 Hertz Towable Diesel Powered Generator Set..... Note: Fuel consumption: 100% load - 1.6 gallons per hour, 75% load - 1.3 gallons per hour, 50% load - 0.9 gallons per hour.	217.32	
		For >8 To 16 Hours Usage Per Day, Add	108.66	
		For >16 To 24 Hours Usage Per Day, Add	217.32	
01 22 23 00-0623	WK	20 KW, 60 Hertz Towable Diesel Powered Generator Set..... Note: Fuel consumption: 100% load - 1.6 gallons per hour, 75% load - 1.3 gallons per hour, 50% load - 0.9 gallons per hour.	568.20	
		For >40 To 80 Hours Usage Per Week, Add	284.10	
		For >80 Hours Usage Per Week, Add	568.20	
01 22 23 00-0624	MO	20 KW, 60 Hertz Towable Diesel Powered Generator Set..... Note: Fuel consumption: 100% load - 1.6 gallons per hour, 75% load - 1.3 gallons per hour, 50% load - 0.9 gallons per hour.	1,547.98	
		For >160 To 320 Hours Usage Per Month, Add	773.99	
		For >320 Hours Usage Per Month, Add	1,547.98	
01 22 23 00-0625	DAY	30 KW, 60 Hertz Towable Diesel Powered Generator Set..... Note: Fuel consumption: 100% load - 2.9 gallons per hour, 75% load - 2.4 gallons per hour, 50% load - 1.8 gallons per hour.	335.48	
		For >8 To 16 Hours Usage Per Day, Add	167.74	
		For >16 To 24 Hours Usage Per Day, Add	335.48	
01 22 23 00-0626	WK	30 KW, 60 Hertz Towable Diesel Powered Generator Set..... Note: Fuel consumption: 100% load - 2.9 gallons per hour, 75% load - 2.4 gallons per hour, 50% load - 1.8 gallons per hour.	995.62	
		For >40 To 80 Hours Usage Per Week, Add	497.81	
		For >80 Hours Usage Per Week, Add	995.62	
01 22 23 00-0627	MO	30 KW, 60 Hertz Towable Diesel Powered Generator Set..... Note: Fuel consumption: 100% load - 2.9 gallons per hour, 75% load - 2.4 gallons per hour, 50% load - 1.8 gallons per hour.	2,056.18	
		For >160 To 320 Hours Usage Per Month, Add	1,028.09	
		For >320 Hours Usage Per Month, Add	2,056.18	
01 22 23 00-0628	DAY	40.0 KW, 60 Hertz Towable Diesel Powered Generator Set..... Note: Fuel consumption: 100% load - 4.0 gallons per hour, 75% load - 3.2 gallons per hour, 50% load - 2.3 gallons per hour.	367.95	
		For >8 To 16 Hours Usage Per Day, Add	183.98	
		For >16 To 24 Hours Usage Per Day, Add	367.95	
01 22 23 00-0629	WK	40.0 KW, 60 Hertz Towable Diesel Powered Generator Set..... Note: Fuel consumption: 100% load - 4.0 gallons per hour, 75% load - 3.2 gallons per hour, 50% load - 2.3 gallons per hour.	1,028.09	
		For >40 To 80 Hours Usage Per Week, Add	514.05	
		For >80 Hours Usage Per Week, Add	1,028.09	
01 22 23 00-0630	MO	40.0 KW, 60 Hertz Towable Diesel Powered Generator Set..... Note: Fuel consumption: 100% load - 4.0 gallons per hour, 75% load - 3.2 gallons per hour, 50% load - 2.3 gallons per hour.	2,272.62	
		For >160 To 320 Hours Usage Per Month, Add	1,136.31	
		For >320 Hours Usage Per Month, Add	2,272.62	
01 22 23 00-0631	DAY	55.0 KW, 60 Hertz Towable Diesel Powered Generator Set..... Note: Fuel consumption: 100% load - 4.8 gallons per hour, 75% load - 3.8 gallons per hour, 50% load - 2.9 gallons per hour.	395.00	
		For >8 To 16 Hours Usage Per Day, Add	197.50	
		For >16 To 24 Hours Usage Per Day, Add	395.00	
01 22 23 00-0632	WK	55.0 KW, 60 Hertz Towable Diesel Powered Generator Set..... Note: Fuel consumption: 100% load - 4.8 gallons per hour, 75% load - 3.8 gallons per hour, 50% load - 2.9 gallons per hour.	1,082.20	
		For >40 To 80 Hours Usage Per Week, Add	541.10	
		For >80 Hours Usage Per Week, Add	1,082.20	
01 22 23 00-0633	MO	55.0 KW, 60 Hertz Towable Diesel Powered Generator Set..... Note: Fuel consumption: 100% load - 4.8 gallons per hour, 75% load - 3.8 gallons per hour, 50% load - 2.9 gallons per hour.	2,597.28	
		For >160 To 320 Hours Usage Per Month, Add	1,298.64	
		For >320 Hours Usage Per Month, Add	2,597.28	
01 22 23 00-0634	DAY	70.0 KW, 60 Hertz Towable Diesel Powered Generator Set..... Note: Fuel consumption: 100% load - 5.7 gallons per hour, 75% load - 4.3 gallons per hour, 50% load - 3.2 gallons per hour.	432.88	
		For >8 To 16 Hours Usage Per Day, Add	216.44	
		For >16 To 24 Hours Usage Per Day, Add	432.88	
01 22 23 00-0635	WK	70.0 KW, 60 Hertz Towable Diesel Powered Generator Set..... Note: Fuel consumption: 100% load - 5.7 gallons per hour, 75% load - 4.3 gallons per hour, 50% load - 3.2 gallons per hour.	1,228.30	
		For >40 To 80 Hours Usage Per Week, Add	614.15	
		For >80 Hours Usage Per Week, Add	1,228.30	
01 22 23 00-0636	MO	70.0 KW, 60 Hertz Towable Diesel Powered Generator Set..... Note: Fuel consumption: 100% load - 5.7 gallons per hour, 75% load - 4.3 gallons per hour, 50% load - 3.2 gallons per hour.	2,921.94	
		For >160 To 320 Hours Usage Per Month, Add	1,460.97	
		For >320 Hours Usage Per Month, Add	2,921.94	

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01 22 23 00-0637	DAY	80.0 KW, 60 Hertz Towable Diesel Powered Generator Set.....486.99 Note: Fuel consumption: 100% load - 6.5 gallons per hour, 75% load - 4.9 gallons per hour, 50% load - 3.6 gallons per hour. For >8 To 16 Hours Usage Per Day, Add 243.50 For >16 To 24 Hours Usage Per Day, Add 486.99		
01 22 23 00-0638	WK	80.0 KW, 60 Hertz Towable Diesel Powered Generator Set.....1,298.64 Note: Fuel consumption: 100% load - 6.5 gallons per hour, 75% load - 4.9 gallons per hour, 50% load - 3.6 gallons per hour. For >40 To 80 Hours Usage Per Week, Add 649.32 For >80 Hours Usage Per Week, Add 1,298.64		
01 22 23 00-0639	MO	80.0 KW, 60 Hertz Towable Diesel Powered Generator Set.....3,246.60 Note: Fuel consumption: 100% load - 6.5 gallons per hour, 75% load - 4.9 gallons per hour, 50% load - 3.6 gallons per hour. For >160 To 320 Hours Usage Per Month, Add 1,623.30 For >320 Hours Usage Per Month, Add 3,246.60		
01 22 23 00-0640	DAY	100.0 KW, 60 Hertz Towable Diesel Powered Generator Set.....503.22 Note: Fuel consumption: 100% load - 7.4 gallons per hour, 75% load - 5.8 gallons per hour, 50% load - 4.1 gallons per hour. For >8 To 16 Hours Usage Per Day, Add 251.61 For >16 To 24 Hours Usage Per Day, Add 503.22		
01 22 23 00-0641	WK	100.0 KW, 60 Hertz Towable Diesel Powered Generator Set.....1,352.75 Note: Fuel consumption: 100% load - 7.4 gallons per hour, 75% load - 5.8 gallons per hour, 50% load - 4.1 gallons per hour. For >40 To 80 Hours Usage Per Week, Add 676.38 For >80 Hours Usage Per Week, Add 1,352.75		
01 22 23 00-0642	MO	100.0 KW, 60 Hertz Towable Diesel Powered Generator Set.....3,679.48 Note: Fuel consumption: 100% load - 7.4 gallons per hour, 75% load - 5.8 gallons per hour, 50% load - 4.1 gallons per hour. For >160 To 320 Hours Usage Per Month, Add 1,839.74 For >320 Hours Usage Per Month, Add 3,679.48		
01 22 23 00-0643	DAY	120.0 KW, 60 Hertz Towable Diesel Powered Generator Set.....568.16 Note: Fuel consumption: 100% load - 8.7 gallons per hour, 75% load - 6.8 gallons per hour, 50% load - 4.8 gallons per hour. For >8 To 16 Hours Usage Per Day, Add 284.08 For >16 To 24 Hours Usage Per Day, Add 568.16		
01 22 23 00-0644	WK	120.0 KW, 60 Hertz Towable Diesel Powered Generator Set.....1,569.19 Note: Fuel consumption: 100% load - 8.7 gallons per hour, 75% load - 6.8 gallons per hour, 50% load - 4.8 gallons per hour. For >40 To 80 Hours Usage Per Week, Add 784.60 For >80 Hours Usage Per Week, Add 1,569.19		
01 22 23 00-0645	MO	120.0 KW, 60 Hertz Towable Diesel Powered Generator Set.....4,220.58 Note: Fuel consumption: 100% load - 8.7 gallons per hour, 75% load - 6.8 gallons per hour, 50% load - 4.8 gallons per hour. For >160 To 320 Hours Usage Per Month, Add 2,110.29 For >320 Hours Usage Per Month, Add 4,220.58		
01 22 23 00-0646	DAY	140.0 KW, 60 Hertz Towable Diesel Powered Generator Set.....595.21 Note: Fuel consumption: 100% load - 10.2 gallons per hour, 75% load - 7.9 gallons per hour, 50% load - 5.6 gallons per hour. For >8 To 16 Hours Usage Per Day, Add 297.61 For >16 To 24 Hours Usage Per Day, Add 595.21		
01 22 23 00-0647	WK	140.0 KW, 60 Hertz Towable Diesel Powered Generator Set.....1,650.36 Note: Fuel consumption: 100% load - 10.2 gallons per hour, 75% load - 7.9 gallons per hour, 50% load - 5.6 gallons per hour. For >40 To 80 Hours Usage Per Week, Add 825.18 For >80 Hours Usage Per Week, Add 1,650.36		
01 22 23 00-0648	MO	140.0 KW, 60 Hertz Towable Diesel Powered Generator Set.....4,653.46 Note: Fuel consumption: 100% load - 10.2 gallons per hour, 75% load - 7.9 gallons per hour, 50% load - 5.6 gallons per hour. For >160 To 320 Hours Usage Per Month, Add 2,326.73 For >320 Hours Usage Per Month, Add 4,653.46		
01 22 23 00-0649	DAY	150.0 KW, 60 Hertz Towable Diesel Powered Generator Set.....622.26 Note: Fuel consumption: 100% load - 10.9 gallons per hour, 75% load - 8.4 gallons per hour, 50% load - 5.9 gallons per hour. For >8 To 16 Hours Usage Per Day, Add 311.13 For >16 To 24 Hours Usage Per Day, Add 622.26		
01 22 23 00-0650	WK	150.0 KW, 60 Hertz Towable Diesel Powered Generator Set.....1,785.63 Note: Fuel consumption: 100% load - 10.9 gallons per hour, 75% load - 8.4 gallons per hour, 50% load - 5.9 gallons per hour. For >40 To 80 Hours Usage Per Week, Add 892.82 For >80 Hours Usage Per Week, Add 1,785.63		
01 22 23 00-0651	MO	150.0 KW, 60 Hertz Towable Diesel Powered Generator Set.....4,869.90 Note: Fuel consumption: 100% load - 10.9 gallons per hour, 75% load - 8.4 gallons per hour, 50% load - 5.9 gallons per hour. For >160 To 320 Hours Usage Per Month, Add 2,434.95 For >320 Hours Usage Per Month, Add 4,869.90		
01 22 23 00-0652	DAY	160.0 KW, 60 Hertz Towable Diesel Powered Generator Set.....649.32 Note: Fuel consumption: 100% load - 11.6 gallons per hour, 75% load - 8.9 gallons per hour, 50% load - 6.2 gallons per hour. For >8 To 16 Hours Usage Per Day, Add 324.66 For >16 To 24 Hours Usage Per Day, Add 649.32		
01 22 23 00-0653	WK	160.0 KW, 60 Hertz Towable Diesel Powered Generator Set.....1,893.85 Note: Fuel consumption: 100% load - 11.6 gallons per hour, 75% load - 8.9 gallons per hour, 50% load - 6.2 gallons per hour. For >40 To 80 Hours Usage Per Week, Add 946.93 For >80 Hours Usage Per Week, Add 1,893.85		



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01 22 23 00-0654	MO		160.0 KW, 60 Hertz Towable Diesel Powered Generator Set.....5,086.34 Note: Fuel consumption: 100% load - 11.6 gallons per hour, 75% load - 8.9 gallons per hour, 50% load - 6.2 gallons per hour. For >160 To 320 Hours Usage Per Month, Add 2,543.17 For >320 Hours Usage Per Month, Add 5,086.34		
01 22 23 00-0655	DAY		175.0 KW, 60 Hertz Towable Diesel Powered Generator Set.....649.32 Note: Fuel consumption: 100% load - 12.7 gallons per hour, 75% load - 9.7 gallons per hour, 50% load - 6.8 gallons per hour. For >8 To 16 Hours Usage Per Day, Add 324.66 For >16 To 24 Hours Usage Per Day, Add 649.32		
01 22 23 00-0656	WK		175.0 KW, 60 Hertz Towable Diesel Powered Generator Set.....1,893.85 Note: Fuel consumption: 100% load - 12.7 gallons per hour, 75% load - 9.7 gallons per hour, 50% load - 6.8 gallons per hour. For >40 To 80 Hours Usage Per Week, Add 946.93 For >80 Hours Usage Per Week, Add 1,893.85		
01 22 23 00-0657	MO		175.0 KW, 60 Hertz Towable Diesel Powered Generator Set.....5,086.34 Note: Fuel consumption: 100% load - 12.7 gallons per hour, 75% load - 9.7 gallons per hour, 50% load - 6.8 gallons per hour. For >160 To 320 Hours Usage Per Month, Add 2,543.17 For >320 Hours Usage Per Month, Add 5,086.34		
01 22 23 00-0658	DAY		200.0 KW, 60 Hertz Towable Diesel Powered Generator Set.....892.82 Note: Fuel consumption: 100% load - 14.4 gallons per hour, 75% load - 11.0 gallons per hour, 50% load - 7.7 gallons per hour. For >8 To 16 Hours Usage Per Day, Add 446.41 For >16 To 24 Hours Usage Per Day, Add 892.82		
01 22 23 00-0659	WK		200.0 KW, 60 Hertz Towable Diesel Powered Generator Set.....2,218.51 Note: Fuel consumption: 100% load - 14.4 gallons per hour, 75% load - 11.0 gallons per hour, 50% load - 7.7 gallons per hour. For >40 To 80 Hours Usage Per Week, Add 1,109.26 For >80 Hours Usage Per Week, Add 2,218.51		
01 22 23 00-0660	MO		200.0 KW, 60 Hertz Towable Diesel Powered Generator Set.....6,493.20 Note: Fuel consumption: 100% load - 14.4 gallons per hour, 75% load - 11.0 gallons per hour, 50% load - 7.7 gallons per hour. For >160 To 320 Hours Usage Per Month, Add 3,246.60 For >320 Hours Usage Per Month, Add 6,493.20		
01 22 23 00-0661	DAY		250.0 KW, 60 Hertz Towable Diesel Powered Generator Set.....946.92 Note: Fuel consumption: 100% load - 19.8 gallons per hour, 75% load - 12.3 gallons per hour, 50% load - 8.6 gallons per hour. For >8 To 16 Hours Usage Per Day, Add 473.46 For >16 To 24 Hours Usage Per Day, Add 946.92		
01 22 23 00-0662	WK		250.0 KW, 60 Hertz Towable Diesel Powered Generator Set.....2,272.62 Note: Fuel consumption: 100% load - 19.8 gallons per hour, 75% load - 12.3 gallons per hour, 50% load - 8.6 gallons per hour. For >40 To 80 Hours Usage Per Week, Add 1,136.31 For >80 Hours Usage Per Week, Add 2,272.62		
01 22 23 00-0663	MO		250.0 KW, 60 Hertz Towable Diesel Powered Generator Set.....6,709.64 Note: Fuel consumption: 100% load - 19.8 gallons per hour, 75% load - 12.3 gallons per hour, 50% load - 8.6 gallons per hour. For >160 To 320 Hours Usage Per Month, Add 3,354.82 For >320 Hours Usage Per Month, Add 6,709.64		
01 22 23 00-0664	DAY		275.0 KW, 60 Hertz Towable Diesel Powered Generator Set.....1,001.04 Note: Fuel consumption: 100% load - 18.0 gallons per hour, 75% load - 13.6 gallons per hour, 50% load - 9.5 gallons per hour. For >8 To 16 Hours Usage Per Day, Add 500.52 For >16 To 24 Hours Usage Per Day, Add 1,001.04		
01 22 23 00-0665	WK		275.0 KW, 60 Hertz Towable Diesel Powered Generator Set.....2,326.73 Note: Fuel consumption: 100% load - 18.0 gallons per hour, 75% load - 13.6 gallons per hour, 50% load - 9.5 gallons per hour. For >40 To 80 Hours Usage Per Week, Add 1,163.37 For >80 Hours Usage Per Week, Add 2,326.73		
01 22 23 00-0666	MO		275.0 KW, 60 Hertz Towable Diesel Powered Generator Set.....6,926.08 Note: Fuel consumption: 100% load - 18.0 gallons per hour, 75% load - 13.6 gallons per hour, 50% load - 9.5 gallons per hour. For >160 To 320 Hours Usage Per Month, Add 3,463.04 For >320 Hours Usage Per Month, Add 6,926.08		
01 22 23 00-0667	DAY		300.0 KW, 60 Hertz Towable Diesel Powered Generator Set.....1,033.50 Note: Fuel consumption: 100% load - 21.5 gallons per hour, 75% load - 16.1 gallons per hour, 50% load - 11.3 gallons per hour. For >8 To 16 Hours Usage Per Day, Add 516.75 For >16 To 24 Hours Usage Per Day, Add 1,033.50		
01 22 23 00-0668	WK		300.0 KW, 60 Hertz Towable Diesel Powered Generator Set.....2,489.06 Note: Fuel consumption: 100% load - 21.5 gallons per hour, 75% load - 16.1 gallons per hour, 50% load - 11.3 gallons per hour. For >40 To 80 Hours Usage Per Week, Add 1,244.53 For >80 Hours Usage Per Week, Add 2,489.06		
01 22 23 00-0669	MO		300.0 KW, 60 Hertz Towable Diesel Powered Generator Set.....7,358.96 Note: Fuel consumption: 100% load - 21.5 gallons per hour, 75% load - 16.1 gallons per hour, 50% load - 11.3 gallons per hour. For >160 To 320 Hours Usage Per Month, Add 3,679.48 For >320 Hours Usage Per Month, Add 7,358.96		
01 22 23 00-0670	DAY		350.0 KW, 60 Hertz Towable Diesel Powered Generator Set.....1,082.20 Note: Fuel consumption: 100% load - 25.1 gallons per hour, 75% load - 18.7 gallons per hour, 50% load - 13.1 gallons per hour. For >8 To 16 Hours Usage Per Day, Add 541.10 For >16 To 24 Hours Usage Per Day, Add 1,082.20		

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01 22 23 00-0671	WK	350.0 KW, 60 Hertz Towable Diesel Powered Generator Set..... Note: Fuel consumption: 100% load - 25.1 gallons per hour, 75% load - 18.7 gallons per hour, 50% load - 13.1 gallons per hour. For >40 To 80 Hours Usage Per Week, Add For >80 Hours Usage Per Week, Add	2,813.72  1,406.86 2,813.72	
01 22 23 00-0672	MO	350.0 KW, 60 Hertz Towable Diesel Powered Generator Set..... Note: Fuel consumption: 100% load - 25.1 gallons per hour, 75% load - 18.7 gallons per hour, 50% load - 13.1 gallons per hour. For >160 To 320 Hours Usage Per Month, Add For >320 Hours Usage Per Month, Add	8,116.50  4,058.25 8,116.50	
01 22 23 00-0673	DAY	400.0 KW, 60 Hertz Towable Diesel Powered Generator Set..... Note: Fuel consumption: 100% load - 28.6 gallons per hour, 75% load - 21.3 gallons per hour, 50% load - 14.9 gallons per hour. For >8 To 16 Hours Usage Per Day, Add For >16 To 24 Hours Usage Per Day, Add	1,523.92  761.96 1,523.92	
01 22 23 00-0674	WK	400.0 KW, 60 Hertz Towable Diesel Powered Generator Set..... Note: Fuel consumption: 100% load - 28.6 gallons per hour, 75% load - 21.3 gallons per hour, 50% load - 14.9 gallons per hour. For >40 To 80 Hours Usage Per Week, Add For >80 Hours Usage Per Week, Add	3,940.06  1,970.03 3,940.06	
01 22 23 00-0675	MO	400.0 KW, 60 Hertz Towable Diesel Powered Generator Set..... Note: Fuel consumption: 100% load - 28.6 gallons per hour, 75% load - 21.3 gallons per hour, 50% load - 14.9 gallons per hour. For >160 To 320 Hours Usage Per Month, Add For >320 Hours Usage Per Month, Add	10,420.00  5,210.00 10,420.00	
01 22 23 00-0676	DAY	500.0 KW, 60 Hertz Container Diesel Powered Generator Set..... Note: Fuel consumption: 100% load - 35.7 gallons per hour, 75% load - 26.4 gallons per hour, 50% load - 18.5 gallons per hour. For >8 To 16 Hours Usage Per Day, Add For >16 To 24 Hours Usage Per Day, Add	1,953.75  976.88 1,953.75	
01 22 23 00-0677	WK	500.0 KW, 60 Hertz Container Diesel Powered Generator Set..... Note: Fuel consumption: 100% load - 35.7 gallons per hour, 75% load - 26.4 gallons per hour, 50% load - 18.5 gallons per hour. For >40 To 80 Hours Usage Per Week, Add For >80 Hours Usage Per Week, Add	5,079.75  2,539.88 5,079.75	
01 22 23 00-0678	MO	500.0 KW, 60 Hertz Container Diesel Powered Generator Set..... Note: Fuel consumption: 100% load - 35.7 gallons per hour, 75% load - 26.4 gallons per hour, 50% load - 18.5 gallons per hour. For >160 To 320 Hours Usage Per Month, Add For >320 Hours Usage Per Month, Add	11,722.50  5,861.25 11,722.50	
01 22 23 00-0679	DAY	640.0 KW, 60 Hertz Container Diesel Powered Generator Set..... Note: Fuel consumption: 100% load - 45.6 gallons per hour, 75% load - 33.5 gallons per hour, 50% load - 20.8 gallons per hour. For >8 To 16 Hours Usage Per Day, Add For >16 To 24 Hours Usage Per Day, Add	2,416.14  1,208.07 2,416.14	
01 22 23 00-0680	WK	640.0 KW, 60 Hertz Container Diesel Powered Generator Set..... Note: Fuel consumption: 100% load - 45.6 gallons per hour, 75% load - 33.5 gallons per hour, 50% load - 20.8 gallons per hour. For >40 To 80 Hours Usage Per Week, Add For >80 Hours Usage Per Week, Add	6,382.25  3,191.13 6,382.25	
01 22 23 00-0681	MO	640.0 KW, 60 Hertz Container Diesel Powered Generator Set..... Note: Fuel consumption: 100% load - 45.6 gallons per hour, 75% load - 33.5 gallons per hour, 50% load - 20.8 gallons per hour. For >160 To 320 Hours Usage Per Month, Add For >320 Hours Usage Per Month, Add	15,630.00  7,815.00 15,630.00	
01 22 23 00-0682	DAY	750.0 KW, 60 Hertz Container Diesel Powered Generator Set..... Note: Fuel consumption: 100% load - 53.4 gallons per hour, 75% load - 39.3 gallons per hour, 50% load - 24.4 gallons per hour. For >8 To 16 Hours Usage Per Day, Add For >16 To 24 Hours Usage Per Day, Add	2,611.51  1,305.76 2,611.51	
01 22 23 00-0683	WK	750.0 KW, 60 Hertz Container Diesel Powered Generator Set..... Note: Fuel consumption: 100% load - 53.4 gallons per hour, 75% load - 39.3 gallons per hour, 50% load - 24.4 gallons per hour. For >40 To 80 Hours Usage Per Week, Add For >80 Hours Usage Per Week, Add	6,017.55  3,008.78 6,017.55	
01 22 23 00-0684	MO	750.0 KW, 60 Hertz Container Diesel Powered Generator Set..... Note: Fuel consumption: 100% load - 53.4 gallons per hour, 75% load - 39.3 gallons per hour, 50% load - 24.4 gallons per hour. For >160 To 320 Hours Usage Per Month, Add For >320 Hours Usage Per Month, Add	18,052.65  9,026.33 18,052.65	
01 22 23 00-0685	EA	Up To 300 KW Generator Set Delivery, Set-Up, Testing And Pick-up.....	857.54	
01 22 23 00-0686	EA	350 To 750 KW Generator Set Delivery, Set-Up, Testing And Pick-up.....	1,390.42	
01 22 23 00-0687		<b>Cabling For Generator Sets</b> <small>(01 22 23 00-0607)</small> Note: Includes delivery to job site and pick-up when complete.		
01 22 23 00-0688	DAY	#1 Banded Cable, 50' With Camlock Ends For Generator Set.....	23.81	
01 22 23 00-0689	WK	#1 Banded Cable, 50' With Camlock Ends For Generator Set.....	41.66	
01 22 23 00-0690	MO	#1 Banded Cable, 50' With Camlock Ends For Generator Set.....	124.99	
01 22 23 00-0691	DAY	50', 4/0 Cable With Camlock Ends For Generator Set.....	11.90	
01 22 23 00-0692	WK	50', 4/0 Cable With Camlock Ends For Generator Set.....	34.63	
01 22 23 00-0693	MO	50', 4/0 Cable With Camlock Ends For Generator Set.....	96.32	



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01 22 23 00-0694			<b>Resistive Loadbanks For Generator Sets</b> (01 22 23 00-0607) Note: Includes delivery to job site and pick-up when complete. See CSI section 01 22 23 00-0715 for reimbursable fuel fees.		
01 22 23 00-0695	DAY		100 KW A/C Resistive Loadbank.....	342.27	
01 22 23 00-0696	WK		100 KW A/C Resistive Loadbank.....	650.98	
01 22 23 00-0697	MO		100 KW A/C Resistive Loadbank.....	1,778.44	
01 22 23 00-0698	DAY		650 KW A/C Resistive Loadbank.....	657.32	
01 22 23 00-0699	WK		650 KW A/C Resistive Loadbank.....	1,757.83	
01 22 23 00-0700	MO		650 KW A/C Resistive Loadbank.....	4,481.73	
01 22 23 00-0701			<b>Sub-Distribution Panels (Spider Box) For Generator Sets</b> (01 22 23 00-0607) Note: Includes delivery to job site and pick-up when complete.		
01 22 23 00-0702	DAY		50 Amperes, 240 Volt, Single Phase, Sub-Distribution Panel (Spider Box).....	58.44	
01 22 23 00-0703	WK		50 Amperes, 240 Volt, Single Phase, Sub-Distribution Panel (Spider Box).....	151.51	
01 22 23 00-0704	MO		50 Amperes, 240 Volt, Single Phase, Sub-Distribution Panel (Spider Box).....	427.47	
01 22 23 00-0705			<b>Portable Distribution Panels For Generator Sets</b> (01 22 23 00-0607) Note: Includes delivery to job site and pick-up when complete.		
01 22 23 00-0706	DAY		200 Amperes, 208 Volt, 3 Phase, Portable Spider Box Feeder Panel.....	129.86	
01 22 23 00-0707	WK		200 Amperes, 208 Volt, 3 Phase, Portable Spider Box Feeder Panel.....	351.72	
01 22 23 00-0708	MO		200 Amperes, 208 Volt, 3 Phase, Portable Spider Box Feeder Panel.....	984.80	
01 22 23 00-0709	DAY		100 Amperes, 208 Volt, 3 Phase, Portable Quad Box Panel.....	106.06	
01 22 23 00-0710	WK		100 Amperes, 208 Volt, 3 Phase, Portable Quad Box Panel.....	275.96	
01 22 23 00-0711	MO		100 Amperes, 208 Volt, 3 Phase, Portable Quad Box Panel.....	784.60	
01 22 23 00-0712	DAY		200 Amperes, 208 Volt, 3 Phase, Portable Quad Box Panel.....	135.28	
01 22 23 00-0713	WK		200 Amperes, 208 Volt, 3 Phase, Portable Quad Box Panel.....	340.89	
01 22 23 00-0714	MO		200 Amperes, 208 Volt, 3 Phase, Portable Quad Box Panel.....	925.28	
01 22 23 00-0715			<b>Fuel Reimbursement For Generators</b> (01 22 23 00-0607) Note: Purchases made by the contractor for fuel will be reimbursed to the Contractor at the actual cost of the purchase, without mark-up, for which a receipt or bill is received. The Adjustment Factor applied to Reimbursable Fees will be 1.0000. The base cost of the purchase is \$1.00, quantity will adjust cost to actual purchase cost; i.e., quantity of 125 = \$125.00 purchase. If there are multiple purchases, each one shall be listed separately with a comment in the "note" block to identify the purchase.		
01 22 23 00-0716	EA		Fuel Reimbursement For Generators .....	1.00	
01 22 23 00-0717			<b>General Equipment</b> (01 22 23)		
01 22 23 00-0718			<b>Jacks And Bracing</b> (01 22 23 00-0717) Note: Includes delivery to job site and pick-up when complete.		
01 22 23 00-0719			<b>Manual Hydraulic Jacks</b> (01 22 23 00-0718)		
01 22 23 00-0720	DAY		12 Ton Manual Hydraulic Bottle Jack .....	1.67	
01 22 23 00-0721	WK		12 Ton Manual Hydraulic Bottle Jack .....	7.93	
01 22 23 00-0722	MO		12 Ton Manual Hydraulic Bottle Jack .....	28.50	
01 22 23 00-0723	DAY		20 Ton Manual Hydraulic Bottle Jack .....	2.92	
01 22 23 00-0724	WK		20 Ton Manual Hydraulic Bottle Jack .....	9.18	
01 22 23 00-0725	MO		20 Ton Manual Hydraulic Bottle Jack .....	34.76	
01 22 23 00-0726	DAY		50 Ton Manual Hydraulic Bottle Jack .....	10.43	
01 22 23 00-0727	WK		50 Ton Manual Hydraulic Bottle Jack .....	40.49	
01 22 23 00-0728	MO		50 Ton Manual Hydraulic Bottle Jack .....	145.66	
01 22 23 00-0729	DAY		100 Ton Manual Hydraulic Bottle Jack .....	14.61	
01 22 23 00-0730	WK		100 Ton Manual Hydraulic Bottle Jack .....	58.43	
01 22 23 00-0731	MO		100 Ton Manual Hydraulic Bottle Jack .....	210.46	
01 22 23 00-0732			<b>Manual Screw Jacks</b> (01 22 23 00-0718)		
01 22 23 00-0733	DAY		10 To 20 Ton Manual Screw Jack .....	26.04	
01 22 23 00-0734	WK		10 To 20 Ton Manual Screw Jack .....	70.11	
01 22 23 00-0735	MO		10 To 20 Ton Manual Screw Jack .....	194.31	
01 22 23 00-0736			<b>Pressure Washers</b> (01 22 23 00-0717) Note: Includes delivery to job site, pick-up when complete and full time operator.		
01 22 23 00-0737	DAY		2,000 PSI Pressure Washer With Full-Time Operator .....	799.63	
			For Equipment Without Operator, Deduct .....	-642.12	
01 22 23 00-0738	WK		2,000 PSI Pressure Washer With Full-Time Operator .....	3,610.43	
			For Equipment Without Operator, Deduct .....	-3,210.59	
01 22 23 00-0739	MO		2,000 PSI Pressure Washer With Full-Time Operator .....	14,930.36	
			For Equipment Without Operator, Deduct .....	-13,912.57	
01 22 23 00-0740	DAY		2,500 PSI Pressure Washer With Full-Time Operator .....	786.93	
			For Equipment Without Operator, Deduct .....	-642.12	
01 22 23 00-0741	WK		2,500 PSI Pressure Washer With Full-Time Operator .....	3,578.19	
			For Equipment Without Operator, Deduct .....	-3,210.59	
01 22 23 00-0742	MO		2,500 PSI Pressure Washer With Full-Time Operator .....	14,848.29	
			For Equipment Without Operator, Deduct .....	-13,912.57	
01 22 23 00-0743	DAY		3,000 PSI Pressure Washer With Full-Time Operator .....	799.63	
			For Equipment Without Operator, Deduct .....	-642.12	

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01 22 23 00-0744 WK 3,000 PSI Pressure Washer With Full-Time Operator ..... <i>For Equipment Without Operator, Deduct</i>	3,610.43 -3,210.59	
01 22 23 00-0745 MO 3,000 PSI Pressure Washer With Full-Time Operator ..... <i>For Equipment Without Operator, Deduct</i>	14,930.36 -13,912.57	
01 22 23 00-0746 DAY 3,500 PSI Pressure Washer With Full-Time Operator ..... <i>For Equipment Without Operator, Deduct</i>	798.07 -642.12	
01 22 23 00-0747 WK 3,500 PSI Pressure Washer With Full-Time Operator ..... <i>For Equipment Without Operator, Deduct</i>	3,611.61 -3,210.59	
01 22 23 00-0748 MO 3,500 PSI Pressure Washer With Full-Time Operator ..... <i>For Equipment Without Operator, Deduct</i>	14,937.40 -13,912.57	
01 22 23 00-0749 DAY 4,000 PSI Pressure Washer With Full-Time Operator ..... <i>For Equipment Without Operator, Deduct</i>	860.22 -642.12	
01 22 23 00-0750 WK 4,000 PSI Pressure Washer With Full-Time Operator ..... <i>For Equipment Without Operator, Deduct</i>	3,804.30 -3,210.59	
01 22 23 00-0751 MO 4,000 PSI Pressure Washer With Full-Time Operator ..... <i>For Equipment Without Operator, Deduct</i>	15,572.53 -13,912.57	
01 22 23 00-0752 DAY 5,000 PSI Pressure Washer With Full-Time Operator ..... <i>For Equipment Without Operator, Deduct</i>	864.91 -642.12	
01 22 23 00-0753 WK 5,000 PSI Pressure Washer With Full-Time Operator ..... <i>For Equipment Without Operator, Deduct</i>	3,812.12 -3,210.59	
01 22 23 00-0754 MO 5,000 PSI Pressure Washer With Full-Time Operator ..... <i>For Equipment Without Operator, Deduct</i>	15,605.77 -13,912.57	
<b>01 22 23 00-0755</b> <b>Confined Space Entry Equipment</b> (01 22 23 00-0717) Note: Includes delivery to job site, set-up, and pick-up when complete.		
01 22 23 00-0756 DAY Ventilation Equipment For Confined Space ..... Note: Includes electric or gas blower and ventilation duct up to 25'.	39.99	
01 22 23 00-0757 WK Ventilation Equipment For Confined Space ..... Note: Includes electric or gas blower and ventilation duct up to 25'.	119.96	
01 22 23 00-0758 MO Ventilation Equipment For Confined Space ..... Note: Includes electric or gas blower and ventilation duct up to 25'.	357.99	
01 22 23 00-0759 DAY Confined Space Air Monitor, Tripod, Harness, Cables, SCBAs And Complete Assembly .....	60.92	
01 22 23 00-0760 WK Confined Space Air Monitor, Tripod, Harness, Cables, SCBAs And Complete Assembly .....	182.76	
01 22 23 00-0761 MO Confined Space Air Monitor, Tripod, Harness, Cables, SCBAs And Complete Assembly .....	548.29	
01 22 23 00-0762 DAY Confined Space Air Monitor Personnel ..... Note: Per person day.	784.94	
<b>01 22 23 00-0763</b> <b>Mowers</b> (01 22 23 00-0717) Note: Includes delivery to job site and pick-up when complete. Excludes operator.		
01 22 23 00-0764 DAY 21" Walk Behind Lawn Mower .....	89.12	
01 22 23 00-0765 WK 21" Walk Behind Lawn Mower .....	256.21	
01 22 23 00-0766 MO 21" Walk Behind Lawn Mower .....	523.56	
01 22 23 00-0767 DAY 32" Walk Behind Lawn Mower .....	111.40	
01 22 23 00-0768 WK 32" Walk Behind Lawn Mower .....	267.35	
01 22 23 00-0769 MO 32" Walk Behind Lawn Mower .....	556.98	
01 22 23 00-0770 DAY 36" To 48" Walk Behind Deck Mower .....	200.51	
01 22 23 00-0771 WK 36" To 48" Walk Behind Deck Mower .....	556.98	
01 22 23 00-0772 MO 36" To 48" Walk Behind Deck Mower .....	1,615.23	
01 22 23 00-0773 DAY 61" To 72" Walk Behind Deck Mower .....	200.51	
01 22 23 00-0774 WK 61" To 72" Walk Behind Deck Mower .....	556.98	
01 22 23 00-0775 MO 61" To 72" Walk Behind Deck Mower .....	1,615.23	
<b>01 22 23 00-0776</b> <b>Material Handling Equipment</b> (01 22 23) <b>01 22 23 00-0777</b> <b>Truck Mounted Hydraulic Cranes</b> (01 22 23 00-0776) Note: Includes full-time operator, delivery, set-up, rigging, and removal time in rental period. Excludes lattice boom extension.		
01 22 23 00-0778 DAY 6 Ton Lift, Truck Mounted Hydraulic Crane With Full-Time Operator ..... <i>For Equipment Without Operator, Deduct</i>	1,299.28 -849.32	
01 22 23 00-0779 WK 6 Ton Lift, Truck Mounted Hydraulic Crane With Full-Time Operator ..... <i>For Equipment Without Operator, Deduct</i>	5,609.72 -4,246.62	
01 22 23 00-0780 MO 6 Ton Lift, Truck Mounted Hydraulic Crane With Full-Time Operator ..... <i>For Equipment Without Operator, Deduct</i>	22,504.56 -18,402.02	
01 22 23 00-0781 DAY 8 To 9 Ton Lift, Truck Mounted Hydraulic Crane With Full-Time Operator ..... <i>For Equipment Without Operator, Deduct</i>	1,418.38 -849.32	
01 22 23 00-0782 WK 8 To 9 Ton Lift, Truck Mounted Hydraulic Crane With Full-Time Operator ..... <i>For Equipment Without Operator, Deduct</i>	5,963.73 -4,246.62	
01 22 23 00-0783 MO 8 To 9 Ton Lift, Truck Mounted Hydraulic Crane With Full-Time Operator ..... <i>For Equipment Without Operator, Deduct</i>	23,563.28 -18,402.02	
01 22 23 00-0784 DAY 14 To 15 Ton Lift, Truck Mounted Hydraulic Crane With Full-Time Operator ..... <i>For Equipment Without Operator, Deduct</i>	1,537.49 -849.32	
01 22 23 00-0785 WK 14 To 15 Ton Lift, Truck Mounted Hydraulic Crane With Full-Time Operator ..... <i>For Equipment Without Operator, Deduct</i>	6,317.74 -4,246.62	
01 22 23 00-0786 MO 14 To 15 Ton Lift, Truck Mounted Hydraulic Crane With Full-Time Operator ..... <i>For Equipment Without Operator, Deduct</i>	24,622.00 -18,402.02	
01 22 23 00-0787 DAY 20 To 25 Ton Lift, Truck Mounted Hydraulic Crane With Full-Time Operator ..... <i>For Equipment Without Operator, Deduct</i>	1,696.30 -849.32	
01 22 23 00-0788 WK 20 To 25 Ton Lift, Truck Mounted Hydraulic Crane With Full-Time Operator ..... <i>For Equipment Without Operator, Deduct</i>	6,794.16 -4,246.62	
01 22 23 00-0789 MO 20 To 25 Ton Lift, Truck Mounted Hydraulic Crane With Full-Time Operator ..... <i>For Equipment Without Operator, Deduct</i>	26,044.66 -18,402.02	





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01 22 23 00-0790 DAY 30 To 35 Ton Lift, Truck Mounted Hydraulic Crane With Full-Time Operator ..... For Equipment Without Operator, Deduct	1,841.87 -849.32	
01 22 23 00-0791 WK 30 To 35 Ton Lift, Truck Mounted Hydraulic Crane With Full-Time Operator ..... For Equipment Without Operator, Deduct	7,780.10 -4,246.62	
01 22 23 00-0792 MO 30 To 35 Ton Lift, Truck Mounted Hydraulic Crane With Full-Time Operator ..... For Equipment Without Operator, Deduct	28,999.81 -18,402.02	
01 22 23 00-0793 DAY 40 To 45 Ton Lift, Truck Mounted Hydraulic Crane With Full-Time Operator ..... For Equipment Without Operator, Deduct	2,185.95 -849.32	
01 22 23 00-0794 WK 40 To 45 Ton Lift, Truck Mounted Hydraulic Crane With Full-Time Operator ..... For Equipment Without Operator, Deduct	9,010.86 -4,246.62	
01 22 23 00-0795 MO 40 To 45 Ton Lift, Truck Mounted Hydraulic Crane With Full-Time Operator ..... For Equipment Without Operator, Deduct	32,694.74 -18,402.02	
<b>01 22 23 00-0796 Telescopic Boom, Hi-Reach, Rough Terrain Construction Forklifts (01 22 23 00-0776)</b> Note: Includes full-time operator. Excludes delivery, set-up, and removal.		
01 22 23 00-0797 DAY 5,000 LB Telescopic Boom, Hi-Reach, Rough Terrain Construction Forklift With Full-Time Operator ..... For Equipment Without Operator, Deduct	1,412.09 -784.94	
01 22 23 00-0798 WK 5,000 LB Telescopic Boom, Hi-Reach, Rough Terrain Construction Forklift With Full-Time Operator ..... For Equipment Without Operator, Deduct	5,459.57 -3,924.70	
01 22 23 00-0799 MO 5,000 LB Telescopic Boom, Hi-Reach, Rough Terrain Construction Forklift With Full-Time Operator ..... For Equipment Without Operator, Deduct	20,307.85 -17,007.05	
01 22 23 00-0800 DAY 6,000 LB Telescopic Boom, Hi-Reach, Rough Terrain Construction Forklift With Full-Time Operator ..... For Equipment Without Operator, Deduct	1,478.11 -784.94	
01 22 23 00-0801 WK 6,000 LB Telescopic Boom, Hi-Reach, Rough Terrain Construction Forklift With Full-Time Operator ..... For Equipment Without Operator, Deduct	5,608.11 -3,924.70	
01 22 23 00-0802 MO 6,000 LB Telescopic Boom, Hi-Reach, Rough Terrain Construction Forklift With Full-Time Operator ..... For Equipment Without Operator, Deduct	20,637.93 -17,007.05	
01 22 23 00-0803 DAY 8,000 LB Telescopic Boom, Hi-Reach, Rough Terrain Construction Forklift With Full-Time Operator ..... For Equipment Without Operator, Deduct	1,461.60 -784.94	
01 22 23 00-0804 WK 8,000 LB Telescopic Boom, Hi-Reach, Rough Terrain Construction Forklift With Full-Time Operator ..... For Equipment Without Operator, Deduct	5,682.38 -3,924.70	
01 22 23 00-0805 MO 8,000 LB Telescopic Boom, Hi-Reach, Rough Terrain Construction Forklift With Full-Time Operator ..... For Equipment Without Operator, Deduct	21,133.05 -17,007.05	
01 22 23 00-0806 DAY 10,000 LB Telescopic Boom, Hi-Reach, Rough Terrain Construction Forklift With Full-Time Operator ..... For Equipment Without Operator, Deduct	1,651.40 -784.94	
01 22 23 00-0807 WK 10,000 LB Telescopic Boom, Hi-Reach, Rough Terrain Construction Forklift With Full-Time Operator ..... For Equipment Without Operator, Deduct	6,177.50 -3,924.70	
01 22 23 00-0808 MO 10,000 LB Telescopic Boom, Hi-Reach, Rough Terrain Construction Forklift With Full-Time Operator ..... For Equipment Without Operator, Deduct	22,288.33 -17,007.05	
<b>01 22 23 00-0809 Straight Mast, Rough Terrain Construction Forklifts (01 22 23 00-0776)</b> Note: Includes full-time operator. Excludes delivery, set-up, and removal.		
01 22 23 00-0810 DAY 5,000 LB Straight Mast, Rough Terrain Construction Forklift With Full-Time Operator ..... For Equipment Without Operator, Deduct For Propane Instead Of Gas Or Diesel, Add	1,192.59 -784.94 81.53	
01 22 23 00-0811 WK 5,000 LB Straight Mast, Rough Terrain Construction Forklift With Full-Time Operator ..... For Equipment Without Operator, Deduct For Propane Instead Of Gas Or Diesel, Add	5,037.89 -3,924.70 222.64	
01 22 23 00-0812 MO 5,000 LB Straight Mast, Rough Terrain Construction Forklift With Full-Time Operator ..... For Equipment Without Operator, Deduct For Propane Instead Of Gas Or Diesel, Add	19,554.85 -17,007.05 509.56	
01 22 23 00-0813 DAY 6,000 LB Straight Mast, Rough Terrain Construction Forklift With Full-Time Operator ..... For Equipment Without Operator, Deduct For Propane Instead Of Gas Or Diesel, Add	1,214.04 -784.94 85.82	
01 22 23 00-0814 WK 6,000 LB Straight Mast, Rough Terrain Construction Forklift With Full-Time Operator ..... For Equipment Without Operator, Deduct For Propane Instead Of Gas Or Diesel, Add	5,096.48 -3,924.70 234.36	
01 22 23 00-0815 MO 6,000 LB Straight Mast, Rough Terrain Construction Forklift With Full-Time Operator ..... For Equipment Without Operator, Deduct For Propane Instead Of Gas Or Diesel, Add	19,688.95 -17,007.05 536.38	
01 22 23 00-0816 DAY 8,000 LB Straight Mast, Rough Terrain Construction Forklift With Full-Time Operator ..... For Equipment Without Operator, Deduct For Propane Instead Of Gas Or Diesel, Add	1,329.57 -784.94 108.93	
01 22 23 00-0817 WK 8,000 LB Straight Mast, Rough Terrain Construction Forklift With Full-Time Operator ..... For Equipment Without Operator, Deduct For Propane Instead Of Gas Or Diesel, Add	5,418.31 -3,924.70 298.72	
01 22 23 00-0818 MO 8,000 LB Straight Mast, Rough Terrain Construction Forklift With Full-Time Operator ..... For Equipment Without Operator, Deduct For Propane Instead Of Gas Or Diesel, Add	20,431.63 -17,007.05 684.92	
01 22 23 00-0819 DAY 10,000 LB Straight Mast, Rough Terrain Construction Forklift With Full-Time Operator ..... For Equipment Without Operator, Deduct For Propane Instead Of Gas Or Diesel, Add	1,393.19 -784.94 121.65	
01 22 23 00-0820 WK 10,000 LB Straight Mast, Rough Terrain Construction Forklift With Full-Time Operator ..... For Equipment Without Operator, Deduct For Propane Instead Of Gas Or Diesel, Add	5,390.75 -3,924.70 293.21	
01 22 23 00-0821 MO 10,000 LB Straight Mast, Rough Terrain Construction Forklift With Full-Time Operator ..... For Equipment Without Operator, Deduct For Propane Instead Of Gas Or Diesel, Add	20,656.58 -17,007.05 729.91	

**01 22 23 00-0822 Straight Mast, Industrial Warehouse Forklifts (01 22 23 00-0776)**  
Note: Includes full-time operator. Excludes delivery, set-up, and removal.

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01 22 23 00-0823 DAY 5,000 LB Straight Mast, Industrial Warehouse Forklift With Full-Time Operator .....	1,131.52	
For Equipment Without Operator, Deduct .....	-784.94	
For Propane Instead Of Gas Or Diesel, Add .....	69.32	
01 22 23 00-0824 WK 5,000 LB Straight Mast, Industrial Warehouse Forklift With Full-Time Operator .....	4,716.89	
For Equipment Without Operator, Deduct .....	-3,924.70	
For Propane Instead Of Gas Or Diesel, Add .....	158.44	
01 22 23 00-0825 MO 5,000 LB Straight Mast, Industrial Warehouse Forklift With Full-Time Operator .....	18,905.01	
For Equipment Without Operator, Deduct .....	-17,007.05	
For Propane Instead Of Gas Or Diesel, Add .....	379.59	
01 22 23 00-0826 DAY 6,000 LB Straight Mast, Industrial Warehouse Forklift With Full-Time Operator .....	1,139.78	
For Equipment Without Operator, Deduct .....	-784.94	
For Propane Instead Of Gas Or Diesel, Add .....	70.97	
01 22 23 00-0827 WK 6,000 LB Straight Mast, Industrial Warehouse Forklift With Full-Time Operator .....	4,741.65	
For Equipment Without Operator, Deduct .....	-3,924.70	
For Propane Instead Of Gas Or Diesel, Add .....	163.39	
01 22 23 00-0828 MO 6,000 LB Straight Mast, Industrial Warehouse Forklift With Full-Time Operator .....	18,962.77	
For Equipment Without Operator, Deduct .....	-17,007.05	
For Propane Instead Of Gas Or Diesel, Add .....	391.14	
01 22 23 00-0829 DAY 8,000 LB Straight Mast, Industrial Warehouse Forklift With Full-Time Operator .....	1,313.07	
For Equipment Without Operator, Deduct .....	-784.94	
For Propane Instead Of Gas Or Diesel, Add .....	105.63	
01 22 23 00-0830 WK 8,000 LB Straight Mast, Industrial Warehouse Forklift With Full-Time Operator .....	5,121.24	
For Equipment Without Operator, Deduct .....	-3,924.70	
For Propane Instead Of Gas Or Diesel, Add .....	239.31	
01 22 23 00-0831 MO 8,000 LB Straight Mast, Industrial Warehouse Forklift With Full-Time Operator .....	19,895.25	
For Equipment Without Operator, Deduct .....	-17,007.05	
For Propane Instead Of Gas Or Diesel, Add .....	577.64	
01 22 23 00-0832 DAY 12,000 LB Straight Mast, Industrial Warehouse Forklift With Full-Time Operator .....	1,329.57	
For Equipment Without Operator, Deduct .....	-784.94	
For Propane Instead Of Gas Or Diesel, Add .....	108.93	
01 22 23 00-0833 WK 12,000 LB Straight Mast, Industrial Warehouse Forklift With Full-Time Operator .....	5,261.52	
For Equipment Without Operator, Deduct .....	-3,924.70	
For Propane Instead Of Gas Or Diesel, Add .....	267.36	
01 22 23 00-0834 MO 12,000 LB Straight Mast, Industrial Warehouse Forklift With Full-Time Operator .....	20,390.37	
For Equipment Without Operator, Deduct .....	-17,007.05	
For Propane Instead Of Gas Or Diesel, Add .....	676.66	
01 22 23 00-0835 DAY 15,000 LB Straight Mast, Industrial Warehouse Forklift With Full-Time Operator .....	1,478.11	
For Equipment Without Operator, Deduct .....	-784.94	
For Propane Instead Of Gas Or Diesel, Add .....	138.63	
01 22 23 00-0836 WK 15,000 LB Straight Mast, Industrial Warehouse Forklift With Full-Time Operator .....	5,500.83	
For Equipment Without Operator, Deduct .....	-3,924.70	
For Propane Instead Of Gas Or Diesel, Add .....	315.23	
01 22 23 00-0837 MO 15,000 LB Straight Mast, Industrial Warehouse Forklift With Full-Time Operator .....	20,802.97	
For Equipment Without Operator, Deduct .....	-17,007.05	
For Propane Instead Of Gas Or Diesel, Add .....	759.18	
<b>01 22 23 00-0838 Roof Swing Hoist</b> (01 22 23 00-0776) Note: Includes delivery to job site and pick-up when complete.		
01 22 23 00-0839 DAY Up To 400#, Manual Swing Roof Hoist .....	95.24	
01 22 23 00-0840 WK Up To 400#, Manual Swing Roof Hoist .....	333.32	
01 22 23 00-0841 MO Up To 400#, Manual Swing Roof Hoist .....	1,142.82	
<b>01 22 23 00-0842 Pumping Equipment</b> (01 22 23)		
<b>01 22 23 00-0843 Gas Powered Portable Centrifugal Pumps</b> (01 22 23 00-0842) Note: Includes delivery, set-up, and removal. Excludes operator. See CSI section 01 22 23 00-0867 for larger diameter pumps.		
01 22 23 00-0844 DAY 8,500 GPH, 2" Discharge, 108' Maximum Head, Gas Powered Portable Centrifugal Pump .....	55.24	
01 22 23 00-0845 WK 8,500 GPH, 2" Discharge, 108' Maximum Head, Gas Powered Portable Centrifugal Pump .....	124.30	
01 22 23 00-0846 MO 8,500 GPH, 2" Discharge, 108' Maximum Head, Gas Powered Portable Centrifugal Pump .....	331.46	
01 22 23 00-0847 DAY 16,500 GPH, 3" Discharge, 85' Maximum Head, Gas Powered Portable Centrifugal Pump .....	66.29	
01 22 23 00-0848 WK 16,500 GPH, 3" Discharge, 85' Maximum Head, Gas Powered Portable Centrifugal Pump .....	149.16	
01 22 23 00-0849 MO 16,500 GPH, 3" Discharge, 85' Maximum Head, Gas Powered Portable Centrifugal Pump .....	397.76	
<b>01 22 23 00-0850 Gas Powered Portable Diaphragm Pumps</b> (01 22 23 00-0842) Note: Includes delivery, set-up, and removal. Excludes operator.		
01 22 23 00-0851 DAY 3,000 GPH, 2" Discharge, 25' Maximum Head, Gas Powered Portable Diaphragm Pump .....	63.53	
01 22 23 00-0852 WK 3,000 GPH, 2" Discharge, 25' Maximum Head, Gas Powered Portable Diaphragm Pump .....	179.54	
01 22 23 00-0853 MO 3,000 GPH, 2" Discharge, 25' Maximum Head, Gas Powered Portable Diaphragm Pump .....	455.76	
01 22 23 00-0854 DAY 5,200 GPH, 3" Discharge, 25' Maximum Head, Gas Powered Portable Diaphragm Pump .....	77.34	
01 22 23 00-0855 WK 5,200 GPH, 3" Discharge, 25' Maximum Head, Gas Powered Portable Diaphragm Pump .....	207.16	
01 22 23 00-0856 MO 5,200 GPH, 3" Discharge, 25' Maximum Head, Gas Powered Portable Diaphragm Pump .....	586.97	
<b>01 22 23 00-0857 Gas Powered Portable Trash Pumps</b> (01 22 23 00-0842) Note: Includes delivery, set-up, and removal. Excludes operator.		
01 22 23 00-0858 DAY 12,000 GPH, 2" Discharge, 100' Maximum Head, Gas Powered Portable Trash Pump .....	80.10	
01 22 23 00-0859 WK 12,000 GPH, 2" Discharge, 100' Maximum Head, Gas Powered Portable Trash Pump .....	165.73	
01 22 23 00-0860 MO 12,000 GPH, 2" Discharge, 100' Maximum Head, Gas Powered Portable Trash Pump .....	497.20	
01 22 23 00-0861 DAY 25,000 GPH, 3" Discharge, 90' Maximum Head, Gas Powered Portable Trash Pump .....	80.10	
01 22 23 00-0862 WK 25,000 GPH, 3" Discharge, 90' Maximum Head, Gas Powered Portable Trash Pump .....	214.07	



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01 22 23 00-0863	MO	25,000 GPH, 3" Discharge, 90' Maximum Head, Gas Powered Portable Trash Pump.....	586.97	
01 22 23 00-0864	DAY	35,000 GPH, 4" Discharge, 106' Maximum Head, Gas Powered Portable Trash Pump.....	127.06	
01 22 23 00-0865	WK	35,000 GPH, 4" Discharge, 106' Maximum Head, Gas Powered Portable Trash Pump.....	359.09	
01 22 23 00-0866	MO	35,000 GPH, 4" Discharge, 106' Maximum Head, Gas Powered Portable Trash Pump.....	1,042.73	
<b>01 22 23 00-0867 Diesel Powered Portable Trash Pumps (01 22 23 00-0842)</b>				
Note: Includes delivery, set-up, and removal. Excludes operator.				
01 22 23 00-0868	DAY	63,000 GPH, 4" Discharge, 153' Maximum Head, Diesel Powered Portable Trash Pump .....	248.60	
01 22 23 00-0869	WK	63,000 GPH, 4" Discharge, 153' Maximum Head, Diesel Powered Portable Trash Pump .....	676.74	
01 22 23 00-0870	MO	63,000 GPH, 4" Discharge, 153' Maximum Head, Diesel Powered Portable Trash Pump .....	2,948.65	
01 22 23 00-0871	DAY	156,000 GPH, 6" Discharge, 160' Maximum Head, Diesel Powered Portable Trash Pump .....	379.80	
01 22 23 00-0872	WK	156,000 GPH, 6" Discharge, 160' Maximum Head, Diesel Powered Portable Trash Pump .....	994.39	
01 22 23 00-0873	MO	156,000 GPH, 6" Discharge, 160' Maximum Head, Diesel Powered Portable Trash Pump .....	2,644.81	
01 22 23 00-0874	DAY	246,000 GPH, 10" Discharge, 160' Maximum Head, Diesel Powered Portable Trash Pump .....	516.53	
01 22 23 00-0875	WK	246,000 GPH, 10" Discharge, 160' Maximum Head, Diesel Powered Portable Trash Pump .....	1,382.48	
01 22 23 00-0876	MO	246,000 GPH, 10" Discharge, 160' Maximum Head, Diesel Powered Portable Trash Pump .....	3,698.59	
01 22 23 00-0877	DAY	379,000 GPH, 12" Discharge, 104' Maximum Head, Diesel Powered Portable Trash Pump .....	668.45	
01 22 23 00-0878	WK	379,000 GPH, 12" Discharge, 104' Maximum Head, Diesel Powered Portable Trash Pump .....	1,707.04	
01 22 23 00-0879	MO	379,000 GPH, 12" Discharge, 104' Maximum Head, Diesel Powered Portable Trash Pump .....	5,013.39	
<b>01 22 23 00-0880 Diesel Powered Portable Silenced Environmental Trash Pumps (01 22 23 00-0842)</b>				
Note: Includes delivery, set-up, and removal. Excludes operator.				
01 22 23 00-0881	DAY	90,000 GPH, 4" Discharge, 330' Maximum Head, Diesel Powered Portable Silenced Environmental Trash Pump .....	354.94	
01 22 23 00-0882	WK	90,000 GPH, 4" Discharge, 330' Maximum Head, Diesel Powered Portable Silenced Environmental Trash Pump .....	807.94	
01 22 23 00-0883	MO	90,000 GPH, 4" Discharge, 330' Maximum Head, Diesel Powered Portable Silenced Environmental Trash Pump .....	2,519.13	
01 22 23 00-0884	DAY	136,800 GPH, 6" Discharge, 158' Maximum Head, Diesel Powered Portable Silenced Environmental Trash Pump .....	435.05	
01 22 23 00-0885	WK	136,800 GPH, 6" Discharge, 158' Maximum Head, Diesel Powered Portable Silenced Environmental Trash Pump .....	1,084.16	
01 22 23 00-0886	MO	136,800 GPH, 6" Discharge, 158' Maximum Head, Diesel Powered Portable Silenced Environmental Trash Pump .....	2,948.65	
01 22 23 00-0887	DAY	246,000 GPH, 10" Discharge, 158' Maximum Head, Diesel Powered Portable Silenced Environmental Trash Pump .....	524.82	
01 22 23 00-0888	WK	246,000 GPH, 10" Discharge, 158' Maximum Head, Diesel Powered Portable Silenced Environmental Trash Pump .....	1,552.36	
01 22 23 00-0889	MO	246,000 GPH, 10" Discharge, 158' Maximum Head, Diesel Powered Portable Silenced Environmental Trash Pump .....	4,329.75	
01 22 23 00-0890	DAY	510,000 GPH, 12" Discharge, 200' Maximum Head, Diesel Powered Portable Silenced Environmental Trash Pump .....	789.99	
01 22 23 00-0891	WK	510,000 GPH, 12" Discharge, 200' Maximum Head, Diesel Powered Portable Silenced Environmental Trash Pump .....	2,017.79	
01 22 23 00-0892	MO	510,000 GPH, 12" Discharge, 200' Maximum Head, Diesel Powered Portable Silenced Environmental Trash Pump .....	5,924.92	
<b>01 22 23 00-0893 3 Phase Electric Submersible Pumps (01 22 23 00-0842)</b>				
Note: Includes delivery, set-up, and removal. Excludes operator.				
01 22 23 00-0894	DAY	24,000 GPH, 3" Discharge, 78' Maximum Head, 3 Phase Electric Submersible Pump .....	138.11	
01 22 23 00-0895	WK	24,000 GPH, 3" Discharge, 78' Maximum Head, 3 Phase Electric Submersible Pump .....	345.28	
01 22 23 00-0896	MO	24,000 GPH, 3" Discharge, 78' Maximum Head, 3 Phase Electric Submersible Pump .....	1,035.82	
01 22 23 00-0897	DAY	49,800 GPH, 4" Discharge, 98' Maximum Head, 3 Phase Electric Submersible Pump .....	182.31	
01 22 23 00-0898	WK	49,800 GPH, 4" Discharge, 98' Maximum Head, 3 Phase Electric Submersible Pump .....	455.76	
01 22 23 00-0899	MO	49,800 GPH, 4" Discharge, 98' Maximum Head, 3 Phase Electric Submersible Pump .....	1,367.29	
<b>01 22 23 00-0900 Suction Hose With Couplings (01 22 23 00-0842)</b>				
Note: Includes delivery, set-up, and removal.				
01 22 23 00-0901	DAY	Up To 2" Inside Diameter, 20' Length, Suction Hose With Couplings.....	6.48	
01 22 23 00-0902	WK	Up To 2" Inside Diameter, 20' Length, Suction Hose With Couplings.....	16.20	
01 22 23 00-0903	MO	Up To 2" Inside Diameter, 20' Length, Suction Hose With Couplings.....	49.68	
01 22 23 00-0904	DAY	3" Inside Diameter, 20' Length, Suction Hose With Couplings.....	17.28	
01 22 23 00-0905	WK	3" Inside Diameter, 20' Length, Suction Hose With Couplings.....	44.28	
01 22 23 00-0906	MO	3" Inside Diameter, 20' Length, Suction Hose With Couplings.....	135.00	
01 22 23 00-0907	DAY	4" Inside Diameter, 20' Length, Suction Hose With Couplings.....	25.92	
01 22 23 00-0908	WK	4" Inside Diameter, 20' Length, Suction Hose With Couplings.....	65.88	
01 22 23 00-0909	MO	4" Inside Diameter, 20' Length, Suction Hose With Couplings.....	199.80	
01 22 23 00-0910	DAY	6" Inside Diameter, 20' Length, Suction Hose With Couplings.....	32.40	
01 22 23 00-0911	WK	6" Inside Diameter, 20' Length, Suction Hose With Couplings.....	81.00	
01 22 23 00-0912	MO	6" Inside Diameter, 20' Length, Suction Hose With Couplings.....	237.60	
01 22 23 00-0913	DAY	10" Inside Diameter, 20' Length, Suction Hose With Couplings.....	75.60	
01 22 23 00-0914	WK	10" Inside Diameter, 20' Length, Suction Hose With Couplings.....	194.40	
01 22 23 00-0915	MO	10" Inside Diameter, 20' Length, Suction Hose With Couplings.....	572.40	
01 22 23 00-0916	DAY	12" Inside Diameter, 20' Length, Suction Hose With Couplings.....	101.52	
01 22 23 00-0917	WK	12" Inside Diameter, 20' Length, Suction Hose With Couplings.....	221.40	
01 22 23 00-0918	MO	12" Inside Diameter, 20' Length, Suction Hose With Couplings.....	664.20	
<b>01 22 23 00-0919 Hydraulic Submersible Pumps (01 22 23 00-0842)</b>				
Note: Includes delivery, set-up, and removal. Excludes operator.				
<b>01 22 23 00-0920 Hydraulic Submersible Pumps (01 22 23 00-0919)</b>				
Note: Includes delivery, set-up, and removal. Excludes operator.				
01 22 23 00-0921	DAY	60,000 GPH, 4" Discharge, 115' Maximum Head, Hydraulic Submersible Pump .....	91.15	

<b>01</b>	<b>General Requirements</b>
<b>01 20</b>	<b>Price and Payment Procedures</b>
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MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
01 22 23 00-0922 WK 60,000 GPH, 4" Discharge, 115' Maximum Head, Hydraulic Submersible Pump .....	244.45	
01 22 23 00-0923 MO 60,000 GPH, 4" Discharge, 115' Maximum Head, Hydraulic Submersible Pump .....	683.64	
01 22 23 00-0924 DAY 132,000 GPH, 6" Discharge, 90' Maximum Head, Hydraulic Submersible Pump .....	116.01	
01 22 23 00-0925 WK 132,000 GPH, 6" Discharge, 90' Maximum Head, Hydraulic Submersible Pump .....	298.32	
01 22 23 00-0926 MO 132,000 GPH, 6" Discharge, 90' Maximum Head, Hydraulic Submersible Pump .....	911.53	
<b>01 22 23 00-0927 Hydraulic Submersible Pump Diesel Power Packs (01 22 23 00-0919)</b>		
Note: Includes delivery, set-up, and removal. Excludes operator.		
01 22 23 00-0928 DAY 100 HP, Hydraulic Submersible Pump Diesel Power Pack .....	210.62	
01 22 23 00-0929 WK 100 HP, Hydraulic Submersible Pump Diesel Power Pack .....	628.40	
01 22 23 00-0930 MO 100 HP, Hydraulic Submersible Pump Diesel Power Pack .....	1,657.32	
<b>01 22 23 00-0931 HDPE Pipe With Couplings (01 22 23 00-0842)</b>		
Note: Includes delivery, set-up, and removal.		
01 22 23 00-0932 DAY 4" x 20' HDPE Pipe With Couplings .....	14.75	
01 22 23 00-0933 WK 4" x 20' HDPE Pipe With Couplings .....	35.40	
01 22 23 00-0934 MO 4" x 20' HDPE Pipe With Couplings .....	109.15	
01 22 23 00-0935 DAY 6" x 20' HDPE Pipe With Couplings .....	23.60	
01 22 23 00-0936 WK 6" x 20' HDPE Pipe With Couplings .....	59.00	
01 22 23 00-0937 MO 6" x 20' HDPE Pipe With Couplings .....	179.95	
01 22 23 00-0938 DAY 8" x 20' HDPE Pipe With Couplings .....	38.35	
01 22 23 00-0939 WK 8" x 20' HDPE Pipe With Couplings .....	100.30	
01 22 23 00-0940 MO 8" x 20' HDPE Pipe With Couplings .....	297.95	
01 22 23 00-0941 DAY 10" x 20' HDPE Pipe With Couplings .....	47.20	
01 22 23 00-0942 WK 10" x 20' HDPE Pipe With Couplings .....	120.95	
01 22 23 00-0943 MO 10" x 20' HDPE Pipe With Couplings .....	368.75	
01 22 23 00-0944 DAY 12" x 10' HDPE Pipe With Couplings .....	35.40	
01 22 23 00-0945 WK 12" x 10' HDPE Pipe With Couplings .....	97.35	
01 22 23 00-0946 MO 12" x 10' HDPE Pipe With Couplings .....	295.00	
01 22 23 00-0947 DAY 4" Elbow For HDPE Pipe, Quick Connect .....	35.40	
01 22 23 00-0948 WK 4" Elbow For HDPE Pipe, Quick Connect .....	91.45	
01 22 23 00-0949 MO 4" Elbow For HDPE Pipe, Quick Connect .....	271.40	
01 22 23 00-0950 DAY 6" Elbow For HDPE Pipe, Quick Connect .....	41.30	
01 22 23 00-0951 WK 6" Elbow For HDPE Pipe, Quick Connect .....	106.20	
01 22 23 00-0952 MO 6" Elbow For HDPE Pipe, Quick Connect .....	324.50	
01 22 23 00-0953 DAY 8" Elbow For HDPE Pipe, Quick Connect .....	47.20	
01 22 23 00-0954 WK 8" Elbow For HDPE Pipe, Quick Connect .....	120.95	
01 22 23 00-0955 MO 8" Elbow For HDPE Pipe, Quick Connect .....	368.75	
01 22 23 00-0956 DAY 10" Elbow For HDPE Pipe, Quick Connect .....	59.00	
01 22 23 00-0957 WK 10" Elbow For HDPE Pipe, Quick Connect .....	150.45	
01 22 23 00-0958 MO 10" Elbow For HDPE Pipe, Quick Connect .....	457.25	
01 22 23 00-0959 DAY 12" Elbow For HDPE Pipe, Quick Connect .....	59.00	
01 22 23 00-0960 WK 12" Elbow For HDPE Pipe, Quick Connect .....	150.45	
01 22 23 00-0961 MO 12" Elbow For HDPE Pipe, Quick Connect .....	457.25	
01 22 23 00-0962 DAY 4" Tee For HDPE Pipe, Quick Connect .....	35.40	
01 22 23 00-0963 WK 4" Tee For HDPE Pipe, Quick Connect .....	91.45	
01 22 23 00-0964 MO 4" Tee For HDPE Pipe, Quick Connect .....	271.40	
01 22 23 00-0965 DAY 6" Tee For HDPE Pipe, Quick Connect .....	47.20	
01 22 23 00-0966 WK 6" Tee For HDPE Pipe, Quick Connect .....	120.95	
01 22 23 00-0967 MO 6" Tee For HDPE Pipe, Quick Connect .....	368.75	
01 22 23 00-0968 DAY 8" Tee For HDPE Pipe, Quick Connect .....	59.00	
01 22 23 00-0969 WK 8" Tee For HDPE Pipe, Quick Connect .....	150.45	
01 22 23 00-0970 MO 8" Tee For HDPE Pipe, Quick Connect .....	457.25	
01 22 23 00-0971 DAY 10" Tee For HDPE Pipe, Quick Connect .....	70.80	
01 22 23 00-0972 WK 10" Tee For HDPE Pipe, Quick Connect .....	179.95	
01 22 23 00-0973 MO 10" Tee For HDPE Pipe, Quick Connect .....	545.75	
01 22 23 00-0974 DAY 12" Tee For HDPE Pipe, Quick Connect .....	70.80	
01 22 23 00-0975 WK 12" Tee For HDPE Pipe, Quick Connect .....	179.95	
01 22 23 00-0976 MO 12" Tee For HDPE Pipe, Quick Connect .....	545.75	
01 22 23 00-0977 DAY 4" Cap For HDPE Pipe, Quick Connect .....	5.90	
01 22 23 00-0978 WK 4" Cap For HDPE Pipe, Quick Connect .....	17.70	
01 22 23 00-0979 MO 4" Cap For HDPE Pipe, Quick Connect .....	53.10	
01 22 23 00-0980 DAY 6" Cap For HDPE Pipe, Quick Connect .....	5.90	
01 22 23 00-0981 WK 6" Cap For HDPE Pipe, Quick Connect .....	17.70	
01 22 23 00-0982 MO 6" Cap For HDPE Pipe, Quick Connect .....	53.10	
01 22 23 00-0983 DAY 8" Cap For HDPE Pipe, Quick Connect .....	5.90	
01 22 23 00-0984 WK 8" Cap For HDPE Pipe, Quick Connect .....	17.70	
01 22 23 00-0985 MO 8" Cap For HDPE Pipe, Quick Connect .....	53.10	
01 22 23 00-0986 DAY 10" Cap For HDPE Pipe, Quick Connect .....	5.90	
01 22 23 00-0987 WK 10" Cap For HDPE Pipe, Quick Connect .....	17.70	
01 22 23 00-0988 MO 10" Cap For HDPE Pipe, Quick Connect .....	53.10	
01 22 23 00-0989 DAY 12" Cap For HDPE Pipe, Quick Connect .....	5.90	
01 22 23 00-0990 WK 12" Cap For HDPE Pipe, Quick Connect .....	17.70	
01 22 23 00-0991 MO 12" Cap For HDPE Pipe, Quick Connect .....	53.10	
01 22 23 00-0992 DAY 4" Wye For HDPE Pipe, Quick Connect .....	17.70	
01 22 23 00-0993 WK 4" Wye For HDPE Pipe, Quick Connect .....	44.25	
01 22 23 00-0994 MO 4" Wye For HDPE Pipe, Quick Connect .....	135.70	
01 22 23 00-0995 DAY 6" Wye For HDPE Pipe, Quick Connect .....	20.65	
01 22 23 00-0996 WK 6" Wye For HDPE Pipe, Quick Connect .....	53.10	



General Requirements			01
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MINOR CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
01 22 23 00-0997	MO	6" Wye For HDPE Pipe, Quick Connect .....	162.25	
01 22 23 00-0998	DAY	8" Wye For HDPE Pipe, Quick Connect .....	35.40	
01 22 23 00-0999	WK	8" Wye For HDPE Pipe, Quick Connect .....	91.45	
01 22 23 00-1000	MO	8" Wye For HDPE Pipe, Quick Connect .....	271.40	
01 22 23 00-1001	DAY	10" Wye For HDPE Pipe, Quick Connect .....	53.10	
01 22 23 00-1002	WK	10" Wye For HDPE Pipe, Quick Connect .....	135.70	
01 22 23 00-1003	MO	10" Wye For HDPE Pipe, Quick Connect .....	413.00	
01 22 23 00-1004	DAY	12" Wye For HDPE Pipe, Quick Connect .....	53.10	
01 22 23 00-1005	WK	12" Wye For HDPE Pipe, Quick Connect .....	135.70	
01 22 23 00-1006	MO	12" Wye For HDPE Pipe, Quick Connect .....	413.00	
01 22 23 00-1007		Truck And Trailer Equipment (01 22 23)		
01 22 23 00-1008		Trucks (01 22 23 00-1007) Note: Includes driver, delivery, and removal.		
01 22 23 00-1009		Flat Bed Trucks (01 22 23 00-1008) Note: Includes hydraulic tilt bed.		
01 22 23 00-1010	DAY	1-1/2 Ton Capacity, 8' To 10' Bed, 4 x 2 Flat Bed Truck With Full-Time Truck Driver .....	928.15	
		For Equipment Without Operator, Deduct .....	-677.68	
01 22 23 00-1011	WK	1-1/2 Ton Capacity, 8' To 10' Bed, 4 x 2 Flat Bed Truck With Full-Time Truck Driver .....	4,045.05	
		For Equipment Without Operator, Deduct .....	-3,388.41	
01 22 23 00-1012	MO	1-1/2 Ton Capacity, 8' To 10' Bed, 4 x 2 Flat Bed Truck With Full-Time Truck Driver .....	16,341.65	
		For Equipment Without Operator, Deduct .....	-14,683.12	
01 22 23 00-1013	DAY	3 Ton Capacity, 12' To 16' Bed, 4 x 2 Flat Bed Truck With Full-Time Truck Driver .....	1,036.46	
		For Equipment Without Operator, Deduct .....	-677.68	
01 22 23 00-1014	WK	3 Ton Capacity, 12' To 16' Bed, 4 x 2 Flat Bed Truck With Full-Time Truck Driver .....	4,322.60	
		For Equipment Without Operator, Deduct .....	-3,388.41	
01 22 23 00-1015	MO	3 Ton Capacity, 12' To 16' Bed, 4 x 2 Flat Bed Truck With Full-Time Truck Driver .....	17,052.44	
		For Equipment Without Operator, Deduct .....	-14,683.12	
01 22 23 00-1016	DAY	6-1/2 Ton Capacity, 16' To 22' Bed, 4 x 2 Flat Bed Truck With Full-Time Truck Driver .....	1,114.18	
		For Equipment Without Operator, Deduct .....	-677.68	
01 22 23 00-1017	WK	6-1/2 Ton Capacity, 16' To 22' Bed, 4 x 2 Flat Bed Truck With Full-Time Truck Driver .....	4,619.65	
		For Equipment Without Operator, Deduct .....	-3,388.41	
01 22 23 00-1018	MO	6-1/2 Ton Capacity, 16' To 22' Bed, 4 x 2 Flat Bed Truck With Full-Time Truck Driver .....	18,182.95	
		For Equipment Without Operator, Deduct .....	-14,683.12	
01 22 23 00-1019		Boom Trucks (01 22 23 00-1008)		
01 22 23 00-1020	DAY	3-1/2 Ton, 4 x 2 Boom Truck With Full-Time Truck Driver .....	1,144.10	
		For Equipment Without Operator, Deduct .....	-677.68	
01 22 23 00-1021	WK	3-1/2 Ton, 4 x 2 Boom Truck With Full-Time Truck Driver .....	4,602.86	
		For Equipment Without Operator, Deduct .....	-3,388.41	
01 22 23 00-1022	MO	3-1/2 Ton, 4 x 2 Boom Truck With Full-Time Truck Driver .....	17,763.24	
		For Equipment Without Operator, Deduct .....	-14,683.12	
01 22 23 00-1023		Rear Dump Trucks (01 22 23 00-1008)		
01 22 23 00-1024	DAY	2.5 CY Rear Dump Truck With Full-Time Truck Driver .....	1,033.72	
		For Equipment Without Operator, Deduct .....	-677.68	
01 22 23 00-1025	WK	2.5 CY Rear Dump Truck With Full-Time Truck Driver .....	4,328.82	
		For Equipment Without Operator, Deduct .....	-3,388.41	
01 22 23 00-1026	MO	2.5 CY Rear Dump Truck With Full-Time Truck Driver .....	17,562.40	
		For Equipment Without Operator, Deduct .....	-14,683.12	
01 22 23 00-1027	DAY	4 CY Rear Dump Truck With Full-Time Truck Driver .....	1,151.76	
		For Equipment Without Operator, Deduct .....	-677.68	
01 22 23 00-1028	WK	4 CY Rear Dump Truck With Full-Time Truck Driver .....	4,694.53	
		For Equipment Without Operator, Deduct .....	-3,388.41	
01 22 23 00-1029	MO	4 CY Rear Dump Truck With Full-Time Truck Driver .....	18,069.37	
		For Equipment Without Operator, Deduct .....	-14,683.12	
01 22 23 00-1030	DAY	6 CY Rear Dump Truck With Full-Time Truck Driver .....	1,219.48	
		For Equipment Without Operator, Deduct .....	-677.68	
01 22 23 00-1031	WK	6 CY Rear Dump Truck With Full-Time Truck Driver .....	4,839.66	
		For Equipment Without Operator, Deduct .....	-3,388.41	
01 22 23 00-1032	MO	6 CY Rear Dump Truck With Full-Time Truck Driver .....	18,166.12	
		For Equipment Without Operator, Deduct .....	-14,683.12	
01 22 23 00-1033	DAY	13 CY Rear Dump Truck With Full-Time Truck Driver .....	2,022.50	
		For Equipment Without Operator, Deduct .....	-677.68	
01 22 23 00-1034	WK	13 CY Rear Dump Truck With Full-Time Truck Driver .....	6,494.09	
		For Equipment Without Operator, Deduct .....	-3,388.41	
01 22 23 00-1035	MO	13 CY Rear Dump Truck With Full-Time Truck Driver .....	22,810.12	
		For Equipment Without Operator, Deduct .....	-14,683.12	
01 22 23 00-1036	DAY	18 CY Rear Dump Truck With Full-Time Truck Driver .....	2,156.99	
		For Equipment Without Operator, Deduct .....	-677.68	
01 22 23 00-1037	WK	18 CY Rear Dump Truck With Full-Time Truck Driver .....	6,804.65	
		For Equipment Without Operator, Deduct .....	-3,388.41	
01 22 23 00-1038	MO	18 CY Rear Dump Truck With Full-Time Truck Driver .....	23,622.82	
		For Equipment Without Operator, Deduct .....	-14,683.12	
01 22 23 00-1039		Under-Bridge Inspection Trucks (01 22 23 00-1008)		
01 22 23 00-1040	DAY	40' Reach Under Bridge Inspection Truck (UBIT) With Full-Time Truck Driver .....	4,314.60	
		For Equipment Without Operator, Deduct .....	-677.68	

<b>01</b>	<b>General Requirements</b>
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MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
01 22 23 00-1041 WK 40' Reach Under Bridge Inspection Truck (UBIT) With Full-Time Truck Driver.....	19,607.09	
For Equipment Without Operator, Deduct	-3,388.41	
01 22 23 00-1042 MO 40' Reach Under Bridge Inspection Truck (UBIT) With Full-Time Truck Driver.....	72,177.45	
For Equipment Without Operator, Deduct	-14,683.12	
01 22 23 00-1043 DAY 50' Reach Under Bridge Inspection Truck (UBIT) With Full-Time Truck Driver.....	4,806.07	
For Equipment Without Operator, Deduct	-677.68	
01 22 23 00-1044 WK 50' Reach Under Bridge Inspection Truck (UBIT) With Full-Time Truck Driver.....	20,590.03	
For Equipment Without Operator, Deduct	-3,388.41	
01 22 23 00-1045 MO 50' Reach Under Bridge Inspection Truck (UBIT) With Full-Time Truck Driver.....	75,886.76	
For Equipment Without Operator, Deduct	-14,683.12	
01 22 23 00-1046 DAY 60' Reach Under Bridge Inspection Truck (UBIT) With Full-Time Truck Driver.....	5,100.96	
For Equipment Without Operator, Deduct	-677.68	
01 22 23 00-1047 WK 60' Reach Under Bridge Inspection Truck (UBIT) With Full-Time Truck Driver.....	22,064.46	
For Equipment Without Operator, Deduct	-3,388.41	
01 22 23 00-1048 MO 60' Reach Under Bridge Inspection Truck (UBIT) With Full-Time Truck Driver.....	79,596.08	
For Equipment Without Operator, Deduct	-14,683.12	
01 22 23 00-1049 DAY 75' Reach Under Bridge Inspection Truck (UBIT) With Full-Time Truck Driver.....	6,378.79	
For Equipment Without Operator, Deduct	-677.68	
01 22 23 00-1050 WK 75' Reach Under Bridge Inspection Truck (UBIT) With Full-Time Truck Driver.....	27,962.16	
For Equipment Without Operator, Deduct	-3,388.41	
01 22 23 00-1051 MO 75' Reach Under Bridge Inspection Truck (UBIT) With Full-Time Truck Driver.....	98,142.63	
For Equipment Without Operator, Deduct	-14,683.12	
<b>01 22 23 00-1052 Vacuum Trucks (01 22 23 00-1008)</b>		
01 22 23 00-1053 DAY 1,500 To 2,000 Gallon Vacuum Truck With Full-Time Truck Driver.....	1,033.30	
For Equipment Without Operator, Deduct	-677.68	
01 22 23 00-1054 WK 1,500 To 2,000 Gallon Vacuum Truck With Full-Time Truck Driver.....	4,448.31	
For Equipment Without Operator, Deduct	-3,388.41	
01 22 23 00-1055 MO 1,500 To 2,000 Gallon Vacuum Truck With Full-Time Truck Driver.....	17,814.00	
For Equipment Without Operator, Deduct	-14,683.12	
01 22 23 00-1056 DAY 5,000 Gallon Vacuum Truck With Full-Time Truck Driver.....	2,012.83	
For Equipment Without Operator, Deduct	-677.68	
01 22 23 00-1057 WK 5,000 Gallon Vacuum Truck With Full-Time Truck Driver.....	7,409.34	
For Equipment Without Operator, Deduct	-3,388.41	
01 22 23 00-1058 MO 5,000 Gallon Vacuum Truck With Full-Time Truck Driver.....	26,548.54	
For Equipment Without Operator, Deduct	-14,683.12	
<b>01 22 23 00-1059 Water Trucks (01 22 23 00-1008)</b>		
Note: Includes pump and 1-1/2" Diameter x 50' water hose. See CSI section 01 22 23 00-1078 for water trailer.		
01 22 23 00-1060 DAY 2,000 Gallon Water Truck With Full-Time Driver.....	1,305.25	
For Equipment Without Operator, Deduct	-677.68	
For Each 1,000 Gallon Of Purchased Water, Add	13.78	
01 22 23 00-1061 WK 2,000 Gallon Water Truck With Full-Time Driver.....	5,041.01	
For Equipment Without Operator, Deduct	-3,388.41	
For Each 1,000 Gallon Of Purchased Water, Add	13.78	
01 22 23 00-1062 MO 2,000 Gallon Water Truck With Full-Time Driver.....	18,588.00	
For Equipment Without Operator, Deduct	-14,683.12	
For Each 1,000 Gallon Of Purchased Water, Add	13.78	
01 22 23 00-1063 DAY 2,500 To 3,000 Gal Water Truck With Full-Time Operator.....	1,416.82	
For Equipment Without Operator, Deduct	-677.68	
For Each 1,000 Gallon Of Purchased Water, Add	13.78	
01 22 23 00-1064 WK 2,500 To 3,000 Gal Water Truck With Full-Time Operator.....	5,815.01	
For Equipment Without Operator, Deduct	-3,388.41	
For Each 1,000 Gallon Of Purchased Water, Add	13.78	
01 22 23 00-1065 MO 2,500 To 3,000 Gal Water Truck With Full-Time Operator.....	20,728.71	
For Equipment Without Operator, Deduct	-14,683.12	
For Each 1,000 Gallon Of Purchased Water, Add	13.78	
01 22 23 00-1066 DAY 3,700 To 4,000 Gallon Water Truck With Full-Time Driver.....	1,612.06	
For Equipment Without Operator, Deduct	-677.68	
For Each 1,000 Gallon Of Purchased Water, Add	13.78	
01 22 23 00-1067 WK 3,700 To 4,000 Gallon Water Truck With Full-Time Driver.....	5,961.45	
For Equipment Without Operator, Deduct	-3,388.41	
For Each 1,000 Gallon Of Purchased Water, Add	13.78	
01 22 23 00-1068 MO 3,700 To 4,000 Gallon Water Truck With Full-Time Driver.....	20,958.82	
For Equipment Without Operator, Deduct	-14,683.12	
For Each 1,000 Gallon Of Purchased Water, Add	13.78	
<b>01 22 23 00-1069 Asphalt Distribution Trucks (01 22 23 00-1008)</b>		
01 22 23 00-1070 DAY 3,000 Gallon Asphalt Prime Coat Distribution Truck With Full-Time Truck Driver.....	1,837.97	
For Equipment Without Operator, Deduct	-677.68	
01 22 23 00-1071 WK 3,000 Gallon Asphalt Prime Coat Distribution Truck With Full-Time Truck Driver.....	6,854.39	
For Equipment Without Operator, Deduct	-3,388.41	
01 22 23 00-1072 MO 3,000 Gallon Asphalt Prime Coat Distribution Truck With Full-Time Truck Driver.....	24,929.44	
For Equipment Without Operator, Deduct	-14,683.12	
<b>01 22 23 00-1073 Traffic Control Truck With Mounted Impact Attenuators/Crash Cushions And Arrow Board (01 22 23 00-1008)</b>		



<b>General Requirements</b>		<b>01</b>
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MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
01 22 23 00-1074 DAY Traffic Control Truck With Mounted Impact Attenuator/Crash Cushion And Arrow Board With Full-Time Truck Driver.....	1,382.37	
For Equipment Without Operator, Deduct.....	-670.83	
01 22 23 00-1075 WK Traffic Control Truck With Mounted Impact Attenuator/Crash Cushion And Arrow Board With Full-Time Truck Driver.....	5,454.09	
For Equipment Without Operator, Deduct.....	-3,354.15	
01 22 23 00-1076 MO Traffic Control Truck With Mounted Impact Attenuator/Crash Cushion And Arrow Board With Full-Time Truck Driver.....	19,634.27	
For Equipment Without Operator, Deduct.....	-14,534.64	
<b>01 22 23 00-1077 Trailers</b> (01 22 23 00-1007) Note: Includes delivery to job site and pick-up when complete.		
<b>01 22 23 00-1078 Water Trailers With Pump</b> (01 22 23 00-1077)		
01 22 23 00-1079 DAY 500 To 600 Gallon Water Trailer With Pump .....	160.38	
01 22 23 00-1080 WK 500 To 600 Gallon Water Trailer With Pump .....	411.41	
01 22 23 00-1081 MO 500 To 600 Gallon Water Trailer With Pump .....	1,101.73	
<b>01 22 23 00-1082 CALTRANS Equipment Rental Rates</b> (01 22 23) Note: An appropriate labor surcharge will be established by the Division of Construction for work that is determined by the resident engineer to be covered by Longshoreman and Harbor Worker's Act. (These tasks will be requested specifically by the owner for miscellaneous work not covered in the Construction Task Catalog®)		
01 22 23 00-1083 EA CALTRANS Equipment Rental Rates, Reimbursable .....	1.00	
Note: Reimbursable Fees will be paid to the contractor for eligible costs. Insert the appropriate quantity to adjust the base cost to the actual Reimbursable Fee. If there are multiple Reimbursable Fees, list each one separately and add a comment in the "note" block to identify the Reimbursable Fee. Per <a href="https://dot.ca.gov/-/media/dot-media/programs/construction/documents/equipment-rental-rates-and-labor-surcharge/book_2020.pdf">https://dot.ca.gov/-/media/dot-media/programs/construction/documents/equipment-rental-rates-and-labor-surcharge/book_2020.pdf</a>		

## 01 40 Quality Requirements (01)

### 01 45 Quality Control (01 40)

#### 01 45 23 Testing and Inspecting Services (01 45)

Note: For application to existing materials/site conditions only. Includes acquisition and maintenance of sample (for laboratory tests) to include shipping as required, applicable equipment for field tests, and appropriate test reports.

##### 01 45 23 00-0001 Soils/Aggregate Testing (01 45 23)

##### 01 45 23 00-0002 Field Soils Tests (01 45 23 00-0001)

01 45 23 00-0003 SET Cement Treated Base Laboratory Design, Soil Cement, Field Soils Test.....	1,261.55
01 45 23 00-0004 EA UBC Or Swell Test, Field Soils Test .....	165.73
01 45 23 00-0005 EA Proctor Compaction 4" Standard Mold ASTM D698, Field Soils Test.....	315.39
01 45 23 00-0006 EA Proctor Compaction 6" Standard Mold, Field Soils Test .....	394.24
01 45 23 00-0007 EA Density And Classification Test, Field Soils Test .....	126.16
01 45 23 00-0008 EA Percolation Test, Field Soils Test .....	315.39
01 45 23 00-0009 EA Infiltration Test, Field Soils Test.....	630.78

##### 01 45 23 00-0010 Aggregate Testing (01 45 23 00-0001)

01 45 23 00-0011 EA Sieve Analysis, Pit Run, ASTM C136 .....	205.00
Note: Includes wash.	
01 45 23 00-0012 EA Sodium And Magnesium Soundness, ASTM C88 .....	441.54
01 45 23 00-0013 EA Organic Impurities In Sand, ASTM C40.....	94.62
01 45 23 00-0014 EA Crushed Particle, ASTM California Test Method .....	94.62
01 45 23 00-0015 EA Clay Lump And Friable Particles, ASTM C142 .....	189.23

##### 01 45 23 00-0016 Permeability Tests (01 45 23 00-0001)

##### 01 45 23 00-0017 In-Place Tests (01 45 23 00-0016)

01 45 23 00-0018 EA Double Ring Infiltrometer Test, ASTM D3385.....	1,670.92
01 45 23 00-0019 EA Unconfined Compressive Strength (Pocket Penetrometer) Test .....	78.85

##### 01 45 23 00-0020 Lab Tests (01 45 23 00-0016)

01 45 23 00-0021 EA Falling Head Rigid Wall Consolidometer Technique CAE .....	779.76
01 45 23 00-0022 EA Falling Head Permeability Test EPA-9100.....	779.76
01 45 23 00-0023 EA Constant Head Permeability Test For Granular Soils, ASTM D2432.....	445.58

##### 01 45 23 00-0024 Concrete/Cement/Asphalt Testing (01 45 23)

##### 01 45 23 00-0025 Concrete Testing (01 45 23 00-0024)

01 45 23 00-0026 EA Laboratory Trial Batch, ASTM C192 .....	946.48
01 45 23 00-0027 EA Drying Shrinkage, ASTM C157 .....	736.16
01 45 23 00-0028 EA 6 x 12 Concrete Cylinder Splitting Tensile Test, ASTM C-496.....	113.58

##### 01 45 23 00-0029 Cement Testing (01 45 23 00-0024)

**01 General Requirements****01 40 Quality Requirements****01 45 Quality Control**

MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
01 45 23 00-0030 EA Cement Grab Sample (CCR Title 24) ..... Note: Includes sealing and storing 1 year.	52.58	
01 45 23 00-0031 EA 2" x 2" x 2" Cube Compression Test, All Type Materials.....	84.13	
<b>01 45 23 00-0032 Asphaltic Concrete Testing</b> (01 45 23 00-0024)		
01 45 23 00-0033 EA Hveem Asphaltic Concrete Stability Test, CA 366 .....	105.16	
01 45 23 00-0034 EA Marshall Asphaltic Concrete Stability Test (3 Specimens), ASTM D-6926/6927 .....	273.43	
01 45 23 00-0035 EA Stability Tests, Premixed, ASTM D1559 .....	105.16	
01 45 23 00-0036 EA Stability Tests, Lab. Mixed, ASTM D1559 .....	273.43	
01 45 23 00-0037 EA Swell Test, CA 305 ..... Note: Includes compaction.	126.20	
01 45 23 00-0038 EA Asphalt Film Stripping Test, CTM 302/AASHTO T182/ASTM D1664 .....	141.92	
01 45 23 00-0039 EA Penetration, ASTM D5 .....	151.92	
<b>01 45 29 Testing Laboratory Services</b> (01 45)		
<b>01 45 29 00-0001 Soil Borings Laboratory Tests</b> (01 45 29) See CSI section 02 32 13 00-0000 for soil borings.		
01 45 29 00-0002 EA Shrinkage Limit, Soil Borings Laboratory Test .....	46.20	
01 45 29 00-0003 EA Unconfined Compressive Strength of Cohesive Soils, Soil Borings Laboratory Test.....	111.40	
01 45 29 00-0004 EA Consolidation, Soil Borings Laboratory Test .....	779.76	
01 45 29 00-0005 EA Swell Test, Soil Borings Laboratory Test .....	153.99	
01 45 29 00-0006 EA Hydrometer Analysis, Soil Borings Laboratory Test.....	268.04	
01 45 29 00-0007 EA Partial Sieve Analysis, Soil Borings Laboratory Test .....	18.48	
01 45 29 00-0008 EA Laboratory Permeability, Soil Borings Laboratory Test.....	924.02	
01 45 29 00-0009 EA Sulfate Soundness, Soil Borings Laboratory Test.....	231.01	
01 45 29 00-0010 EA Soil Bearing Ratio, ASTM D1883.....	473.24	
01 45 29 00-0011 EA Field Density Sand Cone, AASHTO T-191, ASTM D1556, Soil Borings Laboratory Test.....	70.84	
<b>01 50 Temporary Facilities and Controls</b> (01)		
Note: Tasks in this section shall be used as directed by owner.		
<b>01 51 Temporary Utilities</b> (01 50)		
<b>01 51 13 Temporary Electricity</b> (01 51)		
<b>01 51 13 00-0001 Temporary 120/208 Volt Main Lug Panelboard Complete With Branch Fuses</b> (01 51 13) Note: Includes mounting on wall and removal after use.		
01 51 13 00-0002 EA Temporary 100 Amperes, Panelboard Complete With GFCI Circuit Breakers.....	1,673.58	
01 51 13 00-0003 EA Temporary 200 Amperes, Panelboard Complete With GFCI Circuit Breakers.....	2,432.40	
<b>01 51 13 00-0004 Temporary Conduit And Cable For Temporary Disconnect Switches And Temporary Panelboards</b> (01 51 13) Note: Includes all connections, fittings, supports and removal after use.		
01 51 13 00-0005 LF Temporary SER Cable (Conduit As Required) For Temporary Disconnect Switches And Temporary Panelboards .....	11.23	
01 51 13 00-0006 LF Temporary Branch Circuit Conduit And Wiring For Temporary Disconnect Switches And Temporary Panelboards .....	12.30	
<b>01 52 Construction Facilities</b> (01 50)		
Note: Tasks in this section shall be used as directed by owner for owner's use.		
<b>01 52 19 Sanitary Facilities</b> (01 52)		
<b>01 52 19 00-0001 Portable Toilets</b> (01 52 19) Note: Includes set-up, servicing once per week (unless task states otherwise) and removal.		
01 52 19 00-0002 WK Portable Chemical Toilet .....	48.33	
For Each Additional Servicing Per Unit Per Week, Add	25.00	
For Each Delivery, Add	45.00	
01 52 19 00-0003 MO Portable Chemical Toilet.....	144.99	
For Each Additional Servicing Per Unit Per Week, Add	25.00	
For Each Delivery, Add	45.00	
01 52 19 00-0004 WK Americans With Disabilities Act Compliant Portable Chemical Toilet.....	57.64	
For Each Additional Servicing Per Unit Per Week, Add	25.00	
For Each Delivery, Add	45.00	
01 52 19 00-0005 MO Americans With Disabilities Act Compliant Portable Chemical Toilet.....	169.15	
For Each Additional Servicing Per Unit Per Week, Add	25.00	
For Each Delivery, Add	45.00	
01 52 19 00-0006 WK Two Station Portable Handwash.....	51.99	
For Each Delivery, Add	45.00	
01 52 19 00-0007 MO Two Station Portable Handwash.....	157.70	
For Each Delivery, Add	45.00	
01 52 19 00-0008 MO 6 Station, Portable Toilets, Multi Trailer .....	4,312.36	
Note: Includes women's room (3 toilets, 2 sinks) and men's room (1 toilet, 1 urinal and 1 sink)		
01 52 19 00-0009 WK Service 6 Station Trailer Restrooms, 3 Times Per Week.....	1,850.00	
For One Additional Service Per Week, Add	616.67	
Note: For one less service per week, UOM to be negative one (-1)		





General Requirements			01
Temporary Facilities and Controls			01 50
Temporary Construction			01 53

MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
01 53 Temporary Construction (01 50)		
01 53 16 Temporary Decking (01 53)		
01 53 16 00-0001 Temporary Walkways And Railings (01 53 16)		
Note: Includes removal after use.		
01 53 16 00-0002 SF Temporary Wood Walkway, 3/4" Plywood On 2 x 6 Stringers .....	7.72	
01 53 16 00-0003 LF Temporary Wooden Guardrail, 42" High, Posts, Handrail, And Intermediate Rail .....	36.72	
01 53 16 00-0004 LF Temporary Wood Guardrail Base, 12" x 12" Timber Beam.....	14.45	
01 53 16 00-0005 RSR Temporary Wood Stairs, Tread And Riser On 2" x 12" Stringers.....	26.04	
01 53 23 Temporary Ramps (01 53)		
01 53 23 00-0001 Temporary Plywood For Wheel Barrow Access (01 53 23)		
Note: Includes removal after use.		
01 53 23 00-0002 SF Temporary Plywood For Wheel Barrow Access.....	1.86	0.52
01 55 Vehicular Access and Parking (01 50)		
01 55 23 Temporary Roads (01 55)		
01 55 23 00-0001 Temporary Stabilized Construction Entrance (01 55 23)		
Note: As per Caltrans detail.		
01 55 23 00-0002 SF 3" To 4" Rock Temporary Stabilized Construction Entrance Assembly .....	3.48	
Note: Includes up to 12" excavation of pit, hauling and disposal of soil, filter fabric at base and sides, filled with rock, and compaction.		
01 55 23 00-0003 SF >4" To 6" Rock Temporary Stabilized Construction Entrance Assembly .....	4.52	
Note: Includes up to 12" excavation of pit, hauling and disposal of soil, filter fabric at base and sides, filled with rock, and compaction.		
01 55 23 00-0004 Rumble Trench Plate (01 55 23)		
01 55 23 00-0005 MO 8' x 10' Steel Rumble Trench Plate Rental.....	380.94	
01 55 23 00-0006 EA Placement And Removal Of Rumble Plate .....	89.96	
Note: If lifting equipment is not available on site, See CSI section 01 22 23 00-0000 for rentals tasks, 01 71 13 00-0000 for mobilization tasks.		
01 55 23 00-0007 EA Relocate And Adjust Location Of Rumble Plate.....	22.49	
Note: If lifting equipment is not available on site, See CSI section 01 22 23 00-0000 for rentals tasks, 01 71 13 00-0000 for mobilization tasks.		
01 55 23 00-0008 Temporary Road Ramps (Godwin) (01 55 23)		
Note: Excludes asphalt and gravel.		
01 55 23 00-0009 EA 4" Pipeline, 12' Passable Vehicle Width, Temporary Road Ramp (Godwin).....	4,654.66	198.91
01 55 23 00-0010 EA 6" Pipeline, 12' Passable Vehicle Width, Temporary Road Ramp (Godwin).....	6,334.21	298.36
01 55 23 00-0011 EA 8" Pipeline, 12' Passable Vehicle Width, Temporary Road Ramp (Godwin).....	8,754.08	397.82
01 55 23 00-0012 EA 12" Pipeline, 12' Passable Vehicle Width, Temporary Road Ramp (Godwin).....	18,206.98	497.27
01 55 23 00-0013 EA 24" Pipeline, 15' Passable Vehicle Width, Temporary Road Ramp (Godwin).....	26,734.49	596.73
01 55 26 Traffic Control (01 55)		
01 55 26 00-0001 Temporary Traffic Lines And Markers (01 55 26)		
Note: Includes installation and removal after use.		
01 55 26 00-0002 LF 4" Temporary Painted Traffic Lines.....	2.25	
For Not Removed, Deduct		
	-1.49	
01 55 26 00-0003 LF 6" Temporary Painted Traffic Lines.....	2.96	
For Not Removed, Deduct		
	-2.03	
01 55 26 00-0004 LF 8" Temporary Painted Traffic Lines.....	3.70	
For Not Removed, Deduct		
	-2.57	
01 55 26 00-0005 EA 2" High x 2" Wide Temporary Overlay Pavement Markers, "L" With Factory-Applied Adhesive Pad.....	3.26	
01 55 26 00-0006 EA 2" High x 4" Wide Temporary Overlay Pavement Markers, "L" With Factory-Applied Adhesive Pad.....	3.29	
01 55 26 00-0007 Temporary Pedestrian Traffic Control (01 55 26)		
01 55 26 00-0008 CLF 1", 4 Mil Polyethylene Printed Barricade Tape, Fluorescent Orange .....	12.10	
01 55 26 00-0009 CLF 2", 4 Mil Polyethylene Printed Barricade Tape, Fluorescent Orange .....	16.41	
01 55 26 00-0010 CLF 3/4", 4 Mil Polyethylene Printed Barricade Tape, Fluorescent Yellow.....	8.64	
01 55 26 00-0011 CLF 2", 4 Mil Polyethylene Printed Barricade Tape, Fluorescent Yellow.....	10.87	
01 55 26 00-0012 CLF 3", 4 Mil Polyethylene Printed Barricade Tape, Non Fluorescent .....	12.23	
01 55 26 00-0013 CLF 6", 4 Mil Polyethylene Printed Barricade Tape, Non Fluorescent .....	17.75	
01 55 26 00-0014 CLF 1" Exterior Vinyl Tape (Warning Tape) .....	15.07	
01 55 26 00-0015 CLF 2" Exterior Vinyl Tape (Warning Tape) .....	22.04	
01 55 26 00-0016 CLF 3" Exterior Vinyl Tape (Warning Tape) .....	28.80	
01 55 26 00-0017 CLF 4" Exterior Vinyl Tape (Warning Tape) .....	33.76	
01 55 26 00-0018 Linear Delineation System, Temporary Or Permanent (01 55 26)		
Note: High visibility reflective sheeting strips. Scotchlite as manufactured by 3M.		
01 55 26 00-0019 LF 4" Linear Delineation System.....	10.69	

<b>01</b>	<b>General Requirements</b>
<b>01 50</b>	<b>Temporary Facilities and Controls</b>
<b>01 55</b>	<b>Vehicular Access and Parking</b>



MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
01 55 26 00-0020 LF 6" Linear Delineation System.....	14.50	
<b>01 55 26 00-0021 Temporary Traffic Protection</b> (01 55 26)		
<b>01 55 26 00-0022 Temporary Portable Traffic Control Device Usage</b> (01 55 26 00-0021)		
Note: Excludes placing and removing devices. See CSI section 01 55 26 00-0098 for delivery, placing and removal.		
01 55 26 00-0023 DAY 28" Cone With Reflective Collar.....	0.82	
01 55 26 00-0024 WK 28" Cone With Reflective Collar.....	2.45	
01 55 26 00-0025 MO 28" Cone With Reflective Collar.....	7.36	
01 55 26 00-0026 DAY Vertical Panel.....	2.47	
01 55 26 00-0027 WK Vertical Panel.....	7.41	
01 55 26 00-0028 MO Vertical Panel.....	22.23	
01 55 26 00-0029 DAY Channelizer Drum.....	2.68	
01 55 26 00-0030 WK Channelizer Drum.....	8.05	
01 55 26 00-0031 MO Channelizer Drum.....	24.14	
01 55 26 00-0032 DAY Stackable Channelizer Panel.....	1.27	
01 55 26 00-0033 WK Stackable Channelizer Panel.....	3.80	
01 55 26 00-0034 MO Stackable Channelizer Panel.....	11.41	
01 55 26 00-0035 DAY Type I Barricade, Up To 3' Wide With Reflective Rail Each Side.....	1.76	
01 55 26 00-0036 WK Type I Barricade, Up To 3' Wide With Reflective Rail Each Side.....	5.27	
01 55 26 00-0037 MO Type I Barricade, Up To 3' Wide With Reflective Rail Each Side.....	15.81	
01 55 26 00-0038 DAY Type II Barricade, Up To 3' Wide With Two Reflective Rails Each Side.....	3.89	
01 55 26 00-0039 WK Type II Barricade, Up To 3' Wide With Two Reflective Rails Each Side.....	11.68	
01 55 26 00-0040 MO Type II Barricade, Up To 3' Wide With Two Reflective Rails Each Side.....	35.04	
01 55 26 00-0041 DAY Type III Barricade, Up To 5' Wide With Three Reflective Rails.....	4.44	
01 55 26 00-0042 WK Type III Barricade, Up To 5' Wide With Three Reflective Rails.....	13.31	
01 55 26 00-0043 MO Type III Barricade, Up To 5' Wide With Three Reflective Rails.....	39.93	
01 55 26 00-0044 DAY Type III Barricade, >5' To 10' Wide With Three Reflective Rails.....	8.12	
01 55 26 00-0045 WK Type III Barricade, >5' To 10' Wide With Three Reflective Rails.....	24.35	
01 55 26 00-0046 MO Type III Barricade, >5' To 10' Wide With Three Reflective Rails.....	73.04	
01 55 26 00-0047 DAY Up To 10' Wide A Frame Barricade.....	4.45	
01 55 26 00-0048 WK Up To 10' Wide A Frame Barricade.....	13.35	
01 55 26 00-0049 MO Up To 10' Wide A Frame Barricade.....	40.06	
01 55 26 00-0050 DAY Type A Or C Flasher.....	0.91	
01 55 26 00-0051 WK Type A Or C Flasher.....	2.72	
01 55 26 00-0052 MO Type A Or C Flasher.....	8.16	
01 55 26 00-0053 DAY Type B Flasher (High Intensity).....	4.92	
01 55 26 00-0054 WK Type B Flasher (High Intensity).....	14.76	
01 55 26 00-0055 MO Type B Flasher (High Intensity).....	44.29	
<b>01 55 26 00-0056 Temporary Traffic Barriers Usage</b> (01 55 26 00-0021)		
Note: Excludes placing and removing devices. See CSI section 01 55 26 00-0098 for delivery, placing and removal.		
01 55 26 00-0057 DAY 6' Long Portable Parking Curbs.....	2.12	
01 55 26 00-0058 WK 6' Long Portable Parking Curbs.....	6.36	
01 55 26 00-0059 MO 6' Long Portable Parking Curbs.....	19.08	
01 55 26 00-0060 DAY 6' Long Portable Speed Bumps.....	6.27	
01 55 26 00-0061 WK 6' Long Portable Speed Bumps.....	18.82	
01 55 26 00-0062 MO 6' Long Portable Speed Bumps.....	56.45	
01 55 26 00-0063 DAY Up To 12.5' Concrete Traffic Barrier.....	15.07	
01 55 26 00-0064 WK Up To 12.5' Concrete Traffic Barrier.....	45.21	
01 55 26 00-0065 MO Up To 12.5' Concrete Traffic Barrier.....	135.62	
01 55 26 00-0066 DAY >12.5' To 20' Concrete Traffic Barrier.....	30.14	
01 55 26 00-0067 WK >12.5' To 20' Concrete Traffic Barrier.....	90.41	
01 55 26 00-0068 MO >12.5' To 20' Concrete Traffic Barrier.....	271.24	
01 55 26 00-0069 DAY 6' x 32" Tall Plastic Water Barrier.....	18.00	
01 55 26 00-0070 WK 6' x 32" Tall Plastic Water Barrier.....	53.99	
01 55 26 00-0071 MO 6' x 32" Tall Plastic Water Barrier.....	161.96	
01 55 26 00-0072 DAY 6' x 46" Tall Plastic Water Barrier.....	25.70	
01 55 26 00-0073 WK 6' x 46" Tall Plastic Water Barrier.....	77.09	
01 55 26 00-0074 MO 6' x 46" Tall Plastic Water Barrier.....	231.26	
01 55 26 00-0075 DAY Sand Filled Crash Attenuator Barrels.....	10.06	
01 55 26 00-0076 WK Sand Filled Crash Attenuator Barrels.....	30.17	
01 55 26 00-0077 MO Sand Filled Crash Attenuator Barrels.....	90.52	
01 55 26 00-0078 MO 24" Wide x 32" High x 32' Long, Anchorless Water Filler, Non Redirective, Bi-Directional Impact Attenuator (ABSORB 350® BARRIER).....	1,427.28	
Note: Consists of 8 bays with nose piece at the front of the system.		
<b>01 55 26 00-0079 Temporary Portable Signs And Message Displays Usage</b> (01 55 26 00-0021)		
Note: Excludes placing and removing devices. See CSI section 01 55 26 00-0098 for delivery, placing and removal.		
01 55 26 00-0080 DAY Mesh Or Vinyl Roll-up Sign With Stand.....	7.90	
01 55 26 00-0081 WK Mesh Or Vinyl Roll-up Sign With Stand.....	23.69	
01 55 26 00-0082 MO Mesh Or Vinyl Roll-up Sign With Stand.....	71.07	
01 55 26 00-0083 DAY Aluminum Sign And Post.....	3.68	
01 55 26 00-0084 WK Aluminum Sign And Post.....	11.04	
01 55 26 00-0085 MO Aluminum Sign And Post.....	33.11	
01 55 26 00-0086 DAY Aluminum Sign And A Frame Stand.....	5.97	



General Requirements			01
Temporary Facilities and Controls			01 50
Vehicular Access and Parking			01 55

MINOR	CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
01 55 26 00-0087	WK		Aluminum Sign And A Frame Stand .....	17.91	
01 55 26 00-0088	MO		Aluminum Sign And A Frame Stand .....	53.73	
01 55 26 00-0089	DAY		Trailer Mounted Flashing Arrow Board .....	129.00	
01 55 26 00-0090	WK		Trailer Mounted Flashing Arrow Board .....	357.04	
01 55 26 00-0091	MO		Trailer Mounted Flashing Arrow Board .....	944.44	
01 55 26 00-0092	DAY		Trailer Mounted Portable Variable Message Sign (PVMS) .....	372.00	
01 55 26 00-0093	WK		Trailer Mounted Portable Variable Message Sign (PVMS) .....	992.00	
01 55 26 00-0094	MO		Trailer Mounted Portable Variable Message Sign (PVMS) .....	1,984.00	
01 55 26 00-0095	DAY		Two Head, Trailer Mounted Traffic Signal System (Set Of Two) .....	1,343.23	
Note: Consists of a set of two communicating trailers. Each with two LED traffic light head, solar panels and a battery bank, mounted on a heavy-duty towable trailer.					
01 55 26 00-0096	WK		Two Head, Trailer Mounted Traffic Signal System (Set Of Two) .....	4,029.69	
Note: Consists of a set of two communicating trailers. Each with two LED traffic light head, solar panels and a battery bank, mounted on a heavy-duty towable trailer.					
01 55 26 00-0097	MO		Two Head, Trailer Mounted Traffic Signal System (Set Of Two) .....	12,089.07	
Note: Consists of a set of two communicating trailers. Each with two LED traffic light head, solar panels and a battery bank, mounted on a heavy-duty towable trailer.					
<b>01 55 26 00-0098 Place And Remove Temporary Traffic Protection Using Truck (01 55 26 00-0021)</b>					
Note: Includes delivery and return up to 15 miles. See CSI section 01 74 19 00-0015 for delivery >15 miles.					
01 55 26 00-0099	EA		Placement And Removal Of Up To 250 Cones Using Truck .....	3.52	
01 55 26 00-0100	EA		Placement And Removal Of >250 Cones Using Truck .....	3.08	
01 55 26 00-0101	EA		Placement And Removal Of Up To 250 Panels/Channelizers Using Truck .....	5.81	
01 55 26 00-0102	EA		Placement And Removal Of >250 Panels/Channelizers Using Truck .....	4.84	
01 55 26 00-0103	EA		Placement And Removal Of Up To 250 Barricades Using Truck .....	8.80	
01 55 26 00-0104	EA		Placement And Removal Of >250 Barricades Using Truck .....	7.04	
01 55 26 00-0105	EA		Placement And Removal Of Curbs/Speed Bumps Using Truck .....	8.80	
01 55 26 00-0106	EA		Placement And Removal Of Portable Sign And Stand Using Truck .....	5.28	
01 55 26 00-0107	EA		Placement And Removal Of Aluminum Sign And Post Using Truck .....	22.00	
01 55 26 00-0108	EA		Placement And Removal Of Trailer Mounted Boards And Signals Using Truck .....	65.99	
01 55 26 00-0109	EA		Placement And Removal Of Up To 12.5' Concrete Traffic Barrier .....	89.96	
Note: If lifting equipment is not available on site, See CSI section 01 22 23 00-0000 for rentals tasks, 01 71 13 00-0000 for mobilization tasks.					
For 1 Barrier, Add				224.90	
For 2 Barriers, Add				80.96	
For 3 Barriers, Add				26.99	
01 55 26 00-0110	EA		Placement And Removal Of >12.5' Concrete Traffic Barrier .....	134.93	
Note: If lifting equipment is not available on site, See CSI section 01 22 23 00-0000 for rentals tasks, 01 71 13 00-0000 for mobilization tasks.					
For 1 Barrier, Add				337.33	
For 2 Barriers, Add				121.44	
For 3 Barriers, Add				40.48	
01 55 26 00-0111	EA		Placement And Removal Of Plastic Water Barrier .....	51.86	
Note: Includes water. If lifting equipment is not available on site, See CSI section 01 22 23 00-0000 for rental tasks, 01 71 13 00-0000 for mobilization tasks.					
For 1 Barrier, Add				112.43	
For 2 Barriers, Add				40.47	
For 3 Barriers, Add				13.49	
01 55 26 00-0112	EA		Placement And Removal Of Crash Attenuator Barrels .....	67.47	
Note: If lifting equipment is not available on site, See CSI section 01 22 23 00-0000 for rentals tasks, 01 71 13 00-0000 for mobilization tasks.					
For 1 Barrier, Add				168.68	
For 2 Barriers, Add				60.72	
For 3 Barriers, Add				20.24	
01 55 26 00-0113	EA		Placement And Removal Of 24" Wide x 32" High x 32' Long, Anchorless Water Filler, Non Redirective, Bi-Directional Impact Attenuator (ABSORB 350® BARRIER) .....	494.76	
Note: Consists of 8 bays with nose piece at the front of the system attached and anchored in accordance with the manufactures instructions. Includes water. If lifting equipment is not available on site, See CSI section 01 22 23 00-0000 for rental tasks, 01 71 13 00-0000 for mobilization.					
<b>01 55 26 00-0114 Place And Remove Temporary Traffic Protection From Roadside (Daily) (01 55 26 00-0021)</b>					
01 55 26 00-0115	EA		Placement And Removal Of Up To 250 Cones By Hand From Roadside .....	2.20	
01 55 26 00-0116	EA		Placement And Removal Of >250 Cones By Hand From Roadside .....	1.76	
01 55 26 00-0117	EA		Placement And Removal Of Up To 250 Panels/Channelizers By Hand From Roadside .....	2.93	
01 55 26 00-0118	EA		Placement And Removal Of >250 Panels/Channelizers By Hand From Roadside .....	2.34	
01 55 26 00-0119	EA		Placement And Removal Of Up To 250 Barricades By Hand From Roadside .....	4.40	
01 55 26 00-0120	EA		Placement And Removal Of >250 Barricades By Hand From Roadside .....	3.52	
01 55 26 00-0121	EA		Placement And Removal Of Portable Sign And Stand From Roadside .....	2.63	
01 55 26 00-0122	EA		Placement And Removal Of Trailer Mounted Boards And Signals From Roadside .....	33.00	
01 55 26 00-0123	EA		Relocate Concrete Traffic Barrier .....	44.97	
Note: Excludes flatbed truck (if required). If lifting equipment is not available on site. See CSI section 01 22 23 00-0000 for rentals tasks, 01 71 13 00-0000 for mobilization tasks.					
<b>01 55 26 00-0124 Temporary Rumble Strips (01 55 26)</b>					
Note: Includes removal after use.					
01 55 26 00-0125	LF		1/4" High, 4" Wide, Polymer Tape Temporary Rumble Strip .....	12.78	
01 55 26 00-0126	LF		1/2" High, 3-1/2" Wide, Polycarbonate Temporary Rumble Strip .....	9.16	

## 01 56 Temporary Barriers and Enclosures (01 50)

<b>01</b>	<b>General Requirements</b>
<b>01 50</b>	<b>Temporary Facilities and Controls</b>
<b>01 56</b>	<b>Temporary Barriers and Enclosures</b>



MINOR  
CSI UOM DESCRIPTION

TOTAL DIRECT DEMOLITION  
UNIT COST UNIT COST

Note: Includes removal after use.

### 01 56 16 Temporary Dust Barriers (01 56)

#### 01 56 16 00-0001 Temporary Sheeting For Protection (01 56 16)

Note: Includes removal after use.

01 56 16 00-0002	SF	6 Mil, Plastic Sheeting, Applied To Floors.....	0.35
01 56 16 00-0003	SF	6 Mil, Plastic Sheeting, Applied To Walls.....	0.45
01 56 16 00-0004	SF	6 Mil, Plastic Sheeting, Applied To Ceilings.....	0.60
01 56 16 00-0005	SF	6 Mil, Plastic Sheeting, Applied To Scaffolding.....	0.59
01 56 16 00-0006	SF	6 Mil, Fire Retardant, Plastic Sheeting, Applied To Floors.....	0.43
01 56 16 00-0007	SF	6 Mil, Fire Retardant, Plastic Sheeting, Applied To Walls.....	0.53
01 56 16 00-0008	SF	6 Mil, Fire Retardant, Plastic Sheeting, Applied To Ceilings.....	0.68
01 56 16 00-0009	SF	6 Mil, Fire Retardant, Plastic Sheeting, Applied To Scaffolding.....	0.64
01 56 16 00-0010	SF	6 Mil, Fire Retardant, Anti Static, Plastic Sheeting, Applied To Floors.....	0.45
01 56 16 00-0011	SF	6 Mil, Fire Retardant, Anti Static, Plastic Sheeting, Applied To Walls.....	0.55
01 56 16 00-0012	SF	6 Mil, Fire Retardant, Anti Static, Plastic Sheeting, Applied To Ceilings.....	0.70
01 56 16 00-0013	SF	6 Mil, Fire Retardant, Anti Static, Plastic Sheeting, Applied To Scaffolding.....	0.66
01 56 16 00-0014	SF	6 Mil, Reinforced, Plastic Sheeting, Applied To Floors.....	0.45
01 56 16 00-0015	SF	6 Mil, Reinforced, Plastic Sheeting, Applied To Walls.....	0.55
01 56 16 00-0016	SF	6 Mil, Reinforced, Plastic Sheeting, Applied To Ceilings.....	0.70
01 56 16 00-0017	SF	6 Mil, Reinforced, Plastic Sheeting, Applied To Scaffolding.....	0.66
01 56 16 00-0018	SF	6 Mil, Fire Retardant, Reinforced, Plastic Sheeting, Applied To Floors.....	0.52
01 56 16 00-0019	SF	6 Mil, Fire Retardant, Reinforced, Plastic Sheeting, Applied To Walls.....	0.62
01 56 16 00-0020	SF	6 Mil, Fire Retardant, Reinforced, Plastic Sheeting, Applied To Ceilings.....	0.77
01 56 16 00-0021	SF	6 Mil, Fire Retardant, Reinforced, Plastic Sheeting, Applied To Scaffolding.....	0.73
01 56 16 00-0022	SF	10 Mil, Fire Retardant, Reinforced, Plastic Sheeting, Applied To Scaffolding.....	0.83

#### 01 56 16 00-0023 Temporary Canvas For Protection (01 56 16)

Note: Includes removal after use.

01 56 16 00-0024	SF	Heavy Duty Woven Water Repellant Canvas, Applied To Walls.....	0.93
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#### 01 56 16 00-0025 Temporary Stud Wall (01 56 16)

Note: Includes removal after use.

#### 01 56 16 00-0026 Temporary Stud Wall With Drywall (01 56 16 00-0025)

Note: Includes 2 x 4 wood studs installed 16" on center, single bottom and top plate, appropriate fastening devices, drywall taped and finished and removal after use. Excludes paint.

#### 01 56 16 00-0027 Temporary Stud Wall With Drywall (01 56 16 00-0026)

01 56 16 00-0028	SF	3/8" Gypsum Board On One Side, Temporary Wood Stud Wall, 16" On Center.....	7.03
		For Metal Studs 24" On Center, Add/Deduct	0.00
01 56 16 00-0029	SF	1/2" Gypsum Board On One Side, Temporary Wood Stud Wall, 16" On Center.....	7.03
		For Metal Studs 24" On Center, Add/Deduct	0.00
01 56 16 00-0030	SF	5/8" Gypsum Board On One Side, Temporary Wood Stud Wall, 16" On Center.....	7.11
		For Metal Studs 24" On Center, Add/Deduct	0.00
01 56 16 00-0031	SF	3/8" Gypsum Board On Both Sides, Temporary Wood Stud Wall, 16" On Center.....	9.41
		For Metal Studs 24" On Center, Add/Deduct	0.10
01 56 16 00-0032	SF	1/2" Gypsum Board On Both Sides, Temporary Wood Stud Wall, 16" On Center.....	9.41
		For Metal Studs 24" On Center, Add/Deduct	0.10
01 56 16 00-0033	SF	5/8" Gypsum Board On Both Sides, Temporary Wood Stud Wall, 16" On Center.....	9.57
		For Metal Studs 24" On Center, Add/Deduct	0.10

#### 01 56 16 00-0034 Temporary Stud Wall With Fire Rated Drywall (01 56 16 00-0026)

01 56 16 00-0035	SF	1/2" Type C Fire Rated Gypsum Board On One Side, Temporary Wood Stud Wall, 16" On Center.....	7.13
		For Metal Studs 24" On Center, Add/Deduct	0.00
01 56 16 00-0036	SF	5/8" Type C Fire Rated Gypsum Board On One Side, Temporary Wood Stud Wall, 16" On Center.....	7.15
		For Metal Studs 24" On Center, Add/Deduct	0.00
01 56 16 00-0037	SF	5/8" Type X Fire Rated Gypsum Board On One Side, Temporary Wood Stud Wall, 16" On Center.....	7.11
		For Metal Studs 24" On Center, Add/Deduct	0.00
01 56 16 00-0038	SF	3/4" Fire Rated (Sheetrock® Ultracode®) Gypsum Board On One Side, Temporary Wood Stud Wall, 16" On Center.....	7.73
		For Metal Studs 24" On Center, Add/Deduct	0.00
01 56 16 00-0039	SF	1/2" Type C Fire Rated Gypsum Board On Both Sides, Temporary Wood Stud Wall, 16" On Center.....	9.59
		For Metal Studs 24" On Center, Add/Deduct	0.10
01 56 16 00-0040	SF	5/8" Type C Fire Rated Gypsum Board On Both Sides, Temporary Wood Stud Wall, 16" On Center.....	9.65
		For Metal Studs 24" On Center, Add/Deduct	0.10
01 56 16 00-0041	SF	5/8" Type X Fire Rated Gypsum Board On Both Sides, Temporary Wood Stud Wall, 16" On Center.....	9.55
		For Metal Studs 24" On Center, Add/Deduct	0.10
01 56 16 00-0042	SF	3/4" Fire Rated (Sheetrock® Ultracode®) Gypsum Board On Both Sides, Temporary Wood Stud Wall, 16" On Center.....	10.80
		For Metal Studs 24" On Center, Add/Deduct	0.10

#### 01 56 16 00-0043 Temporary Stud Wall With Oriented Strand Board (OSB) (01 56 16 00-0025)

Note: Includes 2 x 4 wood studs installed 16" on center, single bottom and top plate, appropriate fastening devices, oriented strand board (OSB) wall sheathing, and removal after use. Excludes paint.

01 56 16 00-0044	SF	7/16" Oriented Strand Board (OSB) Wall Sheathing On One Side, Temporary Wood Stud Wall, 16" On Center.....	7.57
		For Metal Studs 24" On Center, Add/Deduct	0.00
01 56 16 00-0045	SF	1/2" Oriented Strand Board (OSB) Wall Sheathing On One Side, Temporary Wood Stud Wall, 16" On Center.....	7.69
		For Metal Studs 24" On Center, Add/Deduct	0.00



General Requirements			01
Temporary Facilities and Controls			01 50
Temporary Barriers and Enclosures			01 56

MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
01 56 16 00-0046 SF 5/8" Oriented Strand Board (OSB) Wall Sheathing On One Side, Temporary Wood Stud Wall, 16" On Center.....	8.02	
For Metal Studs 24" On Center, Add/Deduct	0.00	
01 56 16 00-0047 SF 3/4" Oriented Strand Board (OSB) Wall Sheathing On One Side, Temporary Wood Stud Wall, 16" On Center.....	8.21	
For Metal Studs 24" On Center, Add/Deduct	0.00	
01 56 16 00-0048 SF 7/16" Oriented Strand Board (OSB) Wall Sheathing On Both Sides, Temporary Wood Stud Wall, 16" On Center.....	10.48	
For Metal Studs 24" On Center, Add/Deduct	0.10	
01 56 16 00-0049 SF 1/2" Oriented Strand Board (OSB) Wall Sheathing On Both Sides, Temporary Wood Stud Wall, 16" On Center.....	10.72	
For Metal Studs 24" On Center, Add/Deduct	0.10	
01 56 16 00-0050 SF 5/8" Oriented Strand Board (OSB) Wall Sheathing On Both Sides, Temporary Wood Stud Wall, 16" On Center.....	11.39	
For Metal Studs 24" On Center, Add/Deduct	0.10	
01 56 16 00-0051 SF 3/4" Oriented Strand Board (OSB) Wall Sheathing On Both Sides, Temporary Wood Stud Wall, 16" On Center.....	11.75	
For Metal Studs 24" On Center, Add/Deduct	0.10	
<b>01 56 16 00-0052 Temporary Stud Wall With BC Plywood</b> (01 56 16 00-0025)		
Note: Includes 2 x 4 wood studs installed 16" on center, single bottom and top plate, appropriate fastening devices, interior/exterior BC plywood wall sheathing, and removal after use. Excludes paint.		
01 56 16 00-0053 SF 3/8" BC Plywood Wall Sheathing On One Side, Temporary Wood Stud Wall, 16" On Center.....	8.37	
For Metal Studs 24" On Center, Add/Deduct	0.00	
01 56 16 00-0054 SF 1/2" BC Plywood Wall Sheathing On One Side, Temporary Wood Stud Wall, 16" On Center.....	8.81	
For Metal Studs 24" On Center, Add/Deduct	0.00	
01 56 16 00-0055 SF 5/8" BC Plywood Wall Sheathing On One Side, Temporary Wood Stud Wall, 16" On Center.....	9.24	
For Metal Studs 24" On Center, Add/Deduct	0.00	
01 56 16 00-0056 SF 3/4" BC Plywood Wall Sheathing On One Side, Temporary Wood Stud Wall, 16" On Center.....	9.61	
For Metal Studs 24" On Center, Add/Deduct	0.00	
01 56 16 00-0057 SF 3/8" BC Plywood Wall Sheathing On Both Sides, Temporary Wood Stud Wall, 16" On Center.....	12.09	
For Metal Studs 24" On Center, Add/Deduct	0.10	
01 56 16 00-0058 SF 1/2" BC Plywood Wall Sheathing On Both Sides, Temporary Wood Stud Wall, 16" On Center.....	12.96	
For Metal Studs 24" On Center, Add/Deduct	0.10	
01 56 16 00-0059 SF 5/8" BC Plywood Wall Sheathing On Both Sides, Temporary Wood Stud Wall, 16" On Center.....	13.83	
For Metal Studs 24" On Center, Add/Deduct	0.10	
01 56 16 00-0060 SF 3/4" BC Plywood Wall Sheathing On Both Sides, Temporary Wood Stud Wall, 16" On Center.....	14.56	
For Metal Studs 24" On Center, Add/Deduct	0.10	
<b>01 56 16 00-0061 Temporary Stud Wall With Plastic Sheeting</b> (01 56 16 00-0025)		
Note: Includes 2 x 4 wood studs installed 16" on center, single bottom and top plate, appropriate fastening devices, 6 Mil plastic sheeting, and removal after use.		
01 56 16 00-0062 SF 6 Mil, Plastic Sheeting On One Side, Temporary Wood Stud Wall, 16" On Center.....	4.38	
For Metal Studs 24" On Center, Add/Deduct	-0.12	
01 56 16 00-0063 SF 6 Mil, Fire Retardant, Plastic Sheeting On One Side, Temporary Wood Stud Wall, 16" On Center.....	4.46	
For Metal Studs 24" On Center, Add/Deduct	-0.12	
01 56 16 00-0064 SF 6 Mil, Fire Retardant, Anti-Static, Plastic Sheeting On One Side, Temporary Wood Stud Wall, 16" On Center.....	4.49	
For Metal Studs 24" On Center, Add/Deduct	-0.12	
01 56 16 00-0065 SF 6 Mil, Reinforced, Plastic Sheeting On One Side, Temporary Wood Stud Wall, 16" On Center.....	4.48	
For Metal Studs 24" On Center, Add/Deduct	-0.12	
01 56 16 00-0066 SF 6 Mil, Fire Retardant, Reinforced, Plastic Sheeting On One Side, Temporary Wood Stud Wall, 16" On Center.....	4.55	
For Metal Studs 24" On Center, Add/Deduct	-0.12	
<b>01 56 16 00-0067 Temporary Doors</b> (01 56 16 00-0025)		
Note: For temporary stud walls. Includes removal after use.		
01 56 16 00-0068 EA Temporary Metal Door And Frame.....	662.40	
Note: Painted with panic hardware, lockset, threshold and smoke seals. Remove after use.		
<b>01 56 26 Temporary Fencing</b> (01 56)		
<b>01 56 26 00-0001 Temporary Fencing</b> (01 56 26)		
Note: Per ASTM A392-06 Standards		
<b>01 56 26 00-0002 Temporary Chain Link Fence</b> (01 56 26 00-0001)		
Note: Includes delivery, set-up (driving posts) and removal. Excludes auguring/drilling for posts. See CSI section 02 41 19 13-0024 for core drilling in asphalt or concrete, 32 31 13 13-0001 for augering and backfill of posts.		
<b>01 56 26 00-0003 Temporary Chain Link Fence, Up To 6 Months</b> (01 56 26 00-0002)		
01 56 26 00-0004 LF Temporary 4' High Chain Link Fence And Posts, Up To 6 Months.....	6.09	
For >100 To 250, Deduct	-0.14	
For >250 To 500, Deduct	-0.29	
For >500, Deduct	-0.43	
For Each LF Shade Cloth, Add	1.60	
01 56 26 00-0005 LF Temporary 6' High Chain Link Fence And Posts, Up To 6 Months.....	6.78	
For >100 To 250, Deduct	-0.16	
For >250 To 500, Deduct	-0.32	
For >500, Deduct	-0.48	
For Each LF Shade Cloth, Add	2.55	
01 56 26 00-0006 LF Temporary 8' High Chain Link Fence And Posts, Up To 6 Months.....	9.35	
For >100 To 250, Deduct	-0.27	
For >250 To 500, Deduct	-0.55	
For >500, Deduct	-0.82	
For Each LF Shade Cloth, Add	3.60	

<b>01</b>	<b>General Requirements</b>
<b>01 50</b>	<b>Temporary Facilities and Controls</b>
<b>01 56</b>	<b>Temporary Barriers and Enclosures</b>



MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
01 56 26 00-0007 LF Temporary 10' High Chain Link Fence And Posts, Up To 6 Months.....	20.52	
For >100 To 250, Deduct	-0.81	
For >250 To 500, Deduct	-1.62	
For >500, Deduct	-2.43	
For Each LF Shade Cloth, Add	4.75	
<b>01 56 26 00-0008 Temporary Chain Link Fence, &gt;6 To 12 Months (01 56 26 00-0002)</b>		
01 56 26 00-0009 LF Temporary 4' High Chain Link Fence And Posts, >6 To 12 Months.....	6.39	
For >100 To 250, Deduct	-0.16	
For >250 To 500, Deduct	-0.32	
For >500, Deduct	-0.47	
For Each LF Shade Cloth, Add	1.60	
01 56 26 00-0010 LF Temporary 6' High Chain Link Fence And Posts, >6 To 12 Months.....	7.10	
For >100 To 250, Deduct	-0.18	
For >250 To 500, Deduct	-0.36	
For >500, Deduct	-0.53	
For Each LF Shade Cloth, Add	2.55	
01 56 26 00-0011 LF Temporary 8' High Chain Link Fence And Posts, >6 To 12 Months.....	9.89	
For >100 To 250, Deduct	-0.30	
For >250 To 500, Deduct	-0.60	
For >500, Deduct	-0.90	
For Each LF Shade Cloth, Add	3.60	
01 56 26 00-0012 LF Temporary 10' High Chain Link Fence And Posts, >6 To 12 Months.....	22.13	
For >100 To 250, Deduct	-0.89	
For >250 To 500, Deduct	-1.78	
For >500, Deduct	-2.68	
For Each LF Shade Cloth, Add	4.75	
<b>01 56 26 00-0013 Temporary Chain Link Fence, &gt;12 To 18 Months (01 56 26 00-0002)</b>		
01 56 26 00-0014 LF Temporary 4' High Chain Link Fence And Posts, >12 To 18 Months.....	6.71	
For >100 To 250, Deduct	-0.17	
For >250 To 500, Deduct	-0.35	
For >500, Deduct	-0.52	
For Each LF Shade Cloth, Add	1.60	
01 56 26 00-0015 LF Temporary 6' High Chain Link Fence And Posts, >12 To 18 Months.....	7.47	
For >100 To 250, Deduct	-0.20	
For >250 To 500, Deduct	-0.39	
For >500, Deduct	-0.59	
For Each LF Shade Cloth, Add	2.55	
01 56 26 00-0016 LF Temporary 8' High Chain Link Fence And Posts, >12 To 18 Months.....	10.50	
For >100 To 250, Deduct	-0.33	
For >250 To 500, Deduct	-0.66	
For >500, Deduct	-0.99	
For Each LF Shade Cloth, Add	3.60	
01 56 26 00-0017 LF Temporary 10' High Chain Link Fence And Posts, >12 To 18 Months.....	23.92	
For >100 To 250, Deduct	-0.98	
For >250 To 500, Deduct	-1.96	
For >500, Deduct	-2.94	
For Each LF Shade Cloth, Add	4.75	
<b>01 56 26 00-0018 Temporary Chain Link Fence, &gt;18 Months (01 56 26 00-0002)</b>		
01 56 26 00-0019 LF Temporary 4' High Chain Link Fence And Posts, >18 Months.....	7.05	
For >100 To 250, Deduct	-0.19	
For >250 To 500, Deduct	-0.38	
For >500, Deduct	-0.57	
For Each LF Shade Cloth, Add	1.60	
01 56 26 00-0020 LF Temporary 6' High Chain Link Fence And Posts, >18 Months.....	7.83	
For >100 To 250, Deduct	-0.21	
For >250 To 500, Deduct	-0.43	
For >500, Deduct	-0.64	
For Each LF Shade Cloth, Add	2.55	
01 56 26 00-0021 LF Temporary 8' High Chain Link Fence And Posts, >18 Months.....	11.15	
For >100 To 250, Deduct	-0.36	
For >250 To 500, Deduct	-0.73	
For >500, Deduct	-1.09	
For Each LF Shade Cloth, Add	3.60	
01 56 26 00-0022 LF Temporary 10' High Chain Link Fence And Posts, >18 Months.....	25.88	
For >100 To 250, Deduct	-1.08	
For >250 To 500, Deduct	-2.16	
For >500, Deduct	-3.24	
For Each LF Shade Cloth, Add	4.75	
<b>01 56 26 00-0023 Temporary Chain Link Fence Gates (01 56 26 00-0001)</b>		
Note: Includes delivery, set-up (driving posts) and removal. Excludes auguring/drilling for posts. See CSI section 02 41 19 13-0024 for core drilling in asphalt or concrete, 32 31 13 13-0001 for augering and backfill of posts.		
<b>01 56 26 00-0024 Temporary Chain Link Fence Gates, Up To 6 Months (01 56 26 00-0023)</b>		
<b>01 56 26 00-0025 4' High, Temporary Chain Link Fence Gates, Up To 6 Months (01 56 26 00-0024)</b>		
01 56 26 00-0026 EA 4' Wide, 4' High, Temporary Chain Link Fence Gate, Up To 6 Months.....	243.08	
For Each LF Shade Cloth, Add	13.62	



<b>General Requirements</b>		<b>01</b>	<b>5</b>
Temporary Facilities and Controls		01 50	
Temporary Barriers and Enclosures		01 56	

MINOR CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
01 56 26 00-0027	EA	10' Wide, 4' High, Temporary Chain Link Fence Gate, Up To 6 Months.....	413.18	
		For Each LF Shade Cloth, Add	34.05	
01 56 26 00-0028	EA	12' Wide, 4' High, Temporary Chain Link Fence Gate, Up To 6 Months.....	462.62	
		For Each LF Shade Cloth, Add	40.86	
01 56 26 00-0029	EA	15' Wide, 4' High, Temporary Chain Link Fence Gate, Up To 6 Months.....	526.61	
		For Each LF Shade Cloth, Add	51.08	
01 56 26 00-0030	EA	20' Wide, 4' High, Temporary Chain Link Fence Gate, Up To 6 Months.....	630.73	
		For Each LF Shade Cloth, Add	68.11	
01 56 26 00-0031	EA	24' Wide, 4' High, Temporary Chain Link Fence Gate, Up To 6 Months.....	702.11	
		For Each LF Shade Cloth, Add	81.73	
<b>01 56 26 00-0032 6' High, Temporary Chain Link Fence Gates, Up To 6 Months (01 56 26 00-0024)</b>				
01 56 26 00-0033	EA	4' Wide, 6' High, Temporary Chain Link Fence Gate, Up To 6 Months.....	260.28	
		For Each LF Shade Cloth, Add	21.71	
01 56 26 00-0034	EA	10' Wide, 6' High, Temporary Chain Link Fence Gate, Up To 6 Months.....	446.29	
		For Each LF Shade Cloth, Add	54.27	
01 56 26 00-0035	EA	12' Wide, 6' High, Temporary Chain Link Fence Gate, Up To 6 Months.....	500.80	
		For Each LF Shade Cloth, Add	65.13	
01 56 26 00-0036	EA	15' Wide, 6' High, Temporary Chain Link Fence Gate, Up To 6 Months.....	580.40	
		For Each LF Shade Cloth, Add	81.41	
01 56 26 00-0037	EA	20' Wide, 6' High, Temporary Chain Link Fence Gate, Up To 6 Months.....	701.56	
		For Each LF Shade Cloth, Add	108.54	
01 56 26 00-0038	EA	24' Wide, 6' High, Temporary Chain Link Fence Gate, Up To 6 Months.....	796.19	
		For Each LF Shade Cloth, Add	130.25	
<b>01 56 26 00-0039 8' High, Temporary Chain Link Fence Gates, Up To 6 Months (01 56 26 00-0024)</b>				
01 56 26 00-0040	EA	4' Wide, 8' High, Temporary Chain Link Fence Gate, Up To 6 Months.....	290.66	
		For Each LF Shade Cloth, Add	30.65	
01 56 26 00-0041	EA	10' Wide, 8' High, Temporary Chain Link Fence Gate, Up To 6 Months.....	511.55	
		For Shade Cloth, Add	76.62	
01 56 26 00-0042	EA	12' Wide, 8' High, Temporary Chain Link Fence Gate, Up To 6 Months.....	572.08	
		For Shade Cloth, Add	91.94	
01 56 26 00-0043	EA	15' Wide, 8' High, Temporary Chain Link Fence Gate, Up To 6 Months.....	654.94	
		For Shade Cloth, Add	114.93	
01 56 26 00-0044	EA	20' Wide, 8' High, Temporary Chain Link Fence Gate, Up To 6 Months.....	800.43	
		For Shade Cloth, Add	153.24	
01 56 26 00-0045	EA	24' Wide, 8' High, Temporary Chain Link Fence Gate, Up To 6 Months.....	929.14	
		For Shade Cloth, Add	183.89	
<b>01 56 26 00-0046 10' High, Temporary Chain Link Fence Gates, Up To 6 Months (01 56 26 00-0024)</b>				
01 56 26 00-0047	EA	4' Wide, 10' High, Temporary Chain Link Fence Gate, Up To 6 Months.....	352.10	
		For Each LF Shade Cloth, Add	40.44	
01 56 26 00-0048	EA	10' Wide, 10' High, Temporary Chain Link Fence Gate, Up To 6 Months.....	613.35	
		For Each LF Shade Cloth, Add	101.09	
01 56 26 00-0049	EA	12' Wide, 10' High, Temporary Chain Link Fence Gate, Up To 6 Months.....	687.32	
		For Each LF Shade Cloth, Add	121.31	
01 56 26 00-0050	EA	15' Wide, 10' High, Temporary Chain Link Fence Gate, Up To 6 Months.....	785.71	
		For Each LF Shade Cloth, Add	151.64	
01 56 26 00-0051	EA	20' Wide, 10' High, Temporary Chain Link Fence Gate, Up To 6 Months.....	960.49	
		For Each LF Shade Cloth, Add	202.19	
01 56 26 00-0052	EA	24' Wide, 10' High, Temporary Chain Link Fence Gate, Up To 6 Months.....	1,109.85	
		For Each LF Shade Cloth, Add	242.63	
<b>01 56 26 00-0053 Temporary Chain Link Fence Gates, &gt;6 To 12 Months (01 56 26 00-0023)</b>				
<b>01 56 26 00-0054 4' High, Temporary Chain Link Fence Gates, &gt;6 To 12 Months (01 56 26 00-0053)</b>				
01 56 26 00-0055	EA	4' Wide, 4' High, Temporary Chain Link Fence Gate, >6 To 12 Months.....	252.20	
		For Each LF Shade Cloth, Add	13.62	
01 56 26 00-0056	EA	10' Wide, 4' High, Temporary Chain Link Fence Gate, >6 To 12 Months.....	427.36	
		For Each LF Shade Cloth, Add	34.05	
01 56 26 00-0057	EA	12' Wide, 4' High, Temporary Chain Link Fence Gate, >6 To 12 Months.....	478.84	
		For Each LF Shade Cloth, Add	40.86	
01 56 26 00-0058	EA	15' Wide, 4' High, Temporary Chain Link Fence Gate, >6 To 12 Months.....	544.85	
		For Each LF Shade Cloth, Add	51.08	
01 56 26 00-0059	EA	20' Wide, 4' High, Temporary Chain Link Fence Gate, >6 To 12 Months.....	653.03	
		For Each LF Shade Cloth, Add	68.11	
01 56 26 00-0060	EA	24' Wide, 4' High, Temporary Chain Link Fence Gate, >6 To 12 Months.....	726.43	
		For Each LF Shade Cloth, Add	81.73	
<b>01 56 26 00-0061 6' High, Temporary Chain Link Fence Gates, &gt;6 To 12 Months (01 56 26 00-0053)</b>				
01 56 26 00-0062	EA	4' Wide, 6' High, Temporary Chain Link Fence Gate, >6 To 12 Months.....	269.82	
		For Each LF Shade Cloth, Add	21.71	
01 56 26 00-0063	EA	10' Wide, 6' High, Temporary Chain Link Fence Gate, >6 To 12 Months.....	461.12	
		For Each LF Shade Cloth, Add	54.27	
01 56 26 00-0064	EA	12' Wide, 6' High, Temporary Chain Link Fence Gate, >6 To 12 Months.....	517.76	
		For Each LF Shade Cloth, Add	65.13	
01 56 26 00-0065	EA	15' Wide, 6' High, Temporary Chain Link Fence Gate, >6 To 12 Months.....	599.48	
		For Each LF Shade Cloth, Add	81.41	

<b>01</b>	<b>General Requirements</b>
<b>01 50</b>	<b>Temporary Facilities and Controls</b>
<b>01 56</b>	<b>Temporary Barriers and Enclosures</b>



MINOR CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
01 56 26 00-0066	EA	20' Wide, 6' High, Temporary Chain Link Fence Gate, >6 To 12 Months .....	724.87	
		<i>For Each LF Shade Cloth, Add</i> .....	108.54	
01 56 26 00-0067	EA	24' Wide, 6' High, Temporary Chain Link Fence Gate, >6 To 12 Months .....	821.62	
		<i>For Each LF Shade Cloth, Add</i> .....	130.25	
<b>01 56 26 00-0068</b>		<b>8' High, Temporary Chain Link Fence Gates, &gt;6 To 12 Months</b> (01 56 26 00-0053)		
01 56 26 00-0069	EA	4' Wide, 8' High, Temporary Chain Link Fence Gate, >6 To 12 Months .....	301.15	
		<i>For Each LF Shade Cloth, Add</i> .....	30.65	
01 56 26 00-0070	EA	10' Wide, 8' High, Temporary Chain Link Fence Gate, >6 To 12 Months .....	527.87	
		<i>For Shade Cloth, Add</i> .....	76.62	
01 56 26 00-0071	EA	12' Wide, 8' High, Temporary Chain Link Fence Gate, >6 To 12 Months .....	590.73	
		<i>For Shade Cloth, Add</i> .....	91.94	
01 56 26 00-0072	EA	15' Wide, 8' High, Temporary Chain Link Fence Gate, >6 To 12 Months .....	675.92	
		<i>For Shade Cloth, Add</i> .....	114.93	
01 56 26 00-0073	EA	20' Wide, 8' High, Temporary Chain Link Fence Gate, >6 To 12 Months .....	826.07	
		<i>For Shade Cloth, Add</i> .....	153.24	
01 56 26 00-0074	EA	24' Wide, 8' High, Temporary Chain Link Fence Gate, >6 To 12 Months .....	957.11	
		<i>For Shade Cloth, Add</i> .....	183.89	
<b>01 56 26 00-0075</b>		<b>10' High, Temporary Chain Link Fence Gates, &gt;6 To 12 Months</b> (01 56 26 00-0053)		
01 56 26 00-0076	EA	4' Wide, 10' High, Temporary Chain Link Fence Gate, >6 To 12 Months .....	365.21	
		<i>For Each LF Shade Cloth, Add</i> .....	40.44	
01 56 26 00-0077	EA	10' Wide, 10' High, Temporary Chain Link Fence Gate, >6 To 12 Months .....	633.75	
		<i>For Each LF Shade Cloth, Add</i> .....	101.09	
01 56 26 00-0078	EA	12' Wide, 10' High, Temporary Chain Link Fence Gate, >6 To 12 Months .....	710.63	
		<i>For Each LF Shade Cloth, Add</i> .....	121.31	
01 56 26 00-0079	EA	15' Wide, 10' High, Temporary Chain Link Fence Gate, >6 To 12 Months .....	811.94	
		<i>For Each LF Shade Cloth, Add</i> .....	151.64	
01 56 26 00-0080	EA	20' Wide, 10' High, Temporary Chain Link Fence Gate, >6 To 12 Months .....	992.54	
		<i>For Each LF Shade Cloth, Add</i> .....	202.19	
01 56 26 00-0081	EA	24' Wide, 10' High, Temporary Chain Link Fence Gate, >6 To 12 Months .....	1,144.81	
		<i>For Each LF Shade Cloth, Add</i> .....	242.63	
<b>01 56 26 00-0082</b>		<b>Temporary Chain Link Fence Gates, &gt;12 To 18 Months</b> (01 56 26 00-0023)		
<b>01 56 26 00-0083</b>		<b>4' High, Temporary Chain Link Fence Gates, &gt;12 To 18 Months</b> (01 56 26 00-0082)		
01 56 26 00-0084	EA	4' Wide, 4' High, Temporary Chain Link Fence Gate, >12 To 18 Months .....	261.78	
		<i>For Each LF Shade Cloth, Add</i> .....	13.62	
01 56 26 00-0085	EA	10' Wide, 4' High, Temporary Chain Link Fence Gate, >12 To 18 Months .....	442.26	
		<i>For Each LF Shade Cloth, Add</i> .....	34.05	
01 56 26 00-0086	EA	12' Wide, 4' High, Temporary Chain Link Fence Gate, >12 To 18 Months .....	495.86	
		<i>For Each LF Shade Cloth, Add</i> .....	40.86	
01 56 26 00-0087	EA	15' Wide, 4' High, Temporary Chain Link Fence Gate, >12 To 18 Months .....	564.00	
		<i>For Each LF Shade Cloth, Add</i> .....	51.08	
01 56 26 00-0088	EA	20' Wide, 4' High, Temporary Chain Link Fence Gate, >12 To 18 Months .....	676.44	
		<i>For Each LF Shade Cloth, Add</i> .....	68.11	
01 56 26 00-0089	EA	24' Wide, 4' High, Temporary Chain Link Fence Gate, >12 To 18 Months .....	751.97	
		<i>For Each LF Shade Cloth, Add</i> .....	81.73	
<b>01 56 26 00-0090</b>		<b>6' High, Temporary Chain Link Fence Gates, &gt;12 To 18 Months</b> (01 56 26 00-0082)		
01 56 26 00-0091	EA	4' Wide, 6' High, Temporary Chain Link Fence Gate, >12 To 18 Months .....	279.83	
		<i>For Each LF Shade Cloth, Add</i> .....	21.71	
01 56 26 00-0092	EA	10' Wide, 6' High, Temporary Chain Link Fence Gate, >12 To 18 Months .....	476.69	
		<i>For Each LF Shade Cloth, Add</i> .....	54.27	
01 56 26 00-0093	EA	12' Wide, 6' High, Temporary Chain Link Fence Gate, >12 To 18 Months .....	535.56	
		<i>For Each LF Shade Cloth, Add</i> .....	65.13	
01 56 26 00-0094	EA	15' Wide, 6' High, Temporary Chain Link Fence Gate, >12 To 18 Months .....	619.50	
		<i>For Each LF Shade Cloth, Add</i> .....	81.41	
01 56 26 00-0095	EA	20' Wide, 6' High, Temporary Chain Link Fence Gate, >12 To 18 Months .....	749.34	
		<i>For Each LF Shade Cloth, Add</i> .....	108.54	
01 56 26 00-0096	EA	24' Wide, 6' High, Temporary Chain Link Fence Gate, >12 To 18 Months .....	848.32	
		<i>For Each LF Shade Cloth, Add</i> .....	130.25	
<b>01 56 26 00-0097</b>		<b>8' High, Temporary Chain Link Fence Gates, &gt;12 To 18 Months</b> (01 56 26 00-0082)		
01 56 26 00-0098	EA	4' Wide, 8' High, Temporary Chain Link Fence Gate, >12 To 18 Months .....	312.16	
		<i>For Each LF Shade Cloth, Add</i> .....	30.65	
01 56 26 00-0099	EA	10' Wide, 8' High, Temporary Chain Link Fence Gate, >12 To 18 Months .....	545.00	
		<i>For Shade Cloth, Add</i> .....	76.62	
01 56 26 00-0100	EA	12' Wide, 8' High, Temporary Chain Link Fence Gate, >12 To 18 Months .....	610.31	
		<i>For Shade Cloth, Add</i> .....	91.94	
01 56 26 00-0101	EA	15' Wide, 8' High, Temporary Chain Link Fence Gate, >12 To 18 Months .....	697.95	
		<i>For Shade Cloth, Add</i> .....	114.93	
01 56 26 00-0102	EA	20' Wide, 8' High, Temporary Chain Link Fence Gate, >12 To 18 Months .....	852.99	
		<i>For Shade Cloth, Add</i> .....	153.24	
01 56 26 00-0103	EA	24' Wide, 8' High, Temporary Chain Link Fence Gate, >12 To 18 Months .....	986.48	
		<i>For Shade Cloth, Add</i> .....	183.89	





General Requirements			01
Temporary Facilities and Controls			01 50
Temporary Barriers and Enclosures			01 56

MINOR	CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
01 56 26 00-0104			10' High, Temporary Chain Link Fence Gates, >12 To 18 Months (01 56 26 00-0082)		
01 56 26 00-0105	EA	4' Wide, 10' High, Temporary Chain Link Fence Gate, >12 To 18 Months	378.98		
		For Each LF Shade Cloth, Add	40.44		
01 56 26 00-0106	EA	10' Wide, 10' High, Temporary Chain Link Fence Gate, >12 To 18 Months	655.17		
		For Each LF Shade Cloth, Add	101.09		
01 56 26 00-0107	EA	12' Wide, 10' High, Temporary Chain Link Fence Gate, >12 To 18 Months	735.10		
		For Each LF Shade Cloth, Add	121.31		
01 56 26 00-0108	EA	15' Wide, 10' High, Temporary Chain Link Fence Gate, >12 To 18 Months	839.47		
		For Each LF Shade Cloth, Add	151.64		
01 56 26 00-0109	EA	20' Wide, 10' High, Temporary Chain Link Fence Gate, >12 To 18 Months	1,026.20		
		For Each LF Shade Cloth, Add	202.19		
01 56 26 00-0110	EA	24' Wide, 10' High, Temporary Chain Link Fence Gate, >12 To 18 Months	1,181.53		
		For Each LF Shade Cloth, Add	242.63		
01 56 26 00-0111			Temporary Chain Link Fence Gates, >18 Months (01 56 26 00-0023)		
01 56 26 00-0112			4' High, Temporary Chain Link Fence Gates, >18 Months (01 56 26 00-0111)		
01 56 26 00-0113	EA	4' Wide, 4' High, Temporary Chain Link Fence Gate, >18 Months	271.36		
		For Each LF Shade Cloth, Add	13.62		
01 56 26 00-0114	EA	10' Wide, 4' High, Temporary Chain Link Fence Gate, >18 Months	457.16		
		For Each LF Shade Cloth, Add	34.05		
01 56 26 00-0115	EA	12' Wide, 4' High, Temporary Chain Link Fence Gate, >18 Months	512.89		
		For Each LF Shade Cloth, Add	40.86		
01 56 26 00-0116	EA	15' Wide, 4' High, Temporary Chain Link Fence Gate, >18 Months	583.16		
		For Each LF Shade Cloth, Add	51.08		
01 56 26 00-0117	EA	20' Wide, 4' High, Temporary Chain Link Fence Gate, >18 Months	699.85		
		For Each LF Shade Cloth, Add	68.11		
01 56 26 00-0118	EA	24' Wide, 4' High, Temporary Chain Link Fence Gate, >18 Months	777.51		
		For Each LF Shade Cloth, Add	81.73		
01 56 26 00-0119			6' High, Temporary Chain Link Fence Gates, >18 Months (01 56 26 00-0111)		
01 56 26 00-0120	EA	4' Wide, 6' High, Temporary Chain Link Fence Gate, >18 Months	289.84		
		For Each LF Shade Cloth, Add	21.71		
01 56 26 00-0121	EA	10' Wide, 6' High, Temporary Chain Link Fence Gate, >18 Months	492.27		
		For Each LF Shade Cloth, Add	54.27		
01 56 26 00-0122	EA	12' Wide, 6' High, Temporary Chain Link Fence Gate, >18 Months	553.36		
		For Each LF Shade Cloth, Add	65.13		
01 56 26 00-0123	EA	15' Wide, 6' High, Temporary Chain Link Fence Gate, >18 Months	639.53		
		For Each LF Shade Cloth, Add	81.41		
01 56 26 00-0124	EA	20' Wide, 6' High, Temporary Chain Link Fence Gate, >18 Months	773.82		
		For Each LF Shade Cloth, Add	108.54		
01 56 26 00-0125	EA	24' Wide, 6' High, Temporary Chain Link Fence Gate, >18 Months	875.02		
		For Each LF Shade Cloth, Add	130.25		
01 56 26 00-0126			8' High, Temporary Chain Link Fence Gates, >18 Months (01 56 26 00-0111)		
01 56 26 00-0127	EA	4' Wide, 8' High, Temporary Chain Link Fence Gate, >18 Months	323.18		
		For Each LF Shade Cloth, Add	30.65		
01 56 26 00-0128	EA	10' Wide, 8' High, Temporary Chain Link Fence Gate, >18 Months	562.13		
		For Shade Cloth, Add	76.62		
01 56 26 00-0129	EA	12' Wide, 8' High, Temporary Chain Link Fence Gate, >18 Months	629.89		
		For Shade Cloth, Add	91.94		
01 56 26 00-0130	EA	15' Wide, 8' High, Temporary Chain Link Fence Gate, >18 Months	719.97		
		For Shade Cloth, Add	114.93		
01 56 26 00-0131	EA	20' Wide, 8' High, Temporary Chain Link Fence Gate, >18 Months	879.92		
		For Shade Cloth, Add	153.24		
01 56 26 00-0132	EA	24' Wide, 8' High, Temporary Chain Link Fence Gate, >18 Months	1,015.85		
		For Shade Cloth, Add	183.89		
01 56 26 00-0133			10' High, Temporary Chain Link Fence Gates, >18 Months (01 56 26 00-0111)		
01 56 26 00-0134	EA	4' Wide, 10' High, Temporary Chain Link Fence Gate, >18 Months	392.74		
		For Each LF Shade Cloth, Add	40.44		
01 56 26 00-0135	EA	10' Wide, 10' High, Temporary Chain Link Fence Gate, >18 Months	676.58		
		For Each LF Shade Cloth, Add	101.09		
01 56 26 00-0136	EA	12' Wide, 10' High, Temporary Chain Link Fence Gate, >18 Months	759.58		
		For Each LF Shade Cloth, Add	121.31		
01 56 26 00-0137	EA	15' Wide, 10' High, Temporary Chain Link Fence Gate, >18 Months	867.01		
		For Each LF Shade Cloth, Add	151.64		
01 56 26 00-0138	EA	20' Wide, 10' High, Temporary Chain Link Fence Gate, >18 Months	1,059.85		
		For Each LF Shade Cloth, Add	202.19		
01 56 26 00-0139	EA	24' Wide, 10' High, Temporary Chain Link Fence Gate, >18 Months	1,218.24		
		For Each LF Shade Cloth, Add	242.63		
01 56 26 00-0140			Temporary Chain Link Fence Panels (Portable) (01 56 26 00-0001)		
		Note: Includes delivery, set-up and removal. Excludes sandbags.			
01 56 26 00-0141			Temporary Chain Link Fence Panels (Portable), Up To 6 Months (01 56 26 00-0140)		

<b>01</b>	<b>General Requirements</b>
<b>01 50</b>	<b>Temporary Facilities and Controls</b>
<b>01 56</b>	<b>Temporary Barriers and Enclosures</b>



MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
01 56 26 00-0142 LF Temporary 4' High Chain Link Fence Panels (Portable), Up To 6 Months.....	6.66	
For >100 To 250, Deduct	-0.17	
For >250 To 500, Deduct	-0.34	
For >500, Deduct	-0.51	
For Each LF Shade Cloth, Add	1.60	
01 56 26 00-0143 LF Temporary 6' High Chain Link Fence Panels (Portable), Up To 6 Months.....	7.39	
For >100 To 250, Deduct	-0.19	
For >250 To 500, Deduct	-0.38	
For >500, Deduct	-0.58	
For Each LF Shade Cloth, Add	2.55	
01 56 26 00-0144 LF Temporary 8' High Chain Link Fence Panels (Portable), Up To 6 Months.....	10.08	
For >100 To 250, Deduct	-0.31	
For >250 To 500, Deduct	-0.62	
For >500, Deduct	-0.93	
For Each LF Shade Cloth, Add	3.60	
<b>01 56 26 00-0145 Temporary Chain Link Fence Panels (Portable), &gt;6 To 12 Months</b> (01 56 26 00-0140)		
01 56 26 00-0146 LF Temporary 4' High Chain Link Fence Panels (Portable), >6 To 12 Months.....	6.95	
For >100 To 250, Deduct	-0.19	
For >250 To 500, Deduct	-0.37	
For >500, Deduct	-0.56	
For Each LF Shade Cloth, Add	1.60	
01 56 26 00-0147 LF Temporary 6' High Chain Link Fence Panels (Portable), >6 To 12 Months.....	7.71	
For >100 To 250, Deduct	-0.21	
For >250 To 500, Deduct	-0.42	
For >500, Deduct	-0.62	
For Each LF Shade Cloth, Add	2.55	
01 56 26 00-0148 LF Temporary 8' High Chain Link Fence Panels (Portable), >6 To 12 Months.....	10.62	
For >100 To 250, Deduct	-0.34	
For >250 To 500, Deduct	-0.67	
For >500, Deduct	-1.01	
For Each LF Shade Cloth, Add	3.60	
<b>01 56 26 00-0149 Temporary Chain Link Fence Panels (Portable), &gt;12 To 18 Months</b> (01 56 26 00-0140)		
01 56 26 00-0150 LF Temporary 4' High Chain Link Fence Panels (Portable), >12 To 18 Months.....	7.24	
For >100 To 250, Deduct	-0.20	
For >250 To 500, Deduct	-0.40	
For >500, Deduct	-0.60	
For Each LF Shade Cloth, Add	1.60	
01 56 26 00-0151 LF Temporary 6' High Chain Link Fence Panels (Portable), >12 To 18 Months.....	8.08	
For >100 To 250, Deduct	-0.23	
For >250 To 500, Deduct	-0.45	
For >500, Deduct	-0.68	
For Each LF Shade Cloth, Add	2.55	
01 56 26 00-0152 LF Temporary 8' High Chain Link Fence Panels (Portable), >12 To 18 Months.....	11.23	
For >100 To 250, Deduct	-0.37	
For >250 To 500, Deduct	-0.73	
For >500, Deduct	-1.10	
For Each LF Shade Cloth, Add	3.60	
<b>01 56 26 00-0153 Temporary Chain Link Fence Panels (Portable), &gt;18 Months</b> (01 56 26 00-0140)		
01 56 26 00-0154 LF Temporary 4' High Chain Link Fence Panels (Portable), >18 Months.....	7.61	
For >100 To 250, Deduct	-0.22	
For >250 To 500, Deduct	-0.44	
For >500, Deduct	-0.66	
For Each LF Shade Cloth, Add	1.60	
01 56 26 00-0155 LF Temporary 6' High Chain Link Fence Panels (Portable), >18 Months.....	8.45	
For >100 To 250, Deduct	-0.25	
For >250 To 500, Deduct	-0.49	
For >500, Deduct	-0.74	
For Each LF Shade Cloth, Add	2.55	
01 56 26 00-0156 LF Temporary 8' High Chain Link Fence Panels (Portable), >18 Months.....	11.87	
For >100 To 250, Deduct	-0.40	
For >250 To 500, Deduct	-0.80	
For >500, Deduct	-1.20	
For Each LF Shade Cloth, Add	3.60	
<b>01 56 26 00-0157 Temporary Chain Link Fence Panels (Portable) Sandbags</b> (01 56 26 00-0140)		
01 56 26 00-0158 BAG Temporary Chain Link Fence Panels (Portable) Sandbag.....	6.32	
Note: Includes placement and removal.		
<b>01 56 26 00-0159 Relocate Chain Link Fence, Gates And Panels</b> (01 56 26 00-0001)		
Note: Excludes auguring/drilling for posts.		
<b>01 56 26 00-0160 Relocate Temporary Chain Link Fence On Site</b> (01 56 26 00-0159)		
01 56 26 00-0161 LF Relocate Temporary 4' High Chain Link Fence And Posts.....	3.62	
01 56 26 00-0162 LF Relocate Temporary 6' High Chain Link Fence And Posts.....	5.43	
01 56 26 00-0163 LF Relocate Temporary 8' High Chain Link Fence And Posts.....	7.85	
01 56 26 00-0164 LF Relocate Temporary 10' High Chain Link Fence And Posts.....	9.66	



General Requirements			01
Temporary Facilities and Controls			01 50
Temporary Barriers and Enclosures			01 56

MINOR CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
<b>01 56 26 00-0165 Relocate Temporary Chain Link Fence Panels On Site</b> (01 56 26 00-0159)				
01 56 26 00-0166	LF	Relocate Temporary 4' High Chain Link Fence Panel, Self Standing .....	0.81	
01 56 26 00-0167	LF	Relocate Temporary 6' High Chain Link Fence Panel, Self Standing .....	0.97	
01 56 26 00-0168	LF	Relocate Temporary 8' High Chain Link Fence Panel, Self Standing .....	1.09	
<b>01 56 26 00-0169 Relocate Temporary Chain Link Gates On Site</b> (01 56 26 00-0159)				
01 56 26 00-0170	EA	Relocate Temporary 4' High Chain Link Vehicle Gate And Posts.....	105.12	
01 56 26 00-0171	EA	Relocate Temporary 6' High Chain Link Vehicle Gate And Posts.....	121.30	
01 56 26 00-0172	EA	Relocate Temporary 8' High Chain Link Vehicle Gate And Posts.....	149.60	
01 56 26 00-0173	EA	Relocate Temporary 10' High Chain Link Vehicle Gate And Posts.....	161.74	
<b>01 56 26 00-0174 Temporary Safety Fence</b> (01 56 26)				
Note: Includes removal after use.				
01 56 26 00-0175	LF	48" High With Posts At 8' On Center, Plastic Mesh Temporary Safety Fence .....	3.55	
<b>01 56 29 Temporary Protective Walkways</b> (01 56)				
<b>01 56 29 00-0001 Temporary Safety Nets</b> (01 56 29)				
Note: Includes removal after use.				
01 56 29 00-0002	SF	Small Mesh Debris Netting .....	2.08	
Note: Includes 3" molded plastic base plates, plastic cable ties, and 1/4", 7x9 aircraft cable tied off to structure, not including anchors.				
<b>01 56 33 Temporary Security Barriers</b> (01 56)				
<b>01 56 33 00-0001 Temporary Pedestrian Barricade</b> (01 56 33)				
Note: Portable, interlocking galvanized steel fence with pivoting legs.				
01 56 33 00-0002	DAY	3-1/2' x 7-1/2' Galvanized Steel Pedestrian Barricade, Rental.....	13.33	
01 56 33 00-0003	WK	3-1/2' x 7-1/2' Galvanized Steel Pedestrian Barricade, Rental.....	32.38	
01 56 33 00-0004	MO	3-1/2' x 7-1/2' Galvanized Steel Pedestrian Barricade, Rental.....	97.14	
<b>01 57 Temporary Controls</b> (01 50)				
<b>01 57 13 Temporary Erosion and Sediment Control</b> (01 57)				
See CSI section 31 25 00 00-0000 for temporary erosion and sediment control.				
<b>01 57 23 Temporary Storm Water Pollution Control</b> (01 57)				
See CSI section 31 25 00 00-0000 for temporary storm water pollution control.				
<b>01 57 23 00-0001 Temporary Drain Guard</b> (01 57 23)				
Note: Includes removal after use.				
01 57 23 00-0002	EA	36" x 48" x 18" Non-Woven Polypropylene Trash and Debris Drain Guard (Ultra-Drain Guard® 9227) .....	101.68	
01 57 23 00-0003	EA	36" x 48" x 18" Non-Woven Polypropylene Oil and Sediment Drain Guard (Ultra-Drain Guard® 9217) .....	99.72	
Note: Up to 0.87 gallons oil, up to 40 lbs sediment.				
01 57 23 00-0004	EA	36" x 48" x 18" Non-Woven Polypropylene Oil and Sediment Drain Guard (Ultra-Drain Guard® 9219) .....	127.32	
Note: Up to 1.38 gallons oil, up to 40 lbs sediment.				
01 57 23 00-0005	EA	60" x 60" x 18" Non-Woven Polypropylene Oil and Sediment Drain Guard (Ultra-Drain Guard® 9356) .....	125.33	
Note: Up to 1.55 gallons oil, up to 40 lbs sediment.				
01 57 23 00-0006	EA	60" x 60" x 18" Non-Woven Polypropylene Oil and Sediment Drain Guard (Ultra-Drain Guard® 9358) .....	154.91	
Note: Up to 2.06 gallons oil, up to 40 lbs sediment.				
<b>01 58 Project Identification</b> (01 50)				
Note: Includes removal after use.				
<b>01 58 13 Temporary Project Signage</b> (01 58)				
<b>01 58 13 00-0001 Project Sign</b> (01 58 13)				
<b>01 58 13 00-0002 MDO Plywood Signs</b> (01 58 13 00-0001)				
Note: Excludes posts.				
<b>01 58 13 00-0003 Reflectorized, MDO Plywood Signs</b> (01 58 13 00-0002)				
<b>01 58 13 00-0004 Engineer Grade, Reflectorized, MDO Plywood Signs</b> (01 58 13 00-0003)				
01 58 13 00-0005	EA	Up To 8 SF, One Or Two Color Design, Engineer Grade, Reflectorized, MDO Plywood Sign .....	162.54	22.25
For High-Intensity Grade, Add			41.32	
For Diamond Grade, Add			79.69	
01 58 13 00-0006	EA	>8 To 16 SF, One Or Two Color Design, Engineer Grade, Reflectorized, MDO Plywood Sign .....	282.62	23.25
For High-Intensity Grade, Add			82.64	
For Diamond Grade, Add			159.38	
01 58 13 00-0007	EA	>16 To 24 SF, One Or Two Color Design, Engineer Grade, Reflectorized, MDO Plywood Sign .....	402.71	24.26
For High-Intensity Grade, Add			123.96	
For Diamond Grade, Add			239.07	
01 58 13 00-0008	EA	>24 To 32 SF, One Or Two Color Design, Engineer Grade, Reflectorized, MDO Plywood Sign .....	522.79	25.28
For High-Intensity Grade, Add			165.28	
For Diamond Grade, Add			318.76	

<b>01</b>	<b>General Requirements</b>
<b>01 50</b>	<b>Temporary Facilities and Controls</b>
<b>01 58</b>	<b>Project Identification</b>



MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
01 58 13 00-0009 SF >32 SF, One Or Two Color Design, Engineer Grade, Reflectorized, MDO Plywood Sign ..... <i>For High-Intensity Grade, Add</i> <i>For Diamond Grade, Add</i>	16.38 5.17 9.96	0.81
<b>01 58 13 00-0010 Non-Reflectorized, MDO Plywood Signs</b> (01 58 13 00-0002)		
<b>01 58 13 00-0011 One Or Two Color Design, Non-Reflectorized, MDO Plywood Signs</b> (01 58 13 00-0010)		
01 58 13 00-0012 EA Up To 8 SF, One Or Two Color Design, Non Reflectorized, MDO Plywood Sign .....	204.66	22.25
01 58 13 00-0013 EA >8 To 16 SF, One Or Two Color Design, Non Reflectorized, MDO Plywood Sign .....	244.91	23.25
01 58 13 00-0014 EA >16 To 24 SF, One Or Two Color Design, Non Reflectorized, MDO Plywood Sign .....	307.91	24.26
01 58 13 00-0015 EA >24 To 32 SF, One Or Two Color Design, Non Reflectorized, MDO Plywood Sign .....	367.38	25.28
01 58 13 00-0016 SF >32 SF, One Or Two Color Design, Non Reflectorized, MDO Plywood Sign .....	11.52	0.81
<b>01 58 13 00-0017 Full Color Design, Non-Reflectorized, MDO Plywood Signs</b> (01 58 13 00-0010)		
01 58 13 00-0018 EA Up To 8 SF, Full Color Design, Non Reflectorized, MDO Plywood Sign .....	209.17	22.25
01 58 13 00-0019 EA >8 To 16 SF, Full Color Design, Non Reflectorized, MDO Plywood Sign .....	269.22	23.25
01 58 13 00-0020 EA >16 To 24 SF, Full Color Design, Non Reflectorized, MDO Plywood Sign .....	332.61	24.26
01 58 13 00-0021 EA >24 To 32 SF, Full Color Design, Non Reflectorized, MDO Plywood Sign .....	388.55	25.28
01 58 13 00-0022 SF >32 SF, Full Color Design, Non Reflectorized, MDO Plywood Sign .....	12.18	0.81
<b>01 58 13 00-0023 Fabricate And Install New Posts</b> (01 58 13 00-0001) Note: Includes excavation, backfill and compaction. Excludes core drilling.		
01 58 13 00-0024 LF Galvanized Metal Channel Sign Posts .....	16.20	
01 58 13 00-0025 LF 4" x 4" Pressure Treated Wood Sign Posts .....	13.24	
01 58 13 00-0026 LF 4" x 6" Pressure Treated Wood Sign Posts .....	16.00	
<b>01 58 13 00-0027 Owner Supplied Signs</b> (01 58 13 00-0001)		
01 58 13 00-0028 EA Installation And Removal Of Owner Supplied Project Sign .....	80.87	

## 01 70 Execution and Closeout Requirements (01)

### 01 71 Examination and Preparation (01 70)

#### 01 71 13 Mobilization (01 71)

<b>01 71 13 00-0001 Equipment Delivery, Pickup, Mobilization And Demobilization</b> (01 71 13)		
Note: Excludes flagman for traffic control where necessary.		
01 71 13 00-0002 EA Equipment Delivery, Pickup, Mobilization And Demobilization Using A Rollback Flatbed Truck .....	467.34	
Note: Includes loading, tie-down of equipment, delivery of equipment, off loading on site, rigging, dismantling, loading for return and transporting away. For equipment such as trenchers, skid-steer loaders (bobcats), industrial warehouse forklifts, sweepers, scissor platform lifts, telescoping and articulating boom man lifts with up to 40' boom lengths, etc.		
01 71 13 00-0003 EA Equipment Delivery, Pickup, Mobilization And Demobilization Using A Tractor Trailer With Up To 53' Bed.....	1,540.98	
Note: Includes loading, tie-down of equipment, delivery of equipment, off loading on site, rigging, dismantling, loading for return and transporting away. For equipment such as bulldozers, motor scrapers, hydraulic excavators, gradalls, road graders, loader-backhoes, heavy duty construction loaders, tractors, pavers, rollers, bridge finishers, straight mast construction forklifts, telescoping boom rough terrain construction forklifts, telescoping and articulating boom man lifts with >40' boom lengths, etc.		
<b>01 71 13 00-0004 Crane Delivery, Pickup, Mobilization And Demobilization</b> (01 71 13)		
Note: Includes delivery of equipment, off loading on site and rigging. Pick-up (return) includes dismantling, loading and transporting away. Excludes flagman for traffic control where necessary.		
01 71 13 00-0005 EA Move On/Off Cost, Truck Mounted Crane, <40 Ton .....	498.49	
Note: Includes delivery and pickup.		
<i>For &gt;30 To 60 Miles Radius, Add</i>	124.62	
<i>For &gt;60 To 100 Miles Radius, Add</i>	199.40	

#### 01 71 36 Non-Destructive Concrete Examination (01 71)

<b>01 71 36 00-0001 Electromagnetic Survey</b> (01 71 36)		
Note: To locate voids, prior to moving heavy machinery to an area of concern, to locate reinforcing bars, conduits, pipes, etc., prior to core drilling or cutting existing concrete, masonry or asphalt, to locate underground utilities, underground storage tanks, etc. Electromagnetic survey includes Subsurface Interface Radar (SIR) and/or Ground Penetrating Radar (GPR).		
<b>01 71 36 00-0002 Electromagnetic (SIR/GPR) Survey</b> (01 71 36 00-0001)		
01 71 36 00-0003 EA Up To 1 Hour On Site, Electromagnetic (SIR/GPR) Survey, Earth, Concrete, Masonry Or Asphalt .....	1,070.46	
01 71 36 00-0004 EA >1 To 4 Hours On Site, Electromagnetic (SIR/GPR) Survey, Earth, Concrete, Masonry Or Asphalt .....	1,605.69	
01 71 36 00-0005 EA >4 To 8 Hours On Site, Electromagnetic (SIR/GPR) Survey, Earth, Concrete, Masonry Or Asphalt .....	3,211.38	
<b>01 71 36 00-0006 Reports And Mapping For Electromagnetic (SIR/GPR) Surveys</b> (01 71 36 00-0001)		
01 71 36 00-0007 EA Standard Report For Electromagnetic (SIR/GPR) Survey, Earth, Concrete, Masonry Or Asphalt .....	356.82	
Note: Includes a detailed description of the scope of work, inspection methods, and equipment used. Also includes visuals such as site locations, images of data, and site photos.		



<b>General Requirements</b>		<b>01</b>	<b>Σ</b>
<b>Execution and Closeout Requirements</b>		<b>01 70</b>	
<b>Examination and Preparation</b>		<b>01 71</b>	

MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
01 71 36 00-0008 EA GPS Mapping Of Located Utilities/Items For Electromagnetic (SIR/GPR) Survey, Earth, Concrete, Masonry Or Asphalt ..... 713.64 Note: Includes GPS coordinates of located items and reference items.	713.64	
01 71 36 00-0009 EA CAD Mapping Of Located Utilities/Items For Electromagnetic (SIR/GPR) Survey, Earth, Concrete, Masonry Or Asphalt ..... 1,605.69 Note: Includes additions to the owner provided CAD drawing.	1,605.69	

## 01 74 Cleaning and Waste Management (01 70)

### 01 74 13 Progress Cleaning (01 74)

Note: For use on existing areas other than where actual work is to be performed where ordered by the owner. Daily cleanup and final cleanup is included in the contractor's adjustment factor.

#### 01 74 13 00-0001 General (01 74 13)

01 74 13 00-0002 CY Collect Existing Debris And Load Into Truck Or Dumpster ..... 23.71 Note: Per CY of debris removed.	23.71
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### 01 74 16 Site Maintenance (01 74)

#### 01 74 16 00-0001 Parking Lot, Roads And Pathway Maintenance (01 74 16)

Note: These tasks shall be used for maintenance of existing roads and walks only as requested by the owner. Tasks not to be used in conjunction with related installation/demolition tasks in the Construction Task Catalog®.

#### 01 74 16 00-0002 Parking Lot, Road, And Street Sweeping (01 74 16 00-0001)

01 74 16 00-0003 MSF Sweep Parking Lot, With Street Sweeper..... 21.03	21.03
01 74 16 00-0004 MSF Sweeper/Vacuum/Sprayer For Parking Lots, Streets And Roads..... 25.24	25.24

#### 01 74 16 00-0005 Runway Sweeping (01 74 16 00-0001)

01 74 16 00-0006 MSF Sweep Runway, With Street Sweep ..... 31.55	31.55
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### 01 74 19 Construction Waste Management and Disposal (01 74)

Note: Tasks in this section shall be used as directed by owner.

#### 01 74 19 00-0001 Debris Processing Fee (01 74 19)

#### 01 74 19 00-0002 Material Recycling Fees (01 74 19 00-0001)

Note: Not to be used with Dumpster Tasks which includes the Landfill Dump Fee. Excludes hauling.

01 74 19 00-0003 CY Drop-Off Asphalt At Recycling Center ..... 33.46	33.46
01 74 19 00-0004 CY Drop-Off Non Reinforced Concrete At Recycling Center ..... 44.83	44.83
01 74 19 00-0005 CY Drop-Off Reinforced Concrete At Recycling Center..... 67.24	67.24
01 74 19 00-0006 CY Drop-Off Brick Or Block At Recycling Center..... 58.28	58.28
01 74 19 00-0007 CY Drop-Off Dirt At Recycling Center..... 65.00	65.00
01 74 19 00-0008 CY Drop-Off Dimensional Lumber At Recycling Center..... 62.76	62.76

#### 01 74 19 00-0009 Landfill Dump Fees (01 74 19 00-0001)

Note: Does not apply when material is transferred to owner's site or facility, or with use of dumpsters. Excludes hauling.

01 74 19 00-0010 CY Traditional Building Construction Materials Landfill Dump Fee..... 29.83	29.83
01 74 19 00-0011 TON Traditional Building Construction Materials, Landfill Dump Fee..... 130.00	130.00
01 74 19 00-0012 CY Trees, Stumps And Brush, Landfill Dump Fee..... 35.91	35.91
01 74 19 00-0013 CY Hazardous Materials And Rubbish Landfill Dump Fee ..... 85.62 Note: Includes regulated waste such as paint cans, refrigerators/freezers, air conditioners, smoke detectors, batteries, etc.	85.62
01 74 19 00-0014 CY Asphalt, Concrete, Gravel And Subgrade Material, Landfill Dump Fee ..... 60.84	60.84

#### 01 74 19 00-0015 Hauling (01 74 19)

Note: Includes driver and equipment, ten (10) to fifteen (15) minutes load time, time for travel, dump time and return (roundtrip). The task quantity is the number of miles to the disposal site/transfer station (one way mileage) times the number of cubic yards being transported. For example, to haul 8 CY to a site 14 miles away, the quantity is calculated as follows: 14 miles x 8 CY = 112 CYM. Use both hauling tasks for distances greater than 15 miles. To haul 28 CY to a site 32 miles away, the quantity for the task to haul the first 15 miles is calculated: 15 miles x 28 CY = 420 CYM. The quantity for the additional hauling task over the first 15 miles is calculated: 32 total miles less 15 initial miles equals 17 miles x 28 CY = 476 CYM.

01 74 19 00-0016 CYM Hauling On Paved Roads, First 15 Miles ..... 0.97	0.97
01 74 19 00-0017 CYM Hauling On Paved Roads, Miles Over Initial 15 Miles..... 0.65	0.65
01 74 19 00-0018 CYM Hauling On Unimproved Roads, First 15 Miles..... 1.50	1.50
01 74 19 00-0019 CYM Hauling On Unimproved Roads, Miles Over Initial 15 Miles..... 1.17	1.17

#### 01 74 19 00-0020 Construction Dumpsters Rental (01 74 19)

Note: Includes service to delivery and pick-up of dumpster, hauling of debris, rental of dumpster and all applicable non-hazardous disposal fees. Cost of "each" is based on each pick-up. Use modifier for excess tons up to legal state limit. Unacceptable materials include: aerosol cans, all liquids, animals, antifreeze, appliances, asbestos, barrels, batteries, chemical products, computers, contaminated oils (mixed with solvents, gasoline, etc.), dirt, fluorescent tubes, hazardous waste, herbicides and pesticides, industrial waste, lubricating/hydraulic oil, mattresses, medical waste, microwaves, monitors, motor oil, oil filters, other flammable liquids, paint (except completely dried latex paint cans, no liquids), petroleum-contaminated soil/lead paint chips, propane tanks, radioactive material, railroad ties, solvents, televisions, tires, and transmission oil.

**01 General Requirements****01 70 Execution and Closeout Requirements****01 74 Cleaning and Waste Management**

MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
01 74 19 00-0021 EA 10 CY Dumpster (1.5 Ton) "Construction Debris".....	564.99	
Note: Includes delivery of dumpster, rental cost, pick-up cost, hauling, and disposal fee. Non-hazardous material.		
For Each Ton Over Indicated Amount, Add	100.00	
01 74 19 00-0022 EA 15 CY Dumpster (2 Ton) "Construction Debris".....	615.00	
Note: Includes delivery of dumpster, rental cost, pick-up cost, hauling, and disposal fee. Non-hazardous material.		
For Each Ton Over Indicated Amount, Add	100.00	
01 74 19 00-0023 EA 20 CY Dumpster (3 Ton) "Construction Debris".....	675.00	
Note: Includes delivery of dumpster, rental cost, pick-up cost, hauling, and disposal fee. Non-hazardous material.		
For Each Ton Over Indicated Amount, Add	100.00	
01 74 19 00-0024 EA 30 CY Dumpster (4 Ton) "Construction Debris".....	734.96	
Note: Includes delivery of dumpster, rental cost, pick-up cost, hauling, and disposal fee. Non-hazardous material.		
For Each Ton Over Indicated Amount, Add	100.00	
01 74 19 00-0025 EA 40 CY Dumpster (5 Ton) "Construction Debris".....	835.00	
Note: Includes delivery of dumpster, rental cost, pick-up cost, hauling, and disposal fee. Non-hazardous material.		
For Each Ton Over Indicated Amount, Add	100.00	
01 74 19 00-0026 EA 10 CY Low-Boy Dumpster "Concrete Or Asphalt Only" .....	835.00	
Note: Includes delivery of dumpster, rental cost, pick-up cost, hauling, and disposal fee. Concrete or asphalt only.		
01 74 19 00-0027 EA 15 CY Low-Boy Dumpster Clean Recyclable.....	799.21	
Note: For clean dirt, rock, concrete brick or asphalt with no trash or organics. Includes service to deliver and pick-up dumpster, hauling, rental and disposal fee.		
01 74 19 00-0028 EA 15 CY Low-Boy Dumpster Mixed Recyclable .....	858.85	
Note: For mixed dirt, rock, concrete brick or asphalt with no trash or organics. Includes service to deliver and pick-up dumpster, hauling, rental and disposal fee.		

**END OF SECTION 01**



Existing Conditions		02
Assessment		02 20
Existing Material Assessment		02 25

02

MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
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## 02 Existing Conditions

### 02 20 Assessment<sup>(02)</sup>

#### 02 25 Existing Material Assessment<sup>(02 20)</sup>

##### 02 25 16 Existing Concrete, Masonry or Asphalt Assessment<sup>(02 25)</sup>

See CSI section 01 71 36 00-0000 for non-destructive concrete examination.

##### 02 25 16 13 Concrete Assessment Drilling<sup>(02 25 16)</sup>

See CSI section 01 71 36 00-0000 for non-destructive concrete examination.

### 02 30 Subsurface Investigation<sup>(02)</sup>

#### 02 32 Geotechnical Investigations<sup>(02 30)</sup>

##### 02 32 13 Subsurface Drilling and Sampling<sup>(02 32)</sup>

See CSI section 01 45 23 00-0000 for testing and lab reports.

##### 02 32 13 00-0001 Mobilization Of Drilling Crew<sup>(02 32 13)</sup>

02 32 13 00-0002 EA Mobilization Of Drilling Crew..... 1,163.18

##### 02 32 13 00-0003 Auger Borings<sup>(02 32 13)</sup>

02 32 13 00-0004 LF Standard Auger Hole With Split Spoon Sample At 5' Intervals..... 35.03

##### 02 32 13 00-0005 Cased Borings In Earth, With Samples<sup>(02 32 13)</sup>

Note: All types of soils.

02 32 13 00-0006 LF 2-1/2" Diameter Cased Borings In Earth, With Samples..... 90.34

02 32 13 00-0007 LF 4" Diameter Cased Borings In Earth, With Samples..... 154.49

##### 02 32 13 00-0008 Drilling In Rock, BW Core (2.125")<sup>(02 32 13)</sup>

02 32 13 00-0009 LF Drill In Rock, BW Core, With Casing..... 95.49

Note: Includes sampling.

02 32 13 00-0010 EA Drill In Rock, With BW Core Boxes..... 9.04

##### 02 32 13 00-0011 Drilling In Rock, NW Core (2.98")<sup>(02 32 13)</sup>

02 32 13 00-0012 LF Drill In Rock, NW Core, With Casing..... 123.48

Note: Includes sampling.

02 32 13 00-0013 EA Drill In Rock, With NW Core Boxes..... 10.41

##### 02 32 13 00-0014 Test Pits For Boring Activities<sup>(02 32 13)</sup>

Note: Excludes backfill. See CSI section 31 23 16 36-0016 for backfill.

##### 02 32 13 00-0015 Backhoe Dug Test Pits<sup>(02 32 13 00-0014)</sup>

02 32 13 00-0016 CY Excavation For Test Pit, Light Material, Backhoe Excavation..... 64.33

02 32 13 00-0017 CY Excavation For Test Pits, Medium Material, Backhoe Excavation..... 75.05

02 32 13 00-0018 CY Excavation For Test Pit, Heavy Material, Backhoe Excavation..... 100.07

##### 02 32 13 00-0019 Hand-Dug Test Pits<sup>(02 32 13 00-0014)</sup>

02 32 13 00-0020 CY Excavation For Test Pit, Light Soil, Hand Excavation..... 179.70

02 32 13 00-0021 CY Excavation For Test Pit, Heavy Soil, Hand Excavation..... 323.47

##### 02 32 13 00-0022 Shelby Tube Sampling<sup>(02 32 13)</sup>

02 32 13 00-0023 EA Shelby Tube Sampling..... 51.55

02 32 13 00-0024 EA Penetration Test..... 42.00

##### 02 32 13 00-0025 Grouting<sup>(02 32 13)</sup>

02 32 13 00-0026 VLF Boreholes..... 9.77

#### 02 32 19 Exploratory Excavations<sup>(02 32)</sup>

##### 02 32 19 00-0001 Hydro Excavation<sup>(02 32 19)</sup>

Note: Assumes on-site disposal.

02 32 19 00-0002 EA Hydro Excavation, Mobilization/Demobilization..... 163.36

02 32 19 00-0003 EA Hydro Excavation, Minimum Charge..... 653.44

Note: For projects where the total charge is less than the "Hydro Excavation Minimum" cost, use this task exclusively. This task should not be used in conjunction with any other tasks in this section.

02 32 19 00-0004 CY Hydro Excavation, Normal Soil Conditions (Hydro-Vac Truck)..... 36.30

Note: Normal soil conditions consist of silt, sand and gravel.

**02 Existing Conditions****02 30 Subsurface Investigation****02 32 Geotechnical Investigations**

MINOR  
CSI UOM DESCRIPTION

TOTAL DIRECT DEMOLITION  
UNIT COST UNIT COST

02 32 19 00-0005 CY Hydro Excavation, Adverse Soil Conditions (Hydro-Vac Truck).....58.08  
Note: Adverse soil conditions consist of clay, glacial till and rocks.

**02 40 Demolition and Structure Moving<sup>(02)</sup>****02 41 Demolition<sup>(02 40)</sup>****02 41 13 Selective Site Demolition<sup>(02 41)</sup>****02 41 13 13 Paving Removal<sup>(02 41 13)</sup>**

Note: Includes break-up of material, loading into truck or dumpster and clean-up. Salvage tasks include placement on pallets and storage on site.

**02 41 13 13-0001 By Machine, Break-up And Leave In Place Bituminous And Concrete****Paving<sup>(02 41 13 13)</sup>**

Note: Includes slabs, pavements, sidewalks and base courses. Includes work around obstacles. These tasks are not to be used in conjunction with any other loading activities or other break-up tasks. Excludes saw cutting (where required) and disposal. See CSI section 02 41 13 13-0017 for breaking-up, removal and loading as a combined operation, 02 41 19 13-0001 for saw cutting.

02 41 13 13-0002	SY	Up To 3" By Machine, Break-up And Leave In Place Bituminous Paving.....	6.93
		For >500 To 1,000, Deduct	-0.69
		For >1,000 To 2,500, Deduct	-1.25
		For >2,500 To 5,000, Deduct	-1.80
		For >5,000 To 10,000, Deduct	-2.36
		For >10,000, Deduct	-2.91
02 41 13 13-0003	SY	>3" To 6" By Machine, Break-up And Leave In Place Bituminous Paving.....	10.40
		For >500 To 1,000, Deduct	-1.04
		For >1,000 To 2,500, Deduct	-1.87
		For >2,500 To 5,000, Deduct	-2.70
		For >5,000 To 10,000, Deduct	-3.54
		For >10,000, Deduct	-4.37
02 41 13 13-0004	SY	Up To 3" By Machine, Break-up And Leave In Place Concrete Paving.....	13.61
		For >500 To 1,000, Deduct	-1.36
		For >1,000 To 2,500, Deduct	-2.45
		For >2,500 To 5,000, Deduct	-3.54
		For >5,000 To 10,000, Deduct	-4.63
		For >10,000, Deduct	-5.72
02 41 13 13-0005	SY	>3" To 6" By Machine, Break-up And Leave In Place Concrete Paving.....	19.22
		For >500 To 1,000, Deduct	-1.92
		For >1,000 To 2,500, Deduct	-3.46
		For >2,500 To 5,000, Deduct	-5.00
		For >5,000 To 10,000, Deduct	-6.53
		For >10,000, Deduct	-8.07
02 41 13 13-0006	SY	>6" To 9" By Machine, Break-up And Leave In Place Concrete Paving.....	27.23
		For >500 To 1,000, Deduct	-2.72
		For >1,000 To 2,500, Deduct	-4.90
		For >2,500 To 5,000, Deduct	-7.08
		For >5,000 To 10,000, Deduct	-9.26
		For >10,000, Deduct	-11.44
02 41 13 13-0007	SY	>9" To 14" By Machine, Break-up And Leave In Place Concrete Paving.....	38.45
		For >500 To 1,000, Deduct	-3.85
		For >1,000 To 2,500, Deduct	-6.92
		For >2,500 To 5,000, Deduct	-10.00
		For >5,000 To 10,000, Deduct	-13.07
		For >10,000, Deduct	-16.15
02 41 13 13-0008	SY	>14" To 19" By Machine, Break-up And Leave In Place Concrete Paving.....	50.27
		For >500 To 1,000, Deduct	-5.03
		For >1,000 To 2,500, Deduct	-9.05
		For >2,500 To 5,000, Deduct	-13.07
		For >5,000 To 10,000, Deduct	-17.09
		For >10,000, Deduct	-21.11
02 41 13 13-0009	SY	>19" To 24" By Machine, Break-up And Leave In Place Concrete Paving.....	65.36
		For >500 To 1,000, Deduct	-6.54
		For >1,000 To 2,500, Deduct	-11.76
		For >2,500 To 5,000, Deduct	-16.99
		For >5,000 To 10,000, Deduct	-22.22
		For >10,000, Deduct	-27.45

**02 41 13 13-0010 By Hand, Break-up And Leave In Place Bituminous And Concrete Paving<sup>(02 41 13 13)</sup>**

Note: Includes slabs, pavements, sidewalks and base courses. Includes work around obstacles with jackhammer and hand tools. For individual work areas where conventional equipment access is limited or prohibited. Task is only to be used when requested by owner. These tasks are not to be used in conjunction with any other loading activities or other break-up tasks. Excludes saw cutting (where required) and disposal. See CSI section 02 41 13 13-0017 for breaking-up, removal and loading as a combined operation, 02 41 19 13-0001 for saw cutting.

02 41 13 13-0011	SF	Up To 3" By Hand, Break-up And Leave In Place Bituminous Paving.....	1.66
02 41 13 13-0012	SF	>3" To 6" By Hand, Break-up And Leave In Place Bituminous Paving.....	2.11
02 41 13 13-0013	SF	>6" To 8" By Hand, Break-up And Leave In Place Bituminous Paving.....	2.80
02 41 13 13-0014	SF	Up To 3" By Hand, Break-up And Leave In Place Concrete Paving.....	2.08
02 41 13 13-0015	SF	>3" To 6" By Hand, Break-up And Leave In Place Concrete Paving.....	2.65
02 41 13 13-0016	SF	>6" To 8" By Hand, Break-up And Leave In Place Concrete Paving.....	3.49





<b>Existing Conditions</b>		<b>02</b>
<b>Demolition and Structure Moving</b>		<b>02 40</b>
Demolition		02 41

02

MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
02 41 13 13-0017 By Machine, Break-up And Remove Bituminous And Concrete Paving (02 41 13 13) Note: Includes slabs, pavements, sidewalks and base courses. Includes work around obstacles, breaking into manageable sizes by machine and loading into truck, dumpster or moving material to stockpile. Excludes saw cutting (where required) and disposal. See CSI section 02 41 19 13-0001 for saw cutting.		
02 41 13 13-0018 SY Up To 3" By Machine, Break-up And Remove Bituminous Paving ..... For Additional Cost Of Hand Held Equipment Usage (Around Existing Structures And Obstructions), Add For Elevated Slab, Add For >500 To 1,000, Deduct For >1,000 To 2,500, Deduct For >2,500 To 5,000, Deduct For >5,000 To 10,000, Deduct For >10,000, Deduct	15.20 4.56 7.60 -1.52 -2.74 -3.95 -5.17 -6.38	
02 41 13 13-0019 SY >3" To 6" By Machine, Break-up And Remove Bituminous Paving..... For Additional Cost Of Hand Held Equipment Usage (Around Existing Structures And Obstructions), Add For Elevated Slab, Add For >500 To 1,000, Deduct For >1,000 To 2,500, Deduct For >2,500 To 5,000, Deduct For >5,000 To 10,000, Deduct For >10,000, Deduct	20.75 6.23 10.38 -2.08 -3.74 -5.40 -7.06 -8.72	
02 41 13 13-0020 SY Up To 3" By Machine, Break-up And Remove Non Reinforced Concrete Paving..... For Additional Cost Of Hand Held Equipment Usage (Around Existing Structures And Obstructions), Add For Elevated Slab, Add For >500 To 1,000, Deduct For >1,000 To 2,500, Deduct For >2,500 To 5,000, Deduct For >5,000 To 10,000, Deduct For >10,000, Deduct	17.49 5.25 8.75 -1.75 -3.15 -4.55 -5.95 -7.35	
02 41 13 13-0021 SY >3" To 6" By Machine, Break-up And Remove Non Reinforced Concrete Paving..... For Additional Cost Of Hand Held Equipment Usage (Around Existing Structures And Obstructions), Add For Elevated Slab, Add For >500 To 1,000, Deduct For >1,000 To 2,500, Deduct For >2,500 To 5,000, Deduct For >5,000 To 10,000, Deduct For >10,000, Deduct	22.88 6.86 11.44 -2.29 -4.12 -5.95 -7.78 -9.61	
02 41 13 13-0022 SY Up To 3" By Machine, Break-up And Remove Welded Wire Reinforced Concrete Paving..... For Additional Cost Of Hand Held Equipment Usage (Around Existing Structures And Obstructions), Add For Elevated Slab, Add For >500 To 1,000, Deduct For >1,000 To 2,500, Deduct For >2,500 To 5,000, Deduct For >5,000 To 10,000, Deduct For >10,000, Deduct	23.20 6.96 11.60 -2.32 -4.18 -6.03 -7.89 -9.74	
02 41 13 13-0023 SY >3" To 6" By Machine, Break-up And Remove Welded Wire Reinforced Concrete Paving..... For Additional Cost Of Hand Held Equipment Usage (Around Existing Structures And Obstructions), Add For Elevated Slab, Add For >500 To 1,000, Deduct For >1,000 To 2,500, Deduct For >2,500 To 5,000, Deduct For >5,000 To 10,000, Deduct For >10,000, Deduct	30.07 9.02 15.04 -3.01 -5.41 -7.82 -10.22 -12.63	
02 41 13 13-0024 SY >6" To 9" By Machine, Break-up And Remove Welded Wire Reinforced Concrete Paving..... For Additional Cost Of Hand Held Equipment Usage (Around Existing Structures And Obstructions), Add For Elevated Slab, Add For >500 To 1,000, Deduct For >1,000 To 2,500, Deduct For >2,500 To 5,000, Deduct For >5,000 To 10,000, Deduct For >10,000, Deduct	49.84 14.95 24.92 -4.98 -8.97 -12.96 -16.95 -20.93	
02 41 13 13-0025 SY Up To 3" By Machine, Break-up And Remove Rod Reinforced Concrete Paving..... For Elevated Slab, Add For >500 To 1,000, Deduct For >1,000 To 2,500, Deduct For >2,500 To 5,000, Deduct For >5,000 To 10,000, Deduct For >10,000, Deduct	25.16 12.58 -2.52 -4.53 -6.54 -8.55 -10.57	
02 41 13 13-0026 SY >3" To 6" By Machine, Break-up And Remove Rod Reinforced Concrete Paving..... For Elevated Slab, Add For >500 To 1,000, Deduct For >1,000 To 2,500, Deduct For >2,500 To 5,000, Deduct For >5,000 To 10,000, Deduct For >10,000, Deduct	32.35 16.18 -3.24 -5.82 -8.41 -11.00 -13.59	
02 41 13 13-0027 SY >6" To 9" By Machine, Break-up And Remove Rod Reinforced Concrete Paving..... For Elevated Slab, Add For >500 To 1,000, Deduct For >1,000 To 2,500, Deduct For >2,500 To 5,000, Deduct For >5,000 To 10,000, Deduct For >10,000, Deduct	57.85 28.93 -5.79 -10.41 -15.04 -19.67 -24.30	

<b>02</b>	<b>Existing Conditions</b>
<b>02 40</b>	<b>Demolition and Structure Moving</b>
<b>02 41</b>	<b>Demolition</b>



MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
02 41 13 13-0028 SY >9" To 14" By Machine, Break-up And Remove Rod Reinforced Concrete Paving.....	75.49	
For Elevated Slab, Add	37.75	
For >500 To 1,000, Deduct	-7.55	
For >1,000 To 2,500, Deduct	-13.59	
For >2,500 To 5,000, Deduct	-19.63	
For >5,000 To 10,000, Deduct	-25.67	
For >10,000, Deduct	-31.71	
<b>02 41 13 13-0029 By Hand, Break-up And Remove Bituminous And Concrete Paving</b> (02 41 13 13)		
Note: Includes slabs, pavements, sidewalks and base courses. Includes work around obstacles. Work includes breaking into manageable size with jackhammer and hand tools, removal and loading onto a truck or dumpster. For individual work areas where conventional equipment access is limited or prohibited. Task is only to be used when requested by owner. Excludes saw cutting (where required) and disposal. See CSI section 02 41 19 13-0001 for saw cutting.		
02 41 13 13-0030 SF >6" To 8" By Hand, Break-up And Remove Bituminous Paving.....	6.35	
02 41 13 13-0031 SF Up To 3" By Hand, Break-up And Remove Concrete Paving.....	4.63	
02 41 13 13-0032 SF >3" To 6" By Hand, Break-up And Remove Concrete Paving.....	6.40	
02 41 13 13-0033 SF >6" To 8" By Hand, Break-up And Remove Concrete Paving.....	8.21	
02 41 13 13-0034 SF Up To 3" By Hand, Break-up And Remove Welded Wire Reinforced Concrete Paving.....	6.50	
02 41 13 13-0035 SF >3" To 6" By Hand, Break-up And Remove Welded Wire Reinforced Concrete Paving.....	8.97	
02 41 13 13-0036 SF >6" To 8" By Hand, Break-up And Remove Welded Wire Reinforced Concrete Paving.....	11.48	
<b>02 41 13 13-0037 Grind Concrete</b> (02 41 13 13)		
02 41 13 13-0038 EA Grind Existing Sidewalks, Up To 1/2" Depth, To Remove Ridges (Tripping Hazard).....	236.10	
Note: For each location up to 5' wide, feather up to 12" each direction.		
For >1/2" To 1" Depth Of Grinding, Add	35.42	
For >1" To 1-1/2" Depth Of Grinding, Add	59.03	
For Up To 5, Add	47.22	
For >5 To 10, Add	23.61	
For >10 To 25, Deduct	-23.61	
For >25 To 50, Deduct	-35.42	
For >50 To 250, Deduct	-47.22	
For >250, Deduct	-47.22	
For Sidewalks >5', Add	23.61	
For Up To 12" Additional Feathering Per Side, Add	23.61	
<b>02 41 13 13-0039 Repair Uneven Sidewalks</b> (02 41 13 13)		
Note: (1 inch foot = 1 inch high X 1 linear foot long). Example for sample trip hazard: 1/2" high on one side, Zero on the other side, 4 linear foot long. Calculation for height would be: (1/2 + 0)/2 = 1/4 inch average. Calculation for length would be: 1/4 inch average X 4 feet = 1 inch foot.		
02 41 13 13-0040 IF Up To 2000 Inch Feet Repair Uneven Sidewalks .....	81.14	
02 41 13 13-0041 IF 2000 To 3000 Inch Feet Repair Uneven Sidewalks .....	76.98	
02 41 13 13-0042 IF 3000 And Up Inch Feet Repair Uneven Sidewalks .....	72.81	
<b>02 41 13 15 Hydro Demolition</b> (02 41 13)		
<b>02 41 13 15-0001 Hydro Demolition Of Concrete Pavement</b> (02 41 13 15)		
Note: Includes removal but excludes disposal of concrete.		
02 41 13 15-0002 SF Up To 2" Depth, Hydro Demolition, Using 40,000 PSI Water Jet.....	7.16	
02 41 13 15-0003 SF >2" To 4" Depth, Hydro Demolition, Using 40,000 PSI Water Jet .....	8.95	
02 41 13 15-0004 SF >4" To 6" Depth, Hydro Demolition, Using 40,000 PSI Water Jet .....	11.97	
02 41 13 15-0005 SF >6" To 8" Depth, Hydro Demolition, Using 40,000 PSI Water Jet .....	23.83	
<b>02 41 19 Selective Demolition</b> (02 41)		
<b>02 41 19 13 Selective Building Demolition</b> (02 41 19)		
<b>02 41 19 13-0001 Saw Cutting</b> (02 41 19 13)		
Note: Includes blade wear, water, taping off area, layout, clean-up and mist spray with wet vacuuming for dust control where necessary. For projects where the total saw cutting charge is less than the minimum charge, use task "Saw Cut Minimum Charge" exclusively. Task "Saw Cut Minimum Charge" should not be used in conjunction with any other tasks in this section.		
02 41 19 13-0002 LF Bituminous Paving Up To 4" Depth, Saw Cut .....	2.13	
For Each Additional Pass (Depth To 3"), Add	0.83	
For >250, Deduct	-0.21	
02 41 19 13-0003 LF Brick Masonry Up To 4" Depth, Saw Cut .....	8.06	
For Each Additional Pass (Depth To 3"), Add	3.20	
For >250, Deduct	-0.80	
02 41 19 13-0004 LF Concrete Block Up To 4" Depth, Saw Cut .....	7.28	
For Each Additional Pass (Depth To 3"), Add	2.88	
For >250, Deduct	-0.72	
02 41 19 13-0005 LF Non Reinforced Concrete Slab Or Paving Up To 4" Depth, Saw Cut .....	2.43	
For Each Additional Pass (Depth To 3"), Add	0.94	
For >250, Deduct	-0.23	
02 41 19 13-0006 LF Welded Wire Reinforced Concrete Slab Up To 4" Depth, Saw Cut .....	3.21	
For Each Additional Pass (Depth To 3"), Add	1.25	
For >250, Deduct	-0.31	
02 41 19 13-0007 LF Rod Reinforced Concrete Slab Up To 4" Depth, Saw Cut .....	5.34	
For Each Additional Pass (Depth To 3"), Add	2.10	
For >250, Deduct	-0.52	



<b>Existing Conditions</b>		<b>02</b>
<b>Demolition and Structure Moving</b>		<b>02 40</b>
<b>Demolition</b>		<b>02 41</b>

MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
02 41 19 13-0008 LF Plain Concrete Walls Up To 4" Depth, Saw Cut ..... For Each Additional Pass (Depth To 3"), Add ..... For >250, Deduct .....	10.32 4.10 -1.02	
02 41 19 13-0009 LF Saw Cut Rod Reinforced Concrete Walls Up To 4" Depth..... For Each Additional Pass (Depth To 3"), Add ..... For >250, Deduct .....	13.87 5.51 -1.37	
02 41 19 13-0010 LF Concrete And Asphalt Up To 4" Depth, Saw Cut In Streets..... For Each Additional Pass (Depth To 3"), Add ..... For >250, Deduct .....	2.87 1.03 -0.25	
02 41 19 13-0011 LF Igneous Stone Pavements Up To 4" Depth, Saw Cut..... For Each Additional Pass (Depth To 3"), Add ..... For >250, Deduct .....	7.30 2.89 -0.72	
02 41 19 13-0012 LF Sedimentary Stone Pavements Up To 4" Depth, Saw Cut ..... For Each Additional Pass (Depth To 3"), Add ..... For >250, Deduct .....	7.30 2.89 -0.72	
02 41 19 13-0013 LF Metamorphic Stone Pavements Up To 4" Depth, Saw Cut..... For Each Additional Pass (Depth To 3"), Add ..... For >250, Deduct .....	7.30 2.89 -0.72	
02 41 19 13-0014 LF Terrazzo Stone Pavements Up To 4" Depth, Saw Cut ..... For Each Additional Pass (Depth To 3"), Add ..... For >250, Deduct .....	7.30 2.89 -0.72	
02 41 19 13-0015 EA Saw Cut Minimum Charge .....	1,023.52	
Note: For projects where the total saw cutting charge is less than the minimum charge, use this task exclusively. This task should not be used in conjunction with any other tasks in this section.		
02 41 19 13-0016 <b>Torch Cutting</b> (02 41 19 13) Note: Includes grinding edge		
02 41 19 13-0017 LF Up To 1/2", Torch Cut Steel Plate.....	2.93	
02 41 19 13-0018 LF >1/2" To 1" Thick, Torch Cut Steel Plate .....	5.86	
02 41 19 13-0019 LF >1" To 1-1/2" Thick, Torch Cut Steel Plate .....	8.80	
02 41 19 13-0020 LF >1-1/2" To 2" Thick, Torch Cut Steel Plate .....	11.74	
02 41 19 13-0021 LF >2" To 2-1/2" Thick, Torch Cut Steel Plate .....	14.67	
02 41 19 13-0022 LF >2-1/2" To 3" Thick, Torch Cut Steel Plate .....	17.60	
02 41 19 13-0023 EA Torch Cutting Minimum Charge.....	962.92	
Note: For projects where the total torch cutting charge is less than the minimum charge, use this task exclusively. This task should not be used in conjunction with any other tasks in this section.		
02 41 19 13-0024 <b>Drilling In Existing Materials</b> (02 41 19 13) Note: Includes drill bit wear, water, layout, set-up and clean-up.		
02 41 19 13-0025 <b>Concrete Core Drilling</b> (02 41 19 13-0024)		
02 41 19 13-0026 <b>Up To 4" Thick Concrete Core Drilling</b> (02 41 19 13-0025)		
02 41 19 13-0027 EA Drill 1" Diameter Core In Up To 4" Concrete..... For Horizontal Cores, Add ..... For Overhead Ceiling Cores (Where Not Accessible From Above), Add .....	39.60 7.83 15.67	
02 41 19 13-0028 EA Drill 1-1/2" Diameter Core In Up To 4" Concrete ..... For Horizontal Cores, Add ..... For Overhead Ceiling Cores (Where Not Accessible From Above), Add .....	43.94 8.70 17.40	
02 41 19 13-0029 EA Drill 2" Diameter Core In Up To 4" Concrete..... For Horizontal Cores, Add ..... For Overhead Ceiling Cores (Where Not Accessible From Above), Add .....	48.79 9.67 19.34	
02 41 19 13-0030 EA Drill 3" Diameter Core In Up To 4" Concrete..... For Horizontal Cores, Add ..... For Overhead Ceiling Cores (Where Not Accessible From Above), Add .....	69.66 13.82 27.63	
02 41 19 13-0031 EA Drill 4" Diameter Core In Up To 4" Concrete..... For Horizontal Cores, Add ..... For Overhead Ceiling Cores (Where Not Accessible From Above), Add .....	93.34 18.51 37.02	
02 41 19 13-0032 EA Drill 6" Diameter Core In Up To 4" Concrete..... For Horizontal Cores, Add ..... For Overhead Ceiling Cores (Where Not Accessible From Above), Add .....	104.59 20.72 41.44	
02 41 19 13-0033 EA Drill 8" Diameter Core In Up To 4" Concrete..... For Horizontal Cores, Add ..... For Overhead Ceiling Cores (Where Not Accessible From Above), Add .....	167.14 33.16 66.32	
02 41 19 13-0034 EA Drill 10" Diameter Core In Up To 4" Concrete..... For Horizontal Cores, Add ..... For Overhead Ceiling Cores (Where Not Accessible From Above), Add .....	209.07 41.45 82.89	
02 41 19 13-0035 EA Drill 12" Diameter Core In Up To 4" Concrete..... For Horizontal Cores, Add ..... For Overhead Ceiling Cores (Where Not Accessible From Above), Add .....	243.98 48.36 96.71	
02 41 19 13-0036 EA Drill 14" Diameter Core In Up To 4" Concrete..... For Horizontal Cores, Add ..... For Overhead Ceiling Cores (Where Not Accessible From Above), Add .....	278.90 55.26 110.51	
02 41 19 13-0037 EA Drill 18" Diameter Core In Up To 4" Concrete..... For Horizontal Cores, Add ..... For Overhead Ceiling Cores (Where Not Accessible From Above), Add .....	314.17 62.16 124.32	
02 41 19 13-0038 <b>&gt;4" To 6" Thick Concrete Core Drilling</b> (02 41 19 13-0025)		
02 41 19 13-0039 EA Drill 1" Diameter Core In >4" To 6" Concrete..... For Horizontal Cores, Add ..... For Overhead Ceiling Cores (Where Not Accessible From Above), Add .....	56.61 11.19 22.38	

**02 Existing Conditions****02 40 Demolition and Structure Moving****02 41 Demolition**

MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
02 41 19 13-0040 EA Drill 1-1/2" Diameter Core In >4" To 6" Concrete.....	62.81	
For Horizontal Cores, Add	12.43	
For Overhead Ceiling Cores (Where Not Accessible From Above), Add	24.86	
02 41 19 13-0041 EA Drill 2" Diameter Core In >4" To 6" Concrete.....	69.72	
For Horizontal Cores, Add	13.81	
For Overhead Ceiling Cores (Where Not Accessible From Above), Add	27.62	
02 41 19 13-0042 EA Drill 3" Diameter Core In >4" To 6" Concrete.....	83.80	
For Horizontal Cores, Add	16.58	
For Overhead Ceiling Cores (Where Not Accessible From Above), Add	33.16	
02 41 19 13-0043 EA Drill 4" Diameter Core In >4" To 6" Concrete.....	104.81	
For Horizontal Cores, Add	20.72	
For Overhead Ceiling Cores (Where Not Accessible From Above), Add	41.44	
02 41 19 13-0044 EA Drill 6" Diameter Core In >4" To 6" Concrete.....	139.64	
For Horizontal Cores, Add	27.63	
For Overhead Ceiling Cores (Where Not Accessible From Above), Add	55.26	
02 41 19 13-0045 EA Drill 8" Diameter Core In >4" To 6" Concrete.....	209.27	
For Horizontal Cores, Add	41.45	
For Overhead Ceiling Cores (Where Not Accessible From Above), Add	82.89	
02 41 19 13-0046 EA Drill 10" Diameter Core In >4" To 6" Concrete.....	244.53	
For Horizontal Cores, Add	48.36	
For Overhead Ceiling Cores (Where Not Accessible From Above), Add	96.71	
02 41 19 13-0047 EA Drill 12" Diameter Core In >4" To 6" Concrete.....	279.58	
For Horizontal Cores, Add	55.26	
For Overhead Ceiling Cores (Where Not Accessible From Above), Add	110.51	
02 41 19 13-0048 EA Drill 14" Diameter Core In >4" To 6" Concrete.....	314.81	
For Horizontal Cores, Add	62.16	
For Overhead Ceiling Cores (Where Not Accessible From Above), Add	124.32	
02 41 19 13-0049 EA Drill 18" Diameter Core In >4" To 6" Concrete.....	350.56	
For Horizontal Cores, Add	69.07	
For Overhead Ceiling Cores (Where Not Accessible From Above), Add	138.15	
<b>02 41 19 13-0050 &gt;6" To 8" Thick Concrete Core Drilling (02 41 19 13-0025)</b>		
02 41 19 13-0051 EA Drill 1" Diameter Core In >6" To 8" Concrete.....	62.45	
For Horizontal Cores, Add	12.31	
For Overhead Ceiling Cores (Where Not Accessible From Above), Add	24.62	
02 41 19 13-0052 EA Drill 1-1/2" Diameter Core In >6" To 8" Concrete.....	69.29	
For Horizontal Cores, Add	13.68	
For Overhead Ceiling Cores (Where Not Accessible From Above), Add	27.36	
02 41 19 13-0053 EA Drill 2" Diameter Core In >6" To 8" Concrete.....	76.88	
For Horizontal Cores, Add	15.20	
For Overhead Ceiling Cores (Where Not Accessible From Above), Add	30.39	
02 41 19 13-0054 EA Drill 3" Diameter Core In >6" To 8" Concrete.....	91.03	
For Horizontal Cores, Add	17.96	
For Overhead Ceiling Cores (Where Not Accessible From Above), Add	35.92	
02 41 19 13-0055 EA Drill 4" Diameter Core In >6" To 8" Concrete.....	119.04	
For Horizontal Cores, Add	23.48	
For Overhead Ceiling Cores (Where Not Accessible From Above), Add	46.97	
02 41 19 13-0056 EA Drill 6" Diameter Core In >6" To 8" Concrete.....	167.79	
For Horizontal Cores, Add	33.16	
For Overhead Ceiling Cores (Where Not Accessible From Above), Add	66.32	
02 41 19 13-0057 EA Drill 8" Diameter Core In >6" To 8" Concrete.....	279.01	
For Horizontal Cores, Add	55.26	
For Overhead Ceiling Cores (Where Not Accessible From Above), Add	110.51	
02 41 19 13-0058 EA Drill 10" Diameter Core In >6" To 8" Concrete.....	314.46	
For Horizontal Cores, Add	62.16	
For Overhead Ceiling Cores (Where Not Accessible From Above), Add	124.32	
02 41 19 13-0059 EA Drill 12" Diameter Core In >6" To 8" Concrete.....	349.76	
For Horizontal Cores, Add	69.07	
For Overhead Ceiling Cores (Where Not Accessible From Above), Add	138.15	
02 41 19 13-0060 EA Drill 14" Diameter Core In >6" To 8" Concrete.....	385.23	
For Horizontal Cores, Add	75.97	
For Overhead Ceiling Cores (Where Not Accessible From Above), Add	151.94	
02 41 19 13-0061 EA Drill 18" Diameter Core In >6" To 8" Concrete.....	421.47	
For Horizontal Cores, Add	82.89	
For Overhead Ceiling Cores (Where Not Accessible From Above), Add	165.78	
<b>02 41 19 13-0062 &gt;8" To 10" Thick Concrete Core Drilling (02 41 19 13-0025)</b>		
02 41 19 13-0063 EA Drill 2" Diameter Core In >8" To 10" Concrete.....	90.93	
For Horizontal Cores, Add	17.96	
For Overhead Ceiling Cores (Where Not Accessible From Above), Add	35.92	
02 41 19 13-0064 EA Drill 1" Diameter Core In >8" To 10" Concrete.....	73.87	
For Horizontal Cores, Add	14.55	
For Overhead Ceiling Cores (Where Not Accessible From Above), Add	29.10	
02 41 19 13-0065 EA Drill 1-1/2" Diameter Core In >8" To 10" Concrete.....	81.94	
For Horizontal Cores, Add	16.16	
For Overhead Ceiling Cores (Where Not Accessible From Above), Add	32.32	
02 41 19 13-0066 EA Drill 3" Diameter Core In >8" To 10" Concrete.....	105.17	
For Horizontal Cores, Add	20.72	
For Overhead Ceiling Cores (Where Not Accessible From Above), Add	41.44	
02 41 19 13-0067 EA Drill 4" Diameter Core In >8" To 10" Concrete.....	119.46	
For Horizontal Cores, Add	23.48	
For Overhead Ceiling Cores (Where Not Accessible From Above), Add	46.97	



<b>Existing Conditions</b>		<b>02</b>
<b>Demolition and Structure Moving</b>		<b>02 40</b>
<b>Demolition</b>		<b>02 41</b>

02

MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
02 41 19 13-0068 EA Drill 6" Diameter Core In >8" To 10" Concrete.....	168.30	
For Horizontal Cores, Add	33.16	
For Overhead Ceiling Cores (Where Not Accessible From Above), Add	66.32	
02 41 19 13-0069 EA Drill 8" Diameter Core In >8" To 10" Concrete.....	279.70	
For Horizontal Cores, Add	55.26	
For Overhead Ceiling Cores (Where Not Accessible From Above), Add	110.51	
02 41 19 13-0070 EA Drill 10" Diameter Core In >8" To 10" Concrete.....	315.37	
For Horizontal Cores, Add	62.16	
For Overhead Ceiling Cores (Where Not Accessible From Above), Add	124.32	
02 41 19 13-0071 EA Drill 12" Diameter Core In >8" To 10" Concrete.....	350.78	
For Horizontal Cores, Add	69.06	
For Overhead Ceiling Cores (Where Not Accessible From Above), Add	138.12	
02 41 19 13-0072 EA Drill 14" Diameter Core In >8" To 10" Concrete.....	386.61	
For Horizontal Cores, Add	75.97	
For Overhead Ceiling Cores (Where Not Accessible From Above), Add	151.94	
02 41 19 13-0073 EA Drill 18" Diameter Core In >8" To 10" Concrete.....	423.19	
For Horizontal Cores, Add	82.87	
For Overhead Ceiling Cores (Where Not Accessible From Above), Add	165.74	
<b>02 41 19 13-0074 &gt;10" To 12" Thick Concrete Core Drilling (02 41 19 13-0025)</b>		
02 41 19 13-0075 EA Drill 1" Diameter Core In >10" To 12" Concrete.....	79.71	
For Horizontal Cores, Add	15.67	
For Overhead Ceiling Cores (Where Not Accessible From Above), Add	31.34	
02 41 19 13-0076 EA Drill 1-1/2" Diameter Core In >10" To 12" Concrete.....	88.41	
For Horizontal Cores, Add	17.41	
For Overhead Ceiling Cores (Where Not Accessible From Above), Add	34.82	
02 41 19 13-0077 EA Drill 2" Diameter Core In >10" To 12" Concrete.....	98.08	
For Horizontal Cores, Add	19.34	
For Overhead Ceiling Cores (Where Not Accessible From Above), Add	38.68	
02 41 19 13-0078 EA Drill 3" Diameter Core In >10" To 12" Concrete.....	105.50	
For Horizontal Cores, Add	20.72	
For Overhead Ceiling Cores (Where Not Accessible From Above), Add	41.44	
02 41 19 13-0079 EA Drill 4" Diameter Core In >10" To 12" Concrete.....	140.61	
For Horizontal Cores, Add	27.63	
For Overhead Ceiling Cores (Where Not Accessible From Above), Add	55.26	
02 41 19 13-0080 EA Drill 6" Diameter Core In >10" To 12" Concrete.....	182.63	
For Horizontal Cores, Add	35.92	
For Overhead Ceiling Cores (Where Not Accessible From Above), Add	71.84	
02 41 19 13-0081 EA Drill 8" Diameter Core In >10" To 12" Concrete.....	294.23	
For Horizontal Cores, Add	58.02	
For Overhead Ceiling Cores (Where Not Accessible From Above), Add	116.04	
02 41 19 13-0082 EA Drill 10" Diameter Core In >10" To 12" Concrete.....	316.28	
For Horizontal Cores, Add	62.16	
For Overhead Ceiling Cores (Where Not Accessible From Above), Add	124.32	
02 41 19 13-0083 EA Drill 12" Diameter Core In >10" To 12" Concrete.....	365.79	
For Horizontal Cores, Add	71.84	
For Overhead Ceiling Cores (Where Not Accessible From Above), Add	143.69	
<b>02 41 19 13-0084 &gt;12" Thick Concrete Core Drilling (02 41 19 13-0025)</b>		
02 41 19 13-0085 IN Drill 1" Diameter Core In >12" Concrete.....	9.69	
For Horizontal Cores, Add	1.92	
For Overhead Ceiling Cores (Where Not Accessible From Above), Add	3.83	
02 41 19 13-0086 IN Drill 1-1/2" Diameter Core In >12" Concrete.....	10.75	
For Horizontal Cores, Add	2.13	
For Overhead Ceiling Cores (Where Not Accessible From Above), Add	4.26	
02 41 19 13-0087 IN Drill 2" Diameter Core In >12" Concrete.....	11.94	
For Horizontal Cores, Add	2.37	
For Overhead Ceiling Cores (Where Not Accessible From Above), Add	4.73	
02 41 19 13-0088 IN Drill 3" Diameter Core In >12" Concrete.....	13.11	
For Horizontal Cores, Add	2.59	
For Overhead Ceiling Cores (Where Not Accessible From Above), Add	5.18	
02 41 19 13-0089 IN Drill 4" Diameter Core In >12" Concrete.....	17.46	
For Horizontal Cores, Add	3.45	
For Overhead Ceiling Cores (Where Not Accessible From Above), Add	6.90	
02 41 19 13-0090 IN Drill 6" Diameter Core In >12" Concrete.....	22.72	
For Horizontal Cores, Add	4.49	
For Overhead Ceiling Cores (Where Not Accessible From Above), Add	8.99	
02 41 19 13-0091 IN Drill 8" Diameter Core In >12" Concrete.....	36.64	
For Horizontal Cores, Add	7.26	
For Overhead Ceiling Cores (Where Not Accessible From Above), Add	14.52	
02 41 19 13-0092 IN Drill 10" Diameter Core In >12" Concrete.....	39.48	
For Horizontal Cores, Add	7.80	
For Overhead Ceiling Cores (Where Not Accessible From Above), Add	15.61	
02 41 19 13-0093 IN Drill 12" Diameter Core In >12" Concrete.....	45.47	
For Horizontal Cores, Add	8.98	
For Overhead Ceiling Cores (Where Not Accessible From Above), Add	17.97	
<b>02 41 19 13-0094 Brick/Concrete Block Core Drilling (02 41 19 13-0024)</b>		
<b>02 41 19 13-0095 Up To 4" Thick Brick/Concrete Block Core Drilling (02 41 19 13-0094)</b>		

**02 Existing Conditions****02 40 Demolition and Structure Moving****02 41 Demolition**

MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
02 41 19 13-0096 EA Drill 1" Diameter Core In Up To 4" Brick/Concrete Block.....	31.77	
For Horizontal Cores, Add	6.27	
For Overhead Ceiling Cores (Where Not Accessible From Above), Add	12.54	
02 41 19 13-0097 EA Drill 1-1/2" Diameter Core In Up To 4" Brick/Concrete Block.....	35.24	
For Horizontal Cores, Add	6.96	
For Overhead Ceiling Cores (Where Not Accessible From Above), Add	13.92	
02 41 19 13-0098 EA Drill 2" Diameter Core In Up To 4" Brick/Concrete Block.....	39.11	
For Horizontal Cores, Add	7.74	
For Overhead Ceiling Cores (Where Not Accessible From Above), Add	15.47	
02 41 19 13-0099 EA Drill 3" Diameter Core In Up To 4" Brick/Concrete Block.....	55.84	
For Horizontal Cores, Add	11.05	
For Overhead Ceiling Cores (Where Not Accessible From Above), Add	22.10	
02 41 19 13-0100 EA Drill 4" Diameter Core In Up To 4" Brick/Concrete Block.....	74.83	
For Horizontal Cores, Add	14.81	
For Overhead Ceiling Cores (Where Not Accessible From Above), Add	29.62	
02 41 19 13-0101 EA Drill 6" Diameter Core In Up To 4" Brick/Concrete Block.....	83.87	
For Horizontal Cores, Add	16.58	
For Overhead Ceiling Cores (Where Not Accessible From Above), Add	33.16	
02 41 19 13-0102 EA Drill 8" Diameter Core In Up To 4" Brick/Concrete Block.....	133.98	
For Horizontal Cores, Add	26.53	
For Overhead Ceiling Cores (Where Not Accessible From Above), Add	53.05	
02 41 19 13-0103 EA Drill 10" Diameter Core In Up To 4" Brick/Concrete Block.....	167.63	
For Horizontal Cores, Add	33.16	
For Overhead Ceiling Cores (Where Not Accessible From Above), Add	66.32	
02 41 19 13-0104 EA Drill 12" Diameter Core In Up To 4" Brick/Concrete Block.....	195.62	
For Horizontal Cores, Add	38.68	
For Overhead Ceiling Cores (Where Not Accessible From Above), Add	77.37	
02 41 19 13-0105 EA Drill 14" Diameter Core In Up To 4" Brick/Concrete Block.....	223.65	
For Horizontal Cores, Add	44.21	
For Overhead Ceiling Cores (Where Not Accessible From Above), Add	88.41	
02 41 19 13-0106 EA Drill 18" Diameter Core In Up To 4" Brick/Concrete Block.....	252.01	
For Horizontal Cores, Add	49.73	
For Overhead Ceiling Cores (Where Not Accessible From Above), Add	99.46	
<b>02 41 19 13-0107 &gt;4" To 6" Thick Brick/Concrete Block Core Drilling (02 41 19 13-0094)</b>		
02 41 19 13-0108 EA Drill 1" Diameter Core In >4" To 6" Brick/Concrete Block.....	45.42	
For Horizontal Cores, Add	8.95	
For Overhead Ceiling Cores (Where Not Accessible From Above), Add	17.90	
02 41 19 13-0109 EA Drill 1-1/2" Diameter Core In >4" To 6" Brick/Concrete Block.....	50.38	
For Horizontal Cores, Add	9.94	
For Overhead Ceiling Cores (Where Not Accessible From Above), Add	19.89	
02 41 19 13-0110 EA Drill 2" Diameter Core In >4" To 6" Brick/Concrete Block.....	55.91	
For Horizontal Cores, Add	11.05	
For Overhead Ceiling Cores (Where Not Accessible From Above), Add	22.10	
02 41 19 13-0111 EA Drill 3" Diameter Core In >4" To 6" Brick/Concrete Block.....	67.22	
For Horizontal Cores, Add	13.26	
For Overhead Ceiling Cores (Where Not Accessible From Above), Add	26.52	
02 41 19 13-0112 EA Drill 4" Diameter Core In >4" To 6" Brick/Concrete Block.....	84.09	
For Horizontal Cores, Add	16.58	
For Overhead Ceiling Cores (Where Not Accessible From Above), Add	33.16	
02 41 19 13-0113 EA Drill 6" Diameter Core In >4" To 6" Brick/Concrete Block.....	112.01	
For Horizontal Cores, Add	22.10	
For Overhead Ceiling Cores (Where Not Accessible From Above), Add	44.21	
02 41 19 13-0114 EA Drill 8" Diameter Core In >4" To 6" Brick/Concrete Block.....	167.83	
For Horizontal Cores, Add	33.16	
For Overhead Ceiling Cores (Where Not Accessible From Above), Add	66.32	
02 41 19 13-0115 EA Drill 10" Diameter Core In >4" To 6" Brick/Concrete Block.....	196.17	
For Horizontal Cores, Add	38.68	
For Overhead Ceiling Cores (Where Not Accessible From Above), Add	77.37	
02 41 19 13-0116 EA Drill 12" Diameter Core In >4" To 6" Brick/Concrete Block.....	224.33	
For Horizontal Cores, Add	44.21	
For Overhead Ceiling Cores (Where Not Accessible From Above), Add	88.41	
02 41 19 13-0117 EA Drill 14" Diameter Core In >4" To 6" Brick/Concrete Block.....	252.65	
For Horizontal Cores, Add	49.73	
For Overhead Ceiling Cores (Where Not Accessible From Above), Add	99.46	
02 41 19 13-0118 EA Drill 18" Diameter Core In >4" To 6" Brick/Concrete Block.....	281.48	
For Horizontal Cores, Add	55.26	
For Overhead Ceiling Cores (Where Not Accessible From Above), Add	110.52	
<b>02 41 19 13-0119 &gt;6" To 8" Thick Brick/Concrete Block Core Drilling (02 41 19 13-0094)</b>		
02 41 19 13-0120 EA Drill 1" Diameter Core In >6" To 8" Brick/Concrete Block.....	50.14	
For Horizontal Cores, Add	9.85	
For Overhead Ceiling Cores (Where Not Accessible From Above), Add	19.70	
02 41 19 13-0121 EA Drill 1-1/2" Diameter Core In >6" To 8" Brick/Concrete Block.....	55.61	
For Horizontal Cores, Add	10.94	
For Overhead Ceiling Cores (Where Not Accessible From Above), Add	21.88	
02 41 19 13-0122 EA Drill 2" Diameter Core In >6" To 8" Brick/Concrete Block.....	61.68	
For Horizontal Cores, Add	12.16	
For Overhead Ceiling Cores (Where Not Accessible From Above), Add	24.31	
02 41 19 13-0123 EA Drill 3" Diameter Core In >6" To 8" Brick/Concrete Block.....	73.07	
For Horizontal Cores, Add	14.37	
For Overhead Ceiling Cores (Where Not Accessible From Above), Add	28.74	



<b>Existing Conditions</b>		<b>02</b>
<b>Demolition and Structure Moving</b>		<b>02 40</b>
<b>Demolition</b>		<b>02 41</b>

02

MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
02 41 19 13-0124 EA Drill 4" Diameter Core In >6" To 8" Brick/Concrete Block .....95.56 For Horizontal Cores, Add 18.79 For Overhead Ceiling Cores (Where Not Accessible From Above), Add 37.58		
02 41 19 13-0125 EA Drill 6" Diameter Core In >6" To 8" Brick/Concrete Block .....134.63 For Horizontal Cores, Add 26.53 For Overhead Ceiling Cores (Where Not Accessible From Above), Add 53.05		
02 41 19 13-0126 EA Drill 8" Diameter Core In >6" To 8" Brick/Concrete Block .....223.76 For Horizontal Cores, Add 44.21 For Overhead Ceiling Cores (Where Not Accessible From Above), Add 88.41		
02 41 19 13-0127 EA Drill 10" Diameter Core In >6" To 8" Brick/Concrete Block .....252.30 For Horizontal Cores, Add 49.73 For Overhead Ceiling Cores (Where Not Accessible From Above), Add 99.46		
02 41 19 13-0128 EA Drill 12" Diameter Core In >6" To 8" Brick/Concrete Block .....280.68 For Horizontal Cores, Add 55.26 For Overhead Ceiling Cores (Where Not Accessible From Above), Add 110.52		
02 41 19 13-0129 EA Drill 14" Diameter Core In >6" To 8" Brick/Concrete Block .....309.26 For Horizontal Cores, Add 60.77 For Overhead Ceiling Cores (Where Not Accessible From Above), Add 121.55		
02 41 19 13-0130 EA Drill 18" Diameter Core In >6" To 8" Brick/Concrete Block .....338.57 For Horizontal Cores, Add 66.31 For Overhead Ceiling Cores (Where Not Accessible From Above), Add 132.62		
<b>02 41 19 13-0131 &gt;8" To 10" Thick Brick/Concrete Block Core Drilling (02 41 19 13-0094)</b>		
02 41 19 13-0132 EA Drill 1" Diameter Core In >8" To 10" Brick/Concrete Block .....59.32 For Horizontal Cores, Add 11.64 For Overhead Ceiling Cores (Where Not Accessible From Above), Add 23.28		
02 41 19 13-0133 EA Drill 1-1/2" Diameter Core In >8" To 10" Brick/Concrete Block .....65.78 For Horizontal Cores, Add 12.93 For Overhead Ceiling Cores (Where Not Accessible From Above), Add 25.86		
02 41 19 13-0134 EA Drill 2" Diameter Core In >8" To 10" Brick/Concrete Block .....72.96 For Horizontal Cores, Add 14.37 For Overhead Ceiling Cores (Where Not Accessible From Above), Add 28.73		
02 41 19 13-0135 EA Drill 3" Diameter Core In >8" To 10" Brick/Concrete Block .....84.45 For Horizontal Cores, Add 16.58 For Overhead Ceiling Cores (Where Not Accessible From Above), Add 33.16		
02 41 19 13-0136 EA Drill 4" Diameter Core In >8" To 10" Brick/Concrete Block .....95.98 For Horizontal Cores, Add 18.79 For Overhead Ceiling Cores (Where Not Accessible From Above), Add 37.58		
02 41 19 13-0137 EA Drill 6" Diameter Core In >8" To 10" Brick/Concrete Block .....135.14 For Horizontal Cores, Add 26.53 For Overhead Ceiling Cores (Where Not Accessible From Above), Add 53.05		
02 41 19 13-0138 EA Drill 8" Diameter Core In >8" To 10" Brick/Concrete Block .....224.45 For Horizontal Cores, Add 44.21 For Overhead Ceiling Cores (Where Not Accessible From Above), Add 88.41		
02 41 19 13-0139 EA Drill 10" Diameter Core In >8" To 10" Brick/Concrete Block .....253.21 For Horizontal Cores, Add 49.73 For Overhead Ceiling Cores (Where Not Accessible From Above), Add 99.46		
02 41 19 13-0140 EA Drill 12" Diameter Core In >8" To 10" Brick/Concrete Block .....281.72 For Horizontal Cores, Add 55.25 For Overhead Ceiling Cores (Where Not Accessible From Above), Add 110.50		
02 41 19 13-0141 EA Drill 14" Diameter Core In >8" To 10" Brick/Concrete Block .....310.64 For Horizontal Cores, Add 60.77 For Overhead Ceiling Cores (Where Not Accessible From Above), Add 121.55		
02 41 19 13-0142 EA Drill 18" Diameter Core In >8" To 10" Brick/Concrete Block .....340.32 For Horizontal Cores, Add 66.30 For Overhead Ceiling Cores (Where Not Accessible From Above), Add 132.60		
<b>02 41 19 13-0143 &gt;10" To 12" Thick Brick/Concrete Block Core Drilling (02 41 19 13-0094)</b>		
02 41 19 13-0144 EA Drill 1" Diameter Core In >10" To 12" Brick/Concrete Block .....64.04 For Horizontal Cores, Add 12.53 For Overhead Ceiling Cores (Where Not Accessible From Above), Add 25.07		
02 41 19 13-0145 EA Drill 1-1/2" Diameter Core In >10" To 12" Brick/Concrete Block .....71.01 For Horizontal Cores, Add 13.93 For Overhead Ceiling Cores (Where Not Accessible From Above), Add 27.86		
02 41 19 13-0146 EA Drill 2" Diameter Core In >10" To 12" Brick/Concrete Block .....78.74 For Horizontal Cores, Add 15.47 For Overhead Ceiling Cores (Where Not Accessible From Above), Add 30.95		
02 41 19 13-0147 EA Drill 3" Diameter Core In >10" To 12" Brick/Concrete Block .....84.78 For Horizontal Cores, Add 16.58 For Overhead Ceiling Cores (Where Not Accessible From Above), Add 33.16		
02 41 19 13-0148 EA Drill 4" Diameter Core In >10" To 12" Brick/Concrete Block .....112.98 For Horizontal Cores, Add 22.10 For Overhead Ceiling Cores (Where Not Accessible From Above), Add 44.21		
02 41 19 13-0149 EA Drill 6" Diameter Core In >10" To 12" Brick/Concrete Block .....146.71 For Horizontal Cores, Add 28.74 For Overhead Ceiling Cores (Where Not Accessible From Above), Add 57.48		
02 41 19 13-0150 EA Drill 8" Diameter Core In >10" To 12" Brick/Concrete Block .....236.21 For Horizontal Cores, Add 46.42 For Overhead Ceiling Cores (Where Not Accessible From Above), Add 92.84		
02 41 19 13-0151 EA Drill 10" Diameter Core In >10" To 12" Brick/Concrete Block .....254.12 For Horizontal Cores, Add 49.73 For Overhead Ceiling Cores (Where Not Accessible From Above), Add 99.46		

**02 Existing Conditions****02 40 Demolition and Structure Moving****02 41 Demolition**

MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
02 41 19 13-0152 EA Drill 12" Diameter Core In >10" To 12" Brick/Concrete Block .....	293.95	
For Horizontal Cores, Add	57.48	
For Overhead Ceiling Cores (Where Not Accessible From Above), Add	114.95	
<b>02 41 19 13-0153 &gt;12" Thick Brick/Concrete Block Core Drilling (02 41 19 13-0094)</b>		
02 41 19 13-0154 IN Drill 1" Diameter Core In >12" Brick/Concrete Block.....	7.77	
For Horizontal Cores, Add	1.53	
For Overhead Ceiling Cores (Where Not Accessible From Above), Add	3.06	
02 41 19 13-0155 IN Drill 1-1/2" Diameter Core In >12" Brick/Concrete Block.....	8.62	
For Horizontal Cores, Add	1.70	
For Overhead Ceiling Cores (Where Not Accessible From Above), Add	3.40	
02 41 19 13-0156 IN Drill 2" Diameter Core In >12" Brick/Concrete Block.....	9.57	
For Horizontal Cores, Add	1.89	
For Overhead Ceiling Cores (Where Not Accessible From Above), Add	3.78	
02 41 19 13-0157 IN Drill 3" Diameter Core In >12" Brick/Concrete Block.....	10.52	
For Horizontal Cores, Add	2.07	
For Overhead Ceiling Cores (Where Not Accessible From Above), Add	4.14	
02 41 19 13-0158 IN Drill 4" Diameter Core In >12" Brick/Concrete Block.....	14.01	
For Horizontal Cores, Add	2.76	
For Overhead Ceiling Cores (Where Not Accessible From Above), Add	5.52	
02 41 19 13-0159 IN Drill 6" Diameter Core In >12" Brick/Concrete Block.....	18.23	
For Horizontal Cores, Add	3.60	
For Overhead Ceiling Cores (Where Not Accessible From Above), Add	7.19	
02 41 19 13-0160 IN Drill 8" Diameter Core In >12" Brick/Concrete Block.....	29.38	
For Horizontal Cores, Add	5.81	
For Overhead Ceiling Cores (Where Not Accessible From Above), Add	11.62	
02 41 19 13-0161 IN Drill 10" Diameter Core In >12" Brick/Concrete Block.....	31.67	
For Horizontal Cores, Add	6.24	
For Overhead Ceiling Cores (Where Not Accessible From Above), Add	12.48	
02 41 19 13-0162 IN Drill 12" Diameter Core In >12" Brick/Concrete Block.....	36.49	
For Horizontal Cores, Add	7.19	
For Overhead Ceiling Cores (Where Not Accessible From Above), Add	14.38	
<b>02 41 19 13-0163 Asphalt Core Drilling (02 41 19 13-0024)</b>		
<b>02 41 19 13-0164 Up To 2" Thick Asphalt Core Drilling (02 41 19 13-0163)</b>		
02 41 19 13-0165 EA Drill 1" Diameter Core In Up To 2" Asphalt .....	19.00	
02 41 19 13-0166 EA Drill 1-1/2" Diameter Core In Up To 2" Asphalt .....	23.75	
02 41 19 13-0167 EA Drill 2" Diameter Core In Up To 2" Asphalt .....	29.70	
02 41 19 13-0168 EA Drill 3" Diameter Core In Up To 2" Asphalt .....	36.83	
02 41 19 13-0169 EA Drill 4" Diameter Core In Up To 2" Asphalt .....	46.35	
02 41 19 13-0170 EA Drill 6" Diameter Core In Up To 2" Asphalt .....	58.24	
02 41 19 13-0171 EA Drill 8" Diameter Core In Up To 2" Asphalt .....	72.53	
02 41 19 13-0172 EA Drill 10" Diameter Core In Up To 2" Asphalt .....	90.33	
02 41 19 13-0173 EA Drill 12" Diameter Core In Up To 2" Asphalt .....	112.89	
<b>02 41 19 13-0174 &gt;2" To 3" Thick Asphalt Core Drilling (02 41 19 13-0163)</b>		
02 41 19 13-0175 EA Drill 1" Diameter Core In >2" To 3" Asphalt.....	23.74	
02 41 19 13-0176 EA Drill 1-1/2" Diameter Core In >2" To 3" Asphalt .....	30.87	
02 41 19 13-0177 EA Drill 2" Diameter Core In >2" To 3" Asphalt.....	37.98	
02 41 19 13-0178 EA Drill 3" Diameter Core In >2" To 3" Asphalt.....	47.51	
02 41 19 13-0179 EA Drill 4" Diameter Core In >2" To 3" Asphalt.....	59.38	
02 41 19 13-0180 EA Drill 6" Diameter Core In >2" To 3" Asphalt.....	74.84	
02 41 19 13-0181 EA Drill 8" Diameter Core In >2" To 3" Asphalt.....	92.69	
02 41 19 13-0182 EA Drill 10" Diameter Core In >2" To 3" Asphalt.....	116.41	
02 41 19 13-0183 EA Drill 12" Diameter Core In >2" To 3" Asphalt.....	144.90	
<b>02 41 19 13-0184 &gt;3" To 4" Thick Asphalt Core Drilling (02 41 19 13-0163)</b>		
02 41 19 13-0185 EA Drill 1" Diameter Core In >3" To 4" Asphalt.....	30.88	
02 41 19 13-0186 EA Drill 1-1/2" Diameter Core In >3" To 4" Asphalt .....	39.20	
02 41 19 13-0187 EA Drill 2" Diameter Core In >3" To 4" Asphalt.....	48.69	
02 41 19 13-0188 EA Drill 3" Diameter Core In >3" To 4" Asphalt.....	60.59	
02 41 19 13-0189 EA Drill 4" Diameter Core In >3" To 4" Asphalt.....	76.06	
02 41 19 13-0190 EA Drill 6" Diameter Core In >3" To 4" Asphalt.....	95.07	
02 41 19 13-0191 EA Drill 8" Diameter Core In >3" To 4" Asphalt.....	118.90	
02 41 19 13-0192 EA Drill 10" Diameter Core In >3" To 4" Asphalt.....	148.57	
02 41 19 13-0193 EA Drill 12 Diameter Core In >3" To 4" Asphalt.....	185.37	
<b>02 41 19 13-0194 &gt;4" To 6" Thick Asphalt Core Drilling (02 41 19 13-0163)</b>		
02 41 19 13-0195 EA Drill 1" Diameter Core In >4" To 6" Asphalt.....	40.41	
02 41 19 13-0196 EA Drill 1-1/2" Diameter Core In >4" To 6" Asphalt .....	49.93	
02 41 19 13-0197 EA Drill 2" Diameter Core In >4" To 6" Asphalt.....	61.81	
02 41 19 13-0198 EA Drill 3" Diameter Core In >4" To 6" Asphalt.....	78.49	
02 41 19 13-0199 EA Drill 4" Diameter Core In >4" To 6" Asphalt.....	97.55	
02 41 19 13-0200 EA Drill 6" Diameter Core In >4" To 6" Asphalt.....	121.35	
02 41 19 13-0201 EA Drill 8" Diameter Core In >4" To 6" Asphalt.....	152.35	
02 41 19 13-0202 EA Drill 10" Diameter Core In >4" To 6" Asphalt.....	190.34	





<b>Existing Conditions</b>		<b>02</b>
<b>Demolition and Structure Moving</b>		<b>02 40</b>
<b>Demolition</b>		<b>02 41</b>

MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
02 41 19 13-0203 EA Drill 12" Diameter Core In >4" To 6" Asphalt .....	237.87	
<b>02 41 19 13-0204 Manhole Core Drilling</b> (02 41 19 13-0024)		
02 41 19 13-0205 EA Drill 2" Diameter Core In 8" Concrete Manhole.....	278.75	
02 41 19 13-0206 EA Drill 3" Diameter Core In 8" Concrete Manhole.....	296.81	
02 41 19 13-0207 EA Drill 4" Diameter Core In 8" Concrete Manhole.....	326.75	
02 41 19 13-0208 EA Drill 5" Diameter Core In 8" Concrete Manhole.....	350.59	
02 41 19 13-0209 EA Drill 6" Diameter Core In 8" Concrete Manhole.....	415.81	
02 41 19 13-0210 EA Drill 8" Diameter Core In 8" Concrete Manhole.....	593.88	
<b>02 41 19 13-0211 Drilling In Concrete Per Inch Of Depth</b> (02 41 19 13-0024)		
Note: Includes layout.		
02 41 19 13-0212 IN 1/4" Diameter Drilling In Concrete Per Inch Of Depth.....	2.08	
02 41 19 13-0213 IN 3/8" Diameter Drilling In Concrete Per Inch Of Depth.....	2.19	
02 41 19 13-0214 IN 1/2" Diameter Drilling In Concrete Per Inch Of Depth.....	2.34	
02 41 19 13-0215 IN 5/8" Diameter Drilling In Concrete Per Inch Of Depth.....	2.50	
02 41 19 13-0216 IN 3/4" Diameter Drilling In Concrete Per Inch Of Depth.....	2.74	
02 41 19 13-0217 IN 7/8" Diameter Drilling In Concrete Per Inch Of Depth.....	2.97	
02 41 19 13-0218 IN 1" Diameter Drilling In Concrete Per Inch Of Depth.....	3.11	
02 41 19 13-0219 IN 1-1/4" Diameter Drilling In Concrete Per Inch Of Depth.....	3.44	
02 41 19 13-0220 IN 1-1/2" Diameter Drilling In Concrete Per Inch Of Depth.....	3.91	
<b>02 41 19 13-0221 Minimum Charge For Core Drilling</b> (02 41 19 13-0024)		
02 41 19 13-0222 EA Core Drill Minimum Charge.....	822.51	
Note: For projects where the total core drilling charge is less than the minimum charge, use task "Minimum Charge For Core Drilling" exclusively. Task "Minimum Charge For Core Drilling" should not be used in conjunction with any other tasks in this section. Does not apply to sections "Drilling In Concrete Per Inch Of Depth" or "Drilling In Brick Or Block Per Inch Of Depth".		
<b>02 41 19 16 Selective Interior Demolition</b> (02 41 19)		
Note: Includes break-up of material, loading into truck or dumpster and clean-up.		
<b>02 41 19 16-0001 Demolish Ceiling</b> (02 41 19 16)		
02 41 19 16-0002 SF Demolish Furred Plastered Ceiling .....	2.07	
02 41 19 16-0003 SF Demolish Suspended Plastered Ceiling And Suspension System.....	1.59	
<b>02 41 19 16-0004 Demolish Concrete Stair</b> (02 41 19 16)		
02 41 19 16-0005 CF Demolish Interior Reinforced Concrete Stairs.....	7.45	
02 41 19 16-0006 CF Demolish Exterior Reinforced Concrete Stairs.....	6.47	
<b>02 60 Contaminated Site Material Removal</b> (02)		
<b>02 61 Removal and Disposal of Contaminated Soils</b> (02 60)		
<b>02 61 13 Excavation and Handling of Contaminated Material</b> (02 61)		
See CSI section 31 23 16 00-0000 for excavation.		
<b>02 61 13 00-0001 Excavation Of Non-Petroleum Contaminated Soil</b> (02 61 13)		
<b>02 61 13 00-0002 Excavate Non-Petroleum Contaminated Soil</b> (02 61 13 00-0001)		
02 61 13 00-0003 CY Excavate Non Petroleum Contaminated Soil .....	8.82	
Note: Includes excavation, making a determination if the soil is reusable or contaminated, and stockpiling as per determination.		
02 61 13 00-0004 CY Load Excavated Non-Petroleum Contaminated Soil.....	7.95	
02 61 13 00-0005 CY Disposal Fees Of Non-Petroleum Contaminated Soil.....	85.62	
<b>02 61 13 00-0006 Excavate Petroleum Contaminated Soil</b> (02 61 13)		
02 61 13 00-0007 CY Excavate Petroleum Contaminated Soil .....	13.22	
Note: Includes excavation, making a determination if the soil is reusable or contaminated, and stockpiling as per determination.		
02 61 13 00-0008 CY Load Excavated Petroleum Contaminated Soil.....	7.95	
02 61 13 00-0009 CY Disposal Fees Of Petroleum Contaminated Soil.....	137.18	
<b>02 61 13 00-0010 Accessories For Contaminated Soil Stockpile</b> (02 61 13)		
See CSI section 31 25 14 23-0001 for sand bags.		
02 61 13 00-0011 SF 30 Mil Liner For Contaminated Soil Storage.....	1.42	
Note: 9.93 SF of liner per 1 ton of petroleum contaminated soil.		
02 61 13 00-0012 SF 10 Mil Liner For Contaminated Soil Storage.....	0.83	
Note: 9.93 SF of liner per 1 ton of petroleum contaminated soil.		
<b>02 65 Underground Storage Tank Removal</b> (02 60)		
Note: Petroleum gasoline is classified as a hazardous material; fuel oil is considered a non-hazardous material. See CSI section 01		

**02 Existing Conditions****02 60 Contaminated Site Material Removal****02 65 Underground Storage Tank Removal**

MINOR  
CSI UOM DESCRIPTION

TOTAL DIRECT DEMOLITION  
UNIT COST UNIT COST

74 19 00-0015 for hauling, 31 20 00 00-0000 for non-contaminated soil excavation, 31 23 16 00-0000 for excavation, 31 41 00 00-0000 for shoring.

02 65 00 00-0001 Monitoring, Sampling, Testing And Analysis (02 65)

02 65 00 00-0002 Tests And Sampling Labor Hours (02 65 00 00-0001)

02 65 00 00-0003	HR	Certified Tank Installer For Underground Storage Tank .....	139.12
02 65 00 00-0004	HR	Certified Geologist/Environmentalist .....	135.95
02 65 00 00-0005	HR	Hourly Office Work For Reports Required For EPA On Underground Storage Tank.....	144.24

Note: Includes title searches, well survey data, site drawings, submitting preliminary work, etc. Hours not to be used in association with other tasks performed.

02 65 00 00-0006 Temporary Tanks (02 65)

02 65 00 00-0007 Temporary Holding Tanks (02 65 00 00-0006)

02 65 00 00-0008 Above Ground Temporary Holding Tanks, Monthly Rental (02 65 00 00-0007)

02 65 00 00-0009	MO	550 Gallon, Stainless Steel, DOT Approved, Above Ground Temporary Holding Tanks, Monthly Rental .....	889.26
02 65 00 00-0010	MO	630 Gallon, Polyethylene, DOT Approved, Above Ground Temporary Holding Tanks, Monthly Rental .....	889.26
02 65 00 00-0011	MO	630 Gallon, Polyethylene, Stackable, Above Ground Temporary Holding Tanks, Monthly Rental .....	1,778.53
02 65 00 00-0012	MO	4,000 Gallon, Polyethylene, Stackable, Above Ground Temporary Holding Tanks, Monthly Rental .....	1,333.90
02 65 00 00-0013	MO	4,000 Gallon, Polyethylene, Trailer Mounted, Above Ground Temporary Holding Tanks, Monthly Rental .....	3,112.43
02 65 00 00-0014	MO	6,000 Gallon, Polyethylene, Total Drain, Above Ground Temporary Holding Tanks, Monthly Rental.....	2,223.16
02 65 00 00-0015	MO	21,000 Gallon (500 BBL), Steel, Open, Stationary, Above Ground Temporary Holding Tanks, Monthly Rental.....	4,932.15
02 65 00 00-0016	MO	21,000 Gallon (500 BBL), Steel, Closed, Stationary, Above Ground Temporary Holding Tanks, Monthly Rental .....	5,910.75
02 65 00 00-0017	MO	21,000 Gallon (500 BBL), Steel, Vapor Proof, Above Ground Temporary Holding Tanks, Monthly Rental .....	9,981.72

02 65 00 00-0018 Secondary Containment Berm (02 65 00 00-0006)

02 65 00 00-0019	MO	Secondary Containment Berm Monthly Rental .....	1,926.74
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**END OF SECTION 02**



	<b>Concrete</b>	<b>03</b>	
	<b>Maintenance of Concrete</b>	<b>03 01</b>	
	<b>Maintenance of Cast-In-Place Concrete</b>	<b>03 01 30</b>	

CS

MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
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## 03 Concrete

### 03 01 Maintenance of Concrete<sup>(03)</sup>

#### 03 01 30 Maintenance of Cast-In-Place Concrete<sup>(03 01)</sup>

##### 03 01 30 71 Rehabilitation of Cast-In-Place Concrete<sup>(03 01 30)</sup>

03 01 30 71-0001 Concrete Resurfacing/Repair<sup>(03 01 30 71)</sup>

03 01 30 71-0002 Concrete Repair<sup>(03 01 30 71-0001)</sup>

03 01 30 71-0003 Bridge Expansion Joint Repair<sup>(03 01 30 71-0002)</sup>

Note: Replace header with semi-flexible polymer nosing system. Includes saw cutting, chipping, sandblasting, forming, backer rod cleaning, primer and debris removal. Excludes disposal.

03 01 30 71-0004 CF Removal And Replacement Of Header With Semi-Flexible Polymer Nosing System For Bridge Expansion Joint Repair.....876.87

03 01 30 71-0005 CF Removal And Replacement Of Header With Fast-Setting, Rapid-Hardening Structural Repair Mortar For Bridge Expansion Joint Repair.....253.38

Note: Includes saw cutting, drilling, removing concrete, forming, cleaning, primer, concrete material, reinforcing, dowels, debris removal and disposal. Excludes seal.

For Up To 24, Add 40.01

03 01 30 71-0006 CF Removal And Replacement Of Header With Polyester-Based Polymer Patch For Bridge Expansion Joint Repair.....282.42

Note: Includes saw cutting, drilling, removing concrete, forming, cleaning, primer, concrete material, reinforcing, dowels, debris removal and disposal. Excludes seal.

For Up To 24, Add 42.91

03 01 30 71-0007 CI Seal Expansion Joints With Rapid Cure Silicone For Bridge Expansion Joint Repair .....8.35

03 01 30 71-0008 CI Seal Expansion Joints With Closed Cell Foam/EVA For Bridge Expansion Joint Repair .....0.82

03 01 30 71-0009 LF Seal Expansion Joints With "V" Shape Preformed Silicone For Bridge Expansion Joint Repair.....104.78

03 01 30 71-0010 LF Seal Expansion Joints With "W" Shape Preformed Silicone For Bridge Expansion Joint Repair.....111.52

03 01 30 71-0011 Concrete Grinding<sup>(03 01 30 71-0002)</sup>

03 01 30 71-0012 SF Grinding Cured, Warped, Or Rough Concrete Slabs .....1.03

Note: Up to 1/8" of material per pass

03 01 30 71-0013 Bridge Deck Treatment<sup>(03 01 30 71-0002)</sup>

03 01 30 71-0014 SF Sweep Bridge Deck .....0.02

03 01 30 71-0015 SF Clean Bridge Deck.....0.03

03 01 30 71-0016 SF Treat Bridge Deck With Methacrylate Resin Sealant .....2.12

03 01 30 71-0017 Concrete Finishes<sup>(03 01 30 71-0001)</sup>

03 01 30 71-0018 Concrete Patching<sup>(03 01 30 71-0017)</sup>

03 01 30 71-0019 Walls<sup>(03 01 30 71-0018)</sup>

03 01 30 71-0020 BAG Sika Top 111 Plus.....164.37

Note: SikaTop 111 PLUS is a two-component, polymer-modified, portland-cement, fast-setting, screed mortar. Yield: Approximately 0.5 cu. ft./unit. Approximately 0.75 cu. ft./unit (SikaTop 111 + 42 lbs. of 3/8" pea gravel).

For Up To 10, Add 60.63

For >10 To 25, Add 36.38

For >25 To 50, Add 24.25

For >50 To 75, Add 12.13

03 01 30 71-0021 BAG Sika Grout 212, 50 LB Bag.....112.71

Note: SikaGrout 212 is a non-shrink, cementitious grout with a unique 2-stage shrinkage compensating mechanism. It is non-metallic and contains no chloride. Coverage: Approximately 0.44 cu. ft./bag at high flow.

For Up To 10, Add 38.39

For >10 To 25, Add 23.03

For >25 To 50, Add 15.35

For >50 To 75, Add 7.68

03 01 30 71-0022 EA Sika Flex 1A, 10.3 Ounce Tube.....37.74

Note: Sikaflex-1a is a premium-grade, high-performance, moisture-cured, 1-component, polyurethane-based, non-sag elastomeric sealant. Coverage: 10.3 fl. oz. cartridge seals 12.4 lineal ft. of 1/2 x 1/4 in. joint. 20 fl. oz. uni-pac sausage seals 24 lineal ft. of 1/2 x 1/4 in. joint.

03 01 30 71-0023 BAG Pea Gravel.....28.79

03 01 30 71-0024 Crack Repair For Concrete<sup>(03 01 30 71-0001)</sup>

03 01 30 71-0025 Non Structural Crack Repair For Concrete<sup>(03 01 30 71-0024)</sup>

03 01 30 71-0026 Surface Applied, Non Structural Crack Repair For Concrete<sup>(03 01 30 71-0025)</sup>

Note: Includes removing all debris and contaminants accessible within the crack using hand tools, water blasting, compressed air or vacuuming. Includes installing sealer with caulk gun, cartridge gun, squeeze bottle, etc. Excludes backer rod and sanding.

03 01 30 71-0027 LF Up To 1/4" Wide, Latex Emulsion, Gravity Fed Non Structural Crack Repair For Concrete, Surface Applied With Squeeze Tube (Quikrete® Concrete Crack Seal).....5.85

For V-Grooving Crack With Grinder, Add 4.66

**03 Concrete****03 01 Maintenance of Concrete****03 01 30 Maintenance of Cast-In-Place Concrete**

MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
03 01 30 71-0028 LF >1/4" To 1/2" Wide, Latex Emulsion, Gravity Fed Non Structural Crack Repair For Concrete, Surface Applied With Squeeze Tube (Quikrete® Concrete Crack Seal).....	7.67	
For V-Grooving Crack With Grinder, Add	4.55	
03 01 30 71-0029 LF Up To 1/4" Wide, Sanded Acrylic Latex, Gravity Fed Non Structural Crack Repair For Concrete, Surface Applied With Caulk Gun (Quikrete® Concrete Repair).....	5.99	
For V-Grooving Crack With Grinder, Add	4.66	
03 01 30 71-0030 LF >1/4" To 1/2" Wide, Sanded Acrylic Latex, Gravity Fed Non Structural Crack Repair For Concrete, Surface Applied With Caulk Gun (Quikrete® Concrete Repair).....	7.93	
For V-Grooving Crack With Grinder, Add	4.55	
03 01 30 71-0031 LF Up To 1/4" Wide, Self Leveling Polyurethane Sealant, Gravity Fed Non Structural Crack Repair For Concrete, Surface Applied With Cartridge Tool (Sikaflex® Self-Leveling Sealant).....	6.47	
For V-Grooving Crack With Grinder, Add	4.66	
03 01 30 71-0032 LF >1/4" To 1/2" Wide, Self Leveling Polyurethane Sealant, Gravity Fed Non Structural Crack Repair For Concrete, Surface Applied With Cartridge Tool (Sikaflex® Self-Leveling Sealant).....	8.89	
For V-Grooving Crack With Grinder, Add	4.55	
03 01 30 71-0033 LF Up To 1/4" Wide, Non-Sag Elastomeric Polyurethane Sealant, Gravity Fed Non Structural Crack Repair For Concrete, Surface Applied With Cartridge Tool (Sikaflex® Concrete Fix).....	6.82	
For V-Grooving Crack With Grinder, Add	4.66	
03 01 30 71-0034 LF >1/4" To 1/2" Wide, Non-Sag Elastomeric Polyurethane Sealant, Gravity Fed Non Structural Crack Repair For Concrete, Surface Applied With Cartridge Tool (Sikaflex® Concrete Fix).....	9.60	
For V-Grooving Crack With Grinder, Add	4.55	
<b>03 01 30 71-0035 Pressure Injected, Non Structural Crack Repair For Concrete</b> (03 01 30 71-0025)		
Note: Includes removing all debris and contaminants accessible within the crack using hand tools, water blasting, compressed air or vacuuming. Includes installing injection ports, sealing the crack opening (one side only), injecting the crack with polyurethane and restoring the sealed surface to flush conditions. Excludes disposal.		
03 01 30 71-0036 LF Up To 1/4" Wide, Water Activated Polyurethane Foam Grout, Non Structural Crack Repair For Concrete, Installed With Automated Injection Equipment (SealBoss 1570).....	27.55	
For Cracks Accessible From Both Sides, Add	5.61	
<b>03 01 30 71-0037 Structural Crack Repair For Concrete</b> (03 01 30 71-0024)		
<b>03 01 30 71-0038 Surface Applied, Structural Crack Repair For Concrete</b> (03 01 30 71-0037)		
Note: Includes removing all debris and contaminants accessible within the crack using hand tools, water blasting, compressed air or vacuuming. Excludes disposal.		
03 01 30 71-0039 LF Up To 1/4" Wide, Low Viscosity, High Strength Epoxy Resin, Gravity Fed Structural Crack Repair For Concrete, Surface Applied With Trowel (Sikadur® 35).....	6.91	
For V-Grooving Crack With Grinder, Add	4.66	
03 01 30 71-0040 LF >1/4" To 1/2" Wide, Low Viscosity, High Strength Epoxy Resin, Gravity Fed Structural Crack Repair For Concrete, Surface Applied With Trowel (Sikadur® 35).....	9.77	
For V-Grooving Crack With Grinder, Add	4.55	
03 01 30 71-0041 LF Up To 1/4" Wide, Moisture Tolerant, Low Viscosity, High Strength Epoxy Resin, Gravity Fed Structural Crack Repair For Concrete, Surface Applied Trowel (Sikadur® 52).....	6.72	
For V-Grooving Crack With Grinder, Add	4.66	
03 01 30 71-0042 LF >1/4" To 1/2" Wide, Moisture Tolerant, Low Viscosity, High Strength Epoxy Resin, Gravity Fed Structural Crack Repair For Concrete, Surface Applied With Trowel (Sikadur® 52).....	9.40	
For V-Grooving Crack With Grinder, Add	4.55	
03 01 30 71-0043 LF Up To 1/4" Wide, Low Viscosity, High Strength Epoxy Resin, Gravity Fed Structural Crack Repair For Concrete, Surface Applied With Caulk Gun (Sikadur® Crack Fix).....	8.28	
For V-Grooving Crack With Grinder, Add	4.66	
03 01 30 71-0044 LF >1/4" To 1/2" Wide, Low Viscosity, High Strength Epoxy Resin, Gravity Fed Structural Crack Repair For Concrete, Surface Applied With Caulk Gun (Sikadur® Crack Fix).....	12.54	
For V-Grooving Crack With Grinder, Add	4.55	
<b>03 01 30 71-0045 Pressure Injected, Structural Crack Repair For Concrete</b> (03 01 30 71-0037)		
Note: Includes removing all debris and contaminants accessible within the crack using hand tools, water blasting, compressed air or vacuuming. Includes installing injection ports, sealing the crack opening (one side only), injecting the crack with epoxy and restoring the sealed surface to flush conditions. Excludes disposal.		
03 01 30 71-0046 LF Up To 1/4" Wide, Low Viscosity, High Strength Epoxy Resin, Structural Crack Repair For Concrete, Installed With Automated Injection Equipment (Sikadur® 35).....	23.79	
For Cracks Accessible From Both Sides, Add	5.61	
03 01 30 71-0047 LF Up To 1/4" Wide, Moisture Tolerant, Low Viscosity, High Strength Epoxy Resin, Structural Crack Repair For Concrete, Installed With Automated Injection Equipment (Sikadur® 52).....	23.60	
For Cracks Accessible From Both Sides, Add	5.61	
<b>03 01 30 71-0048 Carbon Fiber Strengthening System</b> (03 01 30 71-0001)		
Note: Includes preparing surface, dust and debris removal by hand, clean and protect adjacent area, fill voids, primer, fabric substrate layers, final coat of epoxy and finish. Excludes disposal.		
03 01 30 71-0049 SF Carbon Fiber Strengthening System For Concrete Beams, Per Layer.....	84.09	
Note: Includes carbon fabric epoxy saturant, primer, filler for voids, anchors, finish.		
03 01 30 71-0050 SF Carbon Fiber Strengthening System For Concrete Columns, Per Layer.....	74.41	
Note: Includes carbon fabric epoxy saturant, primer, filler for voids, anchors, finish.		
03 01 30 71-0051 SF Carbon Fiber Strengthening System For Concrete Ceiling Slabs, Per Layer.....	68.98	
Note: Includes carbon fabric epoxy saturant, primer, filler for voids, anchors, finish.		
03 01 30 71-0052 SF Carbon Fiber Strengthening System For Walls, Per Layer.....	65.96	
Note: Includes carbon fabric epoxy saturant, primer, filler for voids, anchors, finish.		
<b>03 01 30 72 Strengthening Of Cast-in-Place Concrete</b> (03 01 30)		
<b>03 01 30 72-0001 Concrete Surface Repairs</b> (03 01 30 72)		



	<b>Concrete</b>	<b>03</b>	
	<b>Maintenance of Concrete</b>	<b>03 01</b>	
	<b>Maintenance of Cast-In-Place Concrete</b>	<b>03 01 30</b>	

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MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
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03 01 30 72-0002 SF Sound The Concrete Surface To Locate Delaminated Areas ..... 0.35

## 03 10 Concrete Forming and Accessories<sup>(03)</sup>

### 03 11 Concrete Forming<sup>(03 10)</sup>

#### 03 11 13 Structural Cast-In-Place Concrete Forming<sup>(03 11)</sup>

Note: Per square foot of formwork.

##### 03 11 13 00-0001 Wood Formwork<sup>(03 11 13)</sup>

Note: For job built wood and/or plywood form systems where metal framed formwork cannot be used. Includes erecting, stripping, stacking, plywood, framing lumber, oiling, studs/walers, strongbacks, deadmen, supporting braces, turnbuckles, ties, and clips.

##### 03 11 13 00-0002 Foundation Wood Formwork<sup>(03 11 13 00-0001)</sup>

Note: For foundation work below or at grade.

03 11 13 00-0003 SF Continuous Footings Foundation Wood Formwork.....	9.63
For <1,000, Add	1.70
For Foundations >8' Below Grade, Add	1.58
For Curved Formwork, Add	3.16
03 11 13 00-0004 SF Pile Cap, Pier Or Spread Footings Foundation Wood Formwork.....	11.28
For <1,000, Add	2.02
For Foundations >8' Below Grade, Add	1.89
For Curved Formwork, Add	3.79
03 11 13 00-0005 SF Mat Foundation Wood Formwork.....	12.80
For <1,000, Add	2.33
For Foundations >8' Below Grade, Add	2.22
For Curved Formwork, Add	4.44
03 11 13 00-0006 SF Grade Beams Or Duct Bank Foundation Wood Formwork.....	10.91
For <1,000, Add	1.96
For Foundations >8' Below Grade, Add	1.84
For Curved Formwork, Add	3.69

##### 03 11 13 00-0007 Slab Edge And Block-Out Wood Formwork<sup>(03 11 13 00-0001)</sup>

03 11 13 00-0008 LF Up To 6" High Slab Edge and Block-Out Wood Formwork.....	7.13
For Foundations >8' Below Grade, Add	1.24
For Curved Formwork, Add	2.49
For Up To 250, Add	1.30
03 11 13 00-0009 LF >6" To 12" High Slab Edge and Block-Out Wood Formwork.....	10.59
For Foundations >8' Below Grade, Add	1.76
For Curved Formwork, Add	3.51
For Up To 250, Add	1.88
03 11 13 00-0010 SF >12" High Slab Edge and Block-Out Wood Formwork.....	13.53
For Foundations >8' Below Grade, Add	2.27
For Curved Formwork, Add	4.53
For <1,000, Add	2.41

##### 03 11 13 00-0011 Fiber Tube Formwork<sup>(03 11 13)</sup>

Note: Includes all supporting braces, erecting, aligning, stripping, turnbuckles, ties and clips.

##### 03 11 13 00-0012 Round Column Fiber Tube Formwork<sup>(03 11 13 00-0011)</sup>

03 11 13 00-0013 LF 6" Diameter Round Fiber Tube Formwork.....	19.61
For Plastic Lined, Add	0.72
For Columns >12' In Length, Add	1.96
03 11 13 00-0014 LF 8" Diameter Round Fiber Tube Formwork.....	20.68
For Plastic Lined, Add	0.85
For Columns >12' In Length, Add	2.07
03 11 13 00-0015 LF 10" Diameter Round Fiber Tube Formwork.....	22.84
For Plastic Lined, Add	0.98
For Columns >12' In Length, Add	2.28
03 11 13 00-0016 LF 12" Diameter Round Fiber Tube Formwork.....	26.93
For Plastic Lined, Add	1.40
For Columns >12' In Length, Add	2.69
03 11 13 00-0017 LF 14" Diameter Round Fiber Tube Formwork.....	30.44
For Plastic Lined, Add	1.90
For Columns >12' In Length, Add	3.04
03 11 13 00-0018 LF 16" Diameter Round Fiber Tube Formwork.....	32.97
For Plastic Lined, Add	2.41
For Columns >12' In Length, Add	3.30
03 11 13 00-0019 LF 18" Diameter Round Fiber Tube Formwork.....	34.65
For Plastic Lined, Add	2.62
For Columns >12' In Length, Add	3.47
03 11 13 00-0020 LF 20" Diameter Round Fiber Tube Formwork.....	37.76
For Plastic Lined, Add	3.26
For Columns >12' In Length, Add	3.78
03 11 13 00-0021 LF 22" Diameter Round Fiber Tube Formwork.....	41.35
For Plastic Lined, Add	3.94
For Columns >12' In Length, Add	4.14
03 11 13 00-0022 LF 24" Diameter Round Fiber Tube Formwork.....	44.95
For Plastic Lined, Add	4.61
For Columns >12' In Length, Add	4.50

**03 Concrete****03 10 Concrete Forming and Accessories****03 11 Concrete Forming**

MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
03 11 13 00-0023 LF 26" Diameter Round Fiber Tube Formwork ..... For Plastic Lined, Add For Columns >12' In Length, Add	46.88 5.03 4.69	
03 11 13 00-0024 LF 28" Diameter Round Fiber Tube Formwork ..... For Plastic Lined, Add For Columns >12' In Length, Add	49.87 5.77 4.99	
03 11 13 00-0025 LF 30" Diameter Round Fiber Tube Formwork ..... For Plastic Lined, Add For Columns >12' In Length, Add	53.09 6.57 5.31	
03 11 13 00-0026 LF 36" Diameter Round Fiber Tube Formwork ..... For Plastic Lined, Add For Columns >12' In Length, Add	64.47 9.41 6.45	
03 11 13 00-0027 LF 42" Diameter Round Fiber Tube Formwork ..... For Plastic Lined, Add For Columns >12' In Length, Add	87.78 15.98 8.78	
03 11 13 00-0028 LF 48" Diameter Round Fiber Tube Formwork ..... For Plastic Lined, Add For Columns >12' In Length, Add	104.55 20.59 10.46	
03 11 13 00-0029 LF 54" Diameter Round Fiber Tube Formwork ..... For Plastic Lined, Add For Columns >12' In Length, Add	173.56 40.61 17.36	
03 11 13 00-0030 LF 60" Diameter Round Fiber Tube Formwork ..... For Plastic Lined, Add For Columns >12' In Length, Add	192.87 45.89 19.29	

**03 15 Concrete Accessories** (03 10)**03 15 16 Concrete Construction Joints** (03 15)**03 15 16 00-0001 Poured Expansion Joint** (03 15 16)

03 15 16 00-0002 LF 1/2" x 1" Plain Asphalt Expansion Joint, Poured.....	3.01	0.81
03 15 16 00-0003 LF 1" x 2" Plain Asphalt Expansion Joint, Poured.....	6.90	0.81
03 15 16 00-0004 LF 1/2" x 1" Liquid Neoprene Expansion Joint, Poured, Cold Applied.....	2.70	0.81
03 15 16 00-0005 LF 1" x 2" Liquid Neoprene Expansion Joint, Poured, Cold Applied.....	5.65	0.81
03 15 16 00-0006 LF 1/2" x 1" Polyurethane Expansion Joint, Poured, 2 Parts.....	3.70	0.81
03 15 16 00-0007 LF 1" x 2" Polyurethane Expansion Joint, Poured, 2 Parts.....	6.62	0.81
03 15 16 00-0008 LF 1/2" x 1" Rubberized Asphalt Expansion Joint, Poured, Hot Or Cold Applied.....	3.36	0.81
03 15 16 00-0009 LF 1/2" x 1" Rubberized Asphalt Expansion Joint, Poured, Hot Applied Fuel Resistant.....	4.16	0.81
03 15 16 00-0010 LF 1" x 2" Rubberized Asphalt Expansion Joint, Poured, Hot Applied Fuel Resistant.....	11.08	0.81

**03 15 16 00-0011 Premolded Expansion Joints** (03 15 16)**03 15 16 00-0012 Asphalt Saturated Fiber, Premolded Expansion Joints** (03 15 16 00-0011)

03 15 16 00-0013 LF 1/4" x 3" Asphalt Saturated Fiber, Premolded Expansion Joint.....	2.58	1.20
03 15 16 00-0014 LF 1/4" x 4" Asphalt Saturated Fiber, Premolded Expansion Joint.....	2.93	1.26
03 15 16 00-0015 LF 1/4" x 5" Asphalt Saturated Fiber, Premolded Expansion Joint.....	3.15	1.32
03 15 16 00-0016 LF 1/4" x 6" Asphalt Saturated Fiber, Premolded Expansion Joint.....	3.39	1.38
03 15 16 00-0017 LF 3/8" x 3" Asphalt Saturated Fiber, Premolded Expansion Joint.....	2.80	1.20
03 15 16 00-0018 LF 3/8" x 4" Asphalt Saturated Fiber, Premolded Expansion Joint.....	3.10	1.26
03 15 16 00-0019 LF 3/8" x 5" Asphalt Saturated Fiber, Premolded Expansion Joint.....	3.46	1.32
03 15 16 00-0020 LF 3/8" x 6" Asphalt Saturated Fiber, Premolded Expansion Joint.....	3.98	1.38
03 15 16 00-0021 LF 1/2" x 2" Asphalt Saturated Fiber, Premolded Expansion Joint.....	2.54	1.14
03 15 16 00-0022 LF 1/2" x 3" Asphalt Saturated Fiber, Premolded Expansion Joint.....	2.76	1.20
03 15 16 00-0023 LF 1/2" x 4" Asphalt Saturated Fiber, Premolded Expansion Joint.....	3.02	1.26
03 15 16 00-0024 LF 1/2" x 5" Asphalt Saturated Fiber, Premolded Expansion Joint.....	3.23	1.32
03 15 16 00-0025 LF 1/2" x 6" Asphalt Saturated Fiber, Premolded Expansion Joint.....	3.50	1.38
03 15 16 00-0026 LF 1/2" x 8" Asphalt Saturated Fiber, Premolded Expansion Joint.....	3.87	1.44
03 15 16 00-0027 LF 1/2" x 10" Asphalt Saturated Fiber, Premolded Expansion Joint.....	4.16	1.50
03 15 16 00-0028 LF 1/2" x 12" Asphalt Saturated Fiber, Premolded Expansion Joint.....	4.64	1.56
03 15 16 00-0029 LF 3/4" x 4" Asphalt Saturated Fiber, Premolded Expansion Joint.....	3.03	1.26
03 15 16 00-0030 LF 3/4" x 5" Asphalt Saturated Fiber, Premolded Expansion Joint.....	3.45	1.32
03 15 16 00-0031 LF 3/4" x 8" Asphalt Saturated Fiber, Premolded Expansion Joint.....	4.19	1.44
03 15 16 00-0032 SF 1" Asphalt Saturated Fiber, Premolded Expansion Joint.....	7.15	1.98

**03 15 16 00-0033 Cork, Premolded Expansion Joints** (03 15 16 00-0011)

03 15 16 00-0034 LF 1/2" x 4" Cork, Premolded Expansion Joint.....	4.24	1.26
03 15 16 00-0035 LF 1/2" x 6" Cork, Premolded Expansion Joint.....	4.76	1.38
03 15 16 00-0036 LF 1/2" x 8" Cork, Premolded Expansion Joint.....	5.16	1.44
03 15 16 00-0037 LF 1/2" x 10" Cork, Premolded Expansion Joint.....	7.12	1.50
03 15 16 00-0038 LF 1/2" x 12" Cork, Premolded Expansion Joint.....	7.57	1.56
03 15 16 00-0039 SF 1/2" Cork, Premolded Expansion Joint.....	8.42	1.98
03 15 16 00-0040 SF 3/4" Cork, Premolded Expansion Joint.....	9.70	1.98
03 15 16 00-0041 SF 1" Cork, Premolded Expansion Joint.....	10.28	1.98

**03 15 16 00-0042 Flexible Polyethylene Foam, Premolded Expansion Joints** (03 15 16 00-0011)

03 15 16 00-0043 LF 1/4" x 4" Flexible Polyethylene Foam, Premolded Expansion Joint.....	2.79	1.26
03 15 16 00-0044 LF 1/4" x 5" Flexible Polyethylene Foam, Premolded Expansion Joint.....	2.91	1.32
03 15 16 00-0045 LF 1/4" x 6" Flexible Polyethylene Foam, Premolded Expansion Joint.....	3.07	1.38



		<b>Concrete</b>	<b>03</b>	<b>CS</b>
		<b>Concrete Forming and Accessories</b>	<b>03 10</b>	
		<b>Concrete Accessories</b>	<b>03 15</b>	

MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
03 15 16 00-0046 LF 1/4" x 8" Flexible Polyethylene Foam, Premolded Expansion Joint.....	3.53	1.44
03 15 16 00-0047 LF 1/2" x 4" Flexible Polyethylene Foam, Premolded Expansion Joint.....	2.86	1.26
03 15 16 00-0048 LF 1/2" x 5" Flexible Polyethylene Foam, Premolded Expansion Joint.....	2.99	1.32
03 15 16 00-0049 LF 1/2" x 6" Flexible Polyethylene Foam, Premolded Expansion Joint.....	3.12	1.38
03 15 16 00-0050 LF 1/2" x 8" Flexible Polyethylene Foam, Premolded Expansion Joint.....	3.41	1.44
<b>03 15 16 00-0051 Zip Strip, Premolded Expansion Joints (03 15 16 00-0011)</b>		
03 15 16 00-0052 LF 1" Zip Strip, Premolded Expansion Joint.....	2.82	1.26
03 15 16 00-0053 LF 1-1/2" Zip Strip, Premolded Expansion Joint.....	3.06	1.32
03 15 16 00-0054 LF 2" Zip Strip, Premolded Expansion Joint.....	3.40	1.44
<b>03 15 16 00-0055 Sponge Rubber, Premolded Expansion Joints (03 15 16 00-0011)</b>		
03 15 16 00-0056 LF 1/2" x 4" Sponge Rubber, Premolded Expansion Joint.....	4.44	1.20
03 15 16 00-0057 LF 1/2" x 6" Sponge Rubber, Premolded Expansion Joint.....	5.32	1.20
<b>03 15 16 00-0058 Asphalt Felt Control Joints Or Bond Breaker (03 15 16)</b>		
03 15 16 00-0059 SF Asphalt Felt Control Joint, 30 LB Felt Bond Breaker.....	1.33	0.90
>1,250, Deduct	-0.07	
03 15 16 00-0060 SF Asphalt Felt Control Joint, 15 LB Felt Bond Breaker.....	1.27	0.90
>1,250, Deduct	-0.06	
<b>03 20 Concrete Reinforcing (03)</b>		
Note: Includes cutting or torching to size, bending where necessary and tie wires.		
<b>03 21 Reinforcement Bars (03 20)</b>		
Note: Includes cutting, bending, tie wire, tying, bar chairs and all non-mechanical splicing. The weights of reinforcing steel shall be used as follows: #2 - 0.167 Lbs./LF, #3 - 0.376 Lbs./LF, #4 - 0.668 Lbs./LF, #5 - 1.043 Lbs./LF, #6 - 1.502 Lbs./LF, #7 - 2.044 Lbs./LF, #8 - 2.670 Lbs./LF, #9 - 3.400 Lbs./LF, #10 - 4.303 Lbs./LF, #11 - 5.313 Lbs./LF, #14 - 7.650 Lbs./LF, #18 - 13.600 Lbs./LF.		
<b>03 21 11 Plain Steel Reinforcement Bars (03 21)</b>		
<b>03 21 11 00-0001 Beams And Girders, Steel Reinforcement Bar (03 21 11)</b>		
Note: ASTM A-615 Plain Steel and A-706 Low Alloy Steel.		
03 21 11 00-0002 LF #3, Grade 40, Beams And Girders, Steel Reinforcement Bar.....	0.65	
03 21 11 00-0003 LF #4, Grade 40, Beams And Girders, Steel Reinforcement Bar.....	1.10	
03 21 11 00-0004 LF #5, Grade 40, Beams And Girders, Steel Reinforcement Bar.....	1.64	
03 21 11 00-0005 LF #6, Grade 40, Beams And Girders, Steel Reinforcement Bar.....	2.26	
03 21 11 00-0006 LF #3, Grade 50, Beams And Girders, Steel Reinforcement Bar.....	0.67	
03 21 11 00-0007 LF #4, Grade 50, Beams And Girders, Steel Reinforcement Bar.....	1.13	
03 21 11 00-0008 LF #5, Grade 50, Beams And Girders, Steel Reinforcement Bar.....	1.67	
03 21 11 00-0009 LF #6, Grade 50, Beams And Girders, Steel Reinforcement Bar.....	2.31	
03 21 11 00-0010 LF #3, Grade 60, Beams And Girders, Steel Reinforcement Bar.....	0.69	
03 21 11 00-0011 LF #4, Grade 60, Beams And Girders, Steel Reinforcement Bar.....	1.16	
03 21 11 00-0012 LF #5, Grade 60, Beams And Girders, Steel Reinforcement Bar.....	1.73	
03 21 11 00-0013 LF #6, Grade 60, Beams And Girders, Steel Reinforcement Bar.....	2.39	
03 21 11 00-0014 LF #7, Grade 60, Beams And Girders, Steel Reinforcement Bar.....	3.09	
03 21 11 00-0015 LF #8, Grade 60, Beams And Girders, Steel Reinforcement Bar.....	3.84	
03 21 11 00-0016 LF #9, Grade 60, Beams And Girders, Steel Reinforcement Bar.....	4.69	
03 21 11 00-0017 LF #10, Grade 60, Beams And Girders, Steel Reinforcement Bar.....	5.72	
03 21 11 00-0018 LF #11, Grade 60, Beams And Girders, Steel Reinforcement Bar.....	6.79	
03 21 11 00-0019 LF #14, Grade 60, Beams And Girders, Steel Reinforcement Bar.....	9.39	
03 21 11 00-0020 LF #18, Grade 60, Beams And Girders, Steel Reinforcement Bar.....	15.98	
03 21 11 00-0021 LF #6, Grade 75, Beams And Girders, Steel Reinforcement Bar.....	2.46	
03 21 11 00-0022 LF #7, Grade 75, Beams And Girders, Steel Reinforcement Bar.....	3.19	
03 21 11 00-0023 LF #8, Grade 75, Beams And Girders, Steel Reinforcement Bar.....	3.97	
03 21 11 00-0024 LF #9, Grade 75, Beams And Girders, Steel Reinforcement Bar.....	4.87	
03 21 11 00-0025 LF #10, Grade 75, Beams And Girders, Steel Reinforcement Bar.....	5.94	
03 21 11 00-0026 LF #11, Grade 75, Beams And Girders, Steel Reinforcement Bar.....	7.06	
03 21 11 00-0027 LF #14, Grade 75, Beams And Girders, Steel Reinforcement Bar.....	9.77	
03 21 11 00-0028 LF #18, Grade 75, Beams And Girders, Steel Reinforcement Bar.....	16.67	
03 21 11 00-0029 LF #3, Grade 60, Beams And Girders, Low Alloy Steel Reinforcement Bar.....	0.70	
03 21 11 00-0030 LF #4, Grade 60, Beams And Girders, Low Alloy Steel Reinforcement Bar.....	1.19	
03 21 11 00-0031 LF #5, Grade 60, Beams And Girders, Low Alloy Steel Reinforcement Bar.....	1.77	
03 21 11 00-0032 LF #6, Grade 60, Beams And Girders, Low Alloy Steel Reinforcement Bar.....	2.44	
03 21 11 00-0033 LF #7, Grade 60, Beams And Girders, Low Alloy Steel Reinforcement Bar.....	3.17	
03 21 11 00-0034 LF #8, Grade 60, Beams And Girders, Low Alloy Steel Reinforcement Bar.....	3.94	
03 21 11 00-0035 LF #9, Grade 60, Beams And Girders, Low Alloy Steel Reinforcement Bar.....	4.82	
03 21 11 00-0036 LF #10, Grade 60, Beams And Girders, Low Alloy Steel Reinforcement Bar.....	5.89	
03 21 11 00-0037 LF #11, Grade 60, Beams And Girders, Low Alloy Steel Reinforcement Bar.....	6.99	
03 21 11 00-0038 LF #14, Grade 60, Beams And Girders, Low Alloy Steel Reinforcement Bar.....	9.68	
03 21 11 00-0039 LF #18, Grade 60, Beams And Girders, Low Alloy Steel Reinforcement Bar.....	16.50	
<b>03 21 11 00-0040 Columns, Steel Reinforcement Bar (03 21 11)</b>		
Note: ASTM A-615 Plain Steel and A-706 Low Alloy Steel.		
03 21 11 00-0041 LF #3, Grade 40, Columns, Steel Reinforcement Bar.....	0.68	
03 21 11 00-0042 LF #4, Grade 40, Columns, Steel Reinforcement Bar.....	1.17	

**03 Concrete**  
**03 20 Concrete Reinforcing**  
**03 21 Reinforcement Bars**



MINOR  
CSI UOM DESCRIPTION

TOTAL DIRECT DEMOLITION  
UNIT COST UNIT COST

03 21 11 00-0043	LF	#5, Grade 40, Columns, Steel Reinforcement Bar.....	1.74	
03 21 11 00-0044	LF	#6, Grade 40, Columns, Steel Reinforcement Bar.....	2.39	
03 21 11 00-0045	LF	#3, Grade 50, Columns, Steel Reinforcement Bar.....	0.70	
03 21 11 00-0046	LF	#4, Grade 50, Columns, Steel Reinforcement Bar.....	1.20	
03 21 11 00-0047	LF	#5, Grade 50, Columns, Steel Reinforcement Bar.....	1.77	
03 21 11 00-0048	LF	#6, Grade 50, Columns, Steel Reinforcement Bar.....	2.44	
03 21 11 00-0049	LF	#3, Grade 60, Columns, Steel Reinforcement Bar.....	0.72	
03 21 11 00-0050	LF	#4, Grade 60, Columns, Steel Reinforcement Bar.....	1.23	
03 21 11 00-0051	LF	#5, Grade 60, Columns, Steel Reinforcement Bar.....	1.83	
03 21 11 00-0052	LF	#6, Grade 60, Columns, Steel Reinforcement Bar.....	2.52	
03 21 11 00-0053	LF	#7, Grade 60, Columns, Steel Reinforcement Bar.....	3.24	
03 21 11 00-0054	LF	#8, Grade 60, Columns, Steel Reinforcement Bar.....	4.01	
03 21 11 00-0055	LF	#9, Grade 60, Columns, Steel Reinforcement Bar.....	4.90	
03 21 11 00-0056	LF	#10, Grade 60, Columns, Steel Reinforcement Bar.....	5.96	
03 21 11 00-0057	LF	#11, Grade 60, Columns, Steel Reinforcement Bar.....	7.06	
03 21 11 00-0058	LF	#14, Grade 60, Columns, Steel Reinforcement Bar.....	9.75	
03 21 11 00-0059	LF	#18, Grade 60, Columns, Steel Reinforcement Bar.....	16.54	
03 21 11 00-0060	LF	#6, Grade 75, Columns, Steel Reinforcement Bar.....	2.59	
03 21 11 00-0061	LF	#7, Grade 75, Columns, Steel Reinforcement Bar.....	3.34	
03 21 11 00-0062	LF	#8, Grade 75, Columns, Steel Reinforcement Bar.....	4.14	
03 21 11 00-0063	LF	#9, Grade 75, Columns, Steel Reinforcement Bar.....	5.08	
03 21 11 00-0064	LF	#10, Grade 75, Columns, Steel Reinforcement Bar.....	6.18	
03 21 11 00-0065	LF	#11, Grade 75, Columns, Steel Reinforcement Bar.....	7.33	
03 21 11 00-0066	LF	#14, Grade 75, Columns, Steel Reinforcement Bar.....	10.13	
03 21 11 00-0067	LF	#18, Grade 75, Columns, Steel Reinforcement Bar.....	17.23	
03 21 11 00-0068	LF	#3, Grade 60, Columns, Low Alloy Steel Reinforcement Bar.....	0.73	
03 21 11 00-0069	LF	#4, Grade 60, Columns, Low Alloy Steel Reinforcement Bar.....	1.26	
03 21 11 00-0070	LF	#5, Grade 60, Columns, Low Alloy Steel Reinforcement Bar.....	1.87	
03 21 11 00-0071	LF	#6, Grade 60, Columns, Low Alloy Steel Reinforcement Bar.....	2.57	
03 21 11 00-0072	LF	#7, Grade 60, Columns, Low Alloy Steel Reinforcement Bar.....	3.32	
03 21 11 00-0073	LF	#8, Grade 60, Columns, Low Alloy Steel Reinforcement Bar.....	4.11	
03 21 11 00-0074	LF	#9, Grade 60, Columns, Low Alloy Steel Reinforcement Bar.....	5.03	
03 21 11 00-0075	LF	#10, Grade 60, Columns, Low Alloy Steel Reinforcement Bar.....	6.13	
03 21 11 00-0076	LF	#11, Grade 60, Columns, Low Alloy Steel Reinforcement Bar.....	7.26	
03 21 11 00-0077	LF	#14, Grade 60, Columns, Low Alloy Steel Reinforcement Bar.....	10.04	
03 21 11 00-0078	LF	#18, Grade 60, Columns, Low Alloy Steel Reinforcement Bar.....	17.06	

**03 21 11 00-0079 Footings, Steel Reinforcement Bar** (03 21 11)

Note: ASTM A-615 Plain Steel and A-706 Low Alloy Steel.

03 21 11 00-0080	LF	#3, Grade 40, Footings, Steel Reinforcement Bar.....	0.59	
03 21 11 00-0081	LF	#4, Grade 40, Footings, Steel Reinforcement Bar.....	1.00	
03 21 11 00-0082	LF	#5, Grade 40, Footings, Steel Reinforcement Bar.....	1.51	
03 21 11 00-0083	LF	#6, Grade 40, Footings, Steel Reinforcement Bar.....	2.08	
03 21 11 00-0084	LF	#3, Grade 50, Footings, Steel Reinforcement Bar.....	0.61	
03 21 11 00-0085	LF	#4, Grade 50, Footings, Steel Reinforcement Bar.....	1.03	
03 21 11 00-0086	LF	#5, Grade 50, Footings, Steel Reinforcement Bar.....	1.54	
03 21 11 00-0087	LF	#6, Grade 50, Footings, Steel Reinforcement Bar.....	2.13	
03 21 11 00-0088	LF	#3, Grade 60, Footings, Steel Reinforcement Bar.....	0.63	
03 21 11 00-0089	LF	#4, Grade 60, Footings, Steel Reinforcement Bar.....	1.06	
03 21 11 00-0090	LF	#5, Grade 60, Footings, Steel Reinforcement Bar.....	1.60	
03 21 11 00-0091	LF	#6, Grade 60, Footings, Steel Reinforcement Bar.....	2.21	
03 21 11 00-0092	LF	#7, Grade 60, Footings, Steel Reinforcement Bar.....	2.86	
03 21 11 00-0093	LF	#8, Grade 60, Footings, Steel Reinforcement Bar.....	3.57	
03 21 11 00-0094	LF	#9, Grade 60, Footings, Steel Reinforcement Bar.....	4.38	
03 21 11 00-0095	LF	#10, Grade 60, Footings, Steel Reinforcement Bar.....	5.35	
03 21 11 00-0096	LF	#11, Grade 60, Footings, Steel Reinforcement Bar.....	6.38	
03 21 11 00-0097	LF	#14, Grade 60, Footings, Steel Reinforcement Bar.....	8.86	
03 21 11 00-0098	LF	#18, Grade 60, Footings, Steel Reinforcement Bar.....	15.13	
03 21 11 00-0099	LF	#6, Grade 75, Footings, Steel Reinforcement Bar.....	2.28	
03 21 11 00-0100	LF	#7, Grade 75, Footings, Steel Reinforcement Bar.....	2.96	
03 21 11 00-0101	LF	#8, Grade 75, Footings, Steel Reinforcement Bar.....	3.70	
03 21 11 00-0102	LF	#9, Grade 75, Footings, Steel Reinforcement Bar.....	4.56	
03 21 11 00-0103	LF	#10, Grade 75, Footings, Steel Reinforcement Bar.....	5.57	
03 21 11 00-0104	LF	#11, Grade 75, Footings, Steel Reinforcement Bar.....	6.65	
03 21 11 00-0105	LF	#14, Grade 75, Footings, Steel Reinforcement Bar.....	9.24	
03 21 11 00-0106	LF	#18, Grade 75, Footings, Steel Reinforcement Bar.....	15.82	
03 21 11 00-0107	LF	#3, Grade 60, Footings, Low Alloy Steel Reinforcement Bar.....	0.64	
03 21 11 00-0108	LF	#4, Grade 60, Footings, Low Alloy Steel Reinforcement Bar.....	1.09	
03 21 11 00-0109	LF	#5, Grade 60, Footings, Low Alloy Steel Reinforcement Bar.....	1.64	
03 21 11 00-0110	LF	#6, Grade 60, Footings, Low Alloy Steel Reinforcement Bar.....	2.26	
03 21 11 00-0111	LF	#7, Grade 60, Footings, Low Alloy Steel Reinforcement Bar.....	2.94	
03 21 11 00-0112	LF	#8, Grade 60, Footings, Low Alloy Steel Reinforcement Bar.....	3.67	
03 21 11 00-0113	LF	#9, Grade 60, Footings, Low Alloy Steel Reinforcement Bar.....	4.51	
03 21 11 00-0114	LF	#10, Grade 60, Footings, Low Alloy Steel Reinforcement Bar.....	5.52	
03 21 11 00-0115	LF	#11, Grade 60, Footings, Low Alloy Steel Reinforcement Bar.....	6.58	
03 21 11 00-0116	LF	#14, Grade 60, Footings, Low Alloy Steel Reinforcement Bar.....	9.15	
03 21 11 00-0117	LF	#18, Grade 60, Footings, Low Alloy Steel Reinforcement Bar.....	15.65	





		<b>Concrete</b>	<b>03</b>	<b>CS</b>
		<b>Concrete Reinforcing</b>	<b>03 20</b>	
		<b>Reinforcement Bars</b>	<b>03 21</b>	

MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
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**03 21 11 00-0118****Slab On Grade, Steel Reinforcement Bar** (03 21 11)

Note: ASTM A-615 Plain Steel and A-706 Low Alloy Steel.

03 21 11 00-0119	LF	#3, Grade 40, Slab On Grade, Steel Reinforcement Bar .....	0.57
03 21 11 00-0120	LF	#4, Grade 40, Slab On Grade, Steel Reinforcement Bar .....	0.97
03 21 11 00-0121	LF	#5, Grade 40, Slab On Grade, Steel Reinforcement Bar .....	1.46
03 21 11 00-0122	LF	#6, Grade 40, Slab On Grade, Steel Reinforcement Bar .....	2.01
03 21 11 00-0123	LF	#3, Grade 50, Slab On Grade, Steel Reinforcement Bar .....	0.59
03 21 11 00-0124	LF	#4, Grade 50, Slab On Grade, Steel Reinforcement Bar .....	1.00
03 21 11 00-0125	LF	#5, Grade 50, Slab On Grade, Steel Reinforcement Bar .....	1.49
03 21 11 00-0126	LF	#6, Grade 50, Slab On Grade, Steel Reinforcement Bar .....	2.06
03 21 11 00-0127	LF	#3, Grade 60, Slab On Grade, Steel Reinforcement Bar .....	0.61
03 21 11 00-0128	LF	#4, Grade 60, Slab On Grade, Steel Reinforcement Bar .....	1.03
03 21 11 00-0129	LF	#5, Grade 60, Slab On Grade, Steel Reinforcement Bar .....	1.55
03 21 11 00-0130	LF	#6, Grade 60, Slab On Grade, Steel Reinforcement Bar .....	2.14
03 21 11 00-0131	LF	#7, Grade 60, Slab On Grade, Steel Reinforcement Bar .....	2.79
03 21 11 00-0132	LF	#8, Grade 60, Slab On Grade, Steel Reinforcement Bar .....	3.48
03 21 11 00-0133	LF	#9, Grade 60, Slab On Grade, Steel Reinforcement Bar .....	4.27
03 21 11 00-0134	LF	#10, Grade 60, Slab On Grade, Steel Reinforcement Bar .....	5.23
03 21 11 00-0135	LF	#11, Grade 60, Slab On Grade, Steel Reinforcement Bar .....	6.25
03 21 11 00-0136	LF	#14, Grade 60, Slab On Grade, Steel Reinforcement Bar .....	8.67
03 21 11 00-0137	LF	#18, Grade 60, Slab On Grade, Steel Reinforcement Bar .....	14.86
03 21 11 00-0138	LF	#6, Grade 75, Slab On Grade, Steel Reinforcement Bar .....	2.21
03 21 11 00-0139	LF	#7, Grade 75, Slab On Grade, Steel Reinforcement Bar .....	2.89
03 21 11 00-0140	LF	#8, Grade 75, Slab On Grade, Steel Reinforcement Bar .....	3.61
03 21 11 00-0141	LF	#9, Grade 75, Slab On Grade, Steel Reinforcement Bar .....	4.45
03 21 11 00-0142	LF	#10, Grade 75, Slab On Grade, Steel Reinforcement Bar .....	5.45
03 21 11 00-0143	LF	#11, Grade 75, Slab On Grade, Steel Reinforcement Bar .....	6.52
03 21 11 00-0144	LF	#14, Grade 75, Slab On Grade, Steel Reinforcement Bar .....	9.05
03 21 11 00-0145	LF	#18, Grade 75, Slab On Grade, Steel Reinforcement Bar .....	15.55
03 21 11 00-0146	LF	#3, Grade 60, Slab On Grade, Low Alloy Steel Reinforcement Bar .....	0.62
03 21 11 00-0147	LF	#4, Grade 60, Slab On Grade, Low Alloy Steel Reinforcement Bar .....	1.06
03 21 11 00-0148	LF	#5, Grade 60, Slab On Grade, Low Alloy Steel Reinforcement Bar .....	1.59
03 21 11 00-0149	LF	#6, Grade 60, Slab On Grade, Low Alloy Steel Reinforcement Bar .....	2.19
03 21 11 00-0150	LF	#7, Grade 60, Slab On Grade, Low Alloy Steel Reinforcement Bar .....	2.87
03 21 11 00-0151	LF	#8, Grade 60, Slab On Grade, Low Alloy Steel Reinforcement Bar .....	3.58
03 21 11 00-0152	LF	#9, Grade 60, Slab On Grade, Low Alloy Steel Reinforcement Bar .....	4.40
03 21 11 00-0153	LF	#10, Grade 60, Slab On Grade, Low Alloy Steel Reinforcement Bar .....	5.40
03 21 11 00-0154	LF	#11, Grade 60, Slab On Grade, Low Alloy Steel Reinforcement Bar .....	6.45
03 21 11 00-0155	LF	#14, Grade 60, Slab On Grade, Low Alloy Steel Reinforcement Bar .....	8.96
03 21 11 00-0156	LF	#18, Grade 60, Slab On Grade, Low Alloy Steel Reinforcement Bar .....	15.38

**03 21 11 00-0157****Elevated Slabs, Steel Reinforcement Bar** (03 21 11)

Note: ASTM A-615 Plain Steel and A-706 Low Alloy Steel.

03 21 11 00-0158	LF	#3, Grade 40, Elevated Slabs, Steel Reinforcement Bar .....	0.53
03 21 11 00-0159	LF	#4, Grade 40, Elevated Slabs, Steel Reinforcement Bar .....	0.90
03 21 11 00-0160	LF	#5, Grade 40, Elevated Slabs, Steel Reinforcement Bar .....	1.37
03 21 11 00-0161	LF	#6, Grade 40, Elevated Slabs, Steel Reinforcement Bar .....	1.88
03 21 11 00-0162	LF	#3, Grade 50, Elevated Slabs, Steel Reinforcement Bar .....	0.55
03 21 11 00-0163	LF	#4, Grade 50, Elevated Slabs, Steel Reinforcement Bar .....	0.93
03 21 11 00-0164	LF	#5, Grade 50, Elevated Slabs, Steel Reinforcement Bar .....	1.40
03 21 11 00-0165	LF	#6, Grade 50, Elevated Slabs, Steel Reinforcement Bar .....	1.93
03 21 11 00-0166	LF	#3, Grade 60, Elevated Slabs, Steel Reinforcement Bar .....	0.57
03 21 11 00-0167	LF	#4, Grade 60, Elevated Slabs, Steel Reinforcement Bar .....	0.96
03 21 11 00-0168	LF	#5, Grade 60, Elevated Slabs, Steel Reinforcement Bar .....	1.46
03 21 11 00-0169	LF	#6, Grade 60, Elevated Slabs, Steel Reinforcement Bar .....	2.01
03 21 11 00-0170	LF	#7, Grade 60, Elevated Slabs, Steel Reinforcement Bar .....	2.64
03 21 11 00-0171	LF	#8, Grade 60, Elevated Slabs, Steel Reinforcement Bar .....	3.29
03 21 11 00-0172	LF	#9, Grade 60, Elevated Slabs, Steel Reinforcement Bar .....	4.07
03 21 11 00-0173	LF	#10, Grade 60, Elevated Slabs, Steel Reinforcement Bar .....	4.99
03 21 11 00-0174	LF	#11, Grade 60, Elevated Slabs, Steel Reinforcement Bar .....	5.97
03 21 11 00-0175	LF	#14, Grade 60, Elevated Slabs, Steel Reinforcement Bar .....	8.32
03 21 11 00-0176	LF	#18, Grade 60, Elevated Slabs, Steel Reinforcement Bar .....	14.30
03 21 11 00-0177	LF	#6, Grade 75, Elevated Slabs, Steel Reinforcement Bar .....	2.08
03 21 11 00-0178	LF	#7, Grade 75, Elevated Slabs, Steel Reinforcement Bar .....	2.74
03 21 11 00-0179	LF	#8, Grade 75, Elevated Slabs, Steel Reinforcement Bar .....	3.42
03 21 11 00-0180	LF	#9, Grade 75, Elevated Slabs, Steel Reinforcement Bar .....	4.25
03 21 11 00-0181	LF	#10, Grade 75, Elevated Slabs, Steel Reinforcement Bar .....	5.21
03 21 11 00-0182	LF	#11, Grade 75, Elevated Slabs, Steel Reinforcement Bar .....	6.24
03 21 11 00-0183	LF	#14, Grade 75, Elevated Slabs, Steel Reinforcement Bar .....	8.70
03 21 11 00-0184	LF	#18, Grade 75, Elevated Slabs, Steel Reinforcement Bar .....	14.99
03 21 11 00-0185	LF	#3, Grade 60, Elevated Slabs, Low Alloy Steel Reinforcement Bar .....	0.58
03 21 11 00-0186	LF	#4, Grade 60, Elevated Slabs, Low Alloy Steel Reinforcement Bar .....	0.99
03 21 11 00-0187	LF	#5, Grade 60, Elevated Slabs, Low Alloy Steel Reinforcement Bar .....	1.50
03 21 11 00-0188	LF	#6, Grade 60, Elevated Slabs, Low Alloy Steel Reinforcement Bar .....	2.06
03 21 11 00-0189	LF	#7, Grade 60, Elevated Slabs, Low Alloy Steel Reinforcement Bar .....	2.72
03 21 11 00-0190	LF	#8, Grade 60, Elevated Slabs, Low Alloy Steel Reinforcement Bar .....	3.39
03 21 11 00-0191	LF	#9, Grade 60, Elevated Slabs, Low Alloy Steel Reinforcement Bar .....	4.20
03 21 11 00-0192	LF	#10, Grade 60, Elevated Slabs, Low Alloy Steel Reinforcement Bar .....	5.16
03 21 11 00-0193	LF	#11, Grade 60, Elevated Slabs, Low Alloy Steel Reinforcement Bar .....	6.17
03 21 11 00-0194	LF	#14, Grade 60, Elevated Slabs, Low Alloy Steel Reinforcement Bar .....	8.61

**03 Concrete**  
**03 20 Concrete Reinforcing**  
**03 21 Reinforcement Bars**



MINOR  
CSI UOM DESCRIPTION

TOTAL DIRECT DEMOLITION  
UNIT COST UNIT COST

03 21 11 00-0195 LF #18, Grade 60, Elevated Slabs, Low Alloy Steel Reinforcement Bar ..... 14.82

**03 21 11 00-0196 Walls, Steel Reinforcement Bar** (03 21 11)

Note: ASTM A-615 Plain Steel and A-706 Low Alloy Steel.

03 21 11 00-0197	LF	#3, Grade 40, Walls, Steel Reinforcement Bar .....	0.51
03 21 11 00-0198	LF	#4, Grade 40, Walls, Steel Reinforcement Bar .....	0.87
03 21 11 00-0199	LF	#5, Grade 40, Walls, Steel Reinforcement Bar .....	1.32
03 21 11 00-0200	LF	#6, Grade 40, Walls, Steel Reinforcement Bar .....	1.82
03 21 11 00-0201	LF	#3, Grade 50, Walls, Steel Reinforcement Bar .....	0.53
03 21 11 00-0202	LF	#4, Grade 50, Walls, Steel Reinforcement Bar .....	0.90
03 21 11 00-0203	LF	#5, Grade 50, Walls, Steel Reinforcement Bar .....	1.35
03 21 11 00-0204	LF	#6, Grade 50, Walls, Steel Reinforcement Bar .....	1.87
03 21 11 00-0205	LF	#3, Grade 60, Walls, Steel Reinforcement Bar .....	0.55
03 21 11 00-0206	LF	#4, Grade 60, Walls, Steel Reinforcement Bar .....	0.93
03 21 11 00-0207	LF	#5, Grade 60, Walls, Steel Reinforcement Bar .....	1.41
03 21 11 00-0208	LF	#6, Grade 60, Walls, Steel Reinforcement Bar .....	1.95
03 21 11 00-0209	LF	#7, Grade 60, Walls, Steel Reinforcement Bar .....	2.55
03 21 11 00-0210	LF	#8, Grade 60, Walls, Steel Reinforcement Bar .....	3.21
03 21 11 00-0211	LF	#9, Grade 60, Walls, Steel Reinforcement Bar .....	3.97
03 21 11 00-0212	LF	#10, Grade 60, Walls, Steel Reinforcement Bar .....	4.87
03 21 11 00-0213	LF	#11, Grade 60, Walls, Steel Reinforcement Bar .....	5.84
03 21 11 00-0214	LF	#14, Grade 60, Walls, Steel Reinforcement Bar .....	8.15
03 21 11 00-0215	LF	#18, Grade 60, Walls, Steel Reinforcement Bar .....	14.02
03 21 11 00-0216	LF	#6, Grade 75, Walls, Steel Reinforcement Bar .....	2.02
03 21 11 00-0217	LF	#7, Grade 75, Walls, Steel Reinforcement Bar .....	2.65
03 21 11 00-0218	LF	#8, Grade 75, Walls, Steel Reinforcement Bar .....	3.34
03 21 11 00-0219	LF	#9, Grade 75, Walls, Steel Reinforcement Bar .....	4.15
03 21 11 00-0220	LF	#10, Grade 75, Walls, Steel Reinforcement Bar .....	5.09
03 21 11 00-0221	LF	#11, Grade 75, Walls, Steel Reinforcement Bar .....	6.11
03 21 11 00-0222	LF	#14, Grade 75, Walls, Steel Reinforcement Bar .....	8.53
03 21 11 00-0223	LF	#18, Grade 75, Walls, Steel Reinforcement Bar .....	14.71
03 21 11 00-0224	LF	#3, Grade 60, Walls, Low Alloy Steel Reinforcement Bar .....	0.56
03 21 11 00-0225	LF	#4, Grade 60, Walls, Low Alloy Steel Reinforcement Bar .....	0.96
03 21 11 00-0226	LF	#5, Grade 60, Walls, Low Alloy Steel Reinforcement Bar .....	1.45
03 21 11 00-0227	LF	#6, Grade 60, Walls, Low Alloy Steel Reinforcement Bar .....	2.00
03 21 11 00-0228	LF	#7, Grade 60, Walls, Low Alloy Steel Reinforcement Bar .....	2.63
03 21 11 00-0229	LF	#8, Grade 60, Walls, Low Alloy Steel Reinforcement Bar .....	3.31
03 21 11 00-0230	LF	#9, Grade 60, Walls, Low Alloy Steel Reinforcement Bar .....	4.10
03 21 11 00-0231	LF	#10, Grade 60, Walls, Low Alloy Steel Reinforcement Bar .....	5.04
03 21 11 00-0232	LF	#11, Grade 60, Walls, Low Alloy Steel Reinforcement Bar .....	6.04
03 21 11 00-0233	LF	#14, Grade 60, Walls, Low Alloy Steel Reinforcement Bar .....	8.44
03 21 11 00-0234	LF	#18, Grade 60, Walls, Low Alloy Steel Reinforcement Bar .....	14.54

**03 21 11 00-0235 Deformed Straight Dowels** (03 21 11)

Note: Excludes drilling. See CSI section 02 41 19 13-0211 for drilling in concrete.

03 21 11 00-0236	EA	3/8" Diameter x 24" Long, Deformed Straight Dowel .....	3.00
		For Up To 12" Length, Deduct .....	-0.36
		For >12" To <24" Length, Deduct .....	-0.18
03 21 11 00-0237	EA	1/2" Diameter x 24" Long, Deformed Straight Dowel .....	3.59
		For Up To 12" Length, Deduct .....	-0.47
		For >12" To <24" Length, Deduct .....	-0.24
03 21 11 00-0238	EA	5/8" Diameter x 24" Long, Deformed Straight Dowel .....	4.39
		For Up To 12" Length, Deduct .....	-0.74
		For >12" To <24" Length, Deduct .....	-0.37
03 21 11 00-0239	EA	3/4" Diameter x 24" Long, Deformed Straight Dowel .....	5.35
		For Up To 12" Length, Deduct .....	-1.07
		For >12" To <24" Length, Deduct .....	-0.54
03 21 11 00-0240	EA	7/8" Diameter x 24" Long, Deformed Straight Dowel .....	6.33
		For Up To 12" Length, Deduct .....	-1.49
		For >12" To <24" Length, Deduct .....	-0.75
03 21 11 00-0241	EA	1" Diameter x 24" Long, Deformed Straight Dowel .....	7.99
		For Up To 12" Length, Deduct .....	-1.92
		For >12" To <24" Length, Deduct .....	-0.96
03 21 11 00-0242	EA	1-1/8" Diameter x 24" Long, Deformed Straight Dowel .....	9.41
		For Up To 12" Length, Deduct .....	-2.36
		For >12" To <24" Length, Deduct .....	-1.18
03 21 11 00-0243	EA	1-1/4" Diameter x 24" Long, Deformed Straight Dowel .....	11.56
		For Up To 12" Length, Deduct .....	-3.09
		For >12" To <24" Length, Deduct .....	-1.54
03 21 11 00-0244	EA	1-3/8" Diameter x 24" Long, Deformed Straight Dowel .....	13.73
		For Up To 12" Length, Deduct .....	-3.81
		For >12" To <24" Length, Deduct .....	-1.91

**03 21 11 00-0245 Spirals, Reinforcing Steel** (03 21 11)

03 21 11 00-0246	TON	Up To 15" Diameter, Grade 60, Spirals, Reinforcing Steel .....	3,466.01
		For Grade 75, Add .....	133.12
03 21 11 00-0247	TON	>15" To 24" Diameter, Grade 60, Spirals, Reinforcing Steel .....	3,425.42
		For Grade 75, Add .....	133.12
03 21 11 00-0248	TON	>24" To 36" Diameter, Grade 60, Spirals, Reinforcing Steel .....	3,394.47
		For Grade 75, Add .....	133.12



	<b>Concrete</b>	<b>03</b>	
	<b>Concrete Reinforcing</b>	<b>03 20</b>	
	<b>Reinforcement Bars</b>	<b>03 21</b>	

MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
03 21 11 00-0249 TON >36" To 48" Diameter, Grade 60, Spirals, Reinforcing Steel ..... For Grade 75, Add	3,343.84 133.12	
03 21 11 00-0250 TON >48" To 64" Diameter, Grade 60, Spirals, Reinforcing Steel ..... For Grade 75, Add	3,275.38 133.12	
03 21 11 00-0251 TON >64" To 84" Diameter, Grade 60, Spirals, Reinforcing Steel ..... For Grade 75, Add	3,251.32 136.40	
03 21 11 00-0252 TON >84" To 96" Diameter, Grade 60, Spirals, Reinforcing Steel ..... For Grade 75, Add	3,194.01 136.40	

### 03 21 13 Galvanized Reinforcement Steel Bars (03 21)

#### 03 21 13 00-0001 Beams And Girders, Galvanized Steel Reinforcement Bar (03 21 13)

Note: ASTM A-767 Hot Dipped Galvanized Steel.

03 21 13 00-0002 LF #3, Grade 40, Beams And Girders, Galvanized Steel Reinforcement Bar .....	0.79
03 21 13 00-0003 LF #4, Grade 40, Beams And Girders, Galvanized Steel Reinforcement Bar .....	1.33
03 21 13 00-0004 LF #5, Grade 40, Beams And Girders, Galvanized Steel Reinforcement Bar .....	2.00
03 21 13 00-0005 LF #6, Grade 40, Beams And Girders, Galvanized Steel Reinforcement Bar .....	2.78
03 21 13 00-0006 LF #3, Grade 50, Beams And Girders, Galvanized Steel Reinforcement Bar .....	0.80
03 21 13 00-0007 LF #4, Grade 50, Beams And Girders, Galvanized Steel Reinforcement Bar .....	1.36
03 21 13 00-0008 LF #5, Grade 50, Beams And Girders, Galvanized Steel Reinforcement Bar .....	2.03
03 21 13 00-0009 LF #6, Grade 50, Beams And Girders, Galvanized Steel Reinforcement Bar .....	2.83
03 21 13 00-0010 LF #3, Grade 60, Beams And Girders, Galvanized Steel Reinforcement Bar .....	0.82
03 21 13 00-0011 LF #4, Grade 60, Beams And Girders, Galvanized Steel Reinforcement Bar .....	1.39
03 21 13 00-0012 LF #5, Grade 60, Beams And Girders, Galvanized Steel Reinforcement Bar .....	2.09
03 21 13 00-0013 LF #6, Grade 60, Beams And Girders, Galvanized Steel Reinforcement Bar .....	2.91
03 21 13 00-0014 LF #7, Grade 60, Beams And Girders, Galvanized Steel Reinforcement Bar .....	3.80
03 21 13 00-0015 LF #8, Grade 60, Beams And Girders, Galvanized Steel Reinforcement Bar .....	4.76
03 21 13 00-0016 LF #9, Grade 60, Beams And Girders, Galvanized Steel Reinforcement Bar .....	5.87
03 21 13 00-0017 LF #10, Grade 60, Beams And Girders, Galvanized Steel Reinforcement Bar .....	7.22
03 21 13 00-0018 LF #11, Grade 60, Beams And Girders, Galvanized Steel Reinforcement Bar .....	8.64
03 21 13 00-0019 LF #14, Grade 60, Beams And Girders, Galvanized Steel Reinforcement Bar .....	12.04
03 21 13 00-0020 LF #18, Grade 60, Beams And Girders, Galvanized Steel Reinforcement Bar .....	20.70
03 21 13 00-0021 LF #6, Grade 75, Beams And Girders, Galvanized Steel Reinforcement Bar .....	2.98
03 21 13 00-0022 LF #7, Grade 75, Beams And Girders, Galvanized Steel Reinforcement Bar .....	3.90
03 21 13 00-0023 LF #8, Grade 75, Beams And Girders, Galvanized Steel Reinforcement Bar .....	4.90
03 21 13 00-0024 LF #9, Grade 75, Beams And Girders, Galvanized Steel Reinforcement Bar .....	6.05
03 21 13 00-0025 LF #10, Grade 75, Beams And Girders, Galvanized Steel Reinforcement Bar .....	7.43
03 21 13 00-0026 LF #11, Grade 75, Beams And Girders, Galvanized Steel Reinforcement Bar .....	8.91
03 21 13 00-0027 LF #14, Grade 75, Beams And Girders, Galvanized Steel Reinforcement Bar .....	12.43
03 21 13 00-0028 LF #18, Grade 75, Beams And Girders, Galvanized Steel Reinforcement Bar .....	21.39

#### 03 21 13 00-0029 Columns, Galvanized Steel Reinforcement Bar (03 21 13)

Note: ASTM A-767 Hot Dipped Galvanized Steel.

03 21 13 00-0030 LF #3, Grade 40, Columns, Galvanized Steel Reinforcement Bar .....	0.82
03 21 13 00-0031 LF #4, Grade 40, Columns, Galvanized Steel Reinforcement Bar .....	1.40
03 21 13 00-0032 LF #5, Grade 40, Columns, Galvanized Steel Reinforcement Bar .....	2.10
03 21 13 00-0033 LF #6, Grade 40, Columns, Galvanized Steel Reinforcement Bar .....	2.91
03 21 13 00-0034 LF #3, Grade 50, Columns, Galvanized Steel Reinforcement Bar .....	0.83
03 21 13 00-0035 LF #4, Grade 50, Columns, Galvanized Steel Reinforcement Bar .....	1.43
03 21 13 00-0036 LF #5, Grade 50, Columns, Galvanized Steel Reinforcement Bar .....	2.13
03 21 13 00-0037 LF #6, Grade 50, Columns, Galvanized Steel Reinforcement Bar .....	2.96
03 21 13 00-0038 LF #3, Grade 60, Columns, Galvanized Steel Reinforcement Bar .....	0.85
03 21 13 00-0039 LF #4, Grade 60, Columns, Galvanized Steel Reinforcement Bar .....	1.46
03 21 13 00-0040 LF #5, Grade 60, Columns, Galvanized Steel Reinforcement Bar .....	2.19
03 21 13 00-0041 LF #6, Grade 60, Columns, Galvanized Steel Reinforcement Bar .....	3.04
03 21 13 00-0042 LF #7, Grade 60, Columns, Galvanized Steel Reinforcement Bar .....	3.95
03 21 13 00-0043 LF #8, Grade 60, Columns, Galvanized Steel Reinforcement Bar .....	4.93
03 21 13 00-0044 LF #9, Grade 60, Columns, Galvanized Steel Reinforcement Bar .....	6.08
03 21 13 00-0045 LF #10, Grade 60, Columns, Galvanized Steel Reinforcement Bar .....	7.46
03 21 13 00-0046 LF #11, Grade 60, Columns, Galvanized Steel Reinforcement Bar .....	8.91
03 21 13 00-0047 LF #14, Grade 60, Columns, Galvanized Steel Reinforcement Bar .....	12.40
03 21 13 00-0048 LF #18, Grade 60, Columns, Galvanized Steel Reinforcement Bar .....	21.26
03 21 13 00-0049 LF #6, Grade 75, Columns, Galvanized Steel Reinforcement Bar .....	3.11
03 21 13 00-0050 LF #7, Grade 75, Columns, Galvanized Steel Reinforcement Bar .....	4.05
03 21 13 00-0051 LF #8, Grade 75, Columns, Galvanized Steel Reinforcement Bar .....	5.07
03 21 13 00-0052 LF #9, Grade 75, Columns, Galvanized Steel Reinforcement Bar .....	6.26
03 21 13 00-0053 LF #10, Grade 75, Columns, Galvanized Steel Reinforcement Bar .....	7.67
03 21 13 00-0054 LF #11, Grade 75, Columns, Galvanized Steel Reinforcement Bar .....	9.18
03 21 13 00-0055 LF #14, Grade 75, Columns, Galvanized Steel Reinforcement Bar .....	12.79
03 21 13 00-0056 LF #18, Grade 75, Columns, Galvanized Steel Reinforcement Bar .....	21.95

#### 03 21 13 00-0057 Footings, Galvanized Steel Reinforcement Bar (03 21 13)

Note: ASTM A-767 Hot Dipped Galvanized Steel.

03 21 13 00-0058 LF #3, Grade 40, Footings, Galvanized Steel Reinforcement Bar .....	0.73
03 21 13 00-0059 LF #4, Grade 40, Footings, Galvanized Steel Reinforcement Bar .....	1.23
03 21 13 00-0060 LF #5, Grade 40, Footings, Galvanized Steel Reinforcement Bar .....	1.87
03 21 13 00-0061 LF #6, Grade 40, Footings, Galvanized Steel Reinforcement Bar .....	2.60
03 21 13 00-0062 LF #3, Grade 50, Footings, Galvanized Steel Reinforcement Bar .....	0.74
03 21 13 00-0063 LF #4, Grade 50, Footings, Galvanized Steel Reinforcement Bar .....	1.26

**03 Concrete**  
**03 20 Concrete Reinforcing**  
**03 21 Reinforcement Bars**



MINOR  
CSI UOM DESCRIPTION

TOTAL DIRECT DEMOLITION  
UNIT COST UNIT COST

03 21 13 00-0064	LF	#5, Grade 50, Footings, Galvanized Steel Reinforcement Bar .....	1.90
03 21 13 00-0065	LF	#6, Grade 50, Footings, Galvanized Steel Reinforcement Bar .....	2.65
03 21 13 00-0066	LF	#3, Grade 60, Footings, Galvanized Steel Reinforcement Bar .....	0.76
03 21 13 00-0067	LF	#4, Grade 60, Footings, Galvanized Steel Reinforcement Bar .....	1.29
03 21 13 00-0068	LF	#5, Grade 60, Footings, Galvanized Steel Reinforcement Bar .....	1.96
03 21 13 00-0069	LF	#6, Grade 60, Footings, Galvanized Steel Reinforcement Bar .....	2.73
03 21 13 00-0070	LF	#7, Grade 60, Footings, Galvanized Steel Reinforcement Bar .....	3.57
03 21 13 00-0071	LF	#8, Grade 60, Footings, Galvanized Steel Reinforcement Bar .....	4.49
03 21 13 00-0072	LF	#9, Grade 60, Footings, Galvanized Steel Reinforcement Bar .....	5.56
03 21 13 00-0073	LF	#10, Grade 60, Footings, Galvanized Steel Reinforcement Bar .....	6.85
03 21 13 00-0074	LF	#11, Grade 60, Footings, Galvanized Steel Reinforcement Bar .....	8.23
03 21 13 00-0075	LF	#14, Grade 60, Footings, Galvanized Steel Reinforcement Bar .....	11.51
03 21 13 00-0076	LF	#18, Grade 60, Footings, Galvanized Steel Reinforcement Bar .....	19.85
03 21 13 00-0077	LF	#6, Grade 75, Footings, Galvanized Steel Reinforcement Bar .....	2.80
03 21 13 00-0078	LF	#7, Grade 75, Footings, Galvanized Steel Reinforcement Bar .....	3.67
03 21 13 00-0079	LF	#8, Grade 75, Footings, Galvanized Steel Reinforcement Bar .....	4.63
03 21 13 00-0080	LF	#9, Grade 75, Footings, Galvanized Steel Reinforcement Bar .....	5.74
03 21 13 00-0081	LF	#10, Grade 75, Footings, Galvanized Steel Reinforcement Bar .....	7.06
03 21 13 00-0082	LF	#11, Grade 75, Footings, Galvanized Steel Reinforcement Bar .....	8.50
03 21 13 00-0083	LF	#14, Grade 75, Footings, Galvanized Steel Reinforcement Bar .....	11.90
03 21 13 00-0084	LF	#18, Grade 75, Footings, Galvanized Steel Reinforcement Bar .....	20.54

**03 21 13 00-0085 Slab On Grade, Galvanized Steel Reinforcement Bar (03 21 13)**

Note: ASTM A-767 Hot Dipped Galvanized Steel.

03 21 13 00-0086	LF	#3, Grade 40, Slab On Grade, Galvanized Steel Reinforcement Bar .....	0.71
03 21 13 00-0087	LF	#4, Grade 40, Slab On Grade, Galvanized Steel Reinforcement Bar .....	1.20
03 21 13 00-0088	LF	#5, Grade 40, Slab On Grade, Galvanized Steel Reinforcement Bar .....	1.82
03 21 13 00-0089	LF	#6, Grade 40, Slab On Grade, Galvanized Steel Reinforcement Bar .....	2.53
03 21 13 00-0090	LF	#3, Grade 50, Slab On Grade, Galvanized Steel Reinforcement Bar .....	0.72
03 21 13 00-0091	LF	#4, Grade 50, Slab On Grade, Galvanized Steel Reinforcement Bar .....	1.23
03 21 13 00-0092	LF	#5, Grade 50, Slab On Grade, Galvanized Steel Reinforcement Bar .....	1.85
03 21 13 00-0093	LF	#6, Grade 50, Slab On Grade, Galvanized Steel Reinforcement Bar .....	2.58
03 21 13 00-0094	LF	#3, Grade 60, Slab On Grade, Galvanized Steel Reinforcement Bar .....	0.74
03 21 13 00-0095	LF	#4, Grade 60, Slab On Grade, Galvanized Steel Reinforcement Bar .....	1.26
03 21 13 00-0096	LF	#5, Grade 60, Slab On Grade, Galvanized Steel Reinforcement Bar .....	1.91
03 21 13 00-0097	LF	#6, Grade 60, Slab On Grade, Galvanized Steel Reinforcement Bar .....	2.66
03 21 13 00-0098	LF	#7, Grade 60, Slab On Grade, Galvanized Steel Reinforcement Bar .....	3.50
03 21 13 00-0099	LF	#8, Grade 60, Slab On Grade, Galvanized Steel Reinforcement Bar .....	4.40
03 21 13 00-0100	LF	#9, Grade 60, Slab On Grade, Galvanized Steel Reinforcement Bar .....	5.45
03 21 13 00-0101	LF	#10, Grade 60, Slab On Grade, Galvanized Steel Reinforcement Bar .....	6.73
03 21 13 00-0102	LF	#11, Grade 60, Slab On Grade, Galvanized Steel Reinforcement Bar .....	8.10
03 21 13 00-0103	LF	#14, Grade 60, Slab On Grade, Galvanized Steel Reinforcement Bar .....	11.32
03 21 13 00-0104	LF	#18, Grade 60, Slab On Grade, Galvanized Steel Reinforcement Bar .....	19.58
03 21 13 00-0105	LF	#6, Grade 75, Slab On Grade, Galvanized Steel Reinforcement Bar .....	2.73
03 21 13 00-0106	LF	#7, Grade 75, Slab On Grade, Galvanized Steel Reinforcement Bar .....	3.60
03 21 13 00-0107	LF	#8, Grade 75, Slab On Grade, Galvanized Steel Reinforcement Bar .....	4.54
03 21 13 00-0108	LF	#9, Grade 75, Slab On Grade, Galvanized Steel Reinforcement Bar .....	5.63
03 21 13 00-0109	LF	#10, Grade 75, Slab On Grade, Galvanized Steel Reinforcement Bar .....	6.94
03 21 13 00-0110	LF	#11, Grade 75, Slab On Grade, Galvanized Steel Reinforcement Bar .....	8.37
03 21 13 00-0111	LF	#14, Grade 75, Slab On Grade, Galvanized Steel Reinforcement Bar .....	11.71
03 21 13 00-0112	LF	#18, Grade 75, Slab On Grade, Galvanized Steel Reinforcement Bar .....	20.27

**03 21 13 00-0113 Elevated Slabs, Galvanized Steel Reinforcement Bar (03 21 13)**

Note: ASTM A-767 Hot Dipped Galvanized Steel.

03 21 13 00-0114	LF	#3, Grade 40, Elevated Slabs, Galvanized Steel Reinforcement Bar .....	0.67
03 21 13 00-0115	LF	#4, Grade 40, Elevated Slabs, Galvanized Steel Reinforcement Bar .....	1.13
03 21 13 00-0116	LF	#5, Grade 40, Elevated Slabs, Galvanized Steel Reinforcement Bar .....	1.73
03 21 13 00-0117	LF	#6, Grade 40, Elevated Slabs, Galvanized Steel Reinforcement Bar .....	2.40
03 21 13 00-0118	LF	#3, Grade 50, Elevated Slabs, Galvanized Steel Reinforcement Bar .....	0.68
03 21 13 00-0119	LF	#4, Grade 50, Elevated Slabs, Galvanized Steel Reinforcement Bar .....	1.16
03 21 13 00-0120	LF	#5, Grade 50, Elevated Slabs, Galvanized Steel Reinforcement Bar .....	1.76
03 21 13 00-0121	LF	#6, Grade 50, Elevated Slabs, Galvanized Steel Reinforcement Bar .....	2.45
03 21 13 00-0122	LF	#3, Grade 60, Elevated Slabs, Galvanized Steel Reinforcement Bar .....	0.70
03 21 13 00-0123	LF	#4, Grade 60, Elevated Slabs, Galvanized Steel Reinforcement Bar .....	1.19
03 21 13 00-0124	LF	#5, Grade 60, Elevated Slabs, Galvanized Steel Reinforcement Bar .....	1.82
03 21 13 00-0125	LF	#6, Grade 60, Elevated Slabs, Galvanized Steel Reinforcement Bar .....	2.53
03 21 13 00-0126	LF	#7, Grade 60, Elevated Slabs, Galvanized Steel Reinforcement Bar .....	3.35
03 21 13 00-0127	LF	#8, Grade 60, Elevated Slabs, Galvanized Steel Reinforcement Bar .....	4.21
03 21 13 00-0128	LF	#9, Grade 60, Elevated Slabs, Galvanized Steel Reinforcement Bar .....	5.25
03 21 13 00-0129	LF	#10, Grade 60, Elevated Slabs, Galvanized Steel Reinforcement Bar .....	6.49
03 21 13 00-0130	LF	#11, Grade 60, Elevated Slabs, Galvanized Steel Reinforcement Bar .....	7.82
03 21 13 00-0131	LF	#14, Grade 60, Elevated Slabs, Galvanized Steel Reinforcement Bar .....	10.97
03 21 13 00-0132	LF	#18, Grade 60, Elevated Slabs, Galvanized Steel Reinforcement Bar .....	19.02
03 21 13 00-0133	LF	#6, Grade 75, Elevated Slabs, Galvanized Steel Reinforcement Bar .....	2.60
03 21 13 00-0134	LF	#7, Grade 75, Elevated Slabs, Galvanized Steel Reinforcement Bar .....	3.45
03 21 13 00-0135	LF	#8, Grade 75, Elevated Slabs, Galvanized Steel Reinforcement Bar .....	4.35
03 21 13 00-0136	LF	#9, Grade 75, Elevated Slabs, Galvanized Steel Reinforcement Bar .....	5.43
03 21 13 00-0137	LF	#10, Grade 75, Elevated Slabs, Galvanized Steel Reinforcement Bar .....	6.70
03 21 13 00-0138	LF	#11, Grade 75, Elevated Slabs, Galvanized Steel Reinforcement Bar .....	8.09



		<b>Concrete</b>	<b>03</b>	<b>CS</b>
		<b>Concrete Reinforcing</b>	<b>03 20</b>	
		<b>Reinforcement Bars</b>	<b>03 21</b>	

MINOR	CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
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03 21 13 00-0139	LF		#14, Grade 75, Elevated Slabs, Galvanized Steel Reinforcement Bar .....	11.36	
03 21 13 00-0140	LF		#18, Grade 75, Elevated Slabs, Galvanized Steel Reinforcement Bar .....	19.71	

#### 03 21 13 00-0141

#### Walls, Galvanized Steel Reinforcement Bar (03 21 13)

Note: ASTM A-767 Hot Dipped Galvanized Steel.

03 21 13 00-0142	LF		#3, Grade 40, Walls, Galvanized Steel Reinforcement Bar .....	0.65	
03 21 13 00-0143	LF		#4, Grade 40, Walls, Galvanized Steel Reinforcement Bar .....	1.10	
03 21 13 00-0144	LF		#5, Grade 40, Walls, Galvanized Steel Reinforcement Bar .....	1.68	
03 21 13 00-0145	LF		#6, Grade 40, Walls, Galvanized Steel Reinforcement Bar .....	2.34	
03 21 13 00-0146	LF		#3, Grade 50, Walls, Galvanized Steel Reinforcement Bar .....	0.66	
03 21 13 00-0147	LF		#4, Grade 50, Walls, Galvanized Steel Reinforcement Bar .....	1.13	
03 21 13 00-0148	LF		#5, Grade 50, Walls, Galvanized Steel Reinforcement Bar .....	1.71	
03 21 13 00-0149	LF		#6, Grade 50, Walls, Galvanized Steel Reinforcement Bar .....	2.39	
03 21 13 00-0150	LF		#3, Grade 60, Walls, Galvanized Steel Reinforcement Bar .....	0.68	
03 21 13 00-0151	LF		#4, Grade 60, Walls, Galvanized Steel Reinforcement Bar .....	1.16	
03 21 13 00-0152	LF		#5, Grade 60, Walls, Galvanized Steel Reinforcement Bar .....	1.77	
03 21 13 00-0153	LF		#6, Grade 60, Walls, Galvanized Steel Reinforcement Bar .....	2.47	
03 21 13 00-0154	LF		#7, Grade 60, Walls, Galvanized Steel Reinforcement Bar .....	3.26	
03 21 13 00-0155	LF		#8, Grade 60, Walls, Galvanized Steel Reinforcement Bar .....	4.13	
03 21 13 00-0156	LF		#9, Grade 60, Walls, Galvanized Steel Reinforcement Bar .....	5.15	
03 21 13 00-0157	LF		#10, Grade 60, Walls, Galvanized Steel Reinforcement Bar .....	6.37	
03 21 13 00-0158	LF		#11, Grade 60, Walls, Galvanized Steel Reinforcement Bar .....	7.69	
03 21 13 00-0159	LF		#14, Grade 60, Walls, Galvanized Steel Reinforcement Bar .....	10.80	
03 21 13 00-0160	LF		#18, Grade 60, Walls, Galvanized Steel Reinforcement Bar .....	18.74	
03 21 13 00-0161	LF		#6, Grade 75, Walls, Galvanized Steel Reinforcement Bar .....	2.54	
03 21 13 00-0162	LF		#7, Grade 75, Walls, Galvanized Steel Reinforcement Bar .....	3.36	
03 21 13 00-0163	LF		#8, Grade 75, Walls, Galvanized Steel Reinforcement Bar .....	4.27	
03 21 13 00-0164	LF		#9, Grade 75, Walls, Galvanized Steel Reinforcement Bar .....	5.33	
03 21 13 00-0165	LF		#10, Grade 75, Walls, Galvanized Steel Reinforcement Bar .....	6.58	
03 21 13 00-0166	LF		#11, Grade 75, Walls, Galvanized Steel Reinforcement Bar .....	7.96	
03 21 13 00-0167	LF		#14, Grade 75, Walls, Galvanized Steel Reinforcement Bar .....	11.19	
03 21 13 00-0168	LF		#18, Grade 75, Walls, Galvanized Steel Reinforcement Bar .....	19.43	

#### 03 21 16

#### Epoxy-Coated Reinforcement Steel Bars (03 21)

#### 03 21 16 00-0001

#### Beams And Girders, Epoxy Coated Steel Reinforcement Bar (03 21 16)

Note: ASTM A-775 Epoxy Coated Steel.

03 21 16 00-0002	LF		#3, Grade 40, Beams And Girders, Epoxy Coated Steel Reinforcement Bar .....	0.77	
03 21 16 00-0003	LF		#4, Grade 40, Beams And Girders, Epoxy Coated Steel Reinforcement Bar .....	1.31	
03 21 16 00-0004	LF		#5, Grade 40, Beams And Girders, Epoxy Coated Steel Reinforcement Bar .....	1.96	
03 21 16 00-0005	LF		#6, Grade 40, Beams And Girders, Epoxy Coated Steel Reinforcement Bar .....	2.72	
03 21 16 00-0006	LF		#3, Grade 50, Beams And Girders, Epoxy Coated Steel Reinforcement Bar .....	0.78	
03 21 16 00-0007	LF		#4, Grade 50, Beams And Girders, Epoxy Coated Steel Reinforcement Bar .....	1.33	
03 21 16 00-0008	LF		#5, Grade 50, Beams And Girders, Epoxy Coated Steel Reinforcement Bar .....	1.99	
03 21 16 00-0009	LF		#6, Grade 50, Beams And Girders, Epoxy Coated Steel Reinforcement Bar .....	2.77	
03 21 16 00-0010	LF		#3, Grade 60, Beams And Girders, Epoxy Coated Steel Reinforcement Bar .....	0.80	
03 21 16 00-0011	LF		#4, Grade 60, Beams And Girders, Epoxy Coated Steel Reinforcement Bar .....	1.37	
03 21 16 00-0012	LF		#5, Grade 60, Beams And Girders, Epoxy Coated Steel Reinforcement Bar .....	2.05	
03 21 16 00-0013	LF		#6, Grade 60, Beams And Girders, Epoxy Coated Steel Reinforcement Bar .....	2.85	
03 21 16 00-0014	LF		#7, Grade 60, Beams And Girders, Epoxy Coated Steel Reinforcement Bar .....	3.72	
03 21 16 00-0015	LF		#8, Grade 60, Beams And Girders, Epoxy Coated Steel Reinforcement Bar .....	4.66	
03 21 16 00-0016	LF		#9, Grade 60, Beams And Girders, Epoxy Coated Steel Reinforcement Bar .....	5.74	
03 21 16 00-0017	LF		#10, Grade 60, Beams And Girders, Epoxy Coated Steel Reinforcement Bar .....	7.05	
03 21 16 00-0018	LF		#11, Grade 60, Beams And Girders, Epoxy Coated Steel Reinforcement Bar .....	8.44	
03 21 16 00-0019	LF		#14, Grade 60, Beams And Girders, Epoxy Coated Steel Reinforcement Bar .....	11.75	
03 21 16 00-0020	LF		#18, Grade 60, Beams And Girders, Epoxy Coated Steel Reinforcement Bar .....	20.19	
03 21 16 00-0021	LF		#6, Grade 75, Beams And Girders, Epoxy Coated Steel Reinforcement Bar .....	2.93	
03 21 16 00-0022	LF		#7, Grade 75, Beams And Girders, Epoxy Coated Steel Reinforcement Bar .....	3.82	
03 21 16 00-0023	LF		#8, Grade 75, Beams And Girders, Epoxy Coated Steel Reinforcement Bar .....	4.80	
03 21 16 00-0024	LF		#9, Grade 75, Beams And Girders, Epoxy Coated Steel Reinforcement Bar .....	5.92	
03 21 16 00-0025	LF		#10, Grade 75, Beams And Girders, Epoxy Coated Steel Reinforcement Bar .....	7.27	
03 21 16 00-0026	LF		#11, Grade 75, Beams And Girders, Epoxy Coated Steel Reinforcement Bar .....	8.70	
03 21 16 00-0027	LF		#14, Grade 75, Beams And Girders, Epoxy Coated Steel Reinforcement Bar .....	12.14	
03 21 16 00-0028	LF		#18, Grade 75, Beams And Girders, Epoxy Coated Steel Reinforcement Bar .....	20.88	

#### 03 21 16 00-0029

#### Columns, Epoxy Coated Steel Reinforcement Bar (03 21 16)

Note: ASTM A-775 Epoxy Coated Steel.

03 21 16 00-0030	LF		#3, Grade 40, Columns, Epoxy Coated Steel Reinforcement Bar .....	0.80	
03 21 16 00-0031	LF		#4, Grade 40, Columns, Epoxy Coated Steel Reinforcement Bar .....	1.38	
03 21 16 00-0032	LF		#5, Grade 40, Columns, Epoxy Coated Steel Reinforcement Bar .....	2.06	
03 21 16 00-0033	LF		#6, Grade 40, Columns, Epoxy Coated Steel Reinforcement Bar .....	2.85	
03 21 16 00-0034	LF		#3, Grade 50, Columns, Epoxy Coated Steel Reinforcement Bar .....	0.81	
03 21 16 00-0035	LF		#4, Grade 50, Columns, Epoxy Coated Steel Reinforcement Bar .....	1.40	
03 21 16 00-0036	LF		#5, Grade 50, Columns, Epoxy Coated Steel Reinforcement Bar .....	2.09	
03 21 16 00-0037	LF		#6, Grade 50, Columns, Epoxy Coated Steel Reinforcement Bar .....	2.90	
03 21 16 00-0038	LF		#3, Grade 60, Columns, Epoxy Coated Steel Reinforcement Bar .....	0.83	
03 21 16 00-0039	LF		#4, Grade 60, Columns, Epoxy Coated Steel Reinforcement Bar .....	1.44	
03 21 16 00-0040	LF		#5, Grade 60, Columns, Epoxy Coated Steel Reinforcement Bar .....	2.15	
03 21 16 00-0041	LF		#6, Grade 60, Columns, Epoxy Coated Steel Reinforcement Bar .....	2.98	

**03 Concrete**  
**03 20 Concrete Reinforcing**  
**03 21 Reinforcement Bars**



MINOR  
CSI UOM DESCRIPTION

TOTAL DIRECT DEMOLITION  
UNIT COST UNIT COST

03 21 16 00-0042	LF	#7, Grade 60, Columns, Epoxy Coated Steel Reinforcement Bar .....	3.87	
03 21 16 00-0043	LF	#8, Grade 60, Columns, Epoxy Coated Steel Reinforcement Bar .....	4.83	
03 21 16 00-0044	LF	#9, Grade 60, Columns, Epoxy Coated Steel Reinforcement Bar .....	5.95	
03 21 16 00-0045	LF	#10, Grade 60, Columns, Epoxy Coated Steel Reinforcement Bar .....	7.29	
03 21 16 00-0046	LF	#11, Grade 60, Columns, Epoxy Coated Steel Reinforcement Bar .....	8.71	
03 21 16 00-0047	LF	#14, Grade 60, Columns, Epoxy Coated Steel Reinforcement Bar .....	12.11	
03 21 16 00-0048	LF	#18, Grade 60, Columns, Epoxy Coated Steel Reinforcement Bar .....	20.75	
03 21 16 00-0049	LF	#6, Grade 75, Columns, Epoxy Coated Steel Reinforcement Bar .....	3.06	
03 21 16 00-0050	LF	#7, Grade 75, Columns, Epoxy Coated Steel Reinforcement Bar .....	3.97	
03 21 16 00-0051	LF	#8, Grade 75, Columns, Epoxy Coated Steel Reinforcement Bar .....	4.97	
03 21 16 00-0052	LF	#9, Grade 75, Columns, Epoxy Coated Steel Reinforcement Bar .....	6.13	
03 21 16 00-0053	LF	#10, Grade 75, Columns, Epoxy Coated Steel Reinforcement Bar .....	7.51	
03 21 16 00-0054	LF	#11, Grade 75, Columns, Epoxy Coated Steel Reinforcement Bar .....	8.97	
03 21 16 00-0055	LF	#14, Grade 75, Columns, Epoxy Coated Steel Reinforcement Bar .....	12.50	
03 21 16 00-0056	LF	#18, Grade 75, Columns, Epoxy Coated Steel Reinforcement Bar .....	21.44	

**03 21 16 00-0057 Footings, Epoxy Coated Steel Reinforcement Bar (03 21 16)**

Note: ASTM A-775 Epoxy Coated Steel.

03 21 16 00-0058	LF	#3, Grade 40, Footings, Epoxy Coated Steel Reinforcement Bar .....	0.71	
03 21 16 00-0059	LF	#4, Grade 40, Footings, Epoxy Coated Steel Reinforcement Bar .....	1.21	
03 21 16 00-0060	LF	#5, Grade 40, Footings, Epoxy Coated Steel Reinforcement Bar .....	1.83	
03 21 16 00-0061	LF	#6, Grade 40, Footings, Epoxy Coated Steel Reinforcement Bar .....	2.54	
03 21 16 00-0062	LF	#3, Grade 50, Footings, Epoxy Coated Steel Reinforcement Bar .....	0.72	
03 21 16 00-0063	LF	#4, Grade 50, Footings, Epoxy Coated Steel Reinforcement Bar .....	1.23	
03 21 16 00-0064	LF	#5, Grade 50, Footings, Epoxy Coated Steel Reinforcement Bar .....	1.86	
03 21 16 00-0065	LF	#6, Grade 50, Footings, Epoxy Coated Steel Reinforcement Bar .....	2.59	
03 21 16 00-0066	LF	#3, Grade 60, Footings, Epoxy Coated Steel Reinforcement Bar .....	0.74	
03 21 16 00-0067	LF	#4, Grade 60, Footings, Epoxy Coated Steel Reinforcement Bar .....	1.27	
03 21 16 00-0068	LF	#5, Grade 60, Footings, Epoxy Coated Steel Reinforcement Bar .....	1.92	
03 21 16 00-0069	LF	#6, Grade 60, Footings, Epoxy Coated Steel Reinforcement Bar .....	2.67	
03 21 16 00-0070	LF	#7, Grade 60, Footings, Epoxy Coated Steel Reinforcement Bar .....	3.49	
03 21 16 00-0071	LF	#8, Grade 60, Footings, Epoxy Coated Steel Reinforcement Bar .....	4.39	
03 21 16 00-0072	LF	#9, Grade 60, Footings, Epoxy Coated Steel Reinforcement Bar .....	5.43	
03 21 16 00-0073	LF	#10, Grade 60, Footings, Epoxy Coated Steel Reinforcement Bar .....	6.68	
03 21 16 00-0074	LF	#11, Grade 60, Footings, Epoxy Coated Steel Reinforcement Bar .....	8.03	
03 21 16 00-0075	LF	#14, Grade 60, Footings, Epoxy Coated Steel Reinforcement Bar .....	11.22	
03 21 16 00-0076	LF	#18, Grade 60, Footings, Epoxy Coated Steel Reinforcement Bar .....	19.34	
03 21 16 00-0077	LF	#6, Grade 75, Footings, Epoxy Coated Steel Reinforcement Bar .....	2.75	
03 21 16 00-0078	LF	#7, Grade 75, Footings, Epoxy Coated Steel Reinforcement Bar .....	3.59	
03 21 16 00-0079	LF	#8, Grade 75, Footings, Epoxy Coated Steel Reinforcement Bar .....	4.53	
03 21 16 00-0080	LF	#9, Grade 75, Footings, Epoxy Coated Steel Reinforcement Bar .....	5.61	
03 21 16 00-0081	LF	#10, Grade 75, Footings, Epoxy Coated Steel Reinforcement Bar .....	6.90	
03 21 16 00-0082	LF	#11, Grade 75, Footings, Epoxy Coated Steel Reinforcement Bar .....	8.29	
03 21 16 00-0083	LF	#14, Grade 75, Footings, Epoxy Coated Steel Reinforcement Bar .....	11.61	
03 21 16 00-0084	LF	#18, Grade 75, Footings, Epoxy Coated Steel Reinforcement Bar .....	20.03	

**03 21 16 00-0085 Slab On Grade, Epoxy Coated Steel Reinforcement Bar (03 21 16)**

Note: ASTM A-775 Epoxy Coated Steel.

03 21 16 00-0086	LF	#3, Grade 40, Slab On Grade, Epoxy Coated Steel Reinforcement Bar .....	0.69	
03 21 16 00-0087	LF	#4, Grade 40, Slab On Grade, Epoxy Coated Steel Reinforcement Bar .....	1.18	
03 21 16 00-0088	LF	#5, Grade 40, Slab On Grade, Epoxy Coated Steel Reinforcement Bar .....	1.78	
03 21 16 00-0089	LF	#6, Grade 40, Slab On Grade, Epoxy Coated Steel Reinforcement Bar .....	2.47	
03 21 16 00-0090	LF	#3, Grade 50, Slab On Grade, Epoxy Coated Steel Reinforcement Bar .....	0.70	
03 21 16 00-0091	LF	#4, Grade 50, Slab On Grade, Epoxy Coated Steel Reinforcement Bar .....	1.20	
03 21 16 00-0092	LF	#5, Grade 50, Slab On Grade, Epoxy Coated Steel Reinforcement Bar .....	1.81	
03 21 16 00-0093	LF	#6, Grade 50, Slab On Grade, Epoxy Coated Steel Reinforcement Bar .....	2.52	
03 21 16 00-0094	LF	#3, Grade 60, Slab On Grade, Epoxy Coated Steel Reinforcement Bar .....	0.72	
03 21 16 00-0095	LF	#4, Grade 60, Slab On Grade, Epoxy Coated Steel Reinforcement Bar .....	1.24	
03 21 16 00-0096	LF	#5, Grade 60, Slab On Grade, Epoxy Coated Steel Reinforcement Bar .....	1.87	
03 21 16 00-0097	LF	#6, Grade 60, Slab On Grade, Epoxy Coated Steel Reinforcement Bar .....	2.60	
03 21 16 00-0098	LF	#7, Grade 60, Slab On Grade, Epoxy Coated Steel Reinforcement Bar .....	3.42	
03 21 16 00-0099	LF	#8, Grade 60, Slab On Grade, Epoxy Coated Steel Reinforcement Bar .....	4.30	
03 21 16 00-0100	LF	#9, Grade 60, Slab On Grade, Epoxy Coated Steel Reinforcement Bar .....	5.32	
03 21 16 00-0101	LF	#10, Grade 60, Slab On Grade, Epoxy Coated Steel Reinforcement Bar .....	6.56	
03 21 16 00-0102	LF	#11, Grade 60, Slab On Grade, Epoxy Coated Steel Reinforcement Bar .....	7.90	
03 21 16 00-0103	LF	#14, Grade 60, Slab On Grade, Epoxy Coated Steel Reinforcement Bar .....	11.03	
03 21 16 00-0104	LF	#18, Grade 60, Slab On Grade, Epoxy Coated Steel Reinforcement Bar .....	19.07	
03 21 16 00-0105	LF	#6, Grade 75, Slab On Grade, Epoxy Coated Steel Reinforcement Bar .....	2.68	
03 21 16 00-0106	LF	#7, Grade 75, Slab On Grade, Epoxy Coated Steel Reinforcement Bar .....	3.52	
03 21 16 00-0107	LF	#8, Grade 75, Slab On Grade, Epoxy Coated Steel Reinforcement Bar .....	4.44	
03 21 16 00-0108	LF	#9, Grade 75, Slab On Grade, Epoxy Coated Steel Reinforcement Bar .....	5.50	
03 21 16 00-0109	LF	#10, Grade 75, Slab On Grade, Epoxy Coated Steel Reinforcement Bar .....	6.78	
03 21 16 00-0110	LF	#11, Grade 75, Slab On Grade, Epoxy Coated Steel Reinforcement Bar .....	8.16	
03 21 16 00-0111	LF	#14, Grade 75, Slab On Grade, Epoxy Coated Steel Reinforcement Bar .....	11.42	
03 21 16 00-0112	LF	#18, Grade 75, Slab On Grade, Epoxy Coated Steel Reinforcement Bar .....	19.76	

**03 21 16 00-0113 Elevated Slabs, Epoxy Coated Steel Reinforcement Bar (03 21 16)**

Note: ASTM A-775 Epoxy Coated Steel.



		<b>Concrete</b>	<b>03</b>	<b>CS</b>
		<b>Concrete Reinforcing</b>	<b>03 20</b>	
		<b>Reinforcement Bars</b>	<b>03 21</b>	

MINOR	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
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03 21 16 00-0114	LF	#3, Grade 40, Elevated Slabs, Epoxy Coated Steel Reinforcement Bar.....	0.65	
03 21 16 00-0115	LF	#4, Grade 40, Elevated Slabs, Epoxy Coated Steel Reinforcement Bar.....	1.11	
03 21 16 00-0116	LF	#5, Grade 40, Elevated Slabs, Epoxy Coated Steel Reinforcement Bar.....	1.69	
03 21 16 00-0117	LF	#6, Grade 40, Elevated Slabs, Epoxy Coated Steel Reinforcement Bar.....	2.34	
03 21 16 00-0118	LF	#3, Grade 50, Elevated Slabs, Epoxy Coated Steel Reinforcement Bar.....	0.66	
03 21 16 00-0119	LF	#4, Grade 50, Elevated Slabs, Epoxy Coated Steel Reinforcement Bar.....	1.13	
03 21 16 00-0120	LF	#5, Grade 50, Elevated Slabs, Epoxy Coated Steel Reinforcement Bar.....	1.72	
03 21 16 00-0121	LF	#6, Grade 50, Elevated Slabs, Epoxy Coated Steel Reinforcement Bar.....	2.39	
03 21 16 00-0122	LF	#3, Grade 60, Elevated Slabs, Epoxy Coated Steel Reinforcement Bar.....	0.68	
03 21 16 00-0123	LF	#4, Grade 60, Elevated Slabs, Epoxy Coated Steel Reinforcement Bar.....	1.17	
03 21 16 00-0124	LF	#5, Grade 60, Elevated Slabs, Epoxy Coated Steel Reinforcement Bar.....	1.78	
03 21 16 00-0125	LF	#6, Grade 60, Elevated Slabs, Epoxy Coated Steel Reinforcement Bar.....	2.47	
03 21 16 00-0126	LF	#7, Grade 60, Elevated Slabs, Epoxy Coated Steel Reinforcement Bar.....	3.27	
03 21 16 00-0127	LF	#8, Grade 60, Elevated Slabs, Epoxy Coated Steel Reinforcement Bar.....	4.11	
03 21 16 00-0128	LF	#9, Grade 60, Elevated Slabs, Epoxy Coated Steel Reinforcement Bar.....	5.12	
03 21 16 00-0129	LF	#10, Grade 60, Elevated Slabs, Epoxy Coated Steel Reinforcement Bar.....	6.32	
03 21 16 00-0130	LF	#11, Grade 60, Elevated Slabs, Epoxy Coated Steel Reinforcement Bar.....	7.62	
03 21 16 00-0131	LF	#14, Grade 60, Elevated Slabs, Epoxy Coated Steel Reinforcement Bar.....	10.68	
03 21 16 00-0132	LF	#18, Grade 60, Elevated Slabs, Epoxy Coated Steel Reinforcement Bar.....	18.51	
03 21 16 00-0133	LF	#6, Grade 75, Elevated Slabs, Epoxy Coated Steel Reinforcement Bar.....	2.55	
03 21 16 00-0134	LF	#7, Grade 75, Elevated Slabs, Epoxy Coated Steel Reinforcement Bar.....	3.37	
03 21 16 00-0135	LF	#8, Grade 75, Elevated Slabs, Epoxy Coated Steel Reinforcement Bar.....	4.25	
03 21 16 00-0136	LF	#9, Grade 75, Elevated Slabs, Epoxy Coated Steel Reinforcement Bar.....	5.30	
03 21 16 00-0137	LF	#10, Grade 75, Elevated Slabs, Epoxy Coated Steel Reinforcement Bar.....	6.54	
03 21 16 00-0138	LF	#11, Grade 75, Elevated Slabs, Epoxy Coated Steel Reinforcement Bar.....	7.88	
03 21 16 00-0139	LF	#14, Grade 75, Elevated Slabs, Epoxy Coated Steel Reinforcement Bar.....	11.07	
03 21 16 00-0140	LF	#18, Grade 75, Elevated Slabs, Epoxy Coated Steel Reinforcement Bar.....	19.20	

#### 03 21 16 00-0141 Walls, Epoxy Coated Steel Reinforcement Bar (03 21 16)

Note: ASTM A-775 Epoxy Coated Steel.

03 21 16 00-0142	LF	#3, Grade 40, Walls, Epoxy Coated Steel Reinforcement Bar.....	0.63	
03 21 16 00-0143	LF	#4, Grade 40, Walls, Epoxy Coated Steel Reinforcement Bar.....	1.08	
03 21 16 00-0144	LF	#5, Grade 40, Walls, Epoxy Coated Steel Reinforcement Bar.....	1.64	
03 21 16 00-0145	LF	#6, Grade 40, Walls, Epoxy Coated Steel Reinforcement Bar.....	2.28	
03 21 16 00-0146	LF	#3, Grade 50, Walls, Epoxy Coated Steel Reinforcement Bar.....	0.64	
03 21 16 00-0147	LF	#4, Grade 50, Walls, Epoxy Coated Steel Reinforcement Bar.....	1.10	
03 21 16 00-0148	LF	#5, Grade 50, Walls, Epoxy Coated Steel Reinforcement Bar.....	1.67	
03 21 16 00-0149	LF	#6, Grade 50, Walls, Epoxy Coated Steel Reinforcement Bar.....	2.33	
03 21 16 00-0150	LF	#3, Grade 60, Walls, Epoxy Coated Steel Reinforcement Bar.....	0.66	
03 21 16 00-0151	LF	#4, Grade 60, Walls, Epoxy Coated Steel Reinforcement Bar.....	1.14	
03 21 16 00-0152	LF	#5, Grade 60, Walls, Epoxy Coated Steel Reinforcement Bar.....	1.73	
03 21 16 00-0153	LF	#6, Grade 60, Walls, Epoxy Coated Steel Reinforcement Bar.....	2.41	
03 21 16 00-0154	LF	#7, Grade 60, Walls, Epoxy Coated Steel Reinforcement Bar.....	3.18	
03 21 16 00-0155	LF	#8, Grade 60, Walls, Epoxy Coated Steel Reinforcement Bar.....	4.03	
03 21 16 00-0156	LF	#9, Grade 60, Walls, Epoxy Coated Steel Reinforcement Bar.....	5.02	
03 21 16 00-0157	LF	#10, Grade 60, Walls, Epoxy Coated Steel Reinforcement Bar.....	6.20	
03 21 16 00-0158	LF	#11, Grade 60, Walls, Epoxy Coated Steel Reinforcement Bar.....	7.49	
03 21 16 00-0159	LF	#14, Grade 60, Walls, Epoxy Coated Steel Reinforcement Bar.....	10.51	
03 21 16 00-0160	LF	#18, Grade 60, Walls, Epoxy Coated Steel Reinforcement Bar.....	18.23	
03 21 16 00-0161	LF	#6, Grade 75, Walls, Epoxy Coated Steel Reinforcement Bar.....	2.49	
03 21 16 00-0162	LF	#7, Grade 75, Walls, Epoxy Coated Steel Reinforcement Bar.....	3.28	
03 21 16 00-0163	LF	#8, Grade 75, Walls, Epoxy Coated Steel Reinforcement Bar.....	4.17	
03 21 16 00-0164	LF	#9, Grade 75, Walls, Epoxy Coated Steel Reinforcement Bar.....	5.20	
03 21 16 00-0165	LF	#10, Grade 75, Walls, Epoxy Coated Steel Reinforcement Bar.....	6.42	
03 21 16 00-0166	LF	#11, Grade 75, Walls, Epoxy Coated Steel Reinforcement Bar.....	7.75	
03 21 16 00-0167	LF	#14, Grade 75, Walls, Epoxy Coated Steel Reinforcement Bar.....	10.90	
03 21 16 00-0168	LF	#18, Grade 75, Walls, Epoxy Coated Steel Reinforcement Bar.....	18.92	

#### 03 21 16 00-0169 Epoxy Coated Deformed Straight Dowels (03 21 16)

Note: Excludes drilling. See CSI section 02 41 19 13-0211 for drilling in concrete.

03 21 16 00-0170	EA	3/8" Diameter x 24" Long, Epoxy Coated Deformed Straight Dowel.....	4.97	
		For Up To 12" Length, Deduct	-0.50	
		For >12" To <24" Length, Deduct	-0.25	
03 21 16 00-0171	EA	1/2" Diameter x 24" Long, Epoxy Coated Deformed Straight Dowel.....	5.86	
		For Up To 12" Length, Deduct	-0.76	
		For >12" To <24" Length, Deduct	-0.38	
03 21 16 00-0172	EA	5/8" Diameter x 24" Long, Epoxy Coated Deformed Straight Dowel.....	7.26	
		For Up To 12" Length, Deduct	-1.13	
		For >12" To <24" Length, Deduct	-0.56	
03 21 16 00-0173	EA	3/4" Diameter x 24" Long, Epoxy Coated Deformed Straight Dowel.....	9.03	
		For Up To 12" Length, Deduct	-1.50	
		For >12" To <24" Length, Deduct	-0.75	
03 21 16 00-0174	EA	7/8" Diameter x 24" Long, Epoxy Coated Deformed Straight Dowel.....	10.88	
		For Up To 12" Length, Deduct	-2.04	
		For >12" To <24" Length, Deduct	-1.02	
03 21 16 00-0175	EA	1" Diameter x 24" Long, Epoxy Coated Deformed Straight Dowel.....	12.65	
		For Up To 12" Length, Deduct	-2.52	
		For >12" To <24" Length, Deduct	-1.26	

**03 Concrete**  
**03 20 Concrete Reinforcing**  
**03 21 Reinforcement Bars**



MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
03 21 16 00-0176 EA 1-1/8" Diameter x 24" Long, Epoxy Coated Deformed Straight Dowel.....	14.94	
For Up To 12" Length, Deduct	-3.04	
For >12" To <24" Length, Deduct	-1.52	
03 21 16 00-0177 EA 1-1/4" Diameter x 24" Long, Epoxy Coated Deformed Straight Dowel.....	17.99	
For Up To 12" Length, Deduct	-3.69	
For >12" To <24" Length, Deduct	-1.84	

**03 22 Fabric and Grid Reinforcing** (03 20)

**03 22 11 Plain Steel Welded Wire Fabric Reinforcing** (03 22)

Note: Includes cutting, tie wire, tying, overlap, bar chairs and all non-mechanical splicing.

**03 22 11 00-0001 Plain Welded Wire Fabric Reinforcing Placed In Floors Or Slabs** (03 22 11)

Note: Includes bar chairs. Under 5 tons. ASTM A-185

03 22 11 00-0002 SF 6" x 6" x #10, 21 LB/CSF, Plain Welded Wire Fabric Reinforcing Placed In Floors Or Slabs (W1.4 x W1.4) .....	0.98	
For >5 Ton, Deduct	-0.14	
03 22 11 00-0003 SF 6" x 6" x #8, 30 LB/CSF, Plain Welded Wire Fabric Reinforcing Placed In Floors Or Slabs (W2.1 x W2.1) .....	1.13	
For >5 Ton, Deduct	-0.16	
03 22 11 00-0004 SF 6" x 6" x #6, 42 LB/CSF, Plain Welded Wire Fabric Reinforcing Placed In Floors Or Slabs (W2.9 x W2.9) .....	1.32	
For >5 Ton, Deduct	-0.18	
03 22 11 00-0005 SF 6" x 6" x #4, 58 LB/CSF, Plain Welded Wire Fabric Reinforcing Placed In Floors Or Slabs (W4.0 x W4.0) .....	1.62	
For >5 Ton, Deduct	-0.22	
03 22 11 00-0006 SF 4" x 4" x #10, 31 LB/CSF, Plain Welded Wire Fabric Reinforcing Placed In Floors Or Slabs (W1.4 x W1.4) .....	1.20	
For >5 Ton, Deduct	-0.17	
03 22 11 00-0007 SF 4" x 4" x #8, 44 LB/CSF, Plain Welded Wire Fabric Reinforcing Placed In Floors Or Slabs (W2.1 x W2.1) .....	1.39	
For >5 Ton, Deduct	-0.19	
03 22 11 00-0008 SF 4" x 4" x #6, 62 LB/CSF, Plain Welded Wire Fabric Reinforcing Placed In Floors Or Slabs (W2.9 x W2.9) .....	1.85	
For >5 Ton, Deduct	-0.24	
03 22 11 00-0009 SF 4" x 4" x #4, 85 LB/CSF, Plain Welded Wire Fabric Reinforcing Placed In Floors Or Slabs (W4.0 x W4.0) .....	2.19	
For >5 Ton, Deduct	-0.28	
03 22 11 00-0010 SF 2" x 2" x #12, 37 LB/CSF, Plain Welded Wire Fabric Reinforcing Placed In Floors Or Slabs (W0.9 x W0.9) .....	2.12	
For >5 Ton, Deduct	-0.26	

**03 22 13 Galvanized Welded Wire Fabric Reinforcing** (03 22)

**03 22 13 00-0001 Galvanized Welded Wire Fabric Reinforcing Placed In Floors Or Slabs** (03 22 13)

Note: Includes bar chairs. Under 5 tons.

03 22 13 00-0002 SF 6" x 6" x #10, 21 LB/CSF, Galvanized Welded Wire Fabric Reinforcing Placed In Floors Or Slabs (W1.4 x W1.4) .....	1.14	
For >5 Ton, Deduct	-0.16	
03 22 13 00-0003 SF 6" x 6" x #8, 29 LB/CSF, Galvanized Welded Wire Fabric Reinforcing Placed In Floors Or Slabs (W2.1 x W2.1) .....	1.31	
For >5 Ton, Deduct	-0.18	
03 22 13 00-0004 SF 6" x 6" x #6, 42 LB/CSF, Galvanized Welded Wire Fabric Reinforcing Placed In Floors Or Slabs (W2.9 x W2.9) .....	1.57	
For >5 Ton, Deduct	-0.21	
03 22 13 00-0005 SF 6" x 6" x #4, 58 LB/CSF, Galvanized Welded Wire Fabric Reinforcing Placed In Floors Or Slabs (W4.0 x W4.0) .....	1.96	
For >5 Ton, Deduct	-0.25	
03 22 13 00-0006 SF 4" x 4" x #10, 31 LB/CSF, Galvanized Welded Wire Fabric Reinforcing Placed In Floors Or Slabs (W1.4 x W1.4) .....	1.42	
For >5 Ton, Deduct	-0.19	
03 22 13 00-0007 SF 4" x 4" x #8, 43 LB/CSF, Galvanized Welded Wire Fabric Reinforcing Placed In Floors Or Slabs (W2.1 x W2.1) .....	1.66	
For >5 Ton, Deduct	-0.22	
03 22 13 00-0008 SF 4" x 4" x #6, 62 LB/CSF, Galvanized Welded Wire Fabric Reinforcing Placed In Floors Or Slabs (W2.9 x W2.9) .....	2.29	
For >5 Ton, Deduct	-0.28	
03 22 13 00-0009 SF 4" x 4" x #4, 85 LB/CSF, Galvanized Welded Wire Fabric Reinforcing Placed In Floors Or Slabs (W4.0 x W4.0) .....	2.74	
For >5 Ton, Deduct	-0.33	

**03 22 13 00-0010 Galvanized Welded Wire Reinforcement Wrap Placed In Beams And Columns** (03 22 13)

Note: Includes bar chairs. Under 5 tons.

03 22 13 00-0011 SF 2" x 2" x #14, 21 LB/CSF, Galvanized Welded Wire Fabric Reinforcing Wrap Placed In Beams And Columns (W0.5 x W0.5) .....	3.66	
For >5 Ton, Deduct	-0.54	

**03 22 16 Epoxy-Coated Welded Wire Fabric Reinforcing** (03 22)

**03 22 16 00-0001 Epoxy Coated Welded Wire Fabric Reinforcing Placed In Floors Or Slabs** (03 22 16)

Note: Includes bar chairs. Under 5 tons.

03 22 16 00-0002 SF 6" x 6" x #10, 21 LB/CSF, Epoxy Coated Welded Wire Fabric Reinforcing Placed In Floors Or Slabs (W1.4 x W1.4) .....	1.12	
For >5 Ton, Deduct	-0.15	
03 22 16 00-0003 SF 6" x 6" x #8, 29 LB/CSF, Epoxy Coated Welded Wire Fabric Reinforcing Placed In Floors Or Slabs (W2.1 x W2.1) .....	1.29	
For >5 Ton, Deduct	-0.18	
03 22 16 00-0004 SF 6" x 6" x #6, 42 LB/CSF, Epoxy Coated Welded Wire Fabric Reinforcing Placed In Floors Or Slabs (W2.9 x W2.9) .....	1.54	
For >5 Ton, Deduct	-0.20	
03 22 16 00-0005 SF 6" x 6" x #4, 58 LB/CSF, Epoxy Coated Welded Wire Fabric Reinforcing Placed In Floors Or Slabs (W4.0 x W4.0) .....	1.92	
For >5 Ton, Deduct	-0.25	
03 22 16 00-0006 SF 4" x 4" x #10, 31 LB/CSF, Epoxy Coated Welded Wire Fabric Reinforcing Placed In Floors Or Slabs (W1.4 x W1.4) .....	1.39	
For >5 Ton, Deduct	-0.19	
03 22 16 00-0007 SF 4" x 4" x #8, 43 LB/CSF, Epoxy Coated Welded Wire Fabric Reinforcing Placed In Floors Or Slabs (W2.1 x W2.1) .....	1.63	
For >5 Ton, Deduct	-0.21	





	<b>Concrete</b>	<b>03</b>	
	<b>Concrete Reinforcing</b>	<b>03 20</b>	
	<b>Fabric and Grid Reinforcing</b>	<b>03 22</b>	

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MINOR	CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
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03 22 16 00-0008	SF	4" x 4" x #6, 62 LB/CSF, Epoxy Coated Welded Wire Fabric Reinforcing Placed In Floors Or Slabs (W2.9 x W2.9).....	2.24		
		For >5 Ton, Deduct		-0.28	
03 22 16 00-0009	SF	4" x 4" x #4, 85 LB/CSF, Epoxy Coated Welded Wire Fabric Reinforcing Placed In Floors Or Slabs (W4.0 x W4.0).....	2.67		
		For >5 Ton, Deduct		-0.32	

### 03 30 Cast-In-Place Concrete<sup>(03)</sup>

See CSI section 01 74 19 00-0015 for hauling over 15 miles.

### 03 31 Structural Concrete<sup>(03 30)</sup>

#### 03 31 13 Heavyweight Structural Concrete<sup>(03 31)</sup>

Note: Includes delivery, fuel charge and placement of material. See CSI section 02 41 00 00-0000 for demolition, 03 11 00 00-0000 for forming, 03 20 00 00-0000 for reinforcing, 03 31 13 00-0029 for small concrete purchases (short load), 03 39 00 00-0000 for curing.

##### 03 31 13 00-0001 Concrete Slab Assemblies<sup>(03 31 13)</sup>

##### 03 31 13 00-0002 3,000 PSI Slab On Grade Concrete Slabs Assemblies<sup>(03 31 13 00-0001)</sup>

Note: Includes forms, welded wire reinforcement (where necessary), #3 to #6 reinforcing rods at 12" on center each way with chairs (where necessary), vapor barrier, concrete, curing, latex or hot asphalt expansion joints, control joints, screed, float, and finish for pedestrian slabs. Excludes excavation, base, earthwork, and expansion joints along existing slab.

03 31 13 00-0003	SF	4" 3,000 PSI Slab On Grade Concrete Slabs Assembly .....	10.27		
		For 2,000 PSI Concrete, Deduct		-0.36	
		For 2,500 PSI Concrete, Deduct		-0.18	
		For 3,500 PSI Concrete, Add		0.13	
		For 4,000 PSI Concrete, Add		0.42	
		For Reinforcing Rods Are At 18" On Center, Deduct		-0.13	
		For Reinforcing Rods Are At 24" On Center, Deduct		-0.40	
		For Up To 500, Add		3.49	
		For >500 To 1,000, Add		2.44	
		For >1,000 To 2,000, Add		1.39	
		For >2,000 To 5,000, Add		0.69	
		For >10,000 To 20,000, Deduct		-0.33	
		For >20,000 To 35,000, Deduct		-0.59	
		For >35,000 To 50,000, Deduct		-0.85	
		For >50,000 To 70,000, Deduct		-1.10	
		For >70,000, Deduct		-1.36	
03 31 13 00-0004	SF	5" 3,000 PSI Slab On Grade Concrete Slabs Assembly .....	11.35		
		For 2,000 PSI Concrete, Deduct		-0.41	
		For 2,500 PSI Concrete, Deduct		-0.20	
		For 3,500 PSI Concrete, Add		0.14	
		For 4,000 PSI Concrete, Add		0.48	
		For Reinforcing Rods Are At 18" On Center, Deduct		-0.13	
		For Reinforcing Rods Are At 24" On Center, Deduct		-0.40	
		For Up To 500, Add		3.78	
		For >500 To 1,000, Add		2.65	
		For >1,000 To 2,000, Add		1.51	
		For >2,000 To 5,000, Add		0.76	
		For >10,000 To 20,000, Deduct		-0.38	
		For >20,000 To 35,000, Deduct		-0.66	
		For >35,000 To 50,000, Deduct		-0.95	
		For >50,000 To 70,000, Deduct		-1.23	
		For >70,000, Deduct		-1.51	
03 31 13 00-0005	SF	6" 3,000 PSI Slab On Grade Concrete Slabs Assembly .....	12.89		
		For 2,000 PSI Concrete, Deduct		-0.48	
		For 2,500 PSI Concrete, Deduct		-0.24	
		For 3,500 PSI Concrete, Add		0.17	
		For 4,000 PSI Concrete, Add		0.56	
		For Reinforcing Rods Are At 18" On Center, Deduct		-0.13	
		For Reinforcing Rods Are At 24" On Center, Deduct		-0.40	
		For Up To 500, Add		4.19	
		For >500 To 1,000, Add		2.94	
		For >1,000 To 2,000, Add		1.69	
		For >2,000 To 5,000, Add		0.85	
		For >10,000 To 20,000, Deduct		-0.44	
		For >20,000 To 35,000, Deduct		-0.77	
		For >35,000 To 50,000, Deduct		-1.09	
		For >50,000 To 70,000, Deduct		-1.41	
		For >70,000, Deduct		-1.73	
03 31 13 00-0006	SF	7" 3,000 PSI Slab On Grade Concrete Slabs Assembly .....	14.39		
		For 2,000 PSI Concrete, Deduct		-0.55	
		For 2,500 PSI Concrete, Deduct		-0.28	
		For 3,500 PSI Concrete, Add		0.19	
		For 4,000 PSI Concrete, Add		0.64	
		For Reinforcing Rods Are At 18" On Center, Deduct		-0.13	
		For Reinforcing Rods Are At 24" On Center, Deduct		-0.40	
		For Up To 500, Add		4.55	
		For >500 To 1,000, Add		3.21	
		For >1,000 To 2,000, Add		1.86	
		For >2,000 To 5,000, Add		0.93	
		For >10,000 To 20,000, Deduct		-0.51	
		For >20,000 To 35,000, Deduct		-0.87	
		For >35,000 To 50,000, Deduct		-1.23	
		For >50,000 To 70,000, Deduct		-1.59	
		For >70,000, Deduct		-1.95	

**03 Concrete****03 30 Cast-In-Place Concrete****03 31 Structural Concrete**

MINOR	CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
03 31 13 00-0007	SF		8" 3,000 PSI Slab On Grade Concrete Slabs Assembly .....	15.64	
			For 2,000 PSI Concrete, Deduct	-0.61	
			For 2,500 PSI Concrete, Deduct	-0.30	
			For 3,500 PSI Concrete, Add	0.21	
			For 4,000 PSI Concrete, Add	0.71	
			For Reinforcing Rods Are At 18" On Center, Deduct	-0.13	
			For Reinforcing Rods Are At 24" On Center, Deduct	-0.40	
			For Up To 500, Add	4.87	
			For >500 To 1,000, Add	3.43	
			For >1,000 To 2,000, Add	2.00	
			For >2,000 To 5,000, Add	1.00	
			For >10,000 To 20,000, Deduct	-0.56	
			For >20,000 To 35,000, Deduct	-0.96	
			For >35,000 To 50,000, Deduct	-1.35	
			For >50,000 To 70,000, Deduct	-1.74	
			For >70,000, Deduct	-2.13	
03 31 13 00-0008	SF		10" 3,000 PSI Slab On Grade Concrete Slabs Assembly .....	18.95	
			For 2,000 PSI Concrete, Deduct	-0.77	
			For 2,500 PSI Concrete, Deduct	-0.39	
			For 3,500 PSI Concrete, Add	0.27	
			For 4,000 PSI Concrete, Add	0.90	
			For Reinforcing Rods Are At 18" On Center, Deduct	-0.13	
			For Reinforcing Rods Are At 24" On Center, Deduct	-0.40	
			For Up To 500, Add	5.67	
			For >500 To 1,000, Add	4.02	
			For >1,000 To 2,000, Add	2.36	
			For >2,000 To 5,000, Add	1.18	
			For >10,000 To 20,000, Deduct	-0.71	
			For >20,000 To 35,000, Deduct	-1.19	
			For >35,000 To 50,000, Deduct	-1.66	
			For >50,000 To 70,000, Deduct	-2.13	
			For >70,000, Deduct	-2.61	
03 31 13 00-0009	SF		12" 3,000 PSI Slab On Grade Concrete Slabs Assembly .....	21.45	
			For 2,000 PSI Concrete, Deduct	-0.89	
			For 2,500 PSI Concrete, Deduct	-0.44	
			For 3,500 PSI Concrete, Add	0.31	
			For 4,000 PSI Concrete, Add	1.04	
			For Reinforcing Rods Are At 18" On Center, Deduct	-0.13	
			For Reinforcing Rods Are At 24" On Center, Deduct	-0.40	
			For Up To 500, Add	6.30	
			For >500 To 1,000, Add	4.47	
			For >1,000 To 2,000, Add	2.65	
			For >2,000 To 5,000, Add	1.32	
			For >10,000 To 20,000, Deduct	-0.82	
			For >20,000 To 35,000, Deduct	-1.36	
			For >35,000 To 50,000, Deduct	-1.89	
			For >50,000 To 70,000, Deduct	-2.43	
			For >70,000, Deduct	-2.97	
03 31 13 00-0010			<b>Concrete Delivery And Placement</b> (03 31 13) Note: Includes cleaning out equipment and standard concrete placement tests. See CSI section 01 45 23 00-0000 for additional tests.		
03 31 13 00-0011			<b>Place Concrete By Method Indicated</b> (03 31 13 00-0010) Note: Tasks for concrete placement "By Concrete Pump" exclude the pumping equipment. See CSI section 03 37 16 00-0001 for concrete pumping equipment.		
03 31 13 00-0012			<b>Place Concrete Pile Caps</b> (03 31 13 00-0011)		
03 31 13 00-0013	CY		Direct Chute, Place 3,000 PSI Concrete Pile Caps.....	327.36	
			For 2,000 PSI Concrete, Deduct	-14.85	
			For 2,500 PSI Concrete, Deduct	-7.42	
			For 3,500 PSI Concrete, Add	13.75	
			For 3,750 PSI Concrete, Add	18.70	
			For 4,000 PSI Concrete, Add	23.65	
			For 4,500 PSI Concrete, Add	27.50	
			For 5,000 PSI Concrete, Add	31.35	
			For 6,000 PSI Concrete, Add	74.25	
			For 7,500 PSI Concrete, Add	184.38	
			For White Cement Concrete, Add	33.00	
			For High Sulfate Resistance, Type 5 Cement Concrete ASTM C150, Add	35.75	
			For High Early Strength, Type 3 ASTM C150, Add	27.50	
			For Lightweight Aggregate, ASTM C330, Add	82.50	
			For Up To 20, Add	20.95	
			For >20 To 50, Add	7.86	
			For >100 To 200, Deduct	-6.55	
			For >200 To 400, Deduct	-13.09	
			For >400, Deduct	-19.64	



	<b>Concrete</b>	<b>03</b>	
	<b>Cast-In-Place Concrete</b>	<b>03 30</b>	
	<b>Structural Concrete</b>	<b>03 31</b>	

MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
03 31 13 00-0014 CY Concrete Pump, Place 3,000 PSI Concrete Pile Caps ..... Note: Excludes pumping equipment.	347.79	
For 2,000 PSI Concrete, Deduct	-16.09	
For 2,500 PSI Concrete, Deduct	-8.04	
For 3,500 PSI Concrete, Add	14.90	
For 3,750 PSI Concrete, Add	20.26	
For 4,000 PSI Concrete, Add	25.62	
For 4,500 PSI Concrete, Add	29.79	
For 5,000 PSI Concrete, Add	33.96	
For 6,000 PSI Concrete, Add	80.44	
For 7,500 PSI Concrete, Add	199.75	
For White Cement Concrete, Add	35.75	
For High Sulfate Resistance, Type 5 Cement Concrete ASTM C150, Add	38.73	
For High Early Strength, Type 3 ASTM C150, Add	29.79	
For Lightweight Aggregate, ASTM C330, Add	89.37	
For Up To 20, Add	19.95	
For >20 To 50, Add	7.48	
For >100 To 200, Deduct	-6.96	
For >200 To 400, Deduct	-13.91	
For >400, Deduct	-20.87	
<b>03 31 13 00-0015 Place Concrete Continuous Footings (03 31 13 00-0011)</b>		
03 31 13 00-0016 CY Direct Chute, Place 3,000 PSI Concrete Continuous Footings.....	321.54	
For 2,000 PSI Concrete, Deduct	-14.85	
For 2,500 PSI Concrete, Deduct	-7.42	
For 3,500 PSI Concrete, Add	13.75	
For 3,750 PSI Concrete, Add	18.70	
For 4,000 PSI Concrete, Add	23.65	
For 4,500 PSI Concrete, Add	27.50	
For 5,000 PSI Concrete, Add	31.35	
For 6,000 PSI Concrete, Add	74.25	
For 7,500 PSI Concrete, Add	184.38	
For White Cement Concrete, Add	33.00	
For High Sulfate Resistance, Type 5 Cement Concrete ASTM C150, Add	35.75	
For High Early Strength, Type 3 ASTM C150, Add	27.50	
For Lightweight Aggregate, ASTM C330, Add	82.50	
For Up To 20, Add	18.62	
For >20 To 50, Add	6.98	
For >100 To 200, Deduct	-6.43	
For >200 To 400, Deduct	-12.86	
For >400, Deduct	-19.29	
03 31 13 00-0017 CY Concrete Pump, Place 3,000 PSI Concrete Continuous Footings..... Note: Excludes pumping equipment.	342.25	
For 2,000 PSI Concrete, Deduct	-16.09	
For 2,500 PSI Concrete, Deduct	-8.04	
For 3,500 PSI Concrete, Add	14.90	
For 3,750 PSI Concrete, Add	20.26	
For 4,000 PSI Concrete, Add	25.62	
For 4,500 PSI Concrete, Add	29.79	
For 5,000 PSI Concrete, Add	33.96	
For 6,000 PSI Concrete, Add	80.44	
For 7,500 PSI Concrete, Add	199.75	
For White Cement Concrete, Add	35.75	
For High Sulfate Resistance, Type 5 Cement Concrete ASTM C150, Add	38.73	
For High Early Strength, Type 3 ASTM C150, Add	29.79	
For Lightweight Aggregate, ASTM C330, Add	89.37	
For Up To 20, Add	17.74	
For >20 To 50, Add	6.65	
For >100 To 200, Deduct	-6.85	
For >200 To 400, Deduct	-13.69	
For >400, Deduct	-20.54	
<b>03 31 13 00-0018 Place Concrete Spread Footings (03 31 13 00-0011)</b>		
03 31 13 00-0019 CY Direct Chute, Place 3,000 PSI Concrete Spread Footings .....	353.55	
For 2,000 PSI Concrete, Deduct	-14.85	
For 2,500 PSI Concrete, Deduct	-7.42	
For 3,500 PSI Concrete, Add	13.75	
For 3,750 PSI Concrete, Add	18.70	
For 4,000 PSI Concrete, Add	23.65	
For 4,500 PSI Concrete, Add	27.50	
For 5,000 PSI Concrete, Add	31.35	
For 6,000 PSI Concrete, Add	74.25	
For 7,500 PSI Concrete, Add	184.38	
For White Cement Concrete, Add	33.00	
For High Sulfate Resistance, Type 5 Cement Concrete ASTM C150, Add	35.75	
For High Early Strength, Type 3 ASTM C150, Add	27.50	
For Lightweight Aggregate, ASTM C330, Add	82.50	
For Up To 20, Add	31.42	
For >20 To 50, Add	11.78	
For >100 To 200, Deduct	-7.07	
For >200 To 400, Deduct	-14.14	
For >400, Deduct	-21.21	

**03 Concrete****03 30 Cast-In-Place Concrete****03 31 Structural Concrete**

MINOR	CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
03 31 13 00-0020	CY		Concrete Pump, Place 3,000 PSI Concrete Spread Footings.....	372.73	
			Note: Excludes pumping equipment.		
			For 2,000 PSI Concrete, Deduct	-16.09	
			For 2,500 PSI Concrete, Deduct	-8.04	
			For 3,500 PSI Concrete, Add	14.90	
			For 3,750 PSI Concrete, Add	20.26	
			For 4,000 PSI Concrete, Add	25.62	
			For 4,500 PSI Concrete, Add	29.79	
			For 5,000 PSI Concrete, Add	33.96	
			For 6,000 PSI Concrete, Add	80.44	
			For 7,500 PSI Concrete, Add	199.75	
			For White Cement Concrete, Add	35.75	
			For High Sulfate Resistance, Type 5 Cement Concrete ASTM C150, Add	38.73	
			For High Early Strength, Type 3 ASTM C150, Add	29.79	
			For Lightweight Aggregate, ASTM C330, Add	89.37	
			For Up To 20, Add	29.93	
			For >20 To 50, Add	11.22	
			For >100 To 200, Deduct	-7.45	
			For >200 To 400, Deduct	-14.91	
			For >400, Deduct	-22.36	
03 31 13 00-0021			<b>Place Concrete Grade Beams</b> (03 31 13 00-0011)		
03 31 13 00-0022	CY		Direct Chute, Place 3000 PSI Concrete Grade Beam.....	312.23	
			For 2,000 PSI Concrete, Deduct	-14.85	
			For 2,500 PSI Concrete, Deduct	-7.42	
			For 3,500 PSI Concrete, Add	13.75	
			For 3,750 PSI Concrete, Add	18.70	
			For 4,000 PSI Concrete, Add	23.65	
			For 4,500 PSI Concrete, Add	27.50	
			For 5,000 PSI Concrete, Add	31.35	
			For 6,000 PSI Concrete, Add	74.25	
			For 7,500 PSI Concrete, Add	184.38	
			For White Cement Concrete, Add	33.00	
			For High Sulfate Resistance, Type 5 Cement Concrete ASTM C150, Add	35.75	
			For High Early Strength, Type 3 ASTM C150, Add	27.50	
			For Lightweight Aggregate, ASTM C330, Add	82.50	
			For Up To 20, Add	14.90	
			For >20 To 50, Add	5.59	
			For >100 To 200, Deduct	-6.24	
			For >200 To 400, Deduct	-12.49	
			For >400, Deduct	-18.73	
03 31 13 00-0023	CY		Concrete Pump, Place 3000 PSI Concrete Grade Beam.....	333.38	
			Note: Excludes pumping equipment.		
			For 2,000 PSI Concrete, Deduct	-16.09	
			For 2,500 PSI Concrete, Deduct	-8.04	
			For 3,500 PSI Concrete, Add	14.90	
			For 3,750 PSI Concrete, Add	20.26	
			For 4,000 PSI Concrete, Add	25.62	
			For 4,500 PSI Concrete, Add	29.79	
			For 5,000 PSI Concrete, Add	33.96	
			For 6,000 PSI Concrete, Add	80.44	
			For 7,500 PSI Concrete, Add	199.75	
			For White Cement Concrete, Add	35.75	
			For High Sulfate Resistance, Type 5 Cement Concrete ASTM C150, Add	38.73	
			For High Early Strength, Type 3 ASTM C150, Add	29.79	
			For Lightweight Aggregate, ASTM C330, Add	89.37	
			For Up To 20, Add	14.19	
			For >20 To 50, Add	5.32	
			For >100 To 200, Deduct	-6.67	
			For >200 To 400, Deduct	-13.34	
			For >400, Deduct	-20.00	
03 31 13 00-0024			<b>Place Concrete Slab On Grade</b> (03 31 13 00-0011)		
03 31 13 00-0025	CY		Up To 6", Direct Chute, Place 3000 PSI Concrete Slab On Grade.....	313.11	
			For 2,000 PSI Concrete, Deduct	-14.85	
			For 2,500 PSI Concrete, Deduct	-7.42	
			For 3,500 PSI Concrete, Add	13.75	
			For 3,750 PSI Concrete, Add	18.70	
			For 4,000 PSI Concrete, Add	23.65	
			For 4,500 PSI Concrete, Add	27.50	
			For 5,000 PSI Concrete, Add	31.35	
			For 6,000 PSI Concrete, Add	74.25	
			For 7,500 PSI Concrete, Add	184.38	
			For White Cement Concrete, Add	33.00	
			For High Sulfate Resistance, Type 5 Cement Concrete ASTM C150, Add	35.75	
			For High Early Strength, Type 3 ASTM C150, Add	27.50	
			For Lightweight Aggregate, ASTM C330, Add	82.50	
			For Up To 20, Add	15.25	
			For >20 To 50, Add	5.72	
			For >100 To 200, Deduct	-6.26	
			For >200 To 400, Deduct	-12.52	
			For >400, Deduct	-18.79	



	<b>Concrete</b>	<b>03</b>	
	<b>Cast-In-Place Concrete</b>	<b>03 30</b>	
	<b>Structural Concrete</b>	<b>03 31</b>	

MINOR	CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
03 31	13 00-0026	CY	>6", Direct Chute, Place 3000 PSI Concrete Slab On Grade.....	303.91	
			For 2,000 PSI Concrete, Deduct	-14.85	
			For 2,500 PSI Concrete, Deduct	-7.42	
			For 3,500 PSI Concrete, Add	13.75	
			For 3,750 PSI Concrete, Add	18.70	
			For 4,000 PSI Concrete, Add	23.65	
			For 4,500 PSI Concrete, Add	27.50	
			For 5,000 PSI Concrete, Add	31.35	
			For 6,000 PSI Concrete, Add	74.25	
			For 7,500 PSI Concrete, Add	184.38	
			For White Cement Concrete, Add	33.00	
			For High Sulfate Resistance, Type 5 Cement Concrete ASTM C150, Add	35.75	
			For High Early Strength, Type 3 ASTM C150, Add	27.50	
			For Lightweight Aggregate, ASTM C330, Add	82.50	
			For Up To 20, Add	11.57	
			For >20 To 50, Add	4.34	
			For >100 To 200, Deduct	-6.08	
			For >200 To 400, Deduct	-12.16	
			For >400, Deduct	-18.23	
03 31	13 00-0027	CY	Up To 6", Concrete Pump, Place 3000 PSI Concrete Slab On Grade.....	329.68	
			Note: Excludes pumping equipment.		
			For 2,000 PSI Concrete, Deduct	-16.09	
			For 2,500 PSI Concrete, Deduct	-8.04	
			For 3,500 PSI Concrete, Add	14.90	
			For 3,750 PSI Concrete, Add	20.26	
			For 4,000 PSI Concrete, Add	25.62	
			For 4,500 PSI Concrete, Add	29.79	
			For 5,000 PSI Concrete, Add	33.96	
			For 6,000 PSI Concrete, Add	80.44	
			For 7,500 PSI Concrete, Add	199.75	
			For White Cement Concrete, Add	35.75	
			For High Sulfate Resistance, Type 5 Cement Concrete ASTM C150, Add	38.73	
			For High Early Strength, Type 3 ASTM C150, Add	29.79	
			For Lightweight Aggregate, ASTM C330, Add	89.37	
			For Up To 20, Add	12.71	
			For >20 To 50, Add	4.77	
			For >100 To 200, Deduct	-6.59	
			For >200 To 400, Deduct	-13.19	
			For >400, Deduct	-19.78	
03 31	13 00-0028	CY	>6", Concrete Pump, Place 3000 PSI Concrete Slab On Grade.....	322.01	
			Note: Excludes pumping equipment.		
			For 2,000 PSI Concrete, Deduct	-16.09	
			For 2,500 PSI Concrete, Deduct	-8.04	
			For 3,500 PSI Concrete, Add	14.90	
			For 3,750 PSI Concrete, Add	20.26	
			For 4,000 PSI Concrete, Add	25.62	
			For 4,500 PSI Concrete, Add	29.79	
			For 5,000 PSI Concrete, Add	33.96	
			For 6,000 PSI Concrete, Add	80.44	
			For 7,500 PSI Concrete, Add	199.75	
			For White Cement Concrete, Add	35.75	
			For High Sulfate Resistance, Type 5 Cement Concrete ASTM C150, Add	38.73	
			For High Early Strength, Type 3 ASTM C150, Add	29.79	
			For Lightweight Aggregate, ASTM C330, Add	89.37	
			For Up To 20, Add	9.64	
			For >20 To 50, Add	3.62	
			For >100 To 200, Deduct	-6.44	
			For >200 To 400, Deduct	-12.88	
			For >400, Deduct	-19.32	
03 31	13 00-0029		Delivery Fee For Small Concrete Purchases (Short Load) (03 31 13)		
03 31	13 00-0030	CY	Delivery Fee For Small Concrete Purchases (Short Load) Per CY For Each CY Less Than 9 CY.....	31.55	
			Note: The task quantity is 9 minus the number of CY's delivered. For example, the delivery fee for 2CY's is: (9-2)		
			= 7.		
03 31	13 00-0031		Delivery Fee For Concrete, Per Truck Load (03 31 13)		
03 31	13 00-0032	EA	Concrete Delivery Fee, Per Truck.....	40.00	
			Note: To be added to all concrete leaving concrete yard		
03 31	16		Lightweight Structural Concrete (03 31)		
03 31	16 00-0001		Low Density Cellular / Foam Concrete Fill (03 31 16)		
03 31	16 00-0002	CY	Lightweight Low Density Cellular/Foam Concrete, 100 To 120 PCF Density Range.....	280.13	
03 37			Specialty Placed Concrete (03 30)		
03 37	16		Pumped Concrete (03 37)		

**03 Concrete****03 30 Cast-In-Place Concrete****03 37 Specialty Placed Concrete**
 MINOR  
 CSI UOM DESCRIPTION

 TOTAL DIRECT DEMOLITION  
 UNIT COST UNIT COST
**03 37 16 00-0001****Concrete Pumping With Boom Truck** (03 37 16)

Note: Includes truck rental, operator, and local travel delivery. For delivery/set-up of equipment add one hour, for clean-up of equipment add one hour. Use four hours as the minimum cost including set-up and clean-up. Excludes concrete, use "Concrete Pump" concrete tasks from appropriate section to place into pump hopper and place concrete. Sizes are measured at a 30 degree vertical reach. See CSI section 03 31 13 00-0010 for concrete placement.

03 37 16 00-0002	HR	55' To 60' Boom Truck For Concrete Placement (95 CY Per Hour Rating) .....	220.94
03 37 16 00-0003	HR	70' To 80' Boom Truck For Concrete Placement (117 CY Per Hour Rating) .....	239.97
03 37 16 00-0004	HR	90' To 100' Boom Truck For Concrete Placement (117 CY Per Hour Rating) .....	308.72
03 37 16 00-0005	HR	105' To 115' Boom Truck For Concrete Placement (117 CY Per Hour Rating) .....	351.51
03 37 16 00-0006	HR	120' To 130' Boom Truck For Concrete Placement (170 CY Per Hour Rating) .....	395.67
03 37 16 00-0007	HR	135' To 140' Boom Truck For Concrete Placement (170 CY Per Hour Rating) .....	489.20
03 37 16 00-0008	HR	148' To 155' Boom Truck For Concrete Placement (170 CY Per Hour Rating) .....	545.01
03 37 16 00-0009	HR	170' To 175' Boom Truck For Concrete Placement (182 CY Per Hour Rating) .....	680.17
03 37 16 00-0010	HR	35 CY/HR, 66 HP Trailer Mounted Concrete Pump .....	153.75

Note: Includes hoses

**03 39 Concrete Curing** (03 39)**03 39 13 Water Concrete Curing** (03 39)**03 39 13 00-0001 Water Concrete Curing** (03 39 13)

03 39 13 00-0002	SF	Water Based Curing, Sealing, Hardening And Dustproofing Compound .....	0.33
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Note: Coverage rates: rough finish = 300 SF/GAL, broom finish = 300 to 400 SF/GAL, steel troweled = 500 to 600 SF/GAL, and vertical surface = 400 - 500 SF/GAL.

**03 39 23 Membrane Concrete Curing** (03 39)**03 39 23 23 Sheet Membrane Concrete Curing** (03 39 23)**03 39 23 23-0001 Warm Weather Concrete Curing Blankets** (03 39 23 23)

03 39 23 23-0002	CSF	Warm Weather Concrete Curing Blankets .....	39.89
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**03 39 23 23-0003 Cold Weather Concrete Curing Blankets** (03 39 23 23)

03 39 23 23-0004	CSF	Electric, Cold Weather Concrete Curing Blanket .....	291.53
03 39 23 23-0005	CSF	Non-Electric, Cold Weather Concrete Curing Blanket .....	35.28

**03 60 Grouting** (03)**03 62 Non-Shrink Grouting** (03 62)**03 62 13 Non-Metallic Non-Shrink Grouting** (03 62)**03 62 13 00-0001 Fluid Type, Non-Metallic Non-Shrink Grouting For Bases** (03 62 13)

03 62 13 00-0002	SF	1" Deep, Fluid Type, Non-Metallic Non-Shrink Grout For Bases .....	30.24
03 62 13 00-0003	SF	2" Deep, Fluid Type, Non-Metallic Non-Shrink Grout For Bases .....	47.53

**03 62 13 00-0004 Non-Metallic Non-Shrink Grouting For Bases** (03 62 13)

03 62 13 00-0005	SF	1" Deep, Non-Metallic Non-Shrink Grout For Bases .....	47.56
03 62 13 00-0006	SF	2" Deep, Non-Metallic Non-Shrink Grout For Bases .....	79.71

**03 62 13 00-0007 Non-Metallic Non-Shrink Grouting For Joints** (03 62 13)**03 62 13 00-0008 1/2" Joint Thickness, Non-Metallic Non-Shrink Grout For Joints** (03 62 13 00-0007)

03 62 13 00-0009	LF	4" Deep x 1/2" Thick, Non-Metallic Non-Shrink Grout For Joints .....	2.30
03 62 13 00-0010	LF	6" Deep x 1/2" Thick, Non-Metallic Non-Shrink Grout For Joints .....	3.07
03 62 13 00-0011	LF	8" Deep x 1/2" Thick, Non-Metallic Non-Shrink Grout For Joints .....	4.06

**03 62 13 00-0012 1" Joint Thickness, Non-Metallic Non-Shrink Grout For Joints** (03 62 13 00-0007)

03 62 13 00-0013	LF	4" Deep x 1" Thick, Non-Metallic Non-Shrink Grout For Joints .....	3.55
03 62 13 00-0014	LF	6" Deep x 1" Thick, Non-Metallic Non-Shrink Grout For Joints .....	4.84
03 62 13 00-0015	LF	8" Deep x 1" Thick, Non-Metallic Non-Shrink Grout For Joints .....	6.42

**03 62 16 Metallic Non-Shrink Grouting** (03 62)**03 62 16 00-0001 Metallic Non-Shrink Grouting For Bases** (03 62 16)

03 62 16 00-0002	SF	1" Deep, Metallic Non-Shrink Grout For Bases .....	37.63
03 62 16 00-0003	SF	2" Deep, Metallic Non-Shrink Grout For Bases .....	60.46

**03 62 16 00-0004 Metallic Non-Shrink Grouting For Joints** (03 62 16)**03 62 16 00-0005 1/2" Joint Thickness, Metallic Non-Shrink Grout For Joints** (03 62 16 00-0004)



Concrete		03	03
Grouting		03 60	
Non-Shrink Grouting		03 62	

MINOR CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
03 62 16 00-0006	LF	4" Deep x 1/2" Thick, Metallic Non-Shrink Grout For Joints.....	1.68	
03 62 16 00-0007	LF	6" Deep x 1/2" Thick, Metallic Non-Shrink Grout For Joints.....	2.14	
03 62 16 00-0008	LF	8" Deep x 1/2" Thick, Metallic Non-Shrink Grout For Joints.....	2.85	
03 62 16 00-0009		1" Joint Thickness, Metallic Non-Shrink Grout For Joints (03 62 16 00-0004)		
03 62 16 00-0010	LF	4" Deep x 1" Thick, Metallic Non-Shrink Grout For Joints.....	2.34	
03 62 16 00-0011	LF	6" Deep x 1" Thick, Metallic Non-Shrink Grout For Joints.....	2.97	
03 62 16 00-0012	LF	8" Deep x 1" Thick, Metallic Non-Shrink Grout For Joints.....	3.96	

## 03 80 Concrete Cutting and Boring (03)

### 03 81 Concrete Cutting (03 80)

#### 03 81 13 Flat Concrete Sawing (03 81)

See CSI section 02 41 19 13-0001 for saw cutting.

#### 03 81 16 Track Mounted Concrete Wall Sawing (03 81)

See CSI section 02 41 19 13-0001 for saw cutting.

### 03 82 Concrete Boring (03 80)

#### 03 82 13 Concrete Core Drilling (03 82)

See CSI section 02 41 19 13-0024 for core drilling.

END OF SECTION 03

03	03	Concrete
	03 80	Concrete Cutting and Boring
	03 82	Concrete Boring



MINOR			TOTAL DIRECT	DEMOLITION
CSI	UOM	DESCRIPTION	UNIT COST	UNIT COST

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	<b>Metals</b>	<b>05</b>	
	<b>Common Work Results for Metals</b>	<b>05 05</b>	<b>05</b>
	<b>Post-Installed Concrete Anchors</b>	<b>05 05 19</b>	

MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
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## 05 Metals

### 05 05 Common Work Results for Metals (05)

#### 05 05 19 Post-Installed Concrete Anchors (05 05)

##### 05 05 19 00-0001 Concrete And Masonry Anchors (05 05 19)

##### 05 05 19 00-0002 J-Type Anchor Bolts (05 05 19 00-0001)

See CSI section 03 11 13 00-0002 for template.

##### 05 05 19 00-0003 1/2" And 5/8" Diameter (05 05 19 00-0002)

05 05 19 00-0004	EA	1/2" Diameter x 6" Length, Plain Steel, J-Type Cast In Place Anchor Bolt .....	10.17
05 05 19 00-0005	EA	1/2" Diameter x 12" Length, Plain Steel, J-Type Cast In Place Anchor Bolt .....	11.62
05 05 19 00-0006	EA	1/2" Diameter x 18" Length, Plain Steel, J-Type Cast In Place Anchor Bolt .....	13.85
05 05 19 00-0007	EA	5/8" Diameter x 12" Length, Plain Steel, J-Type Cast In Place Anchor Bolt .....	15.65
05 05 19 00-0008	EA	5/8" Diameter x 18" Length, Plain Steel, J-Type Cast In Place Anchor Bolt .....	18.96
05 05 19 00-0009	EA	5/8" Diameter x 24" Length, Plain Steel, J-Type Cast In Place Anchor Bolt .....	21.28

##### 05 05 19 00-0010 3/4" And 7/8" Diameter (05 05 19 00-0002)

05 05 19 00-0011	EA	3/4" Diameter x 8" Length, Plain Steel, J-Type Cast In Place Anchor Bolt .....	21.20
05 05 19 00-0012	EA	3/4" Diameter x 12" Length, Plain Steel, J-Type Cast In Place Anchor Bolt .....	24.19
05 05 19 00-0013	EA	3/4" Diameter x 18" Length, Plain Steel, J-Type Cast In Place Anchor Bolt .....	29.33
05 05 19 00-0014	EA	3/4" Diameter x 24" Length, Plain Steel, J-Type Cast In Place Anchor Bolt .....	35.30
05 05 19 00-0015	EA	7/8" Diameter x 12" Length, Plain Steel, J-Type Cast In Place Anchor Bolt .....	27.86
05 05 19 00-0016	EA	7/8" Diameter x 18" Length, Plain Steel, J-Type Cast In Place Anchor Bolt .....	32.72
05 05 19 00-0017	EA	7/8" Diameter x 24" Length, Plain Steel, J-Type Cast In Place Anchor Bolt .....	41.34

##### 05 05 19 00-0018 1" And 1-1/8" Diameter (05 05 19 00-0002)

05 05 19 00-0019	EA	1" Diameter x 12" Length, Plain Steel, J-Type Cast In Place Anchor Bolt .....	34.25
05 05 19 00-0020	EA	1" Diameter x 18" Length, Plain Steel, J-Type Cast In Place Anchor Bolt .....	40.71
05 05 19 00-0021	EA	1" Diameter x 24" Length, Plain Steel, J-Type Cast In Place Anchor Bolt .....	50.17
05 05 19 00-0022	EA	1" Diameter x 36" Length, Plain Steel, J-Type Cast In Place Anchor Bolt .....	61.84
05 05 19 00-0023	EA	1-1/8" Diameter x 12" Length, Plain Steel, J-Type Cast In Place Anchor Bolt .....	40.73
05 05 19 00-0024	EA	1-1/8" Diameter x 18" Length, Plain Steel, J-Type Cast In Place Anchor Bolt .....	48.46
05 05 19 00-0025	EA	1-1/8" Diameter x 24" Length, Plain Steel, J-Type Cast In Place Anchor Bolt .....	59.82
05 05 19 00-0026	EA	1-1/8" Diameter x 36" Length, Plain Steel, J-Type Cast In Place Anchor Bolt .....	73.67

##### 05 05 19 00-0027 1-1/4" And 1-1/2" Diameter (05 05 19 00-0002)

05 05 19 00-0028	EA	1-1/4" Diameter x 12" Length, Plain Steel, J-Type Cast In Place Anchor Bolt .....	48.78
05 05 19 00-0029	EA	1-1/4" Diameter x 18" Length, Plain Steel, J-Type Cast In Place Anchor Bolt .....	58.09
05 05 19 00-0030	EA	1-1/4" Diameter x 24" Length, Plain Steel, J-Type Cast In Place Anchor Bolt .....	71.80
05 05 19 00-0031	EA	1-1/4" Diameter x 36" Length, Plain Steel, J-Type Cast In Place Anchor Bolt .....	88.35
05 05 19 00-0032	EA	1-1/2" Diameter x 12" Length, Plain Steel, J-Type Cast In Place Anchor Bolt .....	58.84
05 05 19 00-0033	EA	1-1/2" Diameter x 18" Length, Plain Steel, J-Type Cast In Place Anchor Bolt .....	70.13
05 05 19 00-0034	EA	1-1/2" Diameter x 24" Length, Plain Steel, J-Type Cast In Place Anchor Bolt .....	86.78
05 05 19 00-0035	EA	1-1/2" Diameter x 36" Length, Plain Steel, J-Type Cast In Place Anchor Bolt .....	106.71

##### 05 05 19 00-0036 L-Type Anchor Bolts (05 05 19 00-0001)

See CSI section 03 11 13 00-0002 for template.

##### 05 05 19 00-0037 3/4" And 7/8" Diameter (05 05 19 00-0036)

05 05 19 00-0038	EA	3/4" Diameter x 12" Length, Plain Steel, L-Type Cast In Place Anchor Bolt .....	19.52
05 05 19 00-0039	EA	3/4" Diameter x 18" Length, Plain Steel, L-Type Cast In Place Anchor Bolt .....	22.94
05 05 19 00-0040	EA	3/4" Diameter x 24" Length, Plain Steel, L-Type Cast In Place Anchor Bolt .....	26.26
05 05 19 00-0041	EA	3/4" Diameter x 30" Length, Plain Steel, L-Type Cast In Place Anchor Bolt .....	29.02
05 05 19 00-0042	EA	3/4" Diameter x 36" Length, Plain Steel, L-Type Cast In Place Anchor Bolt .....	32.85
05 05 19 00-0043	EA	7/8" Diameter x 12" Length, Plain Steel, L-Type Cast In Place Anchor Bolt .....	22.98
05 05 19 00-0044	EA	7/8" Diameter x 18" Length, Plain Steel, L-Type Cast In Place Anchor Bolt .....	26.52
05 05 19 00-0045	EA	7/8" Diameter x 24" Length, Plain Steel, L-Type Cast In Place Anchor Bolt .....	30.67
05 05 19 00-0046	EA	7/8" Diameter x 30" Length, Plain Steel, L-Type Cast In Place Anchor Bolt .....	34.42
05 05 19 00-0047	EA	7/8" Diameter x 36" Length, Plain Steel, L-Type Cast In Place Anchor Bolt .....	39.96

##### 05 05 19 00-0048 1" And 1-1/8" Diameter (05 05 19 00-0036)

05 05 19 00-0049	EA	1" Diameter x 12" Length, Plain Steel, L-Type Cast In Place Anchor Bolt .....	27.81
05 05 19 00-0050	EA	1" Diameter x 18" Length, Plain Steel, L-Type Cast In Place Anchor Bolt .....	31.84
05 05 19 00-0051	EA	1" Diameter x 24" Length, Plain Steel, L-Type Cast In Place Anchor Bolt .....	36.91
05 05 19 00-0052	EA	1" Diameter x 30" Length, Plain Steel, L-Type Cast In Place Anchor Bolt .....	39.41
05 05 19 00-0053	EA	1" Diameter x 36" Length, Plain Steel, L-Type Cast In Place Anchor Bolt .....	43.40
05 05 19 00-0054	EA	1" Diameter x 42" Length, Plain Steel, L-Type Cast In Place Anchor Bolt .....	49.16
05 05 19 00-0055	EA	1" Diameter x 48" Length, Plain Steel, L-Type Cast In Place Anchor Bolt .....	58.32
05 05 19 00-0056	EA	1-1/8" Diameter x 18" Length, Plain Steel, L-Type Cast In Place Anchor Bolt .....	34.55
05 05 19 00-0057	EA	1-1/8" Diameter x 24" Length, Plain Steel, L-Type Cast In Place Anchor Bolt .....	39.95
05 05 19 00-0058	EA	1-1/8" Diameter x 30" Length, Plain Steel, L-Type Cast In Place Anchor Bolt .....	42.57

**05 Metals****05 05 Common Work Results for Metals****05 05 19 Post-Installed Concrete Anchors**
 MINOR  
 CSI UOM DESCRIPTION

 TOTAL DIRECT DEMOLITION  
 UNIT COST UNIT COST
**05 05 19 00-0059 1-1/4" And 1-3/8" Diameter** (05 05 19 00-0036)

05 05 19 00-0060	EA	1-1/4" Diameter x 18" Length, Plain Steel, L-Type Cast In Place Anchor Bolt .....	41.63
05 05 19 00-0061	EA	1-1/4" Diameter x 24" Length, Plain Steel, L-Type Cast In Place Anchor Bolt .....	50.23
05 05 19 00-0062	EA	1-1/4" Diameter x 30" Length, Plain Steel, L-Type Cast In Place Anchor Bolt .....	54.99
05 05 19 00-0063	EA	1-1/4" Diameter x 36" Length, Plain Steel, L-Type Cast In Place Anchor Bolt .....	60.25
05 05 19 00-0064	EA	1-1/4" Diameter x 42" Length, Plain Steel, L-Type Cast In Place Anchor Bolt .....	66.51
05 05 19 00-0065	EA	1-1/4" Diameter x 48" Length, Plain Steel, L-Type Cast In Place Anchor Bolt .....	73.38
05 05 19 00-0066	EA	1-1/4" Diameter x 54" Length, Plain Steel, L-Type Cast In Place Anchor Bolt .....	81.82
05 05 19 00-0067	EA	1-1/4" Diameter x 60" Length, Plain Steel, L-Type Cast In Place Anchor Bolt .....	94.24
05 05 19 00-0068	EA	1-3/8" Diameter x 18" Length, Plain Steel, L-Type Cast In Place Anchor Bolt .....	47.26
05 05 19 00-0069	EA	1-3/8" Diameter x 24" Length, Plain Steel, L-Type Cast In Place Anchor Bolt .....	56.83
05 05 19 00-0070	EA	1-3/8" Diameter x 30" Length, Plain Steel, L-Type Cast In Place Anchor Bolt .....	62.45
05 05 19 00-0071	EA	1-3/8" Diameter x 36" Length, Plain Steel, L-Type Cast In Place Anchor Bolt .....	68.67
05 05 19 00-0072	EA	1-3/8" Diameter x 42" Length, Plain Steel, L-Type Cast In Place Anchor Bolt .....	75.69
05 05 19 00-0073	EA	1-3/8" Diameter x 48" Length, Plain Steel, L-Type Cast In Place Anchor Bolt .....	83.21
05 05 19 00-0074	EA	1-3/8" Diameter x 54" Length, Plain Steel, L-Type Cast In Place Anchor Bolt .....	92.76
05 05 19 00-0075	EA	1-3/8" Diameter x 60" Length, Plain Steel, L-Type Cast In Place Anchor Bolt .....	105.87

**05 05 19 00-0076 1-1/2", 1-3/4", And 2" Diameter** (05 05 19 00-0036)

05 05 19 00-0077	EA	1-1/2" Diameter x 18" Length, Plain Steel, L-Type Cast In Place Anchor Bolt .....	60.75
05 05 19 00-0078	EA	1-1/2" Diameter x 24" Length, Plain Steel, L-Type Cast In Place Anchor Bolt .....	66.07
05 05 19 00-0079	EA	1-1/2" Diameter x 30" Length, Plain Steel, L-Type Cast In Place Anchor Bolt .....	73.14
05 05 19 00-0080	EA	1-1/2" Diameter x 36" Length, Plain Steel, L-Type Cast In Place Anchor Bolt .....	79.06
05 05 19 00-0081	EA	1-1/2" Diameter x 42" Length, Plain Steel, L-Type Cast In Place Anchor Bolt .....	85.22
05 05 19 00-0082	EA	1-1/2" Diameter x 48" Length, Plain Steel, L-Type Cast In Place Anchor Bolt .....	94.15
05 05 19 00-0083	EA	1-1/2" Diameter x 54" Length, Plain Steel, L-Type Cast In Place Anchor Bolt .....	105.52
05 05 19 00-0084	EA	1-1/2" Diameter x 60" Length, Plain Steel, L-Type Cast In Place Anchor Bolt .....	121.94
05 05 19 00-0085	EA	1-3/4" Diameter x 18" Length, Plain Steel, L-Type Cast In Place Anchor Bolt .....	82.60
05 05 19 00-0086	EA	1-3/4" Diameter x 24" Length, Plain Steel, L-Type Cast In Place Anchor Bolt .....	86.54
05 05 19 00-0087	EA	1-3/4" Diameter x 30" Length, Plain Steel, L-Type Cast In Place Anchor Bolt .....	89.07
05 05 19 00-0088	EA	1-3/4" Diameter x 36" Length, Plain Steel, L-Type Cast In Place Anchor Bolt .....	100.27
05 05 19 00-0089	EA	1-3/4" Diameter x 42" Length, Plain Steel, L-Type Cast In Place Anchor Bolt .....	115.41
05 05 19 00-0090	EA	1-3/4" Diameter x 48" Length, Plain Steel, L-Type Cast In Place Anchor Bolt .....	122.16
05 05 19 00-0091	EA	1-3/4" Diameter x 54" Length, Plain Steel, L-Type Cast In Place Anchor Bolt .....	136.71
05 05 19 00-0092	EA	1-3/4" Diameter x 60" Length, Plain Steel, L-Type Cast In Place Anchor Bolt .....	155.49
05 05 19 00-0093	EA	2" Diameter x 24" Length, Plain Steel, L-Type Cast In Place Anchor Bolt .....	117.50
05 05 19 00-0094	EA	2" Diameter x 30" Length, Plain Steel, L-Type Cast In Place Anchor Bolt .....	128.49
05 05 19 00-0095	EA	2" Diameter x 36" Length, Plain Steel, L-Type Cast In Place Anchor Bolt .....	142.10
05 05 19 00-0096	EA	2" Diameter x 42" Length, Plain Steel, L-Type Cast In Place Anchor Bolt .....	154.99
05 05 19 00-0097	EA	2" Diameter x 48" Length, Plain Steel, L-Type Cast In Place Anchor Bolt .....	167.66
05 05 19 00-0098	EA	2" Diameter x 54" Length, Plain Steel, L-Type Cast In Place Anchor Bolt .....	181.09
05 05 19 00-0099	EA	2" Diameter x 60" Length, Plain Steel, L-Type Cast In Place Anchor Bolt .....	205.72
05 05 19 00-0100	EA	2" Diameter x 66" Length, Plain Steel, L-Type Cast In Place Anchor Bolt .....	219.38
05 05 19 00-0101	EA	2" Diameter x 72" Length, Plain Steel, L-Type Cast In Place Anchor Bolt .....	247.62

**05 05 19 00-0102 2-1/2" And 2-3/4" Diameter** (05 05 19 00-0036)

05 05 19 00-0103	EA	2-1/2" Diameter x 24" Length, Plain Steel, L-Type Cast In Place Anchor Bolt .....	226.73
05 05 19 00-0104	EA	2-1/2" Diameter x 30" Length, Plain Steel, L-Type Cast In Place Anchor Bolt .....	239.46
05 05 19 00-0105	EA	2-1/2" Diameter x 36" Length, Plain Steel, L-Type Cast In Place Anchor Bolt .....	261.91
05 05 19 00-0106	EA	2-1/2" Diameter x 42" Length, Plain Steel, L-Type Cast In Place Anchor Bolt .....	280.71
05 05 19 00-0107	EA	2-1/2" Diameter x 48" Length, Plain Steel, L-Type Cast In Place Anchor Bolt .....	297.78
05 05 19 00-0108	EA	2-1/2" Diameter x 54" Length, Plain Steel, L-Type Cast In Place Anchor Bolt .....	317.33
05 05 19 00-0109	EA	2-1/2" Diameter x 60" Length, Plain Steel, L-Type Cast In Place Anchor Bolt .....	347.08
05 05 19 00-0110	EA	2-3/4" Diameter x 24" Length, Plain Steel, L-Type Cast In Place Anchor Bolt .....	254.72
05 05 19 00-0111	EA	2-3/4" Diameter x 30" Length, Plain Steel, L-Type Cast In Place Anchor Bolt .....	274.66
05 05 19 00-0112	EA	2-3/4" Diameter x 36" Length, Plain Steel, L-Type Cast In Place Anchor Bolt .....	296.16
05 05 19 00-0113	EA	2-3/4" Diameter x 42" Length, Plain Steel, L-Type Cast In Place Anchor Bolt .....	318.38
05 05 19 00-0114	EA	2-3/4" Diameter x 48" Length, Plain Steel, L-Type Cast In Place Anchor Bolt .....	339.25
05 05 19 00-0115	EA	2-3/4" Diameter x 54" Length, Plain Steel, L-Type Cast In Place Anchor Bolt .....	367.99
05 05 19 00-0116	EA	2-3/4" Diameter x 60" Length, Plain Steel, L-Type Cast In Place Anchor Bolt .....	404.84

**05 05 19 00-0117 Chemically Adhered Anchor Rods** (05 05 19 00-0001)

Note: Includes drilling hole, injected adhesive or pre-placed adhesive cartridge, nut and washer. Zinc coated carbon steel.

05 05 19 00-0118	EA	1/4" x 1-9/16" Long Chemically Adhered Anchor Rod.....	15.89
		For >10 To 50, Deduct	-0.67
		For >50 To 100, Deduct	-1.40
		For >100, Deduct	-2.79
05 05 19 00-0119	EA	5/16" x 2-3/8" Long Chemically Adhered Anchor Rod.....	18.27
		For >10 To 50, Deduct	-0.73
		For >50 To 100, Deduct	-1.55
		For >100, Deduct	-3.09
05 05 19 00-0120	EA	3/8" x 2-3/4" Long Chemically Adhered Anchor Rod.....	22.70
		For >10 To 50, Deduct	-0.91
		For >50 To 100, Deduct	-1.93
		For >100, Deduct	-3.86



		<b>Metals</b>	<b>05</b>
		<b>Common Work Results for Metals</b>	<b>05 05</b>
		<b>Post-Installed Concrete Anchors</b>	<b>05 05 19</b>

05

MINOR	CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
05 05 19 00-0121	EA		1/2" x 3-11/16" Long Chemically Adhered Anchor Rod .....	26.47	
			For >10 To 50, Deduct	-1.02	
			For >50 To 100, Deduct	-2.20	
			For >100, Deduct	-4.39	
05 05 19 00-0122	EA		1/2" x 5-1/2" Long Chemically Adhered Anchor Rod .....	27.84	
			For >10 To 50, Deduct	-1.02	
			For >50 To 100, Deduct	-2.23	
			For >100, Deduct	-4.46	
05 05 19 00-0123	EA		5/8" x 7" Long Chemically Adhered Anchor Rod.....	34.44	
			For >10 To 50, Deduct	-1.26	
			For >50 To 100, Deduct	-2.76	
			For >100, Deduct	-5.51	
05 05 19 00-0124	EA		3/4" x 9-1/2" Long Chemically Adhered Anchor Rod .....	44.28	
			For >10 To 50, Deduct	-1.50	
			For >50 To 100, Deduct	-3.36	
			For >100, Deduct	-6.72	
05 05 19 00-0125	EA		7/8" x 10" Long Chemically Adhered Anchor Rod.....	51.98	
			For >10 To 50, Deduct	-1.63	
			For >50 To 100, Deduct	-3.74	
			For >100, Deduct	-7.48	
05 05 19 00-0126	EA		1" x 11-3/4" Long Chemically Adhered Anchor Rod .....	70.66	
			For >10 To 50, Deduct	-2.11	
			For >50 To 100, Deduct	-4.93	
			For >100, Deduct	-9.87	
05 05 19 00-0127	EA		1-1/4" x 14" Long Chemically Adhered Anchor Rod .....	100.22	
			For >10 To 50, Deduct	-2.66	
			For >50 To 100, Deduct	-6.50	
			For >100, Deduct	-13.00	
05 05 19 00-0128			Grout Concrete Anchor Bolt Or Threaded Rod (05 05 19 00-0001) .....	4.56	
05 05 19 00-0129	EA		Grout Concrete Anchor Bolt or Threaded Rod.....	4.56	
			For >10 To 50, Deduct	-0.22	
			For >50 To 100, Deduct	-0.44	
			For >100, Deduct	-0.87	
05 05 23			Metal Fastenings (05 05)		
05 05 23 00-0001			Hex Bolts (05 05 23) Note: For owner furnished materials or where requested by the owner. Excludes drilling through wood, steel, concrete, brick or block. See CSI section 02 41 19 13-0211 for drilling into concrete.		
05 05 23 00-0002			A307B Heavy Hex Bolts (05 05 23 00-0001) Note: Includes A307B heavy hex nut and two structural washers.		
05 05 23 00-0003			Plain Finish A307B Heavy Hex Bolts (05 05 23 00-0002)		
05 05 23 00-0004	EA		1/2" Diameter x 1-1/2" Long, Plain Finish A307B Heavy Hex Bolt .....	13.01	1.33
			For >10 To 50, Deduct	-0.55	
			For >50 To 100, Deduct	-1.16	
			For >100, Deduct	-2.31	
05 05 23 00-0005	EA		1/2" Diameter x 3" Long, Plain Finish A307B Heavy Hex Bolt .....	14.13	1.33
			For >10 To 50, Deduct	-0.55	
			For >50 To 100, Deduct	-1.18	
			For >100, Deduct	-2.37	
05 05 23 00-0006	EA		5/8" Diameter x 2" Long, Plain Finish A307B Heavy Hex Bolt .....	14.16	1.33
			For >10 To 50, Deduct	-0.55	
			For >50 To 100, Deduct	-1.19	
			For >100, Deduct	-2.37	
05 05 23 00-0007	EA		5/8" Diameter x 4" Long, Plain Finish A307B Heavy Hex Bolt .....	16.76	1.51
			For >10 To 50, Deduct	-0.63	
			For >50 To 100, Deduct	-1.37	
			For >100, Deduct	-2.74	
05 05 23 00-0008	EA		3/4" Diameter x 2" Long, Plain Finish A307B Heavy Hex Bolt .....	16.04	1.33
			For >10 To 50, Deduct	-0.55	
			For >50 To 100, Deduct	-1.23	
			For >100, Deduct	-2.46	
05 05 23 00-0009	EA		3/4" Diameter x 4" Long, Plain Finish A307B Heavy Hex Bolt .....	19.09	1.51
			For >10 To 50, Deduct	-0.63	
			For >50 To 100, Deduct	-1.43	
			For >100, Deduct	-2.85	
05 05 23 00-0010	EA		3/4" Diameter x 6" Long, Plain Finish A307B Heavy Hex Bolt .....	23.59	1.58
			For >10 To 50, Deduct	-0.66	
			For >50 To 100, Deduct	-1.58	
			For >100, Deduct	-3.16	
05 05 23 00-0011	EA		3/4" Diameter x 8" Long, Plain Finish A307B Heavy Hex Bolt .....	25.28	1.67
			For >10 To 50, Deduct	-0.70	
			For >50 To 100, Deduct	-1.67	
			For >100, Deduct	-3.35	
05 05 23 00-0012	EA		7/8" Diameter x 2" Long, Plain Finish A307B Heavy Hex Bolt .....	18.96	1.44
			For >10 To 50, Deduct	-0.60	
			For >50 To 100, Deduct	-1.37	
			For >100, Deduct	-2.75	

**05 Metals****05 05 Common Work Results for Metals****05 05 23 Metal Fastenings**

MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
05 05 23 00-0013 EA 7/8" Diameter x 4" Long, Plain Finish A307B Heavy Hex Bolt ..... For >10 To 50, Deduct ..... For >50 To 100, Deduct ..... For >100, Deduct .....	22.60 -0.66 -1.55 -3.11	1.58
05 05 23 00-0014 EA 1" Diameter x 4" Long, Plain Finish A307B Heavy Hex Bolt ..... For >10 To 50, Deduct ..... For >50 To 100, Deduct ..... For >100, Deduct .....	26.28 -0.70 -1.70 -3.40	1.67
05 05 23 00-0015 EA 1" Diameter x 6" Long, Plain Finish A307B Heavy Hex Bolt ..... For >10 To 50, Deduct ..... For >50 To 100, Deduct ..... For >100, Deduct .....	36.49 -0.73 -2.01 -4.01	1.75
05 05 23 00-0016 EA 1-1/4" Diameter x 4" Long, Plain Finish A307B Heavy Hex Bolt ..... For >10 To 50, Deduct ..... For >50 To 100, Deduct ..... For >100, Deduct .....	42.60 -0.82 -2.30 -4.60	1.98
05 05 23 00-0017 EA 1-1/4" Diameter x 6" Long, Plain Finish A307B Heavy Hex Bolt ..... For >10 To 50, Deduct ..... For >50 To 100, Deduct ..... For >100, Deduct .....	47.78 -0.88 -2.52 -5.04	2.12
<b>05 05 23 00-0018 Galvanized A307B Heavy Hex Bolts (05 05 23 00-0002)</b>		
05 05 23 00-0019 EA 1/2" Diameter x 1-1/2" Long, Galvanized A307B Heavy Hex Bolt ..... For >10 To 50, Deduct ..... For >50 To 100, Deduct ..... For >100, Deduct .....	13.56 -0.55 -1.17 -2.34	1.33
05 05 23 00-0020 EA 1/2" Diameter x 3" Long, Galvanized A307B Heavy Hex Bolt ..... For >10 To 50, Deduct ..... For >50 To 100, Deduct ..... For >100, Deduct .....	14.50 -0.55 -1.19 -2.39	1.33
05 05 23 00-0021 EA 5/8" Diameter x 2" Long, Galvanized A307B Heavy Hex Bolt ..... For >10 To 50, Deduct ..... For >50 To 100, Deduct ..... For >100, Deduct .....	15.51 -0.55 -1.22 -2.44	1.33
05 05 23 00-0022 EA 5/8" Diameter x 4" Long, Galvanized A307B Heavy Hex Bolt ..... For >10 To 50, Deduct ..... For >50 To 100, Deduct ..... For >100, Deduct .....	18.11 -0.63 -1.40 -2.80	1.51
05 05 23 00-0023 EA 3/4" Diameter x 2" Long, Galvanized A307B Heavy Hex Bolt ..... For >10 To 50, Deduct ..... For >50 To 100, Deduct ..... For >100, Deduct .....	17.57 -0.55 -1.27 -2.54	1.33
05 05 23 00-0024 EA 3/4" Diameter x 4" Long, Galvanized A307B Heavy Hex Bolt ..... For >10 To 50, Deduct ..... For >50 To 100, Deduct ..... For >100, Deduct .....	21.93 -0.63 -1.50 -2.99	1.51
05 05 23 00-0025 EA 3/4" Diameter x 6" Long, Galvanized A307B Heavy Hex Bolt ..... For >10 To 50, Deduct ..... For >50 To 100, Deduct ..... For >100, Deduct .....	28.48 -0.66 -1.70 -3.41	1.58
05 05 23 00-0026 EA 3/4" Diameter x 8" Long, Galvanized A307B Heavy Hex Bolt ..... For >10 To 50, Deduct ..... For >50 To 100, Deduct ..... For >100, Deduct .....	33.20 -0.70 -1.87 -3.75	1.67
05 05 23 00-0027 EA 7/8" Diameter x 2" Long, Galvanized A307B Heavy Hex Bolt ..... For >10 To 50, Deduct ..... For >50 To 100, Deduct ..... For >100, Deduct .....	22.98 -0.60 -1.48 -2.95	1.44
05 05 23 00-0028 EA 7/8" Diameter x 4" Long, Galvanized A307B Heavy Hex Bolt ..... For >10 To 50, Deduct ..... For >50 To 100, Deduct ..... For >100, Deduct .....	27.14 -0.66 -1.67 -3.34	1.58
05 05 23 00-0029 EA 1" Diameter x 4" Long, Galvanized A307B Heavy Hex Bolt ..... For >10 To 50, Deduct ..... For >50 To 100, Deduct ..... For >100, Deduct .....	32.13 -0.70 -1.85 -3.69	1.67
05 05 23 00-0030 EA 1" Diameter x 6" Long, Galvanized A307B Heavy Hex Bolt ..... For >10 To 50, Deduct ..... For >50 To 100, Deduct ..... For >100, Deduct .....	47.09 -0.73 -2.27 -4.54	1.75
05 05 23 00-0031 EA 1-1/4" Diameter x 4" Long, Galvanized A307B Heavy Hex Bolt ..... For >10 To 50, Deduct ..... For >50 To 100, Deduct ..... For >100, Deduct .....	47.35 -0.82 -2.42 -4.84	1.98
05 05 23 00-0032 EA 1-1/4" Diameter x 6" Long, Galvanized A307B Heavy Hex Bolt ..... For >10 To 50, Deduct ..... For >50 To 100, Deduct ..... For >100, Deduct .....	58.76 -0.88 -2.79 -5.59	2.12

05 05 23 00-0033 A325 High Strength Structural Bolts (05 05 23 00-0001)

05 05 23 00-0034 Plain Finish A325 High Strength Structural Bolts (05 05 23 00-0033)  
Note: Includes A325 heavy hex nut and structural washer.



		<b>Metals</b>	<b>05</b>	<b>05</b>
		<b>Common Work Results for Metals</b>	<b>05 05</b>	
		<b>Metal Fastenings</b>	<b>05 05 23</b>	

MINOR	CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
05 05 23 00-0035	EA	1/2" Diameter x 1-1/2" Long, Plain Finish A325 High Strength Structural Bolt.....	12.76	1.33	
		For >10 To 50, Deduct	-0.55		
		For >50 To 100, Deduct	-1.15		
		For >100, Deduct	-2.30		
05 05 23 00-0036	EA	1/2" Diameter x 3" Long, Plain Finish A325 High Strength Structural Bolt.....	13.00	1.33	
		For >10 To 50, Deduct	-0.55		
		For >50 To 100, Deduct	-1.16		
		For >100, Deduct	-2.31		
05 05 23 00-0037	EA	5/8" Diameter x 2" Long, Plain Finish A325 High Strength Structural Bolt.....	13.79	1.33	
		For >10 To 50, Deduct	-0.55		
		For >50 To 100, Deduct	-1.18		
		For >100, Deduct	-2.35		
05 05 23 00-0038	EA	5/8" Diameter x 4" Long, Plain Finish A325 High Strength Structural Bolt.....	16.78	1.51	
		For >10 To 50, Deduct	-0.63		
		For >50 To 100, Deduct	-1.37		
		For >100, Deduct	-2.74		
05 05 23 00-0039	EA	5/8" Diameter x 6" Long, Plain Finish A325 High Strength Structural Bolt.....	19.22	1.58	
		For >10 To 50, Deduct	-0.66		
		For >50 To 100, Deduct	-1.47		
		For >100, Deduct	-2.94		
05 05 23 00-0040	EA	3/4" Diameter x 2" Long, Plain Finish A325 High Strength Structural Bolt.....	14.89	1.33	
		For >10 To 50, Deduct	-0.55		
		For >50 To 100, Deduct	-1.20		
		For >100, Deduct	-2.41		
05 05 23 00-0041	EA	3/4" Diameter x 4" Long, Plain Finish A325 High Strength Structural Bolt.....	17.95	1.51	
		For >10 To 50, Deduct	-0.63		
		For >50 To 100, Deduct	-1.40		
		For >100, Deduct	-2.79		
05 05 23 00-0042	EA	3/4" Diameter x 6" Long, Plain Finish A325 High Strength Structural Bolt.....	20.25	1.58	
		For >10 To 50, Deduct	-0.66		
		For >50 To 100, Deduct	-1.50		
		For >100, Deduct	-2.99		
05 05 23 00-0043	EA	3/4" Diameter x 8" Long, Plain Finish A325 High Strength Structural Bolt.....	24.59	1.67	
		For >10 To 50, Deduct	-0.70		
		For >50 To 100, Deduct	-1.66		
		For >100, Deduct	-3.31		
05 05 23 00-0044	EA	7/8" Diameter x 2" Long, Plain Finish A325 High Strength Structural Bolt.....	17.15	1.44	
		For >10 To 50, Deduct	-0.60		
		For >50 To 100, Deduct	-1.33		
		For >100, Deduct	-2.66		
05 05 23 00-0045	EA	7/8" Diameter x 4" Long, Plain Finish A325 High Strength Structural Bolt.....	20.68	1.58	
		For >10 To 50, Deduct	-0.66		
		For >50 To 100, Deduct	-1.51		
		For >100, Deduct	-3.01		
05 05 23 00-0046	EA	7/8" Diameter x 6" Long, Plain Finish A325 High Strength Structural Bolt.....	23.45	1.67	
		For >10 To 50, Deduct	-0.70		
		For >50 To 100, Deduct	-1.63		
		For >100, Deduct	-3.26		
05 05 23 00-0047	EA	7/8" Diameter x 8" Long, Plain Finish A325 High Strength Structural Bolt.....	25.34	1.75	
		For >10 To 50, Deduct	-0.73		
		For >50 To 100, Deduct	-1.73		
		For >100, Deduct	-3.46		
05 05 23 00-0048	EA	1" Diameter x 2" Long, Plain Finish A325 High Strength Structural Bolt.....	18.85	1.50	
		For >10 To 50, Deduct	-0.62		
		For >50 To 100, Deduct	-1.41		
		For >100, Deduct	-2.82		
05 05 23 00-0049	EA	1" Diameter x 4" Long, Plain Finish A325 High Strength Structural Bolt.....	22.52	1.67	
		For >10 To 50, Deduct	-0.70		
		For >50 To 100, Deduct	-1.61		
		For >100, Deduct	-3.21		
05 05 23 00-0050	EA	1" Diameter x 6" Long, Plain Finish A325 High Strength Structural Bolt.....	25.87	1.75	
		For >10 To 50, Deduct	-0.73		
		For >50 To 100, Deduct	-1.74		
		For >100, Deduct	-3.48		
05 05 23 00-0051	EA	1" Diameter x 8" Long, Plain Finish A325 High Strength Structural Bolt.....	32.69	1.86	
		For >10 To 50, Deduct	-0.78		
		For >50 To 100, Deduct	-1.98		
		For >100, Deduct	-3.97		
05 05 23 00-0052	EA	1-1/4" Diameter x 3" Long, Plain Finish A325 High Strength Structural Bolt.....	31.31	1.86	
		For >10 To 50, Deduct	-0.78		
		For >50 To 100, Deduct	-1.95		
		For >100, Deduct	-3.90		
05 05 23 00-0053	EA	1-1/4" Diameter x 4" Long, Plain Finish A325 High Strength Structural Bolt.....	35.32	1.98	
		For >10 To 50, Deduct	-0.82		
		For >50 To 100, Deduct	-2.12		
		For >100, Deduct	-4.24		
05 05 23 00-0054	EA	1-1/4" Diameter x 6" Long, Plain Finish A325 High Strength Structural Bolt.....	41.22	2.12	
		For >10 To 50, Deduct	-0.88		
		For >50 To 100, Deduct	-2.36		
		For >100, Deduct	-4.71		
05 05 23 00-0055	EA	1-1/4" Diameter x 8" Long, Plain Finish A325 High Strength Structural Bolt.....	48.12	2.27	
		For >10 To 50, Deduct	-0.94		
		For >50 To 100, Deduct	-2.62		
		For >100, Deduct	-5.23		

**05 Metals****05 05 Common Work Results for Metals****05 05 23 Metal Fastenings**

MINOR			TOTAL DIRECT		DEMOLITION
CSI	UOM	DESCRIPTION	UNIT COST	UNIT COST	UNIT COST
05 05 23 00-0056		<b>Galvanized A325 High Strength Structural Bolts</b> (05 05 23 00-0033) Note: Includes A325 heavy hex nut and structural washer.			
05 05 23 00-0057	EA	1/2" Diameter x 1-1/2" Long, Galvanized A325 High Strength Structural Bolt .....	13.25		1.33
		For >10 To 50, Deduct	-0.55		
		For >50 To 100, Deduct	-1.16		
		For >100, Deduct	-2.32		
05 05 23 00-0058	EA	1/2" Diameter x 3" Long, Galvanized A325 High Strength Structural Bolt.....	13.42		1.33
		For >10 To 50, Deduct	-0.55		
		For >50 To 100, Deduct	-1.17		
		For >100, Deduct	-2.33		
05 05 23 00-0059	EA	5/8" Diameter x 2" Long, Galvanized A325 High Strength Structural Bolt.....	14.83		1.33
		For >10 To 50, Deduct	-0.55		
		For >50 To 100, Deduct	-1.20		
		For >100, Deduct	-2.40		
05 05 23 00-0060	EA	5/8" Diameter x 4" Long, Galvanized A325 High Strength Structural Bolt.....	17.52		1.51
		For >10 To 50, Deduct	-0.63		
		For >50 To 100, Deduct	-1.39		
		For >100, Deduct	-2.77		
05 05 23 00-0061	EA	5/8" Diameter x 6" Long, Galvanized A325 High Strength Structural Bolt.....	18.51		1.58
		For >10 To 50, Deduct	-0.66		
		For >50 To 100, Deduct	-1.45		
		For >100, Deduct	-2.91		
05 05 23 00-0062	EA	3/4" Diameter x 2" Long, Galvanized A325 High Strength Structural Bolt.....	15.37		1.33
		For >10 To 50, Deduct	-0.55		
		For >50 To 100, Deduct	-1.22		
		For >100, Deduct	-2.43		
05 05 23 00-0063	EA	3/4" Diameter x 4" Long, Galvanized A325 High Strength Structural Bolt.....	18.55		1.51
		For >10 To 50, Deduct	-0.63		
		For >50 To 100, Deduct	-1.41		
		For >100, Deduct	-2.82		
05 05 23 00-0064	EA	3/4" Diameter x 6" Long, Galvanized A325 High Strength Structural Bolt.....	21.19		1.58
		For >10 To 50, Deduct	-0.66		
		For >50 To 100, Deduct	-1.52		
		For >100, Deduct	-3.04		
05 05 23 00-0065	EA	3/4" Diameter x 8" Long, Galvanized A325 High Strength Structural Bolt.....	26.81		1.67
		For >10 To 50, Deduct	-0.70		
		For >50 To 100, Deduct	-1.71		
		For >100, Deduct	-3.43		
05 05 23 00-0066	EA	7/8" Diameter x 2" Long, Galvanized A325 High Strength Structural Bolt.....	20.02		1.44
		For >10 To 50, Deduct	-0.60		
		For >50 To 100, Deduct	-1.40		
		For >100, Deduct	-2.80		
05 05 23 00-0067	EA	7/8" Diameter x 4" Long, Galvanized A325 High Strength Structural Bolt.....	22.38		1.58
		For >10 To 50, Deduct	-0.66		
		For >50 To 100, Deduct	-1.55		
		For >100, Deduct	-3.10		
05 05 23 00-0068	EA	7/8" Diameter x 6" Long, Galvanized A325 High Strength Structural Bolt.....	25.51		1.67
		For >10 To 50, Deduct	-0.70		
		For >50 To 100, Deduct	-1.68		
		For >100, Deduct	-3.36		
05 05 23 00-0069	EA	7/8" Diameter x 8" Long, Galvanized A325 High Strength Structural Bolt.....	31.51		1.75
		For >10 To 50, Deduct	-0.73		
		For >50 To 100, Deduct	-1.88		
		For >100, Deduct	-3.77		
05 05 23 00-0070	EA	1" Diameter x 2" Long, Galvanized A325 High Strength Structural Bolt.....	21.08		1.50
		For >10 To 50, Deduct	-0.62		
		For >50 To 100, Deduct	-1.46		
		For >100, Deduct	-2.93		
05 05 23 00-0071	EA	1" Diameter x 4" Long, Galvanized A325 High Strength Structural Bolt.....	27.63		1.67
		For >10 To 50, Deduct	-0.70		
		For >50 To 100, Deduct	-1.73		
		For >100, Deduct	-3.47		
05 05 23 00-0072	EA	1" Diameter x 6" Long, Galvanized A325 High Strength Structural Bolt.....	30.15		1.75
		For >10 To 50, Deduct	-0.73		
		For >50 To 100, Deduct	-1.85		
		For >100, Deduct	-3.70		
05 05 23 00-0073	EA	1" Diameter x 8" Long, Galvanized A325 High Strength Structural Bolt.....	37.97		1.86
		For >10 To 50, Deduct	-0.78		
		For >50 To 100, Deduct	-2.12		
		For >100, Deduct	-4.23		
05 05 23 00-0074	EA	1-1/4" Diameter x 3" Long, Galvanized A325 High Strength Structural Bolt .....	37.75		1.86
		For >10 To 50, Deduct	-0.78		
		For >50 To 100, Deduct	-2.11		
		For >100, Deduct	-4.22		
05 05 23 00-0075	EA	1-1/4" Diameter x 4" Long, Galvanized A325 High Strength Structural Bolt .....	40.24		1.98
		For >10 To 50, Deduct	-0.82		
		For >50 To 100, Deduct	-2.24		
		For >100, Deduct	-4.49		
05 05 23 00-0076	EA	1-1/4" Diameter x 6" Long, Galvanized A325 High Strength Structural Bolt .....	46.86		2.12
		For >10 To 50, Deduct	-0.88		
		For >50 To 100, Deduct	-2.50		
		For >100, Deduct	-4.99		
05 05 23 00-0077	EA	1-1/4" Diameter x 8" Long, Galvanized A325 High Strength Structural Bolt .....	54.02		2.27
		For >10 To 50, Deduct	-0.94		
		For >50 To 100, Deduct	-2.76		
		For >100, Deduct	-5.53		



		<b>Metals</b>	<b>05</b>	<b>05</b>
		<b>Common Work Results for Metals</b>	<b>05 05</b>	
		<b>Metal Fastenings</b>	<b>05 05 23</b>	

MINOR		TOTAL DIRECT		DEMOLITION
CSI	UOM DESCRIPTION	UNIT COST		UNIT COST
05 05 23 00-0078	<b>A490 High Strength Structural Bolts</b> (05 05 23 00-0001) Note: Includes A490 heavy hex nut and two structural washers.			
05 05 23 00-0079	<b>Plain Finish A490 High Strength Structural Bolts</b> (05 05 23 00-0078)			
05 05 23 00-0080	EA 5/8" Diameter x 2" Long, Plain Finish A490 High Strength Structural Bolt.....	14.18		1.33
	For >10 To 50, Deduct	-0.55		
	For >50 To 100, Deduct	-1.19		
	For >100, Deduct	-2.37		
05 05 23 00-0081	EA 5/8" Diameter x 4" Long, Plain Finish A490 High Strength Structural Bolt.....	19.46		1.51
	For >10 To 50, Deduct	-0.63		
	For >50 To 100, Deduct	-1.44		
	For >100, Deduct	-2.87		
05 05 23 00-0082	EA 5/8" Diameter x 6" Long, Plain Finish A490 High Strength Structural Bolt.....	20.76		1.58
	For >10 To 50, Deduct	-0.66		
	For >50 To 100, Deduct	-1.51		
	For >100, Deduct	-3.02		
05 05 23 00-0083	EA 3/4" Diameter x 2" Long, Plain Finish A490 High Strength Structural Bolt.....	15.70		1.33
	For >10 To 50, Deduct	-0.55		
	For >50 To 100, Deduct	-1.22		
	For >100, Deduct	-2.45		
05 05 23 00-0084	EA 3/4" Diameter x 4" Long, Plain Finish A490 High Strength Structural Bolt.....	18.87		1.51
	For >10 To 50, Deduct	-0.63		
	For >50 To 100, Deduct	-1.42		
	For >100, Deduct	-2.84		
05 05 23 00-0085	EA 3/4" Diameter x 6" Long, Plain Finish A490 High Strength Structural Bolt.....	21.74		1.58
	For >10 To 50, Deduct	-0.66		
	For >50 To 100, Deduct	-1.53		
	For >100, Deduct	-3.07		
05 05 23 00-0086	EA 3/4" Diameter x 8" Long, Plain Finish A490 High Strength Structural Bolt.....	27.48		1.67
	For >10 To 50, Deduct	-0.70		
	For >50 To 100, Deduct	-1.73		
	For >100, Deduct	-3.46		
05 05 23 00-0087	EA 7/8" Diameter x 2" Long, Plain Finish A490 High Strength Structural Bolt.....	18.09		1.44
	For >10 To 50, Deduct	-0.60		
	For >50 To 100, Deduct	-1.35		
	For >100, Deduct	-2.71		
05 05 23 00-0088	EA 7/8" Diameter x 4" Long, Plain Finish A490 High Strength Structural Bolt.....	20.98		1.58
	For >10 To 50, Deduct	-0.66		
	For >50 To 100, Deduct	-1.51		
	For >100, Deduct	-3.03		
05 05 23 00-0089	EA 7/8" Diameter x 6" Long, Plain Finish A490 High Strength Structural Bolt.....	29.49		1.67
	For >10 To 50, Deduct	-0.70		
	For >50 To 100, Deduct	-1.78		
	For >100, Deduct	-3.56		
05 05 23 00-0090	EA 1" Diameter x 2" Long, Plain Finish A490 High Strength Structural Bolt.....	21.03		1.50
	For >10 To 50, Deduct	-0.62		
	For >50 To 100, Deduct	-1.46		
	For >100, Deduct	-2.93		
05 05 23 00-0091	EA 1" Diameter x 4" Long, Plain Finish A490 High Strength Structural Bolt.....	24.97		1.67
	For >10 To 50, Deduct	-0.70		
	For >50 To 100, Deduct	-1.67		
	For >100, Deduct	-3.33		
05 05 23 00-0092	EA 1" Diameter x 6" Long, Plain Finish A490 High Strength Structural Bolt.....	28.50		1.75
	For >10 To 50, Deduct	-0.73		
	For >50 To 100, Deduct	-1.81		
	For >100, Deduct	-3.62		
05 05 23 00-0093	EA 1-1/4" Diameter x 3" Long, Plain Finish A490 High Strength Structural Bolt.....	35.21		1.86
	For >10 To 50, Deduct	-0.78		
	For >50 To 100, Deduct	-2.05		
	For >100, Deduct	-4.09		
05 05 23 00-0094	EA 1-1/4" Diameter x 4" Long, Plain Finish A490 High Strength Structural Bolt.....	44.63		1.98
	For >10 To 50, Deduct	-0.82		
	For >50 To 100, Deduct	-2.35		
	For >100, Deduct	-4.71		
05 05 23 00-0095	EA 1-1/4" Diameter x 6" Long, Plain Finish A490 High Strength Structural Bolt.....	47.02		2.12
	For >10 To 50, Deduct	-0.88		
	For >50 To 100, Deduct	-2.50		
	For >100, Deduct	-5.00		
05 05 23 00-0096	EA 1-1/4" Diameter x 8" Long, Plain Finish A490 High Strength Structural Bolt.....	49.12		2.27
	For >10 To 50, Deduct	-0.94		
	For >50 To 100, Deduct	-2.64		
	For >100, Deduct	-5.28		
05 05 23 00-0097	<b>Hex Head Bolts</b> (05 05 23 00-0001)			
05 05 23 00-0098	<b>Zinc Plated Steel, Low Carbon/Grade 2, Hex Head Bolts</b> (05 05 23 00-0097)			
05 05 23 00-0099	<b>1/4" Diameter, Zinc Plated Steel, Low Carbon/Grade 2, Hex Head Bolts</b> (05 05 23 00-0098)			
05 05 23 00-0100	EA 1/4" Diameter x 1/2" Length, Zinc Plated Steel, Low Carbon/Grade 2, Hex Head Bolt.....	7.64		
	For >100 To 250, Deduct	-1.51		
	For >250 To 500, Deduct	-1.89		
	For >500, Deduct	-2.27		

**05 Metals****05 05 Common Work Results for Metals****05 05 23 Metal Fastenings**

MINOR	CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
05 05 23 00-0101	EA	1/4" Diameter x 1" Length, Zinc Plated Steel, Low Carbon/Grade 2, Hex Head Bolt	7.67		
		For >100 To 250, Deduct	-1.51		
		For >250 To 500, Deduct	-1.89		
		For >500, Deduct	-2.27		
05 05 23 00-0102	EA	1/4" Diameter x 1-1/2" Length, Zinc Plated Steel, Low Carbon/Grade 2, Hex Head Bolt	7.73		
		For >100 To 250, Deduct	-1.51		
		For >250 To 500, Deduct	-1.89		
		For >500, Deduct	-2.27		
05 05 23 00-0103	EA	1/4" Diameter x 2" Length, Zinc Plated Steel, Low Carbon/Grade 2, Hex Head Bolt	7.76		
		For >100 To 250, Deduct	-1.51		
		For >250 To 500, Deduct	-1.89		
		For >500, Deduct	-2.27		
05 05 23 00-0104	EA	1/4" Diameter x 2-1/2" Length, Zinc Plated Steel, Low Carbon/Grade 2, Hex Head Bolt	8.02		
		For >100 To 250, Deduct	-1.56		
		For >250 To 500, Deduct	-1.95		
		For >500, Deduct	-2.33		
05 05 23 00-0105	EA	1/4" Diameter x 3" Length, Zinc Plated Steel, Low Carbon/Grade 2, Hex Head Bolt	8.05		
		For >100 To 250, Deduct	-1.56		
		For >250 To 500, Deduct	-1.95		
		For >500, Deduct	-2.33		
05 05 23 00-0106	EA	1/4" Diameter x 3-1/2" Length, Zinc Plated Steel, Low Carbon/Grade 2, Hex Head Bolt	8.14		
		For >100 To 250, Deduct	-1.56		
		For >250 To 500, Deduct	-1.95		
		For >500, Deduct	-2.33		
05 05 23 00-0107	EA	1/4" Diameter x 4" Length, Zinc Plated Steel, Low Carbon/Grade 2, Hex Head Bolt	8.36		
		For >100 To 250, Deduct	-1.60		
		For >250 To 500, Deduct	-2.00		
		For >500, Deduct	-2.40		
05 05 23 00-0108	EA	1/4" Diameter x 4-1/2" Length, Zinc Plated Steel, Low Carbon/Grade 2, Hex Head Bolt	8.39		
		For >100 To 250, Deduct	-1.60		
		For >250 To 500, Deduct	-2.00		
		For >500, Deduct	-2.40		
05 05 23 00-0109	EA	1/4" Diameter x 5" Length, Zinc Plated Steel, Low Carbon/Grade 2, Hex Head Bolt	8.54		
		For >100 To 250, Deduct	-1.60		
		For >250 To 500, Deduct	-2.00		
		For >500, Deduct	-2.40		
05 05 23 00-0110	EA	1/4" Diameter x 5-1/2" Length, Zinc Plated Steel, Low Carbon/Grade 2, Hex Head Bolt	8.87		
		For >100 To 250, Deduct	-1.64		
		For >250 To 500, Deduct	-2.05		
		For >500, Deduct	-2.46		
05 05 23 00-0111	EA	1/4" Diameter x 6" Length, Zinc Plated Steel, Low Carbon/Grade 2, Hex Head Bolt	8.98		
		For >100 To 250, Deduct	-1.64		
		For >250 To 500, Deduct	-2.05		
		For >500, Deduct	-2.46		
05 05 23 00-0112	EA	1/4" Diameter x 6-1/2" Length, Zinc Plated Steel, Low Carbon/Grade 2, Hex Head Bolt	9.13		
		For >100 To 250, Deduct	-1.64		
		For >250 To 500, Deduct	-2.05		
		For >500, Deduct	-2.46		
05 05 23 00-0113	EA	1/4" Diameter x 7" Length, Zinc Plated Steel, Low Carbon/Grade 2, Hex Head Bolt	9.67		
		For >100 To 250, Deduct	-1.68		
		For >250 To 500, Deduct	-2.11		
		For >500, Deduct	-2.53		
05 05 23 00-0114	EA	1/4" Diameter x 7-1/2" Length, Zinc Plated Steel, Low Carbon/Grade 2, Hex Head Bolt	9.91		
		For >100 To 250, Deduct	-1.68		
		For >250 To 500, Deduct	-2.11		
		For >500, Deduct	-2.53		
05 05 23 00-0115	EA	1/4" Diameter x 8" Length, Zinc Plated Steel, Low Carbon/Grade 2, Hex Head Bolt	9.97		
		For >100 To 250, Deduct	-1.68		
		For >250 To 500, Deduct	-2.11		
		For >500, Deduct	-2.53		
05 05 23 00-0116		5/16" Diameter, Zinc Plated Steel, Low Carbon/Grade 2, Hex Head Bolts (05 05 23 00-0098)			
05 05 23 00-0117	EA	5/16" Diameter x 1/2" Length, Zinc Plated Steel, Low Carbon/Grade 2, Hex Head Bolt	7.70		
		For >100 To 250, Deduct	-1.51		
		For >250 To 500, Deduct	-1.89		
		For >500, Deduct	-2.27		
05 05 23 00-0118	EA	5/16" Diameter x 1" Length, Zinc Plated Steel, Low Carbon/Grade 2, Hex Head Bolt	7.72		
		For >100 To 250, Deduct	-1.51		
		For >250 To 500, Deduct	-1.89		
		For >500, Deduct	-2.27		
05 05 23 00-0119	EA	5/16" Diameter x 1-1/2" Length, Zinc Plated Steel, Low Carbon/Grade 2, Hex Head Bolt	7.78		
		For >100 To 250, Deduct	-1.51		
		For >250 To 500, Deduct	-1.89		
		For >500, Deduct	-2.27		
05 05 23 00-0120	EA	5/16" Diameter x 2" Length, Zinc Plated Steel, Low Carbon/Grade 2, Hex Head Bolt	7.82		
		For >100 To 250, Deduct	-1.51		
		For >250 To 500, Deduct	-1.89		
		For >500, Deduct	-2.27		
05 05 23 00-0121	EA	5/16" Diameter x 2-1/2" Length, Zinc Plated Steel, Low Carbon/Grade 2, Hex Head Bolt	8.09		
		For >100 To 250, Deduct	-1.56		
		For >250 To 500, Deduct	-1.95		
		For >500, Deduct	-2.33		





		<b>Metals</b>	<b>05</b>
		<b>Common Work Results for Metals</b>	<b>05 05</b>
		<b>Metal Fastenings</b>	<b>05 05 23</b>

05

MINOR	CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
05 05 23 00-0122	EA		5/16" Diameter x 3" Length, Zinc Plated Steel, Low Carbon/Grade 2, Hex Head Bolt.....	8.19	
			For >100 To 250, Deduct	-1.56	
			For >250 To 500, Deduct	-1.95	
			For >500, Deduct	-2.33	
05 05 23 00-0123	EA		5/16" Diameter x 3-1/2" Length, Zinc Plated Steel, Low Carbon/Grade 2, Hex Head Bolt.....	8.23	
			For >100 To 250, Deduct	-1.56	
			For >250 To 500, Deduct	-1.95	
			For >500, Deduct	-2.33	
05 05 23 00-0124	EA		5/16" Diameter x 4" Length, Zinc Plated Steel, Low Carbon/Grade 2, Hex Head Bolt.....	8.53	
			For >100 To 250, Deduct	-1.60	
			For >250 To 500, Deduct	-2.00	
			For >500, Deduct	-2.40	
05 05 23 00-0125	EA		5/16" Diameter x 4-1/2" Length, Zinc Plated Steel, Low Carbon/Grade 2, Hex Head Bolt.....	8.67	
			For >100 To 250, Deduct	-1.60	
			For >250 To 500, Deduct	-2.00	
			For >500, Deduct	-2.40	
05 05 23 00-0126	EA		5/16" Diameter x 5" Length, Zinc Plated Steel, Low Carbon/Grade 2, Hex Head Bolt.....	8.73	
			For >100 To 250, Deduct	-1.60	
			For >250 To 500, Deduct	-2.00	
			For >500, Deduct	-2.40	
05 05 23 00-0127	EA		5/16" Diameter x 5-1/2" Length, Zinc Plated Steel, Low Carbon/Grade 2, Hex Head Bolt.....	8.99	
			For >100 To 250, Deduct	-1.64	
			For >250 To 500, Deduct	-2.05	
			For >500, Deduct	-2.46	
05 05 23 00-0128	EA		5/16" Diameter x 6" Length, Zinc Plated Steel, Low Carbon/Grade 2, Hex Head Bolt.....	9.05	
			For >100 To 250, Deduct	-1.64	
			For >250 To 500, Deduct	-2.05	
			For >500, Deduct	-2.46	
05 05 23 00-0129	EA		5/16" Diameter x 6-1/2" Length, Zinc Plated Steel, Low Carbon/Grade 2, Hex Head Bolt.....	9.59	
			For >100 To 250, Deduct	-1.64	
			For >250 To 500, Deduct	-2.05	
			For >500, Deduct	-2.46	
05 05 23 00-0130	EA		5/16" Diameter x 7" Length, Zinc Plated Steel, Low Carbon/Grade 2, Hex Head Bolt.....	10.06	
			For >100 To 250, Deduct	-1.68	
			For >250 To 500, Deduct	-2.11	
			For >500, Deduct	-2.53	
05 05 23 00-0131	EA		5/16" Diameter x 7-1/2" Length, Zinc Plated Steel, Low Carbon/Grade 2, Hex Head Bolt.....	10.30	
			For >100 To 250, Deduct	-1.68	
			For >250 To 500, Deduct	-2.11	
			For >500, Deduct	-2.53	
05 05 23 00-0132	EA		5/16" Diameter x 8" Length, Zinc Plated Steel, Low Carbon/Grade 2, Hex Head Bolt.....	10.51	
			For >100 To 250, Deduct	-1.68	
			For >250 To 500, Deduct	-2.11	
			For >500, Deduct	-2.53	
05 05 23 00-0133			3/8" Diameter, Zinc Plated Steel, Low Carbon/Grade 2, Hex Head Bolts (05 05		
			23 00-0098)		
05 05 23 00-0134	EA		3/8" Diameter x 1/2" Length, Zinc Plated Steel, Low Carbon/Grade 2, Hex Head Bolt.....	7.77	
			For >100 To 250, Deduct	-1.51	
			For >250 To 500, Deduct	-1.89	
			For >500, Deduct	-2.27	
05 05 23 00-0135	EA		3/8" Diameter x 1" Length, Zinc Plated Steel, Low Carbon/Grade 2, Hex Head Bolt.....	7.79	
			For >100 To 250, Deduct	-1.51	
			For >250 To 500, Deduct	-1.89	
			For >500, Deduct	-2.27	
05 05 23 00-0136	EA		3/8" Diameter x 1-1/2" Length, Zinc Plated Steel, Low Carbon/Grade 2, Hex Head Bolt.....	7.86	
			For >100 To 250, Deduct	-1.51	
			For >250 To 500, Deduct	-1.89	
			For >500, Deduct	-2.27	
05 05 23 00-0137	EA		3/8" Diameter x 2" Length, Zinc Plated Steel, Low Carbon/Grade 2, Hex Head Bolt.....	7.93	
			For >100 To 250, Deduct	-1.51	
			For >250 To 500, Deduct	-1.89	
			For >500, Deduct	-2.27	
05 05 23 00-0138	EA		3/8" Diameter x 2-1/2" Length, Zinc Plated Steel, Low Carbon/Grade 2, Hex Head Bolt.....	8.21	
			For >100 To 250, Deduct	-1.56	
			For >250 To 500, Deduct	-1.95	
			For >500, Deduct	-2.33	
05 05 23 00-0139	EA		3/8" Diameter x 3" Length, Zinc Plated Steel, Low Carbon/Grade 2, Hex Head Bolt.....	8.34	
			For >100 To 250, Deduct	-1.56	
			For >250 To 500, Deduct	-1.95	
			For >500, Deduct	-2.33	
05 05 23 00-0140	EA		3/8" Diameter x 3-1/2" Length, Zinc Plated Steel, Low Carbon/Grade 2, Hex Head Bolt.....	8.46	
			For >100 To 250, Deduct	-1.56	
			For >250 To 500, Deduct	-1.95	
			For >500, Deduct	-2.33	
05 05 23 00-0141	EA		3/8" Diameter x 4" Length, Zinc Plated Steel, Low Carbon/Grade 2, Hex Head Bolt.....	8.79	
			For >100 To 250, Deduct	-1.60	
			For >250 To 500, Deduct	-2.00	
			For >500, Deduct	-2.40	
05 05 23 00-0142	EA		3/8" Diameter x 4-1/2" Length, Zinc Plated Steel, Low Carbon/Grade 2, Hex Head Bolt.....	8.96	
			For >100 To 250, Deduct	-1.60	
			For >250 To 500, Deduct	-2.00	
			For >500, Deduct	-2.40	

**05 Metals****05 05 Common Work Results for Metals****05 05 23 Metal Fastenings**

MINOR	CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
05 05 23 00-0143	EA		3/8" Diameter x 5" Length, Zinc Plated Steel, Low Carbon/Grade 2, Hex Head Bolt.....	9.05	
			For >100 To 250, Deduct	-1.60	
			For >250 To 500, Deduct	-2.00	
			For >500, Deduct	-2.40	
05 05 23 00-0144	EA		3/8" Diameter x 5-1/2" Length, Zinc Plated Steel, Low Carbon/Grade 2, Hex Head Bolt.....	9.43	
			For >100 To 250, Deduct	-1.64	
			For >250 To 500, Deduct	-2.05	
			For >500, Deduct	-2.46	
05 05 23 00-0145	EA		3/8" Diameter x 6" Length, Zinc Plated Steel, Low Carbon/Grade 2, Hex Head Bolt.....	9.52	
			For >100 To 250, Deduct	-1.64	
			For >250 To 500, Deduct	-2.05	
			For >500, Deduct	-2.46	
05 05 23 00-0146	EA		3/8" Diameter x 6-1/2" Length, Zinc Plated Steel, Low Carbon/Grade 2, Hex Head Bolt.....	9.59	
			For >100 To 250, Deduct	-1.64	
			For >250 To 500, Deduct	-2.05	
			For >500, Deduct	-2.46	
05 05 23 00-0147	EA		3/8" Diameter x 7" Length, Zinc Plated Steel, Low Carbon/Grade 2, Hex Head Bolt.....	9.84	
			For >100 To 250, Deduct	-1.68	
			For >250 To 500, Deduct	-2.11	
			For >500, Deduct	-2.53	
05 05 23 00-0148	EA		3/8" Diameter x 7-1/2" Length, Zinc Plated Steel, Low Carbon/Grade 2, Hex Head Bolt.....	9.94	
			For >100 To 250, Deduct	-1.68	
			For >250 To 500, Deduct	-2.11	
			For >500, Deduct	-2.53	
05 05 23 00-0149	EA		3/8" Diameter x 8" Length, Zinc Plated Steel, Low Carbon/Grade 2, Hex Head Bolt.....	10.08	
			For >100 To 250, Deduct	-1.68	
			For >250 To 500, Deduct	-2.11	
			For >500, Deduct	-2.53	
<b>05 05 23 00-0150 7/16" Diameter, Zinc Plated Steel, Low Carbon/Grade 2, Hex Head Bolts (05 05</b>					
			23 00-0098)		
05 05 23 00-0151	EA		7/16" Diameter x 1" Length, Zinc Plated Steel, Low Carbon/Grade 2, Hex Head Bolt.....	9.15	
			For >100 To 250, Deduct	-1.73	
			For >250 To 500, Deduct	-2.16	
			For >500, Deduct	-2.59	
05 05 23 00-0152	EA		7/16" Diameter x 1-1/2" Length, Zinc Plated Steel, Low Carbon/Grade 2, Hex Head Bolt.....	9.25	
			For >100 To 250, Deduct	-1.73	
			For >250 To 500, Deduct	-2.16	
			For >500, Deduct	-2.59	
05 05 23 00-0153	EA		7/16" Diameter x 2" Length, Zinc Plated Steel, Low Carbon/Grade 2, Hex Head Bolt.....	9.26	
			For >100 To 250, Deduct	-1.73	
			For >250 To 500, Deduct	-2.16	
			For >500, Deduct	-2.59	
05 05 23 00-0154	EA		7/16" Diameter x 2-1/2" Length, Zinc Plated Steel, Low Carbon/Grade 2, Hex Head Bolt.....	9.61	
			For >100 To 250, Deduct	-1.77	
			For >250 To 500, Deduct	-2.21	
			For >500, Deduct	-2.66	
05 05 23 00-0155	EA		7/16" Diameter x 3" Length, Zinc Plated Steel, Low Carbon/Grade 2, Hex Head Bolt.....	9.76	
			For >100 To 250, Deduct	-1.77	
			For >250 To 500, Deduct	-2.21	
			For >500, Deduct	-2.66	
05 05 23 00-0156	EA		7/16" Diameter x 3-1/2" Length, Zinc Plated Steel, Low Carbon/Grade 2, Hex Head Bolt.....	9.89	
			For >100 To 250, Deduct	-1.77	
			For >250 To 500, Deduct	-2.21	
			For >500, Deduct	-2.66	
05 05 23 00-0157	EA		7/16" Diameter x 4" Length, Zinc Plated Steel, Low Carbon/Grade 2, Hex Head Bolt.....	10.44	
			For >100 To 250, Deduct	-1.81	
			For >250 To 500, Deduct	-2.27	
			For >500, Deduct	-2.72	
05 05 23 00-0158	EA		7/16" Diameter x 4-1/2" Length, Zinc Plated Steel, Low Carbon/Grade 2, Hex Head Bolt.....	10.53	
			For >100 To 250, Deduct	-1.81	
			For >250 To 500, Deduct	-2.27	
			For >500, Deduct	-2.72	
05 05 23 00-0159	EA		7/16" Diameter x 5" Length, Zinc Plated Steel, Low Carbon/Grade 2, Hex Head Bolt.....	10.71	
			For >100 To 250, Deduct	-1.81	
			For >250 To 500, Deduct	-2.27	
			For >500, Deduct	-2.72	
05 05 23 00-0160	EA		7/16" Diameter x 5-1/2" Length, Zinc Plated Steel, Low Carbon/Grade 2, Hex Head Bolt.....	11.23	
			For >100 To 250, Deduct	-1.86	
			For >250 To 500, Deduct	-2.32	
			For >500, Deduct	-2.79	
05 05 23 00-0161	EA		7/16" Diameter x 6" Length, Zinc Plated Steel, Low Carbon/Grade 2, Hex Head Bolt.....	11.32	
			For >100 To 250, Deduct	-1.86	
			For >250 To 500, Deduct	-2.32	
			For >500, Deduct	-2.79	
05 05 23 00-0162	EA		7/16" Diameter x 6-1/2" Length, Zinc Plated Steel, Low Carbon/Grade 2, Hex Head Bolt.....	11.55	
			For >100 To 250, Deduct	-1.86	
			For >250 To 500, Deduct	-2.32	
			For >500, Deduct	-2.79	
05 05 23 00-0163	EA		7/16" Diameter x 7" Length, Zinc Plated Steel, Low Carbon/Grade 2, Hex Head Bolt.....	11.87	
			For >100 To 250, Deduct	-1.90	
			For >250 To 500, Deduct	-2.38	
			For >500, Deduct	-2.85	



		<b>Metals</b>	<b>05</b>
		<b>Common Work Results for Metals</b>	<b>05 05</b>
		<b>Metal Fastenings</b>	<b>05 05 23</b>

05

MINOR CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
05 05 23 00-0164	EA	7/16" Diameter x 7-1/2" Length, Zinc Plated Steel, Low Carbon/Grade 2, Hex Head Bolt.....	12.08	
		For >100 To 250, Deduct	-1.90	
		For >250 To 500, Deduct	-2.38	
		For >500, Deduct	-2.85	
05 05 23 00-0165	EA	7/16" Diameter x 8" Length, Zinc Plated Steel, Low Carbon/Grade 2, Hex Head Bolt.....	12.49	
		For >100 To 250, Deduct	-1.90	
		For >250 To 500, Deduct	-2.38	
		For >500, Deduct	-2.85	
05 05 23 00-0166		1/2" Diameter, Zinc Plated Steel, Low Carbon/Grade 2, Hex Head Bolts (05 05 23 00-0098)		
05 05 23 00-0167	EA	1/2" Diameter x 1" Length, Zinc Plated Steel, Low Carbon/Grade 2, Hex Head Bolt.....	9.07	
		For >100 To 250, Deduct	-1.73	
		For >250 To 500, Deduct	-2.16	
		For >500, Deduct	-2.59	
05 05 23 00-0168	EA	1/2" Diameter x 1-1/2" Length, Zinc Plated Steel, Low Carbon/Grade 2, Hex Head Bolt.....	9.19	
		For >100 To 250, Deduct	-1.73	
		For >250 To 500, Deduct	-2.16	
		For >500, Deduct	-2.59	
05 05 23 00-0169	EA	1/2" Diameter x 2" Length, Zinc Plated Steel, Low Carbon/Grade 2, Hex Head Bolt.....	9.31	
		For >100 To 250, Deduct	-1.73	
		For >250 To 500, Deduct	-2.16	
		For >500, Deduct	-2.59	
05 05 23 00-0170	EA	1/2" Diameter x 2-1/2" Length, Zinc Plated Steel, Low Carbon/Grade 2, Hex Head Bolt.....	9.65	
		For >100 To 250, Deduct	-1.77	
		For >250 To 500, Deduct	-2.21	
		For >500, Deduct	-2.66	
05 05 23 00-0171	EA	1/2" Diameter x 3" Length, Zinc Plated Steel, Low Carbon/Grade 2, Hex Head Bolt.....	9.78	
		For >100 To 250, Deduct	-1.77	
		For >250 To 500, Deduct	-2.21	
		For >500, Deduct	-2.66	
05 05 23 00-0172	EA	1/2" Diameter x 3-1/2" Length, Zinc Plated Steel, Low Carbon/Grade 2, Hex Head Bolt.....	9.91	
		For >100 To 250, Deduct	-1.77	
		For >250 To 500, Deduct	-2.21	
		For >500, Deduct	-2.66	
05 05 23 00-0173	EA	1/2" Diameter x 4" Length, Zinc Plated Steel, Low Carbon/Grade 2, Hex Head Bolt.....	10.29	
		For >100 To 250, Deduct	-1.81	
		For >250 To 500, Deduct	-2.27	
		For >500, Deduct	-2.72	
05 05 23 00-0174	EA	1/2" Diameter x 4-1/2" Length, Zinc Plated Steel, Low Carbon/Grade 2, Hex Head Bolt.....	10.44	
		For >100 To 250, Deduct	-1.81	
		For >250 To 500, Deduct	-2.27	
		For >500, Deduct	-2.72	
05 05 23 00-0175	EA	1/2" Diameter x 5" Length, Zinc Plated Steel, Low Carbon/Grade 2, Hex Head Bolt.....	10.69	
		For >100 To 250, Deduct	-1.81	
		For >250 To 500, Deduct	-2.27	
		For >500, Deduct	-2.72	
05 05 23 00-0176	EA	1/2" Diameter x 5-1/2" Length, Zinc Plated Steel, Low Carbon/Grade 2, Hex Head Bolt.....	10.94	
		For >100 To 250, Deduct	-1.86	
		For >250 To 500, Deduct	-2.32	
		For >500, Deduct	-2.79	
05 05 23 00-0177	EA	1/2" Diameter x 6" Length, Zinc Plated Steel, Low Carbon/Grade 2, Hex Head Bolt.....	10.97	
		For >100 To 250, Deduct	-1.86	
		For >250 To 500, Deduct	-2.32	
		For >500, Deduct	-2.79	
05 05 23 00-0178	EA	1/2" Diameter x 6-1/2" Length, Zinc Plated Steel, Low Carbon/Grade 2, Hex Head Bolt.....	11.19	
		For >100 To 250, Deduct	-1.86	
		For >250 To 500, Deduct	-2.32	
		For >500, Deduct	-2.79	
05 05 23 00-0179	EA	1/2" Diameter x 7" Length, Zinc Plated Steel, Low Carbon/Grade 2, Hex Head Bolt.....	11.60	
		For >100 To 250, Deduct	-1.90	
		For >250 To 500, Deduct	-2.38	
		For >500, Deduct	-2.85	
05 05 23 00-0180	EA	1/2" Diameter x 7-1/2" Length, Zinc Plated Steel, Low Carbon/Grade 2, Hex Head Bolt.....	11.74	
		For >100 To 250, Deduct	-1.90	
		For >250 To 500, Deduct	-2.38	
		For >500, Deduct	-2.85	
05 05 23 00-0181	EA	1/2" Diameter x 8" Length, Zinc Plated Steel, Low Carbon/Grade 2, Hex Head Bolt.....	12.11	
		For >100 To 250, Deduct	-1.90	
		For >250 To 500, Deduct	-2.38	
		For >500, Deduct	-2.85	
05 05 23 00-0182	EA	1/2" Diameter x 8-1/2" Length, Zinc Plated Steel, Low Carbon/Grade 2, Hex Head Bolt.....	12.50	
		For >100 To 250, Deduct	-1.94	
		For >250 To 500, Deduct	-2.43	
		For >500, Deduct	-2.92	
05 05 23 00-0183	EA	1/2" Diameter x 9" Length, Zinc Plated Steel, Low Carbon/Grade 2, Hex Head Bolt.....	12.64	
		For >100 To 250, Deduct	-1.94	
		For >250 To 500, Deduct	-2.43	
		For >500, Deduct	-2.92	
05 05 23 00-0184	EA	1/2" Diameter x 9-1/2" Length, Zinc Plated Steel, Low Carbon/Grade 2, Hex Head Bolt.....	13.16	
		For >100 To 250, Deduct	-1.94	
		For >250 To 500, Deduct	-2.43	
		For >500, Deduct	-2.92	

**05 Metals****05 05 Common Work Results for Metals****05 05 23 Metal Fastenings**

MINOR	CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
05 05 23 00-0185	EA		1/2" Diameter x 10" Length, Zinc Plated Steel, Low Carbon/Grade 2, Hex Head Bolt.....	13.30	
			For >100 To 250, Deduct	-1.94	
			For >250 To 500, Deduct	-2.43	
			For >500, Deduct	-2.92	
<b>05 05 23 00-0186 9/16" Diameter, Zinc Plated Steel, Low Carbon/Grade 2, Hex Head Bolts (05 05</b>					
			23 00-0098)		
05 05 23 00-0187	EA		9/16" Diameter x 1" Length, Zinc Plated Steel, Low Carbon/Grade 2, Hex Head Bolt.....	9.19	
			For >100 To 250, Deduct	-1.73	
			For >250 To 500, Deduct	-2.16	
			For >500, Deduct	-2.59	
05 05 23 00-0188	EA		9/16" Diameter x 1-1/2" Length, Zinc Plated Steel, Low Carbon/Grade 2, Hex Head Bolt.....	9.36	
			For >100 To 250, Deduct	-1.73	
			For >250 To 500, Deduct	-2.16	
			For >500, Deduct	-2.59	
05 05 23 00-0189	EA		9/16" Diameter x 2" Length, Zinc Plated Steel, Low Carbon/Grade 2, Hex Head Bolt.....	9.40	
			For >100 To 250, Deduct	-1.73	
			For >250 To 500, Deduct	-2.16	
			For >500, Deduct	-2.59	
05 05 23 00-0190	EA		9/16" Diameter x 2-1/2" Length, Zinc Plated Steel, Low Carbon/Grade 2, Hex Head Bolt.....	10.15	
			For >100 To 250, Deduct	-1.77	
			For >250 To 500, Deduct	-2.21	
			For >500, Deduct	-2.66	
05 05 23 00-0191	EA		9/16" Diameter x 3" Length, Zinc Plated Steel, Low Carbon/Grade 2, Hex Head Bolt.....	10.37	
			For >100 To 250, Deduct	-1.77	
			For >250 To 500, Deduct	-2.21	
			For >500, Deduct	-2.66	
05 05 23 00-0192	EA		9/16" Diameter x 3-1/2" Length, Zinc Plated Steel, Low Carbon/Grade 2, Hex Head Bolt.....	10.44	
			For >100 To 250, Deduct	-1.77	
			For >250 To 500, Deduct	-2.21	
			For >500, Deduct	-2.66	
05 05 23 00-0193	EA		9/16" Diameter x 4" Length, Zinc Plated Steel, Low Carbon/Grade 2, Hex Head Bolt.....	10.69	
			For >100 To 250, Deduct	-1.81	
			For >250 To 500, Deduct	-2.27	
			For >500, Deduct	-2.72	
05 05 23 00-0194	EA		9/16" Diameter x 4-1/2" Length, Zinc Plated Steel, Low Carbon/Grade 2, Hex Head Bolt.....	10.74	
			For >100 To 250, Deduct	-1.81	
			For >250 To 500, Deduct	-2.27	
			For >500, Deduct	-2.72	
05 05 23 00-0195	EA		9/16" Diameter x 5" Length, Zinc Plated Steel, Low Carbon/Grade 2, Hex Head Bolt.....	10.93	
			For >100 To 250, Deduct	-1.81	
			For >250 To 500, Deduct	-2.27	
			For >500, Deduct	-2.72	
05 05 23 00-0196	EA		9/16" Diameter x 5-1/2" Length, Zinc Plated Steel, Low Carbon/Grade 2, Hex Head Bolt.....	11.19	
			For >100 To 250, Deduct	-1.86	
			For >250 To 500, Deduct	-2.32	
			For >500, Deduct	-2.79	
05 05 23 00-0197	EA		9/16" Diameter x 6" Length, Zinc Plated Steel, Low Carbon/Grade 2, Hex Head Bolt.....	11.24	
			For >100 To 250, Deduct	-1.86	
			For >250 To 500, Deduct	-2.32	
			For >500, Deduct	-2.79	
05 05 23 00-0198	EA		9/16" Diameter x 6-1/2" Length, Zinc Plated Steel, Low Carbon/Grade 2, Hex Head Bolt.....	11.40	
			For >100 To 250, Deduct	-1.86	
			For >250 To 500, Deduct	-2.32	
			For >500, Deduct	-2.79	
05 05 23 00-0199	EA		9/16" Diameter x 7" Length, Zinc Plated Steel, Low Carbon/Grade 2, Hex Head Bolt.....	11.80	
			For >100 To 250, Deduct	-1.90	
			For >250 To 500, Deduct	-2.38	
			For >500, Deduct	-2.85	
05 05 23 00-0200	EA		9/16" Diameter x 7-1/2" Length, Zinc Plated Steel, Low Carbon/Grade 2, Hex Head Bolt.....	11.99	
			For >100 To 250, Deduct	-1.90	
			For >250 To 500, Deduct	-2.38	
			For >500, Deduct	-2.85	
05 05 23 00-0201	EA		9/16" Diameter x 8" Length, Zinc Plated Steel, Low Carbon/Grade 2, Hex Head Bolt.....	12.19	
			For >100 To 250, Deduct	-1.90	
			For >250 To 500, Deduct	-2.38	
			For >500, Deduct	-2.85	
05 05 23 00-0202	EA		9/16" Diameter x 8-1/2" Length, Zinc Plated Steel, Low Carbon/Grade 2, Hex Head Bolt.....	12.57	
			For >100 To 250, Deduct	-1.94	
			For >250 To 500, Deduct	-2.43	
			For >500, Deduct	-2.92	
05 05 23 00-0203	EA		9/16" Diameter x 9" Length, Zinc Plated Steel, Low Carbon/Grade 2, Hex Head Bolt.....	12.80	
			For >100 To 250, Deduct	-1.94	
			For >250 To 500, Deduct	-2.43	
			For >500, Deduct	-2.92	
05 05 23 00-0204	EA		9/16" Diameter x 9-1/2" Length, Zinc Plated Steel, Low Carbon/Grade 2, Hex Head Bolt.....	12.95	
			For >100 To 250, Deduct	-1.94	
			For >250 To 500, Deduct	-2.43	
			For >500, Deduct	-2.92	
05 05 23 00-0205	EA		9/16" Diameter x 10" Length, Zinc Plated Steel, Low Carbon/Grade 2, Hex Head Bolt.....	13.19	
			For >100 To 250, Deduct	-1.94	
			For >250 To 500, Deduct	-2.43	
			For >500, Deduct	-2.92	



		<b>Metals</b>	<b>05</b>
		<b>Common Work Results for Metals</b>	<b>05 05</b>
		<b>Metal Fastenings</b>	<b>05 05 23</b>

05

MINOR CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
05 05 23 00-0206		5/8" Diameter, Zinc Plated Steel, Low Carbon/Grade 2, Hex Head Bolts (05 05 23 00-0098)		
05 05 23 00-0207	EA	5/8" Diameter x 1" Length, Zinc Plated Steel, Low Carbon/Grade 2, Hex Head Bolt.....	10.64	
		For >100 To 250, Deduct	-1.94	
		For >250 To 500, Deduct	-2.43	
		For >500, Deduct	-2.92	
05 05 23 00-0208	EA	5/8" Diameter x 1-1/2" Length, Zinc Plated Steel, Low Carbon/Grade 2, Hex Head Bolt.....	10.75	
		For >100 To 250, Deduct	-1.94	
		For >250 To 500, Deduct	-2.43	
		For >500, Deduct	-2.92	
05 05 23 00-0209	EA	5/8" Diameter x 2" Length, Zinc Plated Steel, Low Carbon/Grade 2, Hex Head Bolt.....	10.89	
		For >100 To 250, Deduct	-1.94	
		For >250 To 500, Deduct	-2.43	
		For >500, Deduct	-2.92	
05 05 23 00-0210	EA	5/8" Diameter x 2-1/2" Length, Zinc Plated Steel, Low Carbon/Grade 2, Hex Head Bolt.....	11.31	
		For >100 To 250, Deduct	-1.99	
		For >250 To 500, Deduct	-2.49	
		For >500, Deduct	-2.98	
05 05 23 00-0211	EA	5/8" Diameter x 3" Length, Zinc Plated Steel, Low Carbon/Grade 2, Hex Head Bolt.....	11.52	
		For >100 To 250, Deduct	-1.99	
		For >250 To 500, Deduct	-2.49	
		For >500, Deduct	-2.98	
05 05 23 00-0212	EA	5/8" Diameter x 3-1/2" Length, Zinc Plated Steel, Low Carbon/Grade 2, Hex Head Bolt.....	11.79	
		For >100 To 250, Deduct	-1.99	
		For >250 To 500, Deduct	-2.49	
		For >500, Deduct	-2.98	
05 05 23 00-0213	EA	5/8" Diameter x 4" Length, Zinc Plated Steel, Low Carbon/Grade 2, Hex Head Bolt.....	12.34	
		For >100 To 250, Deduct	-2.03	
		For >250 To 500, Deduct	-2.54	
		For >500, Deduct	-3.05	
05 05 23 00-0214	EA	5/8" Diameter x 4-1/2" Length, Zinc Plated Steel, Low Carbon/Grade 2, Hex Head Bolt.....	12.75	
		For >100 To 250, Deduct	-2.03	
		For >250 To 500, Deduct	-2.54	
		For >500, Deduct	-3.05	
05 05 23 00-0215	EA	5/8" Diameter x 5" Length, Zinc Plated Steel, Low Carbon/Grade 2, Hex Head Bolt.....	13.07	
		For >100 To 250, Deduct	-2.03	
		For >250 To 500, Deduct	-2.54	
		For >500, Deduct	-3.05	
05 05 23 00-0216	EA	5/8" Diameter x 5-1/2" Length, Zinc Plated Steel, Low Carbon/Grade 2, Hex Head Bolt.....	13.42	
		For >100 To 250, Deduct	-2.07	
		For >250 To 500, Deduct	-2.59	
		For >500, Deduct	-3.11	
05 05 23 00-0217	EA	5/8" Diameter x 6" Length, Zinc Plated Steel, Low Carbon/Grade 2, Hex Head Bolt.....	13.46	
		For >100 To 250, Deduct	-2.07	
		For >250 To 500, Deduct	-2.59	
		For >500, Deduct	-3.11	
05 05 23 00-0218	EA	5/8" Diameter x 6-1/2" Length, Zinc Plated Steel, Low Carbon/Grade 2, Hex Head Bolt.....	14.00	
		For >100 To 250, Deduct	-2.07	
		For >250 To 500, Deduct	-2.59	
		For >500, Deduct	-3.11	
05 05 23 00-0219	EA	5/8" Diameter x 7" Length, Zinc Plated Steel, Low Carbon/Grade 2, Hex Head Bolt.....	14.52	
		For >100 To 250, Deduct	-2.12	
		For >250 To 500, Deduct	-2.65	
		For >500, Deduct	-3.17	
05 05 23 00-0220	EA	5/8" Diameter x 7-1/2" Length, Zinc Plated Steel, Low Carbon/Grade 2, Hex Head Bolt.....	14.95	
		For >100 To 250, Deduct	-2.12	
		For >250 To 500, Deduct	-2.65	
		For >500, Deduct	-3.17	
05 05 23 00-0221	EA	5/8" Diameter x 8" Length, Zinc Plated Steel, Low Carbon/Grade 2, Hex Head Bolt.....	15.46	
		For >100 To 250, Deduct	-2.12	
		For >250 To 500, Deduct	-2.65	
		For >500, Deduct	-3.17	
05 05 23 00-0222	EA	5/8" Diameter x 8-1/2" Length, Zinc Plated Steel, Low Carbon/Grade 2, Hex Head Bolt.....	16.22	
		For >100 To 250, Deduct	-2.16	
		For >250 To 500, Deduct	-2.70	
		For >500, Deduct	-3.24	
05 05 23 00-0223	EA	5/8" Diameter x 9" Length, Zinc Plated Steel, Low Carbon/Grade 2, Hex Head Bolt.....	16.71	
		For >100 To 250, Deduct	-2.16	
		For >250 To 500, Deduct	-2.70	
		For >500, Deduct	-3.24	
05 05 23 00-0224	EA	5/8" Diameter x 9-1/2" Length, Zinc Plated Steel, Low Carbon/Grade 2, Hex Head Bolt.....	17.22	
		For >100 To 250, Deduct	-2.16	
		For >250 To 500, Deduct	-2.70	
		For >500, Deduct	-3.24	
05 05 23 00-0225	EA	5/8" Diameter x 10" Length, Zinc Plated Steel, Low Carbon/Grade 2, Hex Head Bolt.....	17.61	
		For >100 To 250, Deduct	-2.16	
		For >250 To 500, Deduct	-2.70	
		For >500, Deduct	-3.24	
05 05 23 00-0226		3/4" Diameter, Zinc Plated Steel, Low Carbon/Grade 2, Hex Head Bolts (05 05 23 00-0098)		
05 05 23 00-0227	EA	3/4" Diameter x 1" Length, Zinc Plated Steel, Low Carbon/Grade 2, Hex Head Bolt.....	11.00	
		For >100 To 250, Deduct	-1.94	
		For >250 To 500, Deduct	-2.43	
		For >500, Deduct	-2.92	

**05 Metals****05 05 Common Work Results for Metals****05 05 23 Metal Fastenings**

MINOR	CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
05 05 23 00-0228	EA	3/4"	Diameter x 1-1/2" Length, Zinc Plated Steel, Low Carbon/Grade 2, Hex Head Bolt.....	11.23	
			For >100 To 250, Deduct	-1.94	
			For >250 To 500, Deduct	-2.43	
			For >500, Deduct	-2.92	
05 05 23 00-0229	EA	3/4"	Diameter x 2" Length, Zinc Plated Steel, Low Carbon/Grade 2, Hex Head Bolt.....	11.43	
			For >100 To 250, Deduct	-1.94	
			For >250 To 500, Deduct	-2.43	
			For >500, Deduct	-2.92	
05 05 23 00-0230	EA	3/4"	Diameter x 2-1/2" Length, Zinc Plated Steel, Low Carbon/Grade 2, Hex Head Bolt.....	11.91	
			For >100 To 250, Deduct	-1.99	
			For >250 To 500, Deduct	-2.49	
			For >500, Deduct	-2.98	
05 05 23 00-0231	EA	3/4"	Diameter x 3" Length, Zinc Plated Steel, Low Carbon/Grade 2, Hex Head Bolt.....	12.23	
			For >100 To 250, Deduct	-1.99	
			For >250 To 500, Deduct	-2.49	
			For >500, Deduct	-2.98	
05 05 23 00-0232	EA	3/4"	Diameter x 3-1/2" Length, Zinc Plated Steel, Low Carbon/Grade 2, Hex Head Bolt.....	12.51	
			For >100 To 250, Deduct	-1.99	
			For >250 To 500, Deduct	-2.49	
			For >500, Deduct	-2.98	
05 05 23 00-0233	EA	3/4"	Diameter x 4" Length, Zinc Plated Steel, Low Carbon/Grade 2, Hex Head Bolt.....	13.02	
			For >100 To 250, Deduct	-2.03	
			For >250 To 500, Deduct	-2.54	
			For >500, Deduct	-3.05	
05 05 23 00-0234	EA	3/4"	Diameter x 4-1/2" Length, Zinc Plated Steel, Low Carbon/Grade 2, Hex Head Bolt.....	13.41	
			For >100 To 250, Deduct	-2.03	
			For >250 To 500, Deduct	-2.54	
			For >500, Deduct	-3.05	
05 05 23 00-0235	EA	3/4"	Diameter x 5" Length, Zinc Plated Steel, Low Carbon/Grade 2, Hex Head Bolt.....	13.72	
			For >100 To 250, Deduct	-2.03	
			For >250 To 500, Deduct	-2.54	
			For >500, Deduct	-3.05	
05 05 23 00-0236	EA	3/4"	Diameter x 5-1/2" Length, Zinc Plated Steel, Low Carbon/Grade 2, Hex Head Bolt.....	14.58	
			For >100 To 250, Deduct	-2.07	
			For >250 To 500, Deduct	-2.59	
			For >500, Deduct	-3.11	
05 05 23 00-0237	EA	3/4"	Diameter x 6" Length, Zinc Plated Steel, Low Carbon/Grade 2, Hex Head Bolt.....	14.84	
			For >100 To 250, Deduct	-2.07	
			For >250 To 500, Deduct	-2.59	
			For >500, Deduct	-3.11	
05 05 23 00-0238	EA	3/4"	Diameter x 6-1/2" Length, Zinc Plated Steel, Low Carbon/Grade 2, Hex Head Bolt.....	15.32	
			For >100 To 250, Deduct	-2.07	
			For >250 To 500, Deduct	-2.59	
			For >500, Deduct	-3.11	
05 05 23 00-0239	EA	3/4"	Diameter x 7" Length, Zinc Plated Steel, Low Carbon/Grade 2, Hex Head Bolt.....	15.56	
			For >100 To 250, Deduct	-2.12	
			For >250 To 500, Deduct	-2.65	
			For >500, Deduct	-3.17	
05 05 23 00-0240	EA	3/4"	Diameter x 7-1/2" Length, Zinc Plated Steel, Low Carbon/Grade 2, Hex Head Bolt.....	16.69	
			For >100 To 250, Deduct	-2.12	
			For >250 To 500, Deduct	-2.65	
			For >500, Deduct	-3.17	
05 05 23 00-0241	EA	3/4"	Diameter x 8" Length, Zinc Plated Steel, Low Carbon/Grade 2, Hex Head Bolt.....	17.21	
			For >100 To 250, Deduct	-2.12	
			For >250 To 500, Deduct	-2.65	
			For >500, Deduct	-3.17	
05 05 23 00-0242	EA	3/4"	Diameter x 8-1/2" Length, Zinc Plated Steel, Low Carbon/Grade 2, Hex Head Bolt.....	18.12	
			For >100 To 250, Deduct	-2.16	
			For >250 To 500, Deduct	-2.70	
			For >500, Deduct	-3.24	
05 05 23 00-0243	EA	3/4"	Diameter x 9" Length, Zinc Plated Steel, Low Carbon/Grade 2, Hex Head Bolt.....	18.64	
			For >100 To 250, Deduct	-2.16	
			For >250 To 500, Deduct	-2.70	
			For >500, Deduct	-3.24	
05 05 23 00-0244	EA	3/4"	Diameter x 9-1/2" Length, Zinc Plated Steel, Low Carbon/Grade 2, Hex Head Bolt.....	19.34	
			For >100 To 250, Deduct	-2.16	
			For >250 To 500, Deduct	-2.70	
			For >500, Deduct	-3.24	
05 05 23 00-0245	EA	3/4"	Diameter x 10" Length, Zinc Plated Steel, Low Carbon/Grade 2, Hex Head Bolt.....	20.02	
			For >100 To 250, Deduct	-2.16	
			For >250 To 500, Deduct	-2.70	
			For >500, Deduct	-3.24	
05 05 23 00-0246			7/8" Diameter, Zinc Plated Steel, Low Carbon/Grade 2, Hex Head Bolts (05 05 23 00-0098)		
05 05 23 00-0247	EA	7/8"	Diameter x 1" Length, Zinc Plated Steel, Low Carbon/Grade 2, Hex Head Bolt.....	13.26	
			For >100 To 250, Deduct	-2.16	
			For >250 To 500, Deduct	-2.70	
			For >500, Deduct	-3.24	
05 05 23 00-0248	EA	7/8"	Diameter x 1-1/2" Length, Zinc Plated Steel, Low Carbon/Grade 2, Hex Head Bolt.....	13.45	
			For >100 To 250, Deduct	-2.16	
			For >250 To 500, Deduct	-2.70	
			For >500, Deduct	-3.24	



		<b>Metals</b>	<b>05</b>
		<b>Common Work Results for Metals</b>	<b>05 05</b>
		<b>Metal Fastenings</b>	<b>05 05 23</b>

05

MINOR		TOTAL DIRECT		DEMOLITION
CSI	UOM DESCRIPTION	UNIT COST		UNIT COST
05 05 23 00-0249	EA 7/8" Diameter x 2" Length, Zinc Plated Steel, Low Carbon/Grade 2, Hex Head Bolt.....	13.54		
	For >100 To 250, Deduct	-2.16		
	For >250 To 500, Deduct	-2.70		
	For >500, Deduct	-3.24		
05 05 23 00-0250	EA 7/8" Diameter x 2-1/2" Length, Zinc Plated Steel, Low Carbon/Grade 2, Hex Head Bolt.....	14.02		
	For >100 To 250, Deduct	-2.20		
	For >250 To 500, Deduct	-2.76		
	For >500, Deduct	-3.31		
05 05 23 00-0251	EA 7/8" Diameter x 3" Length, Zinc Plated Steel, Low Carbon/Grade 2, Hex Head Bolt.....	14.53		
	For >100 To 250, Deduct	-2.20		
	For >250 To 500, Deduct	-2.76		
	For >500, Deduct	-3.31		
05 05 23 00-0252	EA 7/8" Diameter x 3-1/2" Length, Zinc Plated Steel, Low Carbon/Grade 2, Hex Head Bolt.....	15.13		
	For >100 To 250, Deduct	-2.20		
	For >250 To 500, Deduct	-2.76		
	For >500, Deduct	-3.31		
05 05 23 00-0253	EA 7/8" Diameter x 4" Length, Zinc Plated Steel, Low Carbon/Grade 2, Hex Head Bolt.....	15.84		
	For >100 To 250, Deduct	-2.25		
	For >250 To 500, Deduct	-2.81		
	For >500, Deduct	-3.37		
05 05 23 00-0254	EA 7/8" Diameter x 4-1/2" Length, Zinc Plated Steel, Low Carbon/Grade 2, Hex Head Bolt.....	16.71		
	For >100 To 250, Deduct	-2.25		
	For >250 To 500, Deduct	-2.81		
	For >500, Deduct	-3.37		
05 05 23 00-0255	EA 7/8" Diameter x 5" Length, Zinc Plated Steel, Low Carbon/Grade 2, Hex Head Bolt.....	17.19		
	For >100 To 250, Deduct	-2.25		
	For >250 To 500, Deduct	-2.81		
	For >500, Deduct	-3.37		
05 05 23 00-0256	EA 7/8" Diameter x 5-1/2" Length, Zinc Plated Steel, Low Carbon/Grade 2, Hex Head Bolt.....	17.79		
	For >100 To 250, Deduct	-2.29		
	For >250 To 500, Deduct	-2.86		
	For >500, Deduct	-3.44		
05 05 23 00-0257	EA 7/8" Diameter x 6" Length, Zinc Plated Steel, Low Carbon/Grade 2, Hex Head Bolt.....	18.08		
	For >100 To 250, Deduct	-2.29		
	For >250 To 500, Deduct	-2.86		
	For >500, Deduct	-3.44		
05 05 23 00-0258	EA 7/8" Diameter x 6-1/2" Length, Zinc Plated Steel, Low Carbon/Grade 2, Hex Head Bolt.....	18.77		
	For >100 To 250, Deduct	-2.29		
	For >250 To 500, Deduct	-2.86		
	For >500, Deduct	-3.44		
05 05 23 00-0259	EA 7/8" Diameter x 7" Length, Zinc Plated Steel, Low Carbon/Grade 2, Hex Head Bolt.....	19.67		
	For >100 To 250, Deduct	-2.33		
	For >250 To 500, Deduct	-2.92		
	For >500, Deduct	-3.50		
05 05 23 00-0260	EA 7/8" Diameter x 7-1/2" Length, Zinc Plated Steel, Low Carbon/Grade 2, Hex Head Bolt.....	20.36		
	For >100 To 250, Deduct	-2.33		
	For >250 To 500, Deduct	-2.92		
	For >500, Deduct	-3.50		
05 05 23 00-0261	EA 7/8" Diameter x 8" Length, Zinc Plated Steel, Low Carbon/Grade 2, Hex Head Bolt.....	21.05		
	For >100 To 250, Deduct	-2.33		
	For >250 To 500, Deduct	-2.92		
	For >500, Deduct	-3.50		
05 05 23 00-0262	EA 7/8" Diameter x 8-1/2" Length, Zinc Plated Steel, Low Carbon/Grade 2, Hex Head Bolt.....	21.92		
	For >100 To 250, Deduct	-2.38		
	For >250 To 500, Deduct	-2.97		
	For >500, Deduct	-3.56		
05 05 23 00-0263	EA 7/8" Diameter x 9" Length, Zinc Plated Steel, Low Carbon/Grade 2, Hex Head Bolt.....	22.65		
	For >100 To 250, Deduct	-2.38		
	For >250 To 500, Deduct	-2.97		
	For >500, Deduct	-3.56		
05 05 23 00-0264	EA 7/8" Diameter x 9-1/2" Length, Zinc Plated Steel, Low Carbon/Grade 2, Hex Head Bolt.....	23.31		
	For >100 To 250, Deduct	-2.38		
	For >250 To 500, Deduct	-2.97		
	For >500, Deduct	-3.56		
05 05 23 00-0265	EA 7/8" Diameter x 10" Length, Zinc Plated Steel, Low Carbon/Grade 2, Hex Head Bolt.....	24.03		
	For >100 To 250, Deduct	-2.38		
	For >250 To 500, Deduct	-2.97		
	For >500, Deduct	-3.56		
05 05 23 00-0266	1" Diameter, Zinc Plated Steel, Low Carbon/Grade 2, Hex Head Bolts (05 05 23 00-0096)			
05 05 23 00-0267	EA 1" Diameter x 1-1/2" Length, Zinc Plated Steel, Low Carbon/Grade 2, Hex Head Bolt.....	14.11		
	For >100 To 250, Deduct	-2.16		
	For >250 To 500, Deduct	-2.70		
	For >500, Deduct	-3.24		
05 05 23 00-0268	EA 1" Diameter x 2" Length, Zinc Plated Steel, Low Carbon/Grade 2, Hex Head Bolt.....	15.37		
	For >100 To 250, Deduct	-2.16		
	For >250 To 500, Deduct	-2.70		
	For >500, Deduct	-3.24		
05 05 23 00-0269	EA 1" Diameter x 2-1/2" Length, Zinc Plated Steel, Low Carbon/Grade 2, Hex Head Bolt.....	16.38		
	For >100 To 250, Deduct	-2.20		
	For >250 To 500, Deduct	-2.76		
	For >500, Deduct	-3.31		

**05 Metals****05 05 Common Work Results for Metals****05 05 23 Metal Fastenings**

MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
05 05 23 00-0270 EA 1" Diameter x 3" Length, Zinc Plated Steel, Low Carbon/Grade 2, Hex Head Bolt.....	17.37	
For >100 To 250, Deduct	-2.20	
For >250 To 500, Deduct	-2.76	
For >500, Deduct	-3.31	
05 05 23 00-0271 EA 1" Diameter x 3-1/2" Length, Zinc Plated Steel, Low Carbon/Grade 2, Hex Head Bolt.....	18.28	
For >100 To 250, Deduct	-2.20	
For >250 To 500, Deduct	-2.76	
For >500, Deduct	-3.31	
05 05 23 00-0272 EA 1" Diameter x 4" Length, Zinc Plated Steel, Low Carbon/Grade 2, Hex Head Bolt.....	19.42	
For >100 To 250, Deduct	-2.25	
For >250 To 500, Deduct	-2.81	
For >500, Deduct	-3.37	
05 05 23 00-0273 EA 1" Diameter x 4-1/2" Length, Zinc Plated Steel, Low Carbon/Grade 2, Hex Head Bolt.....	20.29	
For >100 To 250, Deduct	-2.25	
For >250 To 500, Deduct	-2.81	
For >500, Deduct	-3.37	
05 05 23 00-0274 EA 1" Diameter x 5" Length, Zinc Plated Steel, Low Carbon/Grade 2, Hex Head Bolt.....	21.20	
For >100 To 250, Deduct	-2.25	
For >250 To 500, Deduct	-2.81	
For >500, Deduct	-3.37	
05 05 23 00-0275 EA 1" Diameter x 5-1/2" Length, Zinc Plated Steel, Low Carbon/Grade 2, Hex Head Bolt.....	21.87	
For >100 To 250, Deduct	-2.29	
For >250 To 500, Deduct	-2.86	
For >500, Deduct	-3.44	
05 05 23 00-0276 EA 1" Diameter x 6" Length, Zinc Plated Steel, Low Carbon/Grade 2, Hex Head Bolt.....	22.30	
For >100 To 250, Deduct	-2.29	
For >250 To 500, Deduct	-2.86	
For >500, Deduct	-3.44	
05 05 23 00-0277 EA 1" Diameter x 6-1/2" Length, Zinc Plated Steel, Low Carbon/Grade 2, Hex Head Bolt.....	23.06	
For >100 To 250, Deduct	-2.29	
For >250 To 500, Deduct	-2.86	
For >500, Deduct	-3.44	
05 05 23 00-0278 EA 1" Diameter x 7" Length, Zinc Plated Steel, Low Carbon/Grade 2, Hex Head Bolt.....	24.03	
For >100 To 250, Deduct	-2.33	
For >250 To 500, Deduct	-2.92	
For >500, Deduct	-3.50	
05 05 23 00-0279 EA 1" Diameter x 7-1/2" Length, Zinc Plated Steel, Low Carbon/Grade 2, Hex Head Bolt.....	24.78	
For >100 To 250, Deduct	-2.33	
For >250 To 500, Deduct	-2.92	
For >500, Deduct	-3.50	
05 05 23 00-0280 EA 1" Diameter x 8" Length, Zinc Plated Steel, Low Carbon/Grade 2, Hex Head Bolt.....	25.56	
For >100 To 250, Deduct	-2.33	
For >250 To 500, Deduct	-2.92	
For >500, Deduct	-3.50	
05 05 23 00-0281 EA 1" Diameter x 8-1/2" Length, Zinc Plated Steel, Low Carbon/Grade 2, Hex Head Bolt.....	26.40	
For >100 To 250, Deduct	-2.38	
For >250 To 500, Deduct	-2.97	
For >500, Deduct	-3.56	
05 05 23 00-0282 EA 1" Diameter x 9" Length, Zinc Plated Steel, Low Carbon/Grade 2, Hex Head Bolt.....	27.29	
For >100 To 250, Deduct	-2.38	
For >250 To 500, Deduct	-2.97	
For >500, Deduct	-3.56	
05 05 23 00-0283 EA 1" Diameter x 9-1/2" Length, Zinc Plated Steel, Low Carbon/Grade 2, Hex Head Bolt.....	28.07	
For >100 To 250, Deduct	-2.38	
For >250 To 500, Deduct	-2.97	
For >500, Deduct	-3.56	
05 05 23 00-0284 EA 1" Diameter x 10" Length, Zinc Plated Steel, Low Carbon/Grade 2, Hex Head Bolt.....	28.86	
For >100 To 250, Deduct	-2.38	
For >250 To 500, Deduct	-2.97	
For >500, Deduct	-3.56	
05 05 23 00-0285 Zinc Plated Steel, Grade 5, Hex Head Bolts (05 05 23 00-0097)		
05 05 23 00-0286 1/4" Diameter, Zinc Plated Steel, Grade 5, Hex Head Bolts (05 05 23 00-0285)		
05 05 23 00-0287 EA 1/4" Diameter x 1/2" Length, Zinc Plated Steel, Grade 5, Hex Head Bolt.....	7.69	
For >100 To 250, Deduct	-1.51	
For >250 To 500, Deduct	-1.89	
For >500, Deduct	-2.27	
05 05 23 00-0288 EA 1/4" Diameter x 1" Length, Zinc Plated Steel, Grade 5, Hex Head Bolt.....	7.73	
For >100 To 250, Deduct	-1.51	
For >250 To 500, Deduct	-1.89	
For >500, Deduct	-2.27	
05 05 23 00-0289 EA 1/4" Diameter x 1-1/2" Length, Zinc Plated Steel, Grade 5, Hex Head Bolt.....	7.76	
For >100 To 250, Deduct	-1.51	
For >250 To 500, Deduct	-1.89	
For >500, Deduct	-2.27	
05 05 23 00-0290 EA 1/4" Diameter x 2" Length, Zinc Plated Steel, Grade 5, Hex Head Bolt.....	7.83	
For >100 To 250, Deduct	-1.51	
For >250 To 500, Deduct	-1.89	
For >500, Deduct	-2.27	
05 05 23 00-0291 EA 1/4" Diameter x 2-1/2" Length, Zinc Plated Steel, Grade 5, Hex Head Bolt.....	8.12	
For >100 To 250, Deduct	-1.56	
For >250 To 500, Deduct	-1.95	
For >500, Deduct	-2.33	





		<b>Metals</b>	<b>05</b>
		<b>Common Work Results for Metals</b>	<b>05 05</b>
		<b>Metal Fastenings</b>	<b>05 05 23</b>

05

MINOR CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
05 05 23 00-0292	EA	1/4" Diameter x 3" Length, Zinc Plated Steel, Grade 5, Hex Head Bolt.....	8.23	
		For >100 To 250, Deduct	-1.56	
		For >250 To 500, Deduct	-1.95	
		For >500, Deduct	-2.33	
05 05 23 00-0293	EA	1/4" Diameter x 3-1/2" Length, Zinc Plated Steel, Grade 5, Hex Head Bolt.....	8.36	
		For >100 To 250, Deduct	-1.56	
		For >250 To 500, Deduct	-1.95	
		For >500, Deduct	-2.33	
05 05 23 00-0294	EA	1/4" Diameter x 4" Length, Zinc Plated Steel, Grade 5, Hex Head Bolt.....	8.68	
		For >100 To 250, Deduct	-1.60	
		For >250 To 500, Deduct	-2.00	
		For >500, Deduct	-2.40	
05 05 23 00-0295	EA	1/4" Diameter x 4-1/2" Length, Zinc Plated Steel, Grade 5, Hex Head Bolt.....	8.83	
		For >100 To 250, Deduct	-1.60	
		For >250 To 500, Deduct	-2.00	
		For >500, Deduct	-2.40	
05 05 23 00-0296	EA	1/4" Diameter x 5" Length, Zinc Plated Steel, Grade 5, Hex Head Bolt.....	8.94	
		For >100 To 250, Deduct	-1.60	
		For >250 To 500, Deduct	-2.00	
		For >500, Deduct	-2.40	
05 05 23 00-0297	EA	1/4" Diameter x 5-1/2" Length, Zinc Plated Steel, Grade 5, Hex Head Bolt.....	9.28	
		For >100 To 250, Deduct	-1.64	
		For >250 To 500, Deduct	-2.05	
		For >500, Deduct	-2.46	
05 05 23 00-0298	EA	1/4" Diameter x 6" Length, Zinc Plated Steel, Grade 5, Hex Head Bolt.....	9.38	
		For >100 To 250, Deduct	-1.64	
		For >250 To 500, Deduct	-2.05	
		For >500, Deduct	-2.46	
05 05 23 00-0299	EA	1/4" Diameter x 6-1/2" Length, Zinc Plated Steel, Grade 5, Hex Head Bolt.....	9.48	
		For >100 To 250, Deduct	-1.64	
		For >250 To 500, Deduct	-2.05	
		For >500, Deduct	-2.46	
05 05 23 00-0300	EA	1/4" Diameter x 7" Length, Zinc Plated Steel, Grade 5, Hex Head Bolt.....	9.83	
		For >100 To 250, Deduct	-1.68	
		For >250 To 500, Deduct	-2.11	
		For >500, Deduct	-2.53	
05 05 23 00-0301	EA	1/4" Diameter x 7-1/2" Length, Zinc Plated Steel, Grade 5, Hex Head Bolt.....	9.97	
		For >100 To 250, Deduct	-1.68	
		For >250 To 500, Deduct	-2.11	
		For >500, Deduct	-2.53	
05 05 23 00-0302	EA	1/4" Diameter x 8" Length, Zinc Plated Steel, Grade 5, Hex Head Bolt.....	10.11	
		For >100 To 250, Deduct	-1.68	
		For >250 To 500, Deduct	-2.11	
		For >500, Deduct	-2.53	
05 05 23 00-0303		5/16" Diameter, Zinc Plated Steel, Grade 5, Hex Head Bolts (05 05 23 00-0285)		
05 05 23 00-0304	EA	5/16" Diameter x 1/2" Length, Zinc Plated Steel, Grade 5, Hex Head Bolt.....	7.77	
		For >100 To 250, Deduct	-1.51	
		For >250 To 500, Deduct	-1.89	
		For >500, Deduct	-2.27	
05 05 23 00-0305	EA	5/16" Diameter x 1" Length, Zinc Plated Steel, Grade 5, Hex Head Bolt.....	7.80	
		For >100 To 250, Deduct	-1.51	
		For >250 To 500, Deduct	-1.89	
		For >500, Deduct	-2.27	
05 05 23 00-0306	EA	5/16" Diameter x 1-1/2" Length, Zinc Plated Steel, Grade 5, Hex Head Bolt.....	7.84	
		For >100 To 250, Deduct	-1.51	
		For >250 To 500, Deduct	-1.89	
		For >500, Deduct	-2.27	
05 05 23 00-0307	EA	5/16" Diameter x 2" Length, Zinc Plated Steel, Grade 5, Hex Head Bolt.....	7.93	
		For >100 To 250, Deduct	-1.51	
		For >250 To 500, Deduct	-1.89	
		For >500, Deduct	-2.27	
05 05 23 00-0308	EA	5/16" Diameter x 2-1/2" Length, Zinc Plated Steel, Grade 5, Hex Head Bolt.....	8.22	
		For >100 To 250, Deduct	-1.56	
		For >250 To 500, Deduct	-1.95	
		For >500, Deduct	-2.33	
05 05 23 00-0309	EA	5/16" Diameter x 3" Length, Zinc Plated Steel, Grade 5, Hex Head Bolt.....	8.33	
		For >100 To 250, Deduct	-1.56	
		For >250 To 500, Deduct	-1.95	
		For >500, Deduct	-2.33	
05 05 23 00-0310	EA	5/16" Diameter x 3-1/2" Length, Zinc Plated Steel, Grade 5, Hex Head Bolt.....	8.54	
		For >100 To 250, Deduct	-1.56	
		For >250 To 500, Deduct	-1.95	
		For >500, Deduct	-2.33	
05 05 23 00-0311	EA	5/16" Diameter x 4" Length, Zinc Plated Steel, Grade 5, Hex Head Bolt.....	8.85	
		For >100 To 250, Deduct	-1.60	
		For >250 To 500, Deduct	-2.00	
		For >500, Deduct	-2.40	
05 05 23 00-0312	EA	5/16" Diameter x 4-1/2" Length, Zinc Plated Steel, Grade 5, Hex Head Bolt.....	9.00	
		For >100 To 250, Deduct	-1.60	
		For >250 To 500, Deduct	-2.00	
		For >500, Deduct	-2.40	

**05 Metals****05 05 Common Work Results for Metals****05 05 23 Metal Fastenings**

MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
05 05 23 00-0313 EA 5/16" Diameter x 5" Length, Zinc Plated Steel, Grade 5, Hex Head Bolt.....	9.15	
For >100 To 250, Deduct	-1.60	
For >250 To 500, Deduct	-2.00	
For >500, Deduct	-2.40	
05 05 23 00-0314 EA 5/16" Diameter x 5-1/2" Length, Zinc Plated Steel, Grade 5, Hex Head Bolt.....	9.66	
For >100 To 250, Deduct	-1.64	
For >250 To 500, Deduct	-2.05	
For >500, Deduct	-2.46	
05 05 23 00-0315 EA 5/16" Diameter x 6" Length, Zinc Plated Steel, Grade 5, Hex Head Bolt.....	9.71	
For >100 To 250, Deduct	-1.64	
For >250 To 500, Deduct	-2.05	
For >500, Deduct	-2.46	
05 05 23 00-0316 EA 5/16" Diameter x 6-1/2" Length, Zinc Plated Steel, Grade 5, Hex Head Bolt.....	9.90	
For >100 To 250, Deduct	-1.64	
For >250 To 500, Deduct	-2.05	
For >500, Deduct	-2.46	
05 05 23 00-0317 EA 5/16" Diameter x 7" Length, Zinc Plated Steel, Grade 5, Hex Head Bolt.....	10.37	
For >100 To 250, Deduct	-1.68	
For >250 To 500, Deduct	-2.11	
For >500, Deduct	-2.53	
05 05 23 00-0318 EA 5/16" Diameter x 7-1/2" Length, Zinc Plated Steel, Grade 5, Hex Head Bolt.....	10.64	
For >100 To 250, Deduct	-1.68	
For >250 To 500, Deduct	-2.11	
For >500, Deduct	-2.53	
05 05 23 00-0319 EA 5/16" Diameter x 8" Length, Zinc Plated Steel, Grade 5, Hex Head Bolt.....	10.89	
For >100 To 250, Deduct	-1.68	
For >250 To 500, Deduct	-2.11	
For >500, Deduct	-2.53	
<b>05 05 23 00-0320 3/8" Diameter, Zinc Plated Steel, Grade 5, Hex Head Bolts (05 05 23 00-0285)</b>		
05 05 23 00-0321 EA 3/8" Diameter x 1/2" Length, Zinc Plated Steel, Grade 5, Hex Head Bolt.....	7.81	
For >100 To 250, Deduct	-1.51	
For >250 To 500, Deduct	-1.89	
For >500, Deduct	-2.27	
05 05 23 00-0322 EA 3/8" Diameter x 1" Length, Zinc Plated Steel, Grade 5, Hex Head Bolt.....	7.83	
For >100 To 250, Deduct	-1.51	
For >250 To 500, Deduct	-1.89	
For >500, Deduct	-2.27	
05 05 23 00-0323 EA 3/8" Diameter x 1-1/2" Length, Zinc Plated Steel, Grade 5, Hex Head Bolt.....	7.92	
For >100 To 250, Deduct	-1.51	
For >250 To 500, Deduct	-1.89	
For >500, Deduct	-2.27	
05 05 23 00-0324 EA 3/8" Diameter x 2" Length, Zinc Plated Steel, Grade 5, Hex Head Bolt.....	8.02	
For >100 To 250, Deduct	-1.51	
For >250 To 500, Deduct	-1.89	
For >500, Deduct	-2.27	
05 05 23 00-0325 EA 3/8" Diameter x 2-1/2" Length, Zinc Plated Steel, Grade 5, Hex Head Bolt.....	8.34	
For >100 To 250, Deduct	-1.56	
For >250 To 500, Deduct	-1.95	
For >500, Deduct	-2.33	
05 05 23 00-0326 EA 3/8" Diameter x 3" Length, Zinc Plated Steel, Grade 5, Hex Head Bolt.....	8.45	
For >100 To 250, Deduct	-1.56	
For >250 To 500, Deduct	-1.95	
For >500, Deduct	-2.33	
05 05 23 00-0327 EA 3/8" Diameter x 3-1/2" Length, Zinc Plated Steel, Grade 5, Hex Head Bolt.....	8.63	
For >100 To 250, Deduct	-1.56	
For >250 To 500, Deduct	-1.95	
For >500, Deduct	-2.33	
05 05 23 00-0328 EA 3/8" Diameter x 4" Length, Zinc Plated Steel, Grade 5, Hex Head Bolt.....	9.03	
For >100 To 250, Deduct	-1.60	
For >250 To 500, Deduct	-2.00	
For >500, Deduct	-2.40	
05 05 23 00-0329 EA 3/8" Diameter x 4-1/2" Length, Zinc Plated Steel, Grade 5, Hex Head Bolt.....	9.44	
For >100 To 250, Deduct	-1.60	
For >250 To 500, Deduct	-2.00	
For >500, Deduct	-2.40	
05 05 23 00-0330 EA 3/8" Diameter x 5" Length, Zinc Plated Steel, Grade 5, Hex Head Bolt.....	9.62	
For >100 To 250, Deduct	-1.60	
For >250 To 500, Deduct	-2.00	
For >500, Deduct	-2.40	
05 05 23 00-0331 EA 3/8" Diameter x 5-1/2" Length, Zinc Plated Steel, Grade 5, Hex Head Bolt.....	10.09	
For >100 To 250, Deduct	-1.64	
For >250 To 500, Deduct	-2.05	
For >500, Deduct	-2.46	
05 05 23 00-0332 EA 3/8" Diameter x 6" Length, Zinc Plated Steel, Grade 5, Hex Head Bolt.....	10.26	
For >100 To 250, Deduct	-1.64	
For >250 To 500, Deduct	-2.05	
For >500, Deduct	-2.46	
05 05 23 00-0333 EA 3/8" Diameter x 6-1/2" Length, Zinc Plated Steel, Grade 5, Hex Head Bolt.....	10.57	
For >100 To 250, Deduct	-1.64	
For >250 To 500, Deduct	-2.05	
For >500, Deduct	-2.46	



		<b>Metals</b>	<b>05</b>	<b>05</b>
		<b>Common Work Results for Metals</b>	<b>05 05</b>	
		<b>Metal Fastenings</b>	<b>05 05 23</b>	

MINOR CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
05 05 23 00-0334	EA	3/8" Diameter x 7" Length, Zinc Plated Steel, Grade 5, Hex Head Bolt.....	11.01	
		For >100 To 250, Deduct	-1.68	
		For >250 To 500, Deduct	-2.11	
		For >500, Deduct	-2.53	
05 05 23 00-0335	EA	3/8" Diameter x 7-1/2" Length, Zinc Plated Steel, Grade 5, Hex Head Bolt.....	11.42	
		For >100 To 250, Deduct	-1.68	
		For >250 To 500, Deduct	-2.11	
		For >500, Deduct	-2.53	
05 05 23 00-0336	EA	3/8" Diameter x 8" Length, Zinc Plated Steel, Grade 5, Hex Head Bolt.....	11.75	
		For >100 To 250, Deduct	-1.68	
		For >250 To 500, Deduct	-2.11	
		For >500, Deduct	-2.53	
<b>05 05 23 00-0337 7/16" Diameter, Zinc Plated Steel, Grade 5, Hex Head Bolts (05 05 23 00-0285)</b>				
05 05 23 00-0338	EA	7/16" Diameter x 1" Length, Zinc Plated Steel, Grade 5, Hex Head Bolt.....	9.08	
		For >100 To 250, Deduct	-1.73	
		For >250 To 500, Deduct	-2.16	
		For >500, Deduct	-2.59	
05 05 23 00-0339	EA	7/16" Diameter x 1-1/2" Length, Zinc Plated Steel, Grade 5, Hex Head Bolt.....	9.16	
		For >100 To 250, Deduct	-1.73	
		For >250 To 500, Deduct	-2.16	
		For >500, Deduct	-2.59	
05 05 23 00-0340	EA	7/16" Diameter x 2" Length, Zinc Plated Steel, Grade 5, Hex Head Bolt.....	9.37	
		For >100 To 250, Deduct	-1.73	
		For >250 To 500, Deduct	-2.16	
		For >500, Deduct	-2.59	
05 05 23 00-0341	EA	7/16" Diameter x 2-1/2" Length, Zinc Plated Steel, Grade 5, Hex Head Bolt.....	9.74	
		For >100 To 250, Deduct	-1.77	
		For >250 To 500, Deduct	-2.21	
		For >500, Deduct	-2.66	
05 05 23 00-0342	EA	7/16" Diameter x 3" Length, Zinc Plated Steel, Grade 5, Hex Head Bolt.....	9.90	
		For >100 To 250, Deduct	-1.77	
		For >250 To 500, Deduct	-2.21	
		For >500, Deduct	-2.66	
05 05 23 00-0343	EA	7/16" Diameter x 3-1/2" Length, Zinc Plated Steel, Grade 5, Hex Head Bolt.....	10.04	
		For >100 To 250, Deduct	-1.77	
		For >250 To 500, Deduct	-2.21	
		For >500, Deduct	-2.66	
05 05 23 00-0344	EA	7/16" Diameter x 4" Length, Zinc Plated Steel, Grade 5, Hex Head Bolt.....	10.45	
		For >100 To 250, Deduct	-1.81	
		For >250 To 500, Deduct	-2.27	
		For >500, Deduct	-2.72	
05 05 23 00-0345	EA	7/16" Diameter x 4-1/2" Length, Zinc Plated Steel, Grade 5, Hex Head Bolt.....	11.26	
		For >100 To 250, Deduct	-1.81	
		For >250 To 500, Deduct	-2.27	
		For >500, Deduct	-2.72	
05 05 23 00-0346	EA	7/16" Diameter x 5" Length, Zinc Plated Steel, Grade 5, Hex Head Bolt.....	11.62	
		For >100 To 250, Deduct	-1.81	
		For >250 To 500, Deduct	-2.27	
		For >500, Deduct	-2.72	
05 05 23 00-0347	EA	7/16" Diameter x 5-1/2" Length, Zinc Plated Steel, Grade 5, Hex Head Bolt.....	11.95	
		For >100 To 250, Deduct	-1.86	
		For >250 To 500, Deduct	-2.32	
		For >500, Deduct	-2.79	
05 05 23 00-0348	EA	7/16" Diameter x 6" Length, Zinc Plated Steel, Grade 5, Hex Head Bolt.....	12.11	
		For >100 To 250, Deduct	-1.86	
		For >250 To 500, Deduct	-2.32	
		For >500, Deduct	-2.79	
05 05 23 00-0349	EA	7/16" Diameter x 6-1/2" Length, Zinc Plated Steel, Grade 5, Hex Head Bolt.....	12.29	
		For >100 To 250, Deduct	-1.86	
		For >250 To 500, Deduct	-2.32	
		For >500, Deduct	-2.79	
05 05 23 00-0350	EA	7/16" Diameter x 7" Length, Zinc Plated Steel, Grade 5, Hex Head Bolt.....	12.74	
		For >100 To 250, Deduct	-1.90	
		For >250 To 500, Deduct	-2.38	
		For >500, Deduct	-2.85	
05 05 23 00-0351	EA	7/16" Diameter x 7-1/2" Length, Zinc Plated Steel, Grade 5, Hex Head Bolt.....	12.98	
		For >100 To 250, Deduct	-1.90	
		For >250 To 500, Deduct	-2.38	
		For >500, Deduct	-2.85	
05 05 23 00-0352	EA	7/16" Diameter x 8" Length, Zinc Plated Steel, Grade 5, Hex Head Bolt.....	13.22	
		For >100 To 250, Deduct	-1.90	
		For >250 To 500, Deduct	-2.38	
		For >500, Deduct	-2.85	
<b>05 05 23 00-0353 1/2" Diameter, Zinc Plated Steel, Grade 5, Hex Head Bolts (05 05 23 00-0285)</b>				
05 05 23 00-0354	EA	1/2" Diameter x 1" Length, Zinc Plated Steel, Grade 5, Hex Head Bolt.....	9.19	
		For >100 To 250, Deduct	-1.73	
		For >250 To 500, Deduct	-2.16	
		For >500, Deduct	-2.59	

**05 Metals****05 05 Common Work Results for Metals****05 05 23 Metal Fastenings**

MINOR	CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
05 05 23 00-0355	EA	1/2" Diameter x 1-1/2" Length, Zinc Plated Steel, Grade 5, Hex Head Bolt	.....	9.30	
		For >100 To 250, Deduct	.....	-1.73	
		For >250 To 500, Deduct	.....	-2.16	
		For >500, Deduct	.....	-2.59	
05 05 23 00-0356	EA	1/2" Diameter x 2" Length, Zinc Plated Steel, Grade 5, Hex Head Bolt	.....	9.42	
		For >100 To 250, Deduct	.....	-1.73	
		For >250 To 500, Deduct	.....	-2.16	
		For >500, Deduct	.....	-2.59	
05 05 23 00-0357	EA	1/2" Diameter x 2-1/2" Length, Zinc Plated Steel, Grade 5, Hex Head Bolt	.....	9.83	
		For >100 To 250, Deduct	.....	-1.77	
		For >250 To 500, Deduct	.....	-2.21	
		For >500, Deduct	.....	-2.66	
05 05 23 00-0358	EA	1/2" Diameter x 3" Length, Zinc Plated Steel, Grade 5, Hex Head Bolt	.....	10.01	
		For >100 To 250, Deduct	.....	-1.77	
		For >250 To 500, Deduct	.....	-2.21	
		For >500, Deduct	.....	-2.66	
05 05 23 00-0359	EA	1/2" Diameter x 3-1/2" Length, Zinc Plated Steel, Grade 5, Hex Head Bolt	.....	10.20	
		For >100 To 250, Deduct	.....	-1.77	
		For >250 To 500, Deduct	.....	-2.21	
		For >500, Deduct	.....	-2.66	
05 05 23 00-0360	EA	1/2" Diameter x 4" Length, Zinc Plated Steel, Grade 5, Hex Head Bolt	.....	10.60	
		For >100 To 250, Deduct	.....	-1.81	
		For >250 To 500, Deduct	.....	-2.27	
		For >500, Deduct	.....	-2.72	
05 05 23 00-0361	EA	1/2" Diameter x 4-1/2" Length, Zinc Plated Steel, Grade 5, Hex Head Bolt	.....	11.24	
		For >100 To 250, Deduct	.....	-1.81	
		For >250 To 500, Deduct	.....	-2.27	
		For >500, Deduct	.....	-2.72	
05 05 23 00-0362	EA	1/2" Diameter x 5" Length, Zinc Plated Steel, Grade 5, Hex Head Bolt	.....	11.28	
		For >100 To 250, Deduct	.....	-1.81	
		For >250 To 500, Deduct	.....	-2.27	
		For >500, Deduct	.....	-2.72	
05 05 23 00-0363	EA	1/2" Diameter x 5-1/2" Length, Zinc Plated Steel, Grade 5, Hex Head Bolt	.....	11.93	
		For >100 To 250, Deduct	.....	-1.86	
		For >250 To 500, Deduct	.....	-2.32	
		For >500, Deduct	.....	-2.79	
05 05 23 00-0364	EA	1/2" Diameter x 6" Length, Zinc Plated Steel, Grade 5, Hex Head Bolt	.....	12.17	
		For >100 To 250, Deduct	.....	-1.86	
		For >250 To 500, Deduct	.....	-2.32	
		For >500, Deduct	.....	-2.79	
05 05 23 00-0365	EA	1/2" Diameter x 6-1/2" Length, Zinc Plated Steel, Grade 5, Hex Head Bolt	.....	12.81	
		For >100 To 250, Deduct	.....	-1.86	
		For >250 To 500, Deduct	.....	-2.32	
		For >500, Deduct	.....	-2.79	
05 05 23 00-0366	EA	1/2" Diameter x 7" Length, Zinc Plated Steel, Grade 5, Hex Head Bolt	.....	13.61	
		For >100 To 250, Deduct	.....	-1.90	
		For >250 To 500, Deduct	.....	-2.38	
		For >500, Deduct	.....	-2.85	
05 05 23 00-0367	EA	1/2" Diameter x 7-1/2" Length, Zinc Plated Steel, Grade 5, Hex Head Bolt	.....	13.96	
		For >100 To 250, Deduct	.....	-1.90	
		For >250 To 500, Deduct	.....	-2.38	
		For >500, Deduct	.....	-2.85	
05 05 23 00-0368	EA	1/2" Diameter x 8" Length, Zinc Plated Steel, Grade 5, Hex Head Bolt	.....	14.10	
		For >100 To 250, Deduct	.....	-1.90	
		For >250 To 500, Deduct	.....	-2.38	
		For >500, Deduct	.....	-2.85	
05 05 23 00-0369	EA	1/2" Diameter x 8-1/2" Length, Zinc Plated Steel, Grade 5, Hex Head Bolt	.....	14.97	
		For >100 To 250, Deduct	.....	-1.94	
		For >250 To 500, Deduct	.....	-2.43	
		For >500, Deduct	.....	-2.92	
05 05 23 00-0370	EA	1/2" Diameter x 9" Length, Zinc Plated Steel, Grade 5, Hex Head Bolt	.....	15.59	
		For >100 To 250, Deduct	.....	-1.94	
		For >250 To 500, Deduct	.....	-2.43	
		For >500, Deduct	.....	-2.92	
05 05 23 00-0371	EA	1/2" Diameter x 9-1/2" Length, Zinc Plated Steel, Grade 5, Hex Head Bolt	.....	16.47	
		For >100 To 250, Deduct	.....	-1.94	
		For >250 To 500, Deduct	.....	-2.43	
		For >500, Deduct	.....	-2.92	
05 05 23 00-0372	EA	1/2" Diameter x 10" Length, Zinc Plated Steel, Grade 5, Hex Head Bolt	.....	16.81	
		For >100 To 250, Deduct	.....	-1.94	
		For >250 To 500, Deduct	.....	-2.43	
		For >500, Deduct	.....	-2.92	
05 05 23 00-0373	EA	9/16" Diameter, Zinc Plated Steel, Grade 5, Hex Head Bolts (05 05 23 00-0285)	.....	9.53	
		For >100 To 250, Deduct	.....	-1.73	
		For >250 To 500, Deduct	.....	-2.16	
		For >500, Deduct	.....	-2.59	
05 05 23 00-0375	EA	9/16" Diameter x 1-1/2" Length, Zinc Plated Steel, Grade 5, Hex Head Bolt	.....	9.74	
		For >100 To 250, Deduct	.....	-1.73	
		For >250 To 500, Deduct	.....	-2.16	
		For >500, Deduct	.....	-2.59	



		<b>Metals</b>	<b>05</b>
		<b>Common Work Results for Metals</b>	<b>05 05</b>
		<b>Metal Fastenings</b>	<b>05 05 23</b>

05

MINOR CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
05 05 23 00-0376	EA	9/16" Diameter x 2" Length, Zinc Plated Steel, Grade 5, Hex Head Bolt.....	9.92	
		For >100 To 250, Deduct	-1.73	
		For >250 To 500, Deduct	-2.16	
		For >500, Deduct	-2.59	
05 05 23 00-0377	EA	9/16" Diameter x 2-1/2" Length, Zinc Plated Steel, Grade 5, Hex Head Bolt.....	10.34	
		For >100 To 250, Deduct	-1.77	
		For >250 To 500, Deduct	-2.21	
		For >500, Deduct	-2.66	
05 05 23 00-0378	EA	9/16" Diameter x 3" Length, Zinc Plated Steel, Grade 5, Hex Head Bolt.....	10.59	
		For >100 To 250, Deduct	-1.77	
		For >250 To 500, Deduct	-2.21	
		For >500, Deduct	-2.66	
05 05 23 00-0379	EA	9/16" Diameter x 3-1/2" Length, Zinc Plated Steel, Grade 5, Hex Head Bolt.....	10.88	
		For >100 To 250, Deduct	-1.77	
		For >250 To 500, Deduct	-2.21	
		For >500, Deduct	-2.66	
05 05 23 00-0380	EA	9/16" Diameter x 4" Length, Zinc Plated Steel, Grade 5, Hex Head Bolt.....	11.43	
		For >100 To 250, Deduct	-1.81	
		For >250 To 500, Deduct	-2.27	
		For >500, Deduct	-2.72	
05 05 23 00-0381	EA	9/16" Diameter x 4-1/2" Length, Zinc Plated Steel, Grade 5, Hex Head Bolt.....	12.54	
		For >100 To 250, Deduct	-1.81	
		For >250 To 500, Deduct	-2.27	
		For >500, Deduct	-2.72	
05 05 23 00-0382	EA	9/16" Diameter x 5" Length, Zinc Plated Steel, Grade 5, Hex Head Bolt.....	12.83	
		For >100 To 250, Deduct	-1.81	
		For >250 To 500, Deduct	-2.27	
		For >500, Deduct	-2.72	
05 05 23 00-0383	EA	9/16" Diameter x 5-1/2" Length, Zinc Plated Steel, Grade 5, Hex Head Bolt.....	13.37	
		For >100 To 250, Deduct	-1.86	
		For >250 To 500, Deduct	-2.32	
		For >500, Deduct	-2.79	
05 05 23 00-0384	EA	9/16" Diameter x 6" Length, Zinc Plated Steel, Grade 5, Hex Head Bolt.....	13.67	
		For >100 To 250, Deduct	-1.86	
		For >250 To 500, Deduct	-2.32	
		For >500, Deduct	-2.79	
05 05 23 00-0385	EA	9/16" Diameter x 6-1/2" Length, Zinc Plated Steel, Grade 5, Hex Head Bolt.....	14.70	
		For >100 To 250, Deduct	-1.86	
		For >250 To 500, Deduct	-2.32	
		For >500, Deduct	-2.79	
05 05 23 00-0386	EA	9/16" Diameter x 7" Length, Zinc Plated Steel, Grade 5, Hex Head Bolt.....	16.18	
		For >100 To 250, Deduct	-1.90	
		For >250 To 500, Deduct	-2.38	
		For >500, Deduct	-2.85	
05 05 23 00-0387	EA	9/16" Diameter x 7-1/2" Length, Zinc Plated Steel, Grade 5, Hex Head Bolt.....	16.60	
		For >100 To 250, Deduct	-1.90	
		For >250 To 500, Deduct	-2.38	
		For >500, Deduct	-2.85	
05 05 23 00-0388	EA	9/16" Diameter x 8" Length, Zinc Plated Steel, Grade 5, Hex Head Bolt.....	17.31	
		For >100 To 250, Deduct	-1.90	
		For >250 To 500, Deduct	-2.38	
		For >500, Deduct	-2.85	
05 05 23 00-0389	EA	9/16" Diameter x 8-1/2" Length, Zinc Plated Steel, Grade 5, Hex Head Bolt.....	18.19	
		For >100 To 250, Deduct	-1.94	
		For >250 To 500, Deduct	-2.43	
		For >500, Deduct	-2.92	
05 05 23 00-0390	EA	9/16" Diameter x 9" Length, Zinc Plated Steel, Grade 5, Hex Head Bolt.....	18.44	
		For >100 To 250, Deduct	-1.94	
		For >250 To 500, Deduct	-2.43	
		For >500, Deduct	-2.92	
05 05 23 00-0391	EA	9/16" Diameter x 9-1/2" Length, Zinc Plated Steel, Grade 5, Hex Head Bolt.....	18.70	
		For >100 To 250, Deduct	-1.94	
		For >250 To 500, Deduct	-2.43	
		For >500, Deduct	-2.92	
05 05 23 00-0392	EA	9/16" Diameter x 10" Length, Zinc Plated Steel, Grade 5, Hex Head Bolt.....	19.34	
		For >100 To 250, Deduct	-1.94	
		For >250 To 500, Deduct	-2.43	
		For >500, Deduct	-2.92	
05 05 23 00-0393		5/8" Diameter, Zinc Plated Steel, Grade 5, Hex Head Bolts (05 05 23 00-0285)		
05 05 23 00-0394	EA	5/8" Diameter x 1" Length, Zinc Plated Steel, Grade 5, Hex Head Bolt.....	10.83	
		For >100 To 250, Deduct	-1.94	
		For >250 To 500, Deduct	-2.43	
		For >500, Deduct	-2.92	
05 05 23 00-0395	EA	5/8" Diameter x 1-1/2" Length, Zinc Plated Steel, Grade 5, Hex Head Bolt.....	10.90	
		For >100 To 250, Deduct	-1.94	
		For >250 To 500, Deduct	-2.43	
		For >500, Deduct	-2.92	
05 05 23 00-0396	EA	5/8" Diameter x 2" Length, Zinc Plated Steel, Grade 5, Hex Head Bolt.....	10.96	
		For >100 To 250, Deduct	-1.94	
		For >250 To 500, Deduct	-2.43	
		For >500, Deduct	-2.92	

**05 Metals****05 05 Common Work Results for Metals****05 05 23 Metal Fastenings**

MINOR CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
05 05 23 00-0397	EA	5/8" Diameter x 2-1/2" Length, Zinc Plated Steel, Grade 5, Hex Head Bolt.....	11.38	
		For >100 To 250, Deduct	-1.99	
		For >250 To 500, Deduct	-2.49	
		For >500, Deduct	-2.98	
05 05 23 00-0398	EA	5/8" Diameter x 3" Length, Zinc Plated Steel, Grade 5, Hex Head Bolt.....	11.72	
		For >100 To 250, Deduct	-1.99	
		For >250 To 500, Deduct	-2.49	
		For >500, Deduct	-2.98	
05 05 23 00-0399	EA	5/8" Diameter x 3-1/2" Length, Zinc Plated Steel, Grade 5, Hex Head Bolt.....	12.02	
		For >100 To 250, Deduct	-1.99	
		For >250 To 500, Deduct	-2.49	
		For >500, Deduct	-2.98	
05 05 23 00-0400	EA	5/8" Diameter x 4" Length, Zinc Plated Steel, Grade 5, Hex Head Bolt.....	12.55	
		For >100 To 250, Deduct	-2.03	
		For >250 To 500, Deduct	-2.54	
		For >500, Deduct	-3.05	
05 05 23 00-0401	EA	5/8" Diameter x 4-1/2" Length, Zinc Plated Steel, Grade 5, Hex Head Bolt.....	13.15	
		For >100 To 250, Deduct	-2.03	
		For >250 To 500, Deduct	-2.54	
		For >500, Deduct	-3.05	
05 05 23 00-0402	EA	5/8" Diameter x 5" Length, Zinc Plated Steel, Grade 5, Hex Head Bolt.....	13.47	
		For >100 To 250, Deduct	-2.03	
		For >250 To 500, Deduct	-2.54	
		For >500, Deduct	-3.05	
05 05 23 00-0403	EA	5/8" Diameter x 5-1/2" Length, Zinc Plated Steel, Grade 5, Hex Head Bolt.....	13.85	
		For >100 To 250, Deduct	-2.07	
		For >250 To 500, Deduct	-2.59	
		For >500, Deduct	-3.11	
05 05 23 00-0404	EA	5/8" Diameter x 6" Length, Zinc Plated Steel, Grade 5, Hex Head Bolt.....	14.36	
		For >100 To 250, Deduct	-2.07	
		For >250 To 500, Deduct	-2.59	
		For >500, Deduct	-3.11	
05 05 23 00-0405	EA	5/8" Diameter x 6-1/2" Length, Zinc Plated Steel, Grade 5, Hex Head Bolt.....	15.17	
		For >100 To 250, Deduct	-2.07	
		For >250 To 500, Deduct	-2.59	
		For >500, Deduct	-3.11	
05 05 23 00-0406	EA	5/8" Diameter x 7" Length, Zinc Plated Steel, Grade 5, Hex Head Bolt.....	16.12	
		For >100 To 250, Deduct	-2.12	
		For >250 To 500, Deduct	-2.65	
		For >500, Deduct	-3.17	
05 05 23 00-0407	EA	5/8" Diameter x 7-1/2" Length, Zinc Plated Steel, Grade 5, Hex Head Bolt.....	16.79	
		For >100 To 250, Deduct	-2.12	
		For >250 To 500, Deduct	-2.65	
		For >500, Deduct	-3.17	
05 05 23 00-0408	EA	5/8" Diameter x 8" Length, Zinc Plated Steel, Grade 5, Hex Head Bolt.....	16.89	
		For >100 To 250, Deduct	-2.12	
		For >250 To 500, Deduct	-2.65	
		For >500, Deduct	-3.17	
05 05 23 00-0409	EA	5/8" Diameter x 8-1/2" Length, Zinc Plated Steel, Grade 5, Hex Head Bolt.....	18.32	
		For >100 To 250, Deduct	-2.16	
		For >250 To 500, Deduct	-2.70	
		For >500, Deduct	-3.24	
05 05 23 00-0410	EA	5/8" Diameter x 9" Length, Zinc Plated Steel, Grade 5, Hex Head Bolt.....	19.23	
		For >100 To 250, Deduct	-2.16	
		For >250 To 500, Deduct	-2.70	
		For >500, Deduct	-3.24	
05 05 23 00-0411	EA	5/8" Diameter x 9-1/2" Length, Zinc Plated Steel, Grade 5, Hex Head Bolt.....	20.55	
		For >100 To 250, Deduct	-2.16	
		For >250 To 500, Deduct	-2.70	
		For >500, Deduct	-3.24	
05 05 23 00-0412	EA	5/8" Diameter x 10" Length, Zinc Plated Steel, Grade 5, Hex Head Bolt.....	21.01	
		For >100 To 250, Deduct	-2.16	
		For >250 To 500, Deduct	-2.70	
		For >500, Deduct	-3.24	
05 05 23 00-0413		3/4" Diameter, Zinc Plated Steel, Grade 5, Hex Head Bolts (05 05 23 00-0285)		
05 05 23 00-0414	EA	3/4" Diameter x 1" Length, Zinc Plated Steel, Grade 5, Hex Head Bolt.....	11.59	
		For >100 To 250, Deduct	-1.94	
		For >250 To 500, Deduct	-2.43	
		For >500, Deduct	-2.92	
05 05 23 00-0415	EA	3/4" Diameter x 1-1/2" Length, Zinc Plated Steel, Grade 5, Hex Head Bolt.....	11.72	
		For >100 To 250, Deduct	-1.94	
		For >250 To 500, Deduct	-2.43	
		For >500, Deduct	-2.92	
05 05 23 00-0416	EA	3/4" Diameter x 2" Length, Zinc Plated Steel, Grade 5, Hex Head Bolt.....	11.79	
		For >100 To 250, Deduct	-1.94	
		For >250 To 500, Deduct	-2.43	
		For >500, Deduct	-2.92	
05 05 23 00-0417	EA	3/4" Diameter x 2-1/2" Length, Zinc Plated Steel, Grade 5, Hex Head Bolt.....	12.30	
		For >100 To 250, Deduct	-1.99	
		For >250 To 500, Deduct	-2.49	
		For >500, Deduct	-2.98	



MINOR	CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
05 05 23 00-0418	EA	3/4" Diameter x 3" Length, Zinc Plated Steel, Grade 5, Hex Head Bolt	12.64		
		For >100 To 250, Deduct	-1.99		
		For >250 To 500, Deduct	-2.49		
		For >500, Deduct	-2.98		
05 05 23 00-0419	EA	3/4" Diameter x 3-1/2" Length, Zinc Plated Steel, Grade 5, Hex Head Bolt	13.15		
		For >100 To 250, Deduct	-1.99		
		For >250 To 500, Deduct	-2.49		
		For >500, Deduct	-2.98		
05 05 23 00-0420	EA	3/4" Diameter x 4" Length, Zinc Plated Steel, Grade 5, Hex Head Bolt	13.71		
		For >100 To 250, Deduct	-2.03		
		For >250 To 500, Deduct	-2.54		
		For >500, Deduct	-3.05		
05 05 23 00-0421	EA	3/4" Diameter x 4-1/2" Length, Zinc Plated Steel, Grade 5, Hex Head Bolt	14.04		
		For >100 To 250, Deduct	-2.03		
		For >250 To 500, Deduct	-2.54		
		For >500, Deduct	-3.05		
05 05 23 00-0422	EA	3/4" Diameter x 5" Length, Zinc Plated Steel, Grade 5, Hex Head Bolt	14.74		
		For >100 To 250, Deduct	-2.03		
		For >250 To 500, Deduct	-2.54		
		For >500, Deduct	-3.05		
05 05 23 00-0423	EA	3/4" Diameter x 5-1/2" Length, Zinc Plated Steel, Grade 5, Hex Head Bolt	15.28		
		For >100 To 250, Deduct	-2.07		
		For >250 To 500, Deduct	-2.59		
		For >500, Deduct	-3.11		
05 05 23 00-0424	EA	3/4" Diameter x 6" Length, Zinc Plated Steel, Grade 5, Hex Head Bolt	15.85		
		For >100 To 250, Deduct	-2.07		
		For >250 To 500, Deduct	-2.59		
		For >500, Deduct	-3.11		
05 05 23 00-0425	EA	3/4" Diameter x 6-1/2" Length, Zinc Plated Steel, Grade 5, Hex Head Bolt	16.55		
		For >100 To 250, Deduct	-2.07		
		For >250 To 500, Deduct	-2.59		
		For >500, Deduct	-3.11		
05 05 23 00-0426	EA	3/4" Diameter x 7" Length, Zinc Plated Steel, Grade 5, Hex Head Bolt	17.75		
		For >100 To 250, Deduct	-2.12		
		For >250 To 500, Deduct	-2.65		
		For >500, Deduct	-3.17		
05 05 23 00-0427	EA	3/4" Diameter x 7-1/2" Length, Zinc Plated Steel, Grade 5, Hex Head Bolt	18.48		
		For >100 To 250, Deduct	-2.12		
		For >250 To 500, Deduct	-2.65		
		For >500, Deduct	-3.17		
05 05 23 00-0428	EA	3/4" Diameter x 8" Length, Zinc Plated Steel, Grade 5, Hex Head Bolt	18.89		
		For >100 To 250, Deduct	-2.12		
		For >250 To 500, Deduct	-2.65		
		For >500, Deduct	-3.17		
05 05 23 00-0429	EA	3/4" Diameter x 8-1/2" Length, Zinc Plated Steel, Grade 5, Hex Head Bolt	20.20		
		For >100 To 250, Deduct	-2.16		
		For >250 To 500, Deduct	-2.70		
		For >500, Deduct	-3.24		
05 05 23 00-0430	EA	3/4" Diameter x 9" Length, Zinc Plated Steel, Grade 5, Hex Head Bolt	20.57		
		For >100 To 250, Deduct	-2.16		
		For >250 To 500, Deduct	-2.70		
		For >500, Deduct	-3.24		
05 05 23 00-0431	EA	3/4" Diameter x 9-1/2" Length, Zinc Plated Steel, Grade 5, Hex Head Bolt	21.77		
		For >100 To 250, Deduct	-2.16		
		For >250 To 500, Deduct	-2.70		
		For >500, Deduct	-3.24		
05 05 23 00-0432	EA	3/4" Diameter x 10" Length, Zinc Plated Steel, Grade 5, Hex Head Bolt	22.07		
		For >100 To 250, Deduct	-2.16		
		For >250 To 500, Deduct	-2.70		
		For >500, Deduct	-3.24		
05 05 23 00-0433		7/8" Diameter, Zinc Plated Steel, Grade 5, Hex Head Bolts (05 05 23 00-0285)			
05 05 23 00-0434	EA	7/8" Diameter x 1" Length, Zinc Plated Steel, Grade 5, Hex Head Bolt	13.62		
		For >100 To 250, Deduct	-2.16		
		For >250 To 500, Deduct	-2.70		
		For >500, Deduct	-3.24		
05 05 23 00-0435	EA	7/8" Diameter x 1-1/2" Length, Zinc Plated Steel, Grade 5, Hex Head Bolt	13.79		
		For >100 To 250, Deduct	-2.16		
		For >250 To 500, Deduct	-2.70		
		For >500, Deduct	-3.24		
05 05 23 00-0436	EA	7/8" Diameter x 2" Length, Zinc Plated Steel, Grade 5, Hex Head Bolt	14.01		
		For >100 To 250, Deduct	-2.16		
		For >250 To 500, Deduct	-2.70		
		For >500, Deduct	-3.24		
05 05 23 00-0437	EA	7/8" Diameter x 2-1/2" Length, Zinc Plated Steel, Grade 5, Hex Head Bolt	14.46		
		For >100 To 250, Deduct	-2.20		
		For >250 To 500, Deduct	-2.76		
		For >500, Deduct	-3.31		
05 05 23 00-0438	EA	7/8" Diameter x 3" Length, Zinc Plated Steel, Grade 5, Hex Head Bolt	15.14		
		For >100 To 250, Deduct	-2.20		
		For >250 To 500, Deduct	-2.76		
		For >500, Deduct	-3.31		

**05 Metals****05 05 Common Work Results for Metals****05 05 23 Metal Fastenings**

MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
05 05 23 00-0439 EA 7/8" Diameter x 3-1/2" Length, Zinc Plated Steel, Grade 5, Hex Head Bolt.....	15.59	
For >100 To 250, Deduct	-2.20	
For >250 To 500, Deduct	-2.76	
For >500, Deduct	-3.31	
05 05 23 00-0440 EA 7/8" Diameter x 4" Length, Zinc Plated Steel, Grade 5, Hex Head Bolt.....	16.14	
For >100 To 250, Deduct	-2.25	
For >250 To 500, Deduct	-2.81	
For >500, Deduct	-3.37	
05 05 23 00-0441 EA 7/8" Diameter x 4-1/2" Length, Zinc Plated Steel, Grade 5, Hex Head Bolt.....	16.94	
For >100 To 250, Deduct	-2.25	
For >250 To 500, Deduct	-2.81	
For >500, Deduct	-3.37	
05 05 23 00-0442 EA 7/8" Diameter x 5" Length, Zinc Plated Steel, Grade 5, Hex Head Bolt.....	17.54	
For >100 To 250, Deduct	-2.25	
For >250 To 500, Deduct	-2.81	
For >500, Deduct	-3.37	
05 05 23 00-0443 EA 7/8" Diameter x 5-1/2" Length, Zinc Plated Steel, Grade 5, Hex Head Bolt.....	18.05	
For >100 To 250, Deduct	-2.29	
For >250 To 500, Deduct	-2.86	
For >500, Deduct	-3.44	
05 05 23 00-0444 EA 7/8" Diameter x 6" Length, Zinc Plated Steel, Grade 5, Hex Head Bolt.....	18.55	
For >100 To 250, Deduct	-2.29	
For >250 To 500, Deduct	-2.86	
For >500, Deduct	-3.44	
05 05 23 00-0445 EA 7/8" Diameter x 6-1/2" Length, Zinc Plated Steel, Grade 5, Hex Head Bolt.....	20.71	
For >100 To 250, Deduct	-2.29	
For >250 To 500, Deduct	-2.86	
For >500, Deduct	-3.44	
05 05 23 00-0446 EA 7/8" Diameter x 7" Length, Zinc Plated Steel, Grade 5, Hex Head Bolt.....	21.69	
For >100 To 250, Deduct	-2.33	
For >250 To 500, Deduct	-2.92	
For >500, Deduct	-3.50	
05 05 23 00-0447 EA 7/8" Diameter x 7-1/2" Length, Zinc Plated Steel, Grade 5, Hex Head Bolt.....	22.63	
For >100 To 250, Deduct	-2.33	
For >250 To 500, Deduct	-2.92	
For >500, Deduct	-3.50	
05 05 23 00-0448 EA 7/8" Diameter x 8" Length, Zinc Plated Steel, Grade 5, Hex Head Bolt.....	22.69	
For >100 To 250, Deduct	-2.33	
For >250 To 500, Deduct	-2.92	
For >500, Deduct	-3.50	
05 05 23 00-0449 EA 7/8" Diameter x 8-1/2" Length, Zinc Plated Steel, Grade 5, Hex Head Bolt.....	24.28	
For >100 To 250, Deduct	-2.38	
For >250 To 500, Deduct	-2.97	
For >500, Deduct	-3.56	
05 05 23 00-0450 EA 7/8" Diameter x 9" Length, Zinc Plated Steel, Grade 5, Hex Head Bolt.....	25.20	
For >100 To 250, Deduct	-2.38	
For >250 To 500, Deduct	-2.97	
For >500, Deduct	-3.56	
05 05 23 00-0451 EA 7/8" Diameter x 9-1/2" Length, Zinc Plated Steel, Grade 5, Hex Head Bolt.....	25.99	
For >100 To 250, Deduct	-2.38	
For >250 To 500, Deduct	-2.97	
For >500, Deduct	-3.56	
05 05 23 00-0452 EA 7/8" Diameter x 10" Length, Zinc Plated Steel, Grade 5, Hex Head Bolt.....	26.78	
For >100 To 250, Deduct	-2.38	
For >250 To 500, Deduct	-2.97	
For >500, Deduct	-3.56	
<b>05 05 23 00-0453 1" Diameter, Zinc Plated Steel, Grade 5, Hex Head Bolts (05 05 23 00-0285)</b>		
05 05 23 00-0454 EA 1" Diameter x 1-1/2" Length, Zinc Plated Steel, Grade 5, Hex Head Bolt.....	15.13	
For >100 To 250, Deduct	-2.16	
For >250 To 500, Deduct	-2.70	
For >500, Deduct	-3.24	
05 05 23 00-0455 EA 1" Diameter x 2" Length, Zinc Plated Steel, Grade 5, Hex Head Bolt.....	15.18	
For >100 To 250, Deduct	-2.16	
For >250 To 500, Deduct	-2.70	
For >500, Deduct	-3.24	
05 05 23 00-0456 EA 1" Diameter x 2-1/2" Length, Zinc Plated Steel, Grade 5, Hex Head Bolt.....	15.91	
For >100 To 250, Deduct	-2.20	
For >250 To 500, Deduct	-2.76	
For >500, Deduct	-3.31	
05 05 23 00-0457 EA 1" Diameter x 3" Length, Zinc Plated Steel, Grade 5, Hex Head Bolt.....	16.56	
For >100 To 250, Deduct	-2.20	
For >250 To 500, Deduct	-2.76	
For >500, Deduct	-3.31	
05 05 23 00-0458 EA 1" Diameter x 3-1/2" Length, Zinc Plated Steel, Grade 5, Hex Head Bolt.....	17.05	
For >100 To 250, Deduct	-2.20	
For >250 To 500, Deduct	-2.76	
For >500, Deduct	-3.31	
05 05 23 00-0459 EA 1" Diameter x 4" Length, Zinc Plated Steel, Grade 5, Hex Head Bolt.....	17.87	
For >100 To 250, Deduct	-2.25	
For >250 To 500, Deduct	-2.81	
For >500, Deduct	-3.37	





MINOR	CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
05 05 23 00-0460	EA	1"	Diameter x 4-1/2" Length, Zinc Plated Steel, Grade 5, Hex Head Bolt.....	18.64	
			For >100 To 250, Deduct	-2.25	
			For >250 To 500, Deduct	-2.81	
			For >500, Deduct	-3.37	
05 05 23 00-0461	EA	1"	Diameter x 5" Length, Zinc Plated Steel, Grade 5, Hex Head Bolt.....	19.76	
			For >100 To 250, Deduct	-2.25	
			For >250 To 500, Deduct	-2.81	
			For >500, Deduct	-3.37	
05 05 23 00-0462	EA	1"	Diameter x 5-1/2" Length, Zinc Plated Steel, Grade 5, Hex Head Bolt.....	20.78	
			For >100 To 250, Deduct	-2.29	
			For >250 To 500, Deduct	-2.86	
			For >500, Deduct	-3.44	
05 05 23 00-0463	EA	1"	Diameter x 6" Length, Zinc Plated Steel, Grade 5, Hex Head Bolt.....	21.02	
			For >100 To 250, Deduct	-2.29	
			For >250 To 500, Deduct	-2.86	
			For >500, Deduct	-3.44	
05 05 23 00-0464	EA	1"	Diameter x 6-1/2" Length, Zinc Plated Steel, Grade 5, Hex Head Bolt.....	22.58	
			For >100 To 250, Deduct	-2.29	
			For >250 To 500, Deduct	-2.86	
			For >500, Deduct	-3.44	
05 05 23 00-0465	EA	1"	Diameter x 7" Length, Zinc Plated Steel, Grade 5, Hex Head Bolt.....	23.79	
			For >100 To 250, Deduct	-2.33	
			For >250 To 500, Deduct	-2.92	
			For >500, Deduct	-3.50	
05 05 23 00-0466	EA	1"	Diameter x 7-1/2" Length, Zinc Plated Steel, Grade 5, Hex Head Bolt.....	25.46	
			For >100 To 250, Deduct	-2.33	
			For >250 To 500, Deduct	-2.92	
			For >500, Deduct	-3.50	
05 05 23 00-0467	EA	1"	Diameter x 8" Length, Zinc Plated Steel, Grade 5, Hex Head Bolt.....	25.93	
			For >100 To 250, Deduct	-2.33	
			For >250 To 500, Deduct	-2.92	
			For >500, Deduct	-3.50	
05 05 23 00-0468	EA	1"	Diameter x 8-1/2" Length, Zinc Plated Steel, Grade 5, Hex Head Bolt.....	31.47	
			For >100 To 250, Deduct	-2.38	
			For >250 To 500, Deduct	-2.97	
			For >500, Deduct	-3.56	
05 05 23 00-0469	EA	1"	Diameter x 9" Length, Zinc Plated Steel, Grade 5, Hex Head Bolt.....	31.90	
			For >100 To 250, Deduct	-2.38	
			For >250 To 500, Deduct	-2.97	
			For >500, Deduct	-3.56	
05 05 23 00-0470	EA	1"	Diameter x 9-1/2" Length, Zinc Plated Steel, Grade 5, Hex Head Bolt.....	33.04	
			For >100 To 250, Deduct	-2.38	
			For >250 To 500, Deduct	-2.97	
			For >500, Deduct	-3.56	
05 05 23 00-0471	EA	1"	Diameter x 10" Length, Zinc Plated Steel, Grade 5, Hex Head Bolt.....	33.82	
			For >100 To 250, Deduct	-2.38	
			For >250 To 500, Deduct	-2.97	
			For >500, Deduct	-3.56	
05 05 23 00-0472			Zinc Plated Steel, Grade 8, Hex Head Bolts (05 05 23 00-0097)		
05 05 23 00-0473			1/4" Diameter, Zinc Plated Steel, Grade 8, Hex Head Bolts (05 05 23 00-0472)		
05 05 23 00-0474	EA	1/4"	Diameter x 1/2" Length, Yellow Zinc Plated Steel, Grade 8, Hex Head Bolt.....	7.71	
			For >100 To 250, Deduct	-1.51	
			For >250 To 500, Deduct	-1.89	
			For >500, Deduct	-2.27	
05 05 23 00-0475	EA	1/4"	Diameter x 1" Length, Yellow Zinc Plated Steel, Grade 8, Hex Head Bolt.....	7.79	
			For >100 To 250, Deduct	-1.51	
			For >250 To 500, Deduct	-1.89	
			For >500, Deduct	-2.27	
05 05 23 00-0476	EA	1/4"	Diameter x 1-1/2" Length, Yellow Zinc Plated Steel, Grade 8, Hex Head Bolt .....	7.83	
			For >100 To 250, Deduct	-1.51	
			For >250 To 500, Deduct	-1.89	
			For >500, Deduct	-2.27	
05 05 23 00-0477	EA	1/4"	Diameter x 2" Length, Yellow Zinc Plated Steel, Grade 8, Hex Head Bolt.....	7.91	
			For >100 To 250, Deduct	-1.51	
			For >250 To 500, Deduct	-1.89	
			For >500, Deduct	-2.27	
05 05 23 00-0478	EA	1/4"	Diameter x 2-1/2" Length, Yellow Zinc Plated Steel, Grade 8, Hex Head Bolt .....	8.19	
			For >100 To 250, Deduct	-1.56	
			For >250 To 500, Deduct	-1.95	
			For >500, Deduct	-2.33	
05 05 23 00-0479	EA	1/4"	Diameter x 3" Length, Yellow Zinc Plated Steel, Grade 8, Hex Head Bolt.....	8.28	
			For >100 To 250, Deduct	-1.56	
			For >250 To 500, Deduct	-1.95	
			For >500, Deduct	-2.33	
05 05 23 00-0480	EA	1/4"	Diameter x 3-1/2" Length, Yellow Zinc Plated Steel, Grade 8, Hex Head Bolt .....	8.37	
			For >100 To 250, Deduct	-1.56	
			For >250 To 500, Deduct	-1.95	
			For >500, Deduct	-2.33	
05 05 23 00-0481	EA	1/4"	Diameter x 4" Length, Yellow Zinc Plated Steel, Grade 8, Hex Head Bolt.....	8.59	
			For >100 To 250, Deduct	-1.60	
			For >250 To 500, Deduct	-2.00	
			For >500, Deduct	-2.40	

**05 Metals****05 05 Common Work Results for Metals****05 05 23 Metal Fastenings**

MINOR CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
05 05 23 00-0482	EA	1/4" Diameter x 4-1/2" Length, Yellow Zinc Plated Steel, Grade 8, Hex Head Bolt.....	8.85	
		For >100 To 250, Deduct	-1.60	
		For >250 To 500, Deduct	-2.00	
		For >500, Deduct	-2.40	
05 05 23 00-0483	EA	1/4" Diameter x 5" Length, Yellow Zinc Plated Steel, Grade 8, Hex Head Bolt.....	9.09	
		For >100 To 250, Deduct	-1.60	
		For >250 To 500, Deduct	-2.00	
		For >500, Deduct	-2.40	
05 05 23 00-0484	EA	1/4" Diameter x 5-1/2" Length, Yellow Zinc Plated Steel, Grade 8, Hex Head Bolt.....	9.43	
		For >100 To 250, Deduct	-1.64	
		For >250 To 500, Deduct	-2.05	
		For >500, Deduct	-2.46	
05 05 23 00-0485	EA	1/4" Diameter x 6" Length, Yellow Zinc Plated Steel, Grade 8, Hex Head Bolt.....	9.56	
		For >100 To 250, Deduct	-1.64	
		For >250 To 500, Deduct	-2.05	
		For >500, Deduct	-2.46	
05 05 23 00-0486	EA	1/4" Diameter x 6-1/2" Length, Yellow Zinc Plated Steel, Grade 8, Hex Head Bolt.....	9.73	
		For >100 To 250, Deduct	-1.64	
		For >250 To 500, Deduct	-2.05	
		For >500, Deduct	-2.46	
05 05 23 00-0487	EA	1/4" Diameter x 7" Length, Yellow Zinc Plated Steel, Grade 8, Hex Head Bolt.....	10.05	
		For >100 To 250, Deduct	-1.68	
		For >250 To 500, Deduct	-2.11	
		For >500, Deduct	-2.53	
05 05 23 00-0488	EA	1/4" Diameter x 7-1/2" Length, Yellow Zinc Plated Steel, Grade 8, Hex Head Bolt.....	10.37	
		For >100 To 250, Deduct	-1.68	
		For >250 To 500, Deduct	-2.11	
		For >500, Deduct	-2.53	
05 05 23 00-0489	EA	1/4" Diameter x 8" Length, Yellow Zinc Plated Steel, Grade 8, Hex Head Bolt.....	10.51	
		For >100 To 250, Deduct	-1.68	
		For >250 To 500, Deduct	-2.11	
		For >500, Deduct	-2.53	
<b>05 05 23 00-0490 5/16" Diameter, Zinc Plated Steel, Grade 8, Hex Head Bolts (05 05 23 00-0472)</b>				
05 05 23 00-0491	EA	5/16" Diameter x 1/2" Length, Yellow Zinc Plated Steel, Grade 8, Hex Head Bolt.....	7.78	
		For >100 To 250, Deduct	-1.51	
		For >250 To 500, Deduct	-1.89	
		For >500, Deduct	-2.27	
05 05 23 00-0492	EA	5/16" Diameter x 1" Length, Yellow Zinc Plated Steel, Grade 8, Hex Head Bolt.....	7.83	
		For >100 To 250, Deduct	-1.51	
		For >250 To 500, Deduct	-1.89	
		For >500, Deduct	-2.27	
05 05 23 00-0493	EA	5/16" Diameter x 1-1/2" Length, Yellow Zinc Plated Steel, Grade 8, Hex Head Bolt.....	7.98	
		For >100 To 250, Deduct	-1.51	
		For >250 To 500, Deduct	-1.89	
		For >500, Deduct	-2.27	
05 05 23 00-0494	EA	5/16" Diameter x 2" Length, Yellow Zinc Plated Steel, Grade 8, Hex Head Bolt.....	8.01	
		For >100 To 250, Deduct	-1.51	
		For >250 To 500, Deduct	-1.89	
		For >500, Deduct	-2.27	
05 05 23 00-0495	EA	5/16" Diameter x 2-1/2" Length, Yellow Zinc Plated Steel, Grade 8, Hex Head Bolt.....	8.32	
		For >100 To 250, Deduct	-1.56	
		For >250 To 500, Deduct	-1.95	
		For >500, Deduct	-2.33	
05 05 23 00-0496	EA	5/16" Diameter x 3" Length, Yellow Zinc Plated Steel, Grade 8, Hex Head Bolt.....	8.54	
		For >100 To 250, Deduct	-1.56	
		For >250 To 500, Deduct	-1.95	
		For >500, Deduct	-2.33	
05 05 23 00-0497	EA	5/16" Diameter x 3-1/2" Length, Yellow Zinc Plated Steel, Grade 8, Hex Head Bolt.....	8.61	
		For >100 To 250, Deduct	-1.56	
		For >250 To 500, Deduct	-1.95	
		For >500, Deduct	-2.33	
05 05 23 00-0498	EA	5/16" Diameter x 4" Length, Yellow Zinc Plated Steel, Grade 8, Hex Head Bolt.....	8.95	
		For >100 To 250, Deduct	-1.60	
		For >250 To 500, Deduct	-2.00	
		For >500, Deduct	-2.40	
05 05 23 00-0499	EA	5/16" Diameter x 4-1/2" Length, Yellow Zinc Plated Steel, Grade 8, Hex Head Bolt.....	9.10	
		For >100 To 250, Deduct	-1.60	
		For >250 To 500, Deduct	-2.00	
		For >500, Deduct	-2.40	
05 05 23 00-0500	EA	5/16" Diameter x 5" Length, Yellow Zinc Plated Steel, Grade 8, Hex Head Bolt.....	9.43	
		For >100 To 250, Deduct	-1.60	
		For >250 To 500, Deduct	-2.00	
		For >500, Deduct	-2.40	
05 05 23 00-0501	EA	5/16" Diameter x 5-1/2" Length, Yellow Zinc Plated Steel, Grade 8, Hex Head Bolt.....	9.84	
		For >100 To 250, Deduct	-1.64	
		For >250 To 500, Deduct	-2.05	
		For >500, Deduct	-2.46	
05 05 23 00-0502	EA	5/16" Diameter x 6" Length, Yellow Zinc Plated Steel, Grade 8, Hex Head Bolt.....	9.97	
		For >100 To 250, Deduct	-1.64	
		For >250 To 500, Deduct	-2.05	
		For >500, Deduct	-2.46	



		<b>Metals</b>	<b>05</b>
		<b>Common Work Results for Metals</b>	<b>05 05</b>
		<b>Metal Fastenings</b>	<b>05 05 23</b>

05

MINOR		TOTAL DIRECT		DEMOLITION
CSI	UOM DESCRIPTION	UNIT COST	UNIT COST	UNIT COST
05 05 23 00-0503	EA 5/16" Diameter x 6-1/2" Length, Yellow Zinc Plated Steel, Grade 8, Hex Head Bolt .....	10.16		
	For >100 To 250, Deduct	-1.64		
	For >250 To 500, Deduct	-2.05		
	For >500, Deduct	-2.46		
05 05 23 00-0504	EA 5/16" Diameter x 7" Length, Yellow Zinc Plated Steel, Grade 8, Hex Head Bolt.....	10.50		
	For >100 To 250, Deduct	-1.68		
	For >250 To 500, Deduct	-2.11		
	For >500, Deduct	-2.53		
05 05 23 00-0505	EA 5/16" Diameter x 7-1/2" Length, Yellow Zinc Plated Steel, Grade 8, Hex Head Bolt .....	10.65		
	For >100 To 250, Deduct	-1.68		
	For >250 To 500, Deduct	-2.11		
	For >500, Deduct	-2.53		
05 05 23 00-0506	EA 5/16" Diameter x 8" Length, Yellow Zinc Plated Steel, Grade 8, Hex Head Bolt.....	10.92		
	For >100 To 250, Deduct	-1.68		
	For >250 To 500, Deduct	-2.11		
	For >500, Deduct	-2.53		
05 05 23 00-0507	3/8" Diameter, Zinc Plated Steel, Grade 8, Hex Head Bolts (05 05 23 00-0472)			
05 05 23 00-0508	EA 3/8" Diameter x 1/2" Length, Yellow Zinc Plated Steel, Grade 8, Hex Head Bolt.....	7.94		
	For >100 To 250, Deduct	-1.51		
	For >250 To 500, Deduct	-1.89		
	For >500, Deduct	-2.27		
05 05 23 00-0509	EA 3/8" Diameter x 1" Length, Yellow Zinc Plated Steel, Grade 8, Hex Head Bolt.....	7.96		
	For >100 To 250, Deduct	-1.51		
	For >250 To 500, Deduct	-1.89		
	For >500, Deduct	-2.27		
05 05 23 00-0510	EA 3/8" Diameter x 1-1/2" Length, Yellow Zinc Plated Steel, Grade 8, Hex Head Bolt .....	7.97		
	For >100 To 250, Deduct	-1.51		
	For >250 To 500, Deduct	-1.89		
	For >500, Deduct	-2.27		
05 05 23 00-0511	EA 3/8" Diameter x 2" Length, Yellow Zinc Plated Steel, Grade 8, Hex Head Bolt.....	8.15		
	For >100 To 250, Deduct	-1.51		
	For >250 To 500, Deduct	-1.89		
	For >500, Deduct	-2.27		
05 05 23 00-0512	EA 3/8" Diameter x 2-1/2" Length, Yellow Zinc Plated Steel, Grade 8, Hex Head Bolt .....	8.48		
	For >100 To 250, Deduct	-1.56		
	For >250 To 500, Deduct	-1.95		
	For >500, Deduct	-2.33		
05 05 23 00-0513	EA 3/8" Diameter x 3" Length, Yellow Zinc Plated Steel, Grade 8, Hex Head Bolt.....	8.66		
	For >100 To 250, Deduct	-1.56		
	For >250 To 500, Deduct	-1.95		
	For >500, Deduct	-2.33		
05 05 23 00-0514	EA 3/8" Diameter x 3-1/2" Length, Yellow Zinc Plated Steel, Grade 8, Hex Head Bolt .....	8.82		
	For >100 To 250, Deduct	-1.56		
	For >250 To 500, Deduct	-1.95		
	For >500, Deduct	-2.33		
05 05 23 00-0515	EA 3/8" Diameter x 4" Length, Yellow Zinc Plated Steel, Grade 8, Hex Head Bolt.....	9.54		
	For >100 To 250, Deduct	-1.60		
	For >250 To 500, Deduct	-2.00		
	For >500, Deduct	-2.40		
05 05 23 00-0516	EA 3/8" Diameter x 4-1/2" Length, Yellow Zinc Plated Steel, Grade 8, Hex Head Bolt .....	9.75		
	For >100 To 250, Deduct	-1.60		
	For >250 To 500, Deduct	-2.00		
	For >500, Deduct	-2.40		
05 05 23 00-0517	EA 3/8" Diameter x 5" Length, Yellow Zinc Plated Steel, Grade 8, Hex Head Bolt.....	9.79		
	For >100 To 250, Deduct	-1.60		
	For >250 To 500, Deduct	-2.00		
	For >500, Deduct	-2.40		
05 05 23 00-0518	EA 3/8" Diameter x 5-1/2" Length, Yellow Zinc Plated Steel, Grade 8, Hex Head Bolt .....	10.09		
	For >100 To 250, Deduct	-1.64		
	For >250 To 500, Deduct	-2.05		
	For >500, Deduct	-2.46		
05 05 23 00-0519	EA 3/8" Diameter x 6" Length, Yellow Zinc Plated Steel, Grade 8, Hex Head Bolt.....	10.31		
	For >100 To 250, Deduct	-1.64		
	For >250 To 500, Deduct	-2.05		
	For >500, Deduct	-2.46		
05 05 23 00-0520	EA 3/8" Diameter x 6-1/2" Length, Yellow Zinc Plated Steel, Grade 8, Hex Head Bolt .....	11.32		
	For >100 To 250, Deduct	-1.64		
	For >250 To 500, Deduct	-2.05		
	For >500, Deduct	-2.46		
05 05 23 00-0521	EA 3/8" Diameter x 7" Length, Yellow Zinc Plated Steel, Grade 8, Hex Head Bolt.....	11.77		
	For >100 To 250, Deduct	-1.68		
	For >250 To 500, Deduct	-2.11		
	For >500, Deduct	-2.53		
05 05 23 00-0522	EA 3/8" Diameter x 7-1/2" Length, Yellow Zinc Plated Steel, Grade 8, Hex Head Bolt .....	12.22		
	For >100 To 250, Deduct	-1.68		
	For >250 To 500, Deduct	-2.11		
	For >500, Deduct	-2.53		
05 05 23 00-0523	EA 3/8" Diameter x 8" Length, Yellow Zinc Plated Steel, Grade 8, Hex Head Bolt.....	13.28		
	For >100 To 250, Deduct	-1.68		
	For >250 To 500, Deduct	-2.11		
	For >500, Deduct	-2.53		

**05 Metals****05 05 Common Work Results for Metals****05 05 23 Metal Fastenings**

MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
<b>05 05 23 00-0524 7/16" Diameter, Zinc Plated Steel, Grade 8, Hex Head Bolts (05 05 23 00-0472)</b>		
05 05 23 00-0525 EA 7/16" Diameter x 1" Length, Yellow Zinc Plated Steel, Grade 8, Hex Head Bolt.....	9.20	
For >100 To 250, Deduct	-1.73	
For >250 To 500, Deduct	-2.16	
For >500, Deduct	-2.59	
05 05 23 00-0526 EA 7/16" Diameter x 1-1/2" Length, Yellow Zinc Plated Steel, Grade 8, Hex Head Bolt.....	9.22	
For >100 To 250, Deduct	-1.73	
For >250 To 500, Deduct	-2.16	
For >500, Deduct	-2.59	
05 05 23 00-0527 EA 7/16" Diameter x 2" Length, Yellow Zinc Plated Steel, Grade 8, Hex Head Bolt.....	9.51	
For >100 To 250, Deduct	-1.73	
For >250 To 500, Deduct	-2.16	
For >500, Deduct	-2.59	
05 05 23 00-0528 EA 7/16" Diameter x 2-1/2" Length, Yellow Zinc Plated Steel, Grade 8, Hex Head Bolt.....	9.74	
For >100 To 250, Deduct	-1.77	
For >250 To 500, Deduct	-2.21	
For >500, Deduct	-2.66	
05 05 23 00-0529 EA 7/16" Diameter x 3" Length, Yellow Zinc Plated Steel, Grade 8, Hex Head Bolt.....	10.06	
For >100 To 250, Deduct	-1.77	
For >250 To 500, Deduct	-2.21	
For >500, Deduct	-2.66	
05 05 23 00-0530 EA 7/16" Diameter x 3-1/2" Length, Yellow Zinc Plated Steel, Grade 8, Hex Head Bolt.....	10.24	
For >100 To 250, Deduct	-1.77	
For >250 To 500, Deduct	-2.21	
For >500, Deduct	-2.66	
05 05 23 00-0531 EA 7/16" Diameter x 4" Length, Yellow Zinc Plated Steel, Grade 8, Hex Head Bolt.....	10.49	
For >100 To 250, Deduct	-1.81	
For >250 To 500, Deduct	-2.27	
For >500, Deduct	-2.72	
05 05 23 00-0532 EA 7/16" Diameter x 4-1/2" Length, Yellow Zinc Plated Steel, Grade 8, Hex Head Bolt.....	11.19	
For >100 To 250, Deduct	-1.81	
For >250 To 500, Deduct	-2.27	
For >500, Deduct	-2.72	
05 05 23 00-0533 EA 7/16" Diameter x 5" Length, Yellow Zinc Plated Steel, Grade 8, Hex Head Bolt.....	11.75	
For >100 To 250, Deduct	-1.81	
For >250 To 500, Deduct	-2.27	
For >500, Deduct	-2.72	
05 05 23 00-0534 EA 7/16" Diameter x 5-1/2" Length, Yellow Zinc Plated Steel, Grade 8, Hex Head Bolt.....	12.34	
For >100 To 250, Deduct	-1.86	
For >250 To 500, Deduct	-2.32	
For >500, Deduct	-2.79	
05 05 23 00-0535 EA 7/16" Diameter x 6" Length, Yellow Zinc Plated Steel, Grade 8, Hex Head Bolt.....	12.53	
For >100 To 250, Deduct	-1.86	
For >250 To 500, Deduct	-2.32	
For >500, Deduct	-2.79	
05 05 23 00-0536 EA 7/16" Diameter x 6-1/2" Length, Yellow Zinc Plated Steel, Grade 8, Hex Head Bolt.....	12.82	
For >100 To 250, Deduct	-1.86	
For >250 To 500, Deduct	-2.32	
For >500, Deduct	-2.79	
05 05 23 00-0537 EA 7/16" Diameter x 7" Length, Yellow Zinc Plated Steel, Grade 8, Hex Head Bolt.....	13.47	
For >100 To 250, Deduct	-1.90	
For >250 To 500, Deduct	-2.38	
For >500, Deduct	-2.85	
05 05 23 00-0538 EA 7/16" Diameter x 7-1/2" Length, Yellow Zinc Plated Steel, Grade 8, Hex Head Bolt.....	14.41	
For >100 To 250, Deduct	-1.90	
For >250 To 500, Deduct	-2.38	
For >500, Deduct	-2.85	
05 05 23 00-0539 EA 7/16" Diameter x 8" Length, Yellow Zinc Plated Steel, Grade 8, Hex Head Bolt.....	14.48	
For >100 To 250, Deduct	-1.90	
For >250 To 500, Deduct	-2.38	
For >500, Deduct	-2.85	
<b>05 05 23 00-0540 1/2" Diameter, Zinc Plated Steel, Grade 8, Hex Head Bolts (05 05 23 00-0472)</b>		
05 05 23 00-0541 EA 1/2" Diameter x 1" Length, Yellow Zinc Plated Steel, Grade 8, Hex Head Bolt.....	9.38	
For >100 To 250, Deduct	-1.73	
For >250 To 500, Deduct	-2.16	
For >500, Deduct	-2.59	
05 05 23 00-0542 EA 1/2" Diameter x 1-1/2" Length, Yellow Zinc Plated Steel, Grade 8, Hex Head Bolt.....	9.59	
For >100 To 250, Deduct	-1.73	
For >250 To 500, Deduct	-2.16	
For >500, Deduct	-2.59	
05 05 23 00-0543 EA 1/2" Diameter x 2" Length, Yellow Zinc Plated Steel, Grade 8, Hex Head Bolt.....	9.72	
For >100 To 250, Deduct	-1.73	
For >250 To 500, Deduct	-2.16	
For >500, Deduct	-2.59	
05 05 23 00-0544 EA 1/2" Diameter x 2-1/2" Length, Yellow Zinc Plated Steel, Grade 8, Hex Head Bolt.....	10.06	
For >100 To 250, Deduct	-1.77	
For >250 To 500, Deduct	-2.21	
For >500, Deduct	-2.66	
05 05 23 00-0545 EA 1/2" Diameter x 3" Length, Yellow Zinc Plated Steel, Grade 8, Hex Head Bolt.....	10.29	
For >100 To 250, Deduct	-1.77	
For >250 To 500, Deduct	-2.21	
For >500, Deduct	-2.66	



		<b>Metals</b>	<b>05</b>
		<b>Common Work Results for Metals</b>	<b>05 05</b>
		<b>Metal Fastenings</b>	<b>05 05 23</b>

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MINOR CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
05 05 23 00-0546	EA	1/2" Diameter x 3-1/2" Length, Yellow Zinc Plated Steel, Grade 8, Hex Head Bolt .....	10.80	
		For >100 To 250, Deduct	-1.77	
		For >250 To 500, Deduct	-2.21	
		For >500, Deduct	-2.66	
05 05 23 00-0547	EA	1/2" Diameter x 4" Length, Yellow Zinc Plated Steel, Grade 8, Hex Head Bolt.....	11.38	
		For >100 To 250, Deduct	-1.81	
		For >250 To 500, Deduct	-2.27	
		For >500, Deduct	-2.72	
05 05 23 00-0548	EA	1/2" Diameter x 4-1/2" Length, Yellow Zinc Plated Steel, Grade 8, Hex Head Bolt .....	11.68	
		For >100 To 250, Deduct	-1.81	
		For >250 To 500, Deduct	-2.27	
		For >500, Deduct	-2.72	
05 05 23 00-0549	EA	1/2" Diameter x 5" Length, Yellow Zinc Plated Steel, Grade 8, Hex Head Bolt.....	11.89	
		For >100 To 250, Deduct	-1.81	
		For >250 To 500, Deduct	-2.27	
		For >500, Deduct	-2.72	
05 05 23 00-0550	EA	1/2" Diameter x 5-1/2" Length, Yellow Zinc Plated Steel, Grade 8, Hex Head Bolt .....	12.48	
		For >100 To 250, Deduct	-1.86	
		For >250 To 500, Deduct	-2.32	
		For >500, Deduct	-2.79	
05 05 23 00-0551	EA	1/2" Diameter x 6" Length, Yellow Zinc Plated Steel, Grade 8, Hex Head Bolt.....	13.13	
		For >100 To 250, Deduct	-1.86	
		For >250 To 500, Deduct	-2.32	
		For >500, Deduct	-2.79	
05 05 23 00-0552	EA	1/2" Diameter x 6-1/2" Length, Yellow Zinc Plated Steel, Grade 8, Hex Head Bolt .....	13.72	
		For >100 To 250, Deduct	-1.86	
		For >250 To 500, Deduct	-2.32	
		For >500, Deduct	-2.79	
05 05 23 00-0553	EA	1/2" Diameter x 7" Length, Yellow Zinc Plated Steel, Grade 8, Hex Head Bolt.....	14.46	
		For >100 To 250, Deduct	-1.90	
		For >250 To 500, Deduct	-2.38	
		For >500, Deduct	-2.85	
05 05 23 00-0554	EA	1/2" Diameter x 7-1/2" Length, Yellow Zinc Plated Steel, Grade 8, Hex Head Bolt .....	14.72	
		For >100 To 250, Deduct	-1.90	
		For >250 To 500, Deduct	-2.38	
		For >500, Deduct	-2.85	
05 05 23 00-0555	EA	1/2" Diameter x 8" Length, Yellow Zinc Plated Steel, Grade 8, Hex Head Bolt.....	15.46	
		For >100 To 250, Deduct	-1.90	
		For >250 To 500, Deduct	-2.38	
		For >500, Deduct	-2.85	
05 05 23 00-0556	EA	1/2" Diameter x 8-1/2" Length, Yellow Zinc Plated Steel, Grade 8, Hex Head Bolt .....	16.91	
		For >100 To 250, Deduct	-1.94	
		For >250 To 500, Deduct	-2.43	
		For >500, Deduct	-2.92	
05 05 23 00-0557	EA	1/2" Diameter x 9" Length, Yellow Zinc Plated Steel, Grade 8, Hex Head Bolt.....	17.44	
		For >100 To 250, Deduct	-1.94	
		For >250 To 500, Deduct	-2.43	
		For >500, Deduct	-2.92	
05 05 23 00-0558	EA	1/2" Diameter x 9-1/2" Length, Yellow Zinc Plated Steel, Grade 8, Hex Head Bolt .....	17.72	
		For >100 To 250, Deduct	-1.94	
		For >250 To 500, Deduct	-2.43	
		For >500, Deduct	-2.92	
05 05 23 00-0559	EA	1/2" Diameter x 10" Length, Yellow Zinc Plated Steel, Grade 8, Hex Head Bolt.....	19.04	
		For >100 To 250, Deduct	-1.94	
		For >250 To 500, Deduct	-2.43	
		For >500, Deduct	-2.92	
05 05 23 00-0560		9/16" Diameter, Zinc Plated Steel, Grade 8, Hex Head Bolts (05 05 23 00-0472)		
05 05 23 00-0561	EA	9/16" Diameter x 1" Length, Yellow Zinc Plated Steel, Grade 8, Hex Head Bolt.....	9.57	
		For >100 To 250, Deduct	-1.73	
		For >250 To 500, Deduct	-2.16	
		For >500, Deduct	-2.59	
05 05 23 00-0562	EA	9/16" Diameter x 1-1/2" Length, Yellow Zinc Plated Steel, Grade 8, Hex Head Bolt .....	9.70	
		For >100 To 250, Deduct	-1.73	
		For >250 To 500, Deduct	-2.16	
		For >500, Deduct	-2.59	
05 05 23 00-0563	EA	9/16" Diameter x 2" Length, Yellow Zinc Plated Steel, Grade 8, Hex Head Bolt.....	9.98	
		For >100 To 250, Deduct	-1.73	
		For >250 To 500, Deduct	-2.16	
		For >500, Deduct	-2.59	
05 05 23 00-0564	EA	9/16" Diameter x 2-1/2" Length, Yellow Zinc Plated Steel, Grade 8, Hex Head Bolt .....	10.62	
		For >100 To 250, Deduct	-1.77	
		For >250 To 500, Deduct	-2.21	
		For >500, Deduct	-2.66	
05 05 23 00-0565	EA	9/16" Diameter x 3" Length, Yellow Zinc Plated Steel, Grade 8, Hex Head Bolt.....	10.72	
		For >100 To 250, Deduct	-1.77	
		For >250 To 500, Deduct	-2.21	
		For >500, Deduct	-2.66	
05 05 23 00-0566	EA	9/16" Diameter x 3-1/2" Length, Yellow Zinc Plated Steel, Grade 8, Hex Head Bolt .....	11.14	
		For >100 To 250, Deduct	-1.77	
		For >250 To 500, Deduct	-2.21	
		For >500, Deduct	-2.66	

**05 Metals****05 05 Common Work Results for Metals****05 05 23 Metal Fastenings**

MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
05 05 23 00-0567 EA 9/16" Diameter x 4" Length, Yellow Zinc Plated Steel, Grade 8, Hex Head Bolt.....	11.64	
For >100 To 250, Deduct	-1.81	
For >250 To 500, Deduct	-2.27	
For >500, Deduct	-2.72	
05 05 23 00-0568 EA 9/16" Diameter x 4-1/2" Length, Yellow Zinc Plated Steel, Grade 8, Hex Head Bolt.....	13.01	
For >100 To 250, Deduct	-1.81	
For >250 To 500, Deduct	-2.27	
For >500, Deduct	-2.72	
05 05 23 00-0569 EA 9/16" Diameter x 5" Length, Yellow Zinc Plated Steel, Grade 8, Hex Head Bolt.....	13.28	
For >100 To 250, Deduct	-1.81	
For >250 To 500, Deduct	-2.27	
For >500, Deduct	-2.72	
05 05 23 00-0570 EA 9/16" Diameter x 5-1/2" Length, Yellow Zinc Plated Steel, Grade 8, Hex Head Bolt.....	13.71	
For >100 To 250, Deduct	-1.86	
For >250 To 500, Deduct	-2.32	
For >500, Deduct	-2.79	
05 05 23 00-0571 EA 9/16" Diameter x 6" Length, Yellow Zinc Plated Steel, Grade 8, Hex Head Bolt.....	14.31	
For >100 To 250, Deduct	-1.86	
For >250 To 500, Deduct	-2.32	
For >500, Deduct	-2.79	
05 05 23 00-0572 EA 9/16" Diameter x 6-1/2" Length, Yellow Zinc Plated Steel, Grade 8, Hex Head Bolt.....	16.56	
For >100 To 250, Deduct	-1.86	
For >250 To 500, Deduct	-2.32	
For >500, Deduct	-2.79	
05 05 23 00-0573 EA 9/16" Diameter x 7" Length, Yellow Zinc Plated Steel, Grade 8, Hex Head Bolt.....	19.42	
For >100 To 250, Deduct	-1.90	
For >250 To 500, Deduct	-2.38	
For >500, Deduct	-2.85	
05 05 23 00-0574 EA 9/16" Diameter x 7-1/2" Length, Yellow Zinc Plated Steel, Grade 8, Hex Head Bolt.....	22.67	
For >100 To 250, Deduct	-1.90	
For >250 To 500, Deduct	-2.38	
For >500, Deduct	-2.85	
05 05 23 00-0575 EA 9/16" Diameter x 8" Length, Yellow Zinc Plated Steel, Grade 8, Hex Head Bolt.....	26.21	
For >100 To 250, Deduct	-1.90	
For >250 To 500, Deduct	-2.38	
For >500, Deduct	-2.85	
<b>05 05 23 00-0576 5/8" Diameter, Zinc Plated Steel, Grade 8, Hex Head Bolts (05 05 23 00-0472)</b>		
05 05 23 00-0577 EA 5/8" Diameter x 1" Length, Yellow Zinc Plated Steel, Grade 8, Hex Head Bolt.....	11.10	
For >100 To 250, Deduct	-1.94	
For >250 To 500, Deduct	-2.43	
For >500, Deduct	-2.92	
05 05 23 00-0578 EA 5/8" Diameter x 1-1/2" Length, Yellow Zinc Plated Steel, Grade 8, Hex Head Bolt.....	11.22	
For >100 To 250, Deduct	-1.94	
For >250 To 500, Deduct	-2.43	
For >500, Deduct	-2.92	
05 05 23 00-0579 EA 5/8" Diameter x 2" Length, Yellow Zinc Plated Steel, Grade 8, Hex Head Bolt.....	11.54	
For >100 To 250, Deduct	-1.94	
For >250 To 500, Deduct	-2.43	
For >500, Deduct	-2.92	
05 05 23 00-0580 EA 5/8" Diameter x 2-1/2" Length, Yellow Zinc Plated Steel, Grade 8, Hex Head Bolt.....	12.22	
For >100 To 250, Deduct	-1.99	
For >250 To 500, Deduct	-2.49	
For >500, Deduct	-2.98	
05 05 23 00-0581 EA 5/8" Diameter x 3" Length, Yellow Zinc Plated Steel, Grade 8, Hex Head Bolt.....	12.60	
For >100 To 250, Deduct	-1.99	
For >250 To 500, Deduct	-2.49	
For >500, Deduct	-2.98	
05 05 23 00-0582 EA 5/8" Diameter x 3-1/2" Length, Yellow Zinc Plated Steel, Grade 8, Hex Head Bolt.....	12.80	
For >100 To 250, Deduct	-1.99	
For >250 To 500, Deduct	-2.49	
For >500, Deduct	-2.98	
05 05 23 00-0583 EA 5/8" Diameter x 4" Length, Yellow Zinc Plated Steel, Grade 8, Hex Head Bolt.....	13.16	
For >100 To 250, Deduct	-2.03	
For >250 To 500, Deduct	-2.54	
For >500, Deduct	-3.05	
05 05 23 00-0584 EA 5/8" Diameter x 4-1/2" Length, Yellow Zinc Plated Steel, Grade 8, Hex Head Bolt.....	13.83	
For >100 To 250, Deduct	-2.03	
For >250 To 500, Deduct	-2.54	
For >500, Deduct	-3.05	
05 05 23 00-0585 EA 5/8" Diameter x 5" Length, Yellow Zinc Plated Steel, Grade 8, Hex Head Bolt.....	14.13	
For >100 To 250, Deduct	-2.03	
For >250 To 500, Deduct	-2.54	
For >500, Deduct	-3.05	
05 05 23 00-0586 EA 5/8" Diameter x 5-1/2" Length, Yellow Zinc Plated Steel, Grade 8, Hex Head Bolt.....	14.67	
For >100 To 250, Deduct	-2.07	
For >250 To 500, Deduct	-2.59	
For >500, Deduct	-3.11	
05 05 23 00-0587 EA 5/8" Diameter x 6" Length, Yellow Zinc Plated Steel, Grade 8, Hex Head Bolt.....	14.99	
For >100 To 250, Deduct	-2.07	
For >250 To 500, Deduct	-2.59	
For >500, Deduct	-3.11	



MINOR	CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
05 05 23 00-0588	EA		5/8" Diameter x 6-1/2" Length, Yellow Zinc Plated Steel, Grade 8, Hex Head Bolt .....	15.66	
			For >100 To 250, Deduct	-2.07	
			For >250 To 500, Deduct	-2.59	
			For >500, Deduct	-3.11	
05 05 23 00-0589	EA		5/8" Diameter x 7" Length, Yellow Zinc Plated Steel, Grade 8, Hex Head Bolt.....	17.45	
			For >100 To 250, Deduct	-2.12	
			For >250 To 500, Deduct	-2.65	
			For >500, Deduct	-3.17	
05 05 23 00-0590	EA		5/8" Diameter x 7-1/2" Length, Yellow Zinc Plated Steel, Grade 8, Hex Head Bolt .....	18.21	
			For >100 To 250, Deduct	-2.12	
			For >250 To 500, Deduct	-2.65	
			For >500, Deduct	-3.17	
05 05 23 00-0591	EA		5/8" Diameter x 8" Length, Yellow Zinc Plated Steel, Grade 8, Hex Head Bolt.....	18.52	
			For >100 To 250, Deduct	-2.12	
			For >250 To 500, Deduct	-2.65	
			For >500, Deduct	-3.17	
05 05 23 00-0592	EA		5/8" Diameter x 8-1/2" Length, Yellow Zinc Plated Steel, Grade 8, Hex Head Bolt .....	20.09	
			For >100 To 250, Deduct	-2.16	
			For >250 To 500, Deduct	-2.70	
			For >500, Deduct	-3.24	
05 05 23 00-0593	EA		5/8" Diameter x 9" Length, Yellow Zinc Plated Steel, Grade 8, Hex Head Bolt.....	21.58	
			For >100 To 250, Deduct	-2.16	
			For >250 To 500, Deduct	-2.70	
			For >500, Deduct	-3.24	
05 05 23 00-0594	EA		5/8" Diameter x 9-1/2" Length, Yellow Zinc Plated Steel, Grade 8, Hex Head Bolt .....	21.69	
			For >100 To 250, Deduct	-2.16	
			For >250 To 500, Deduct	-2.70	
			For >500, Deduct	-3.24	
05 05 23 00-0595	EA		5/8" Diameter x 10" Length, Yellow Zinc Plated Steel, Grade 8, Hex Head Bolt.....	23.08	
			For >100 To 250, Deduct	-2.16	
			For >250 To 500, Deduct	-2.70	
			For >500, Deduct	-3.24	
05 05 23 00-0596			3/4" Diameter, Zinc Plated Steel, Grade 8, Hex Head Bolts (05 05 23 00-0472)		
05 05 23 00-0597	EA		3/4" Diameter x 1" Length, Yellow Zinc Plated Steel, Grade 8, Hex Head Bolt.....	11.80	
			For >100 To 250, Deduct	-1.94	
			For >250 To 500, Deduct	-2.43	
			For >500, Deduct	-2.92	
05 05 23 00-0598	EA		3/4" Diameter x 1-1/2" Length, Yellow Zinc Plated Steel, Grade 8, Hex Head Bolt .....	11.94	
			For >100 To 250, Deduct	-1.94	
			For >250 To 500, Deduct	-2.43	
			For >500, Deduct	-2.92	
05 05 23 00-0599	EA		3/4" Diameter x 2" Length, Yellow Zinc Plated Steel, Grade 8, Hex Head Bolt.....	12.03	
			For >100 To 250, Deduct	-1.94	
			For >250 To 500, Deduct	-2.43	
			For >500, Deduct	-2.92	
05 05 23 00-0600	EA		3/4" Diameter x 2-1/2" Length, Yellow Zinc Plated Steel, Grade 8, Hex Head Bolt .....	12.44	
			For >100 To 250, Deduct	-1.99	
			For >250 To 500, Deduct	-2.49	
			For >500, Deduct	-2.98	
05 05 23 00-0601	EA		3/4" Diameter x 3" Length, Yellow Zinc Plated Steel, Grade 8, Hex Head Bolt.....	12.72	
			For >100 To 250, Deduct	-1.99	
			For >250 To 500, Deduct	-2.49	
			For >500, Deduct	-2.98	
05 05 23 00-0602	EA		3/4" Diameter x 3-1/2" Length, Yellow Zinc Plated Steel, Grade 8, Hex Head Bolt .....	13.53	
			For >100 To 250, Deduct	-1.99	
			For >250 To 500, Deduct	-2.49	
			For >500, Deduct	-2.98	
05 05 23 00-0603	EA		3/4" Diameter x 4" Length, Yellow Zinc Plated Steel, Grade 8, Hex Head Bolt.....	14.08	
			For >100 To 250, Deduct	-2.03	
			For >250 To 500, Deduct	-2.54	
			For >500, Deduct	-3.05	
05 05 23 00-0604	EA		3/4" Diameter x 4-1/2" Length, Yellow Zinc Plated Steel, Grade 8, Hex Head Bolt .....	14.15	
			For >100 To 250, Deduct	-2.03	
			For >250 To 500, Deduct	-2.54	
			For >500, Deduct	-3.05	
05 05 23 00-0605	EA		3/4" Diameter x 5" Length, Yellow Zinc Plated Steel, Grade 8, Hex Head Bolt.....	15.25	
			For >100 To 250, Deduct	-2.03	
			For >250 To 500, Deduct	-2.54	
			For >500, Deduct	-3.05	
05 05 23 00-0606	EA		3/4" Diameter x 5-1/2" Length, Yellow Zinc Plated Steel, Grade 8, Hex Head Bolt .....	15.87	
			For >100 To 250, Deduct	-2.07	
			For >250 To 500, Deduct	-2.59	
			For >500, Deduct	-3.11	
05 05 23 00-0607	EA		3/4" Diameter x 6" Length, Yellow Zinc Plated Steel, Grade 8, Hex Head Bolt.....	16.45	
			For >100 To 250, Deduct	-2.07	
			For >250 To 500, Deduct	-2.59	
			For >500, Deduct	-3.11	
05 05 23 00-0608	EA		3/4" Diameter x 6-1/2" Length, Yellow Zinc Plated Steel, Grade 8, Hex Head Bolt .....	17.52	
			For >100 To 250, Deduct	-2.07	
			For >250 To 500, Deduct	-2.59	
			For >500, Deduct	-3.11	

**05 Metals****05 05 Common Work Results for Metals****05 05 23 Metal Fastenings**

MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
05 05 23 00-0609 EA 3/4" Diameter x 7" Length, Yellow Zinc Plated Steel, Grade 8, Hex Head Bolt.....	19.05	
For >100 To 250, Deduct	-2.12	
For >250 To 500, Deduct	-2.65	
For >500, Deduct	-3.17	
05 05 23 00-0610 EA 3/4" Diameter x 7-1/2" Length, Yellow Zinc Plated Steel, Grade 8, Hex Head Bolt.....	19.62	
For >100 To 250, Deduct	-2.12	
For >250 To 500, Deduct	-2.65	
For >500, Deduct	-3.17	
05 05 23 00-0611 EA 3/4" Diameter x 8" Length, Yellow Zinc Plated Steel, Grade 8, Hex Head Bolt.....	19.92	
For >100 To 250, Deduct	-2.12	
For >250 To 500, Deduct	-2.65	
For >500, Deduct	-3.17	
05 05 23 00-0612 EA 3/4" Diameter x 8-1/2" Length, Yellow Zinc Plated Steel, Grade 8, Hex Head Bolt.....	21.56	
For >100 To 250, Deduct	-2.16	
For >250 To 500, Deduct	-2.70	
For >500, Deduct	-3.24	
05 05 23 00-0613 EA 3/4" Diameter x 9" Length, Yellow Zinc Plated Steel, Grade 8, Hex Head Bolt.....	22.60	
For >100 To 250, Deduct	-2.16	
For >250 To 500, Deduct	-2.70	
For >500, Deduct	-3.24	
05 05 23 00-0614 EA 3/4" Diameter x 9-1/2" Length, Yellow Zinc Plated Steel, Grade 8, Hex Head Bolt.....	23.35	
For >100 To 250, Deduct	-2.16	
For >250 To 500, Deduct	-2.70	
For >500, Deduct	-3.24	
05 05 23 00-0615 EA 3/4" Diameter x 10" Length, Yellow Zinc Plated Steel, Grade 8, Hex Head Bolt.....	23.63	
For >100 To 250, Deduct	-2.16	
For >250 To 500, Deduct	-2.70	
For >500, Deduct	-3.24	
<b>05 05 23 00-0616 7/8" Diameter, Zinc Plated Steel, Grade 8, Hex Head Bolts (05 05 23 00-0472)</b>		
05 05 23 00-0617 EA 7/8" Diameter x 1-1/2" Length, Yellow Zinc Plated Steel, Grade 8, Hex Head Bolt.....	14.83	
For >100 To 250, Deduct	-2.16	
For >250 To 500, Deduct	-2.70	
For >500, Deduct	-3.24	
05 05 23 00-0618 EA 7/8" Diameter x 2" Length, Yellow Zinc Plated Steel, Grade 8, Hex Head Bolt.....	15.19	
For >100 To 250, Deduct	-2.16	
For >250 To 500, Deduct	-2.70	
For >500, Deduct	-3.24	
05 05 23 00-0619 EA 7/8" Diameter x 2-1/2" Length, Yellow Zinc Plated Steel, Grade 8, Hex Head Bolt.....	15.94	
For >100 To 250, Deduct	-2.20	
For >250 To 500, Deduct	-2.76	
For >500, Deduct	-3.31	
05 05 23 00-0620 EA 7/8" Diameter x 3" Length, Yellow Zinc Plated Steel, Grade 8, Hex Head Bolt.....	17.00	
For >100 To 250, Deduct	-2.20	
For >250 To 500, Deduct	-2.76	
For >500, Deduct	-3.31	
05 05 23 00-0621 EA 7/8" Diameter x 3-1/2" Length, Yellow Zinc Plated Steel, Grade 8, Hex Head Bolt.....	17.13	
For >100 To 250, Deduct	-2.20	
For >250 To 500, Deduct	-2.76	
For >500, Deduct	-3.31	
05 05 23 00-0622 EA 7/8" Diameter x 4" Length, Yellow Zinc Plated Steel, Grade 8, Hex Head Bolt.....	17.56	
For >100 To 250, Deduct	-2.25	
For >250 To 500, Deduct	-2.81	
For >500, Deduct	-3.37	
05 05 23 00-0623 EA 7/8" Diameter x 4-1/2" Length, Yellow Zinc Plated Steel, Grade 8, Hex Head Bolt.....	20.14	
For >100 To 250, Deduct	-2.25	
For >250 To 500, Deduct	-2.81	
For >500, Deduct	-3.37	
05 05 23 00-0624 EA 7/8" Diameter x 5" Length, Yellow Zinc Plated Steel, Grade 8, Hex Head Bolt.....	20.80	
For >100 To 250, Deduct	-2.25	
For >250 To 500, Deduct	-2.81	
For >500, Deduct	-3.37	
05 05 23 00-0625 EA 7/8" Diameter x 5-1/2" Length, Yellow Zinc Plated Steel, Grade 8, Hex Head Bolt.....	22.55	
For >100 To 250, Deduct	-2.29	
For >250 To 500, Deduct	-2.86	
For >500, Deduct	-3.44	
05 05 23 00-0626 EA 7/8" Diameter x 6" Length, Yellow Zinc Plated Steel, Grade 8, Hex Head Bolt.....	23.51	
For >100 To 250, Deduct	-2.29	
For >250 To 500, Deduct	-2.86	
For >500, Deduct	-3.44	
05 05 23 00-0627 EA 7/8" Diameter x 6-1/2" Length, Yellow Zinc Plated Steel, Grade 8, Hex Head Bolt.....	26.01	
For >100 To 250, Deduct	-2.29	
For >250 To 500, Deduct	-2.86	
For >500, Deduct	-3.44	
05 05 23 00-0628 EA 7/8" Diameter x 7" Length, Yellow Zinc Plated Steel, Grade 8, Hex Head Bolt.....	27.05	
For >100 To 250, Deduct	-2.33	
For >250 To 500, Deduct	-2.92	
For >500, Deduct	-3.50	
05 05 23 00-0629 EA 7/8" Diameter x 7-1/2" Length, Yellow Zinc Plated Steel, Grade 8, Hex Head Bolt.....	29.61	
For >100 To 250, Deduct	-2.33	
For >250 To 500, Deduct	-2.92	
For >500, Deduct	-3.50	





		<b>Metals</b>	<b>05</b>
		<b>Common Work Results for Metals</b>	<b>05 05</b>
		<b>Metal Fastenings</b>	<b>05 05 23</b>

05

MINOR		TOTAL DIRECT		DEMOLITION
CSI	UOM DESCRIPTION	UNIT COST		UNIT COST
05 05 23 00-0630	EA 7/8" Diameter x 8" Length, Yellow Zinc Plated Steel, Grade 8, Hex Head Bolt..... For >100 To 250, Deduct For >250 To 500, Deduct For >500, Deduct	30.65 -2.33 -2.92 -3.50		
05 05 23 00-0631	EA 7/8" Diameter x 8-1/2" Length, Yellow Zinc Plated Steel, Grade 8, Hex Head Bolt ..... For >100 To 250, Deduct For >250 To 500, Deduct For >500, Deduct	31.70 -2.38 -2.97 -3.56		
05 05 23 00-0632	EA 7/8" Diameter x 9" Length, Yellow Zinc Plated Steel, Grade 8, Hex Head Bolt..... For >100 To 250, Deduct For >250 To 500, Deduct For >500, Deduct	32.00 -2.38 -2.97 -3.56		
05 05 23 00-0633	EA 7/8" Diameter x 9-1/2" Length, Yellow Zinc Plated Steel, Grade 8, Hex Head Bolt ..... For >100 To 250, Deduct For >250 To 500, Deduct For >500, Deduct	32.26 -2.38 -2.97 -3.56		
05 05 23 00-0634	EA 7/8" Diameter x 10" Length, Yellow Zinc Plated Steel, Grade 8, Hex Head Bolt..... For >100 To 250, Deduct For >250 To 500, Deduct For >500, Deduct	32.87 -2.38 -2.97 -3.56		
05 05 23 00-0635	1" Diameter, Zinc Plated Steel, Grade 8, Hex Head Bolts (05 05 23 00-0472)			
05 05 23 00-0636	EA 1" Diameter x 1-1/2" Length, Yellow Zinc Plated Steel, Grade 8, Hex Head Bolt ..... For >100 To 250, Deduct For >250 To 500, Deduct For >500, Deduct	15.85 -2.16 -2.70 -3.24		
05 05 23 00-0637	EA 1" Diameter x 2" Length, Yellow Zinc Plated Steel, Grade 8, Hex Head Bolt..... For >100 To 250, Deduct For >250 To 500, Deduct For >500, Deduct	16.74 -2.16 -2.70 -3.24		
05 05 23 00-0638	EA 1" Diameter x 2-1/2" Length, Yellow Zinc Plated Steel, Grade 8, Hex Head Bolt ..... For >100 To 250, Deduct For >250 To 500, Deduct For >500, Deduct	17.35 -2.20 -2.76 -3.31		
05 05 23 00-0639	EA 1" Diameter x 3" Length, Yellow Zinc Plated Steel, Grade 8, Hex Head Bolt..... For >100 To 250, Deduct For >250 To 500, Deduct For >500, Deduct	18.02 -2.20 -2.76 -3.31		
05 05 23 00-0640	EA 1" Diameter x 3-1/2" Length, Yellow Zinc Plated Steel, Grade 8, Hex Head Bolt ..... For >100 To 250, Deduct For >250 To 500, Deduct For >500, Deduct	19.27 -2.20 -2.76 -3.31		
05 05 23 00-0641	EA 1" Diameter x 4" Length, Yellow Zinc Plated Steel, Grade 8, Hex Head Bolt..... For >100 To 250, Deduct For >250 To 500, Deduct For >500, Deduct	19.81 -2.25 -2.81 -3.37		
05 05 23 00-0642	EA 1" Diameter x 4-1/2" Length, Yellow Zinc Plated Steel, Grade 8, Hex Head Bolt ..... For >100 To 250, Deduct For >250 To 500, Deduct For >500, Deduct	20.89 -2.25 -2.81 -3.37		
05 05 23 00-0643	EA 1" Diameter x 5" Length, Yellow Zinc Plated Steel, Grade 8, Hex Head Bolt..... For >100 To 250, Deduct For >250 To 500, Deduct For >500, Deduct	22.33 -2.25 -2.81 -3.37		
05 05 23 00-0644	EA 1" Diameter x 5-1/2" Length, Yellow Zinc Plated Steel, Grade 8, Hex Head Bolt ..... For >100 To 250, Deduct For >250 To 500, Deduct For >500, Deduct	23.22 -2.29 -2.86 -3.44		
05 05 23 00-0645	EA 1" Diameter x 6" Length, Yellow Zinc Plated Steel, Grade 8, Hex Head Bolt..... For >100 To 250, Deduct For >250 To 500, Deduct For >500, Deduct	23.83 -2.29 -2.86 -3.44		
05 05 23 00-0646	EA 1" Diameter x 6-1/2" Length, Yellow Zinc Plated Steel, Grade 8, Hex Head Bolt ..... For >100 To 250, Deduct For >250 To 500, Deduct For >500, Deduct	26.84 -2.29 -2.86 -3.44		
05 05 23 00-0647	EA 1" Diameter x 7" Length, Yellow Zinc Plated Steel, Grade 8, Hex Head Bolt..... For >100 To 250, Deduct For >250 To 500, Deduct For >500, Deduct	27.51 -2.33 -2.92 -3.50		
05 05 23 00-0648	EA 1" Diameter x 7-1/2" Length, Yellow Zinc Plated Steel, Grade 8, Hex Head Bolt ..... For >100 To 250, Deduct For >250 To 500, Deduct For >500, Deduct	30.91 -2.33 -2.92 -3.50		
05 05 23 00-0649	EA 1" Diameter x 8" Length, Yellow Zinc Plated Steel, Grade 8, Hex Head Bolt..... For >100 To 250, Deduct For >250 To 500, Deduct For >500, Deduct	31.49 -2.33 -2.92 -3.50		
05 05 23 00-0650	EA 1" Diameter x 8-1/2" Length, Yellow Zinc Plated Steel, Grade 8, Hex Head Bolt ..... For >100 To 250, Deduct For >250 To 500, Deduct For >500, Deduct	33.52 -2.38 -2.97 -3.56		

**05 Metals****05 05 Common Work Results for Metals****05 05 23 Metal Fastenings**

MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
05 05 23 00-0651 EA 1" Diameter x 9" Length, Yellow Zinc Plated Steel, Grade 8, Hex Head Bolt.....	34.50	
For >100 To 250, Deduct	-2.38	
For >250 To 500, Deduct	-2.97	
For >500, Deduct	-3.56	
05 05 23 00-0652 EA 1" Diameter x 9-1/2" Length, Yellow Zinc Plated Steel, Grade 8, Hex Head Bolt.....	37.09	
For >100 To 250, Deduct	-2.38	
For >250 To 500, Deduct	-2.97	
For >500, Deduct	-3.56	
05 05 23 00-0653 EA 1" Diameter x 10" Length, Yellow Zinc Plated Steel, Grade 8, Hex Head Bolt.....	38.67	
For >100 To 250, Deduct	-2.38	
For >250 To 500, Deduct	-2.97	
For >500, Deduct	-3.56	
<b>05 05 23 00-0654 Hot Dipped Galvanized Steel, Low Carbon/Grade 2, Hex Head Bolts (05 05 23 00-0097)</b>		
<b>05 05 23 00-0655 1/4" Diameter, Hot Dipped Galvanized Steel, Low Carbon/Grade 2, Hex Head Bolts (05 05 23 00-0654)</b>		
05 05 23 00-0656 EA 1/4" Diameter x 1/2" Length, Hot Dipped Galvanized Steel, Low Carbon/Grade 2, Hex Head Bolt.....	7.82	
For >100 To 250, Deduct	-1.51	
For >250 To 500, Deduct	-1.89	
For >500, Deduct	-2.27	
05 05 23 00-0657 EA 1/4" Diameter x 1" Length, Hot Dipped Galvanized Steel, Low Carbon/Grade 2, Hex Head Bolt.....	7.83	
For >100 To 250, Deduct	-1.51	
For >250 To 500, Deduct	-1.89	
For >500, Deduct	-2.27	
05 05 23 00-0658 EA 1/4" Diameter x 1-1/2" Length, Hot Dipped Galvanized Steel, Low Carbon/Grade 2, Hex Head Bolt.....	7.85	
For >100 To 250, Deduct	-1.51	
For >250 To 500, Deduct	-1.89	
For >500, Deduct	-2.27	
05 05 23 00-0659 EA 1/4" Diameter x 2" Length, Hot Dipped Galvanized Steel, Low Carbon/Grade 2, Hex Head Bolt.....	8.03	
For >100 To 250, Deduct	-1.51	
For >250 To 500, Deduct	-1.89	
For >500, Deduct	-2.27	
05 05 23 00-0660 EA 1/4" Diameter x 2-1/2" Length, Hot Dipped Galvanized Steel, Low Carbon/Grade 2, Hex Head Bolt.....	8.34	
For >100 To 250, Deduct	-1.56	
For >250 To 500, Deduct	-1.95	
For >500, Deduct	-2.33	
05 05 23 00-0661 EA 1/4" Diameter x 3" Length, Hot Dipped Galvanized Steel, Low Carbon/Grade 2, Hex Head Bolt.....	8.45	
For >100 To 250, Deduct	-1.56	
For >250 To 500, Deduct	-1.95	
For >500, Deduct	-2.33	
05 05 23 00-0662 EA 1/4" Diameter x 3-1/2" Length, Hot Dipped Galvanized Steel, Low Carbon/Grade 2, Hex Head Bolt.....	8.49	
For >100 To 250, Deduct	-1.56	
For >250 To 500, Deduct	-1.95	
For >500, Deduct	-2.33	
05 05 23 00-0663 EA 1/4" Diameter x 4" Length, Hot Dipped Galvanized Steel, Low Carbon/Grade 2, Hex Head Bolt.....	8.71	
For >100 To 250, Deduct	-1.60	
For >250 To 500, Deduct	-2.00	
For >500, Deduct	-2.40	
05 05 23 00-0664 EA 1/4" Diameter x 4-1/2" Length, Hot Dipped Galvanized Steel, Low Carbon/Grade 2, Hex Head Bolt.....	8.84	
For >100 To 250, Deduct	-1.60	
For >250 To 500, Deduct	-2.00	
For >500, Deduct	-2.40	
05 05 23 00-0665 EA 1/4" Diameter x 5" Length, Hot Dipped Galvanized Steel, Low Carbon/Grade 2, Hex Head Bolt.....	8.88	
For >100 To 250, Deduct	-1.60	
For >250 To 500, Deduct	-2.00	
For >500, Deduct	-2.40	
05 05 23 00-0666 EA 1/4" Diameter x 5-1/2" Length, Hot Dipped Galvanized Steel, Low Carbon/Grade 2, Hex Head Bolt.....	9.19	
For >100 To 250, Deduct	-1.64	
For >250 To 500, Deduct	-2.05	
For >500, Deduct	-2.46	
05 05 23 00-0667 EA 1/4" Diameter x 6" Length, Hot Dipped Galvanized Steel, Low Carbon/Grade 2, Hex Head Bolt.....	9.30	
For >100 To 250, Deduct	-1.64	
For >250 To 500, Deduct	-2.05	
For >500, Deduct	-2.46	
05 05 23 00-0668 EA 1/4" Diameter x 6-1/2" Length, Hot Dipped Galvanized Steel, Low Carbon/Grade 2, Hex Head Bolt.....	9.34	
For >100 To 250, Deduct	-1.64	
For >250 To 500, Deduct	-2.05	
For >500, Deduct	-2.46	
05 05 23 00-0669 EA 1/4" Diameter x 7" Length, Hot Dipped Galvanized Steel, Low Carbon/Grade 2, Hex Head Bolt.....	9.65	
For >100 To 250, Deduct	-1.68	
For >250 To 500, Deduct	-2.11	
For >500, Deduct	-2.53	
05 05 23 00-0670 EA 1/4" Diameter x 7-1/2" Length, Hot Dipped Galvanized Steel, Low Carbon/Grade 2, Hex Head Bolt.....	9.96	
For >100 To 250, Deduct	-1.68	
For >250 To 500, Deduct	-2.11	
For >500, Deduct	-2.53	
05 05 23 00-0671 EA 1/4" Diameter x 8" Length, Hot Dipped Galvanized Steel, Low Carbon/Grade 2, Hex Head Bolt.....	10.35	
For >100 To 250, Deduct	-1.68	
For >250 To 500, Deduct	-2.11	
For >500, Deduct	-2.53	



		<b>Metals</b>	<b>05</b>
		<b>Common Work Results for Metals</b>	<b>05 05</b>
		<b>Metal Fastenings</b>	<b>05 05 23</b>

05

MINOR CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
05 05 23 00-0672		<b>5/16" Diameter, Hot Dipped Galvanized Steel, Low Carbon/Grade 2, Hex Head Bolts</b> (05 05 23 00-0654)		
05 05 23 00-0673	EA	5/16" Diameter x 1/2" Length, Hot Dipped Galvanized Steel, Low Carbon/Grade 2, Hex Head Bolt.....	7.73	
		For >100 To 250, Deduct	-1.51	
		For >250 To 500, Deduct	-1.89	
		For >500, Deduct	-2.27	
05 05 23 00-0674	EA	5/16" Diameter x 1" Length, Hot Dipped Galvanized Steel, Low Carbon/Grade 2, Hex Head Bolt.....	8.09	
		For >100 To 250, Deduct	-1.51	
		For >250 To 500, Deduct	-1.89	
		For >500, Deduct	-2.27	
05 05 23 00-0675	EA	5/16" Diameter x 1-1/2" Length, Hot Dipped Galvanized Steel, Low Carbon/Grade 2, Hex Head Bolt.....	8.12	
		For >100 To 250, Deduct	-1.51	
		For >250 To 500, Deduct	-1.89	
		For >500, Deduct	-2.27	
05 05 23 00-0676	EA	5/16" Diameter x 2" Length, Hot Dipped Galvanized Steel, Low Carbon/Grade 2, Hex Head Bolt.....	8.13	
		For >100 To 250, Deduct	-1.51	
		For >250 To 500, Deduct	-1.89	
		For >500, Deduct	-2.27	
05 05 23 00-0677	EA	5/16" Diameter x 2-1/2" Length, Hot Dipped Galvanized Steel, Low Carbon/Grade 2, Hex Head Bolt.....	8.51	
		For >100 To 250, Deduct	-1.56	
		For >250 To 500, Deduct	-1.95	
		For >500, Deduct	-2.33	
05 05 23 00-0678	EA	5/16" Diameter x 3" Length, Hot Dipped Galvanized Steel, Low Carbon/Grade 2, Hex Head Bolt.....	8.85	
		For >100 To 250, Deduct	-1.56	
		For >250 To 500, Deduct	-1.95	
		For >500, Deduct	-2.33	
05 05 23 00-0679	EA	5/16" Diameter x 3-1/2" Length, Hot Dipped Galvanized Steel, Low Carbon/Grade 2, Hex Head Bolt.....	8.91	
		For >100 To 250, Deduct	-1.56	
		For >250 To 500, Deduct	-1.95	
		For >500, Deduct	-2.33	
05 05 23 00-0680	EA	5/16" Diameter x 4" Length, Hot Dipped Galvanized Steel, Low Carbon/Grade 2, Hex Head Bolt.....	9.21	
		For >100 To 250, Deduct	-1.60	
		For >250 To 500, Deduct	-2.00	
		For >500, Deduct	-2.40	
05 05 23 00-0681	EA	5/16" Diameter x 4-1/2" Length, Hot Dipped Galvanized Steel, Low Carbon/Grade 2, Hex Head Bolt.....	9.24	
		For >100 To 250, Deduct	-1.60	
		For >250 To 500, Deduct	-2.00	
		For >500, Deduct	-2.40	
05 05 23 00-0682	EA	5/16" Diameter x 5" Length, Hot Dipped Galvanized Steel, Low Carbon/Grade 2, Hex Head Bolt.....	9.51	
		For >100 To 250, Deduct	-1.60	
		For >250 To 500, Deduct	-2.00	
		For >500, Deduct	-2.40	
05 05 23 00-0683	EA	5/16" Diameter x 5-1/2" Length, Hot Dipped Galvanized Steel, Low Carbon/Grade 2, Hex Head Bolt.....	9.80	
		For >100 To 250, Deduct	-1.64	
		For >250 To 500, Deduct	-2.05	
		For >500, Deduct	-2.46	
05 05 23 00-0684	EA	5/16" Diameter x 6" Length, Hot Dipped Galvanized Steel, Low Carbon/Grade 2, Hex Head Bolt.....	9.90	
		For >100 To 250, Deduct	-1.64	
		For >250 To 500, Deduct	-2.05	
		For >500, Deduct	-2.46	
05 05 23 00-0685	EA	5/16" Diameter x 6-1/2" Length, Hot Dipped Galvanized Steel, Low Carbon/Grade 2, Hex Head Bolt.....	10.16	
		For >100 To 250, Deduct	-1.64	
		For >250 To 500, Deduct	-2.05	
		For >500, Deduct	-2.46	
05 05 23 00-0686	EA	5/16" Diameter x 7" Length, Hot Dipped Galvanized Steel, Low Carbon/Grade 2, Hex Head Bolt.....	10.88	
		For >100 To 250, Deduct	-1.68	
		For >250 To 500, Deduct	-2.11	
		For >500, Deduct	-2.53	
05 05 23 00-0687	EA	5/16" Diameter x 7-1/2" Length, Hot Dipped Galvanized Steel, Low Carbon/Grade 2, Hex Head Bolt.....	11.29	
		For >100 To 250, Deduct	-1.68	
		For >250 To 500, Deduct	-2.11	
		For >500, Deduct	-2.53	
05 05 23 00-0688	EA	5/16" Diameter x 8" Length, Hot Dipped Galvanized Steel, Low Carbon/Grade 2, Hex Head Bolt.....	11.67	
		For >100 To 250, Deduct	-1.68	
		For >250 To 500, Deduct	-2.11	
		For >500, Deduct	-2.53	
05 05 23 00-0689		<b>3/8" Diameter, Hot Dipped Galvanized Steel, Low Carbon/Grade 2, Hex Head Bolts</b> (05 05 23 00-0654)		
05 05 23 00-0690	EA	3/8" Diameter x 1/2" Length, Hot Dipped Galvanized Steel, Low Carbon/Grade 2, Hex Head Bolt.....	7.84	
		For >100 To 250, Deduct	-1.51	
		For >250 To 500, Deduct	-1.89	
		For >500, Deduct	-2.27	
05 05 23 00-0691	EA	3/8" Diameter x 1" Length, Hot Dipped Galvanized Steel, Low Carbon/Grade 2, Hex Head Bolt.....	7.93	
		For >100 To 250, Deduct	-1.51	
		For >250 To 500, Deduct	-1.89	
		For >500, Deduct	-2.27	
05 05 23 00-0692	EA	3/8" Diameter x 1-1/2" Length, Hot Dipped Galvanized Steel, Low Carbon/Grade 2, Hex Head Bolt.....	8.01	
		For >100 To 250, Deduct	-1.51	
		For >250 To 500, Deduct	-1.89	
		For >500, Deduct	-2.27	

**05 Metals****05 05 Common Work Results for Metals****05 05 23 Metal Fastenings**

MINOR	CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
05 05 23 00-0693	EA		3/8" Diameter x 2" Length, Hot Dipped Galvanized Steel, Low Carbon/Grade 2, Hex Head Bolt .....	8.23	
			For >100 To 250, Deduct	-1.51	
			For >250 To 500, Deduct	-1.89	
			For >500, Deduct	-2.27	
05 05 23 00-0694	EA		3/8" Diameter x 2-1/2" Length, Hot Dipped Galvanized Steel, Low Carbon/Grade 2, Hex Head Bolt .....	8.54	
			For >100 To 250, Deduct	-1.56	
			For >250 To 500, Deduct	-1.95	
			For >500, Deduct	-2.33	
05 05 23 00-0695	EA		3/8" Diameter x 3" Length, Hot Dipped Galvanized Steel, Low Carbon/Grade 2, Hex Head Bolt .....	8.72	
			For >100 To 250, Deduct	-1.56	
			For >250 To 500, Deduct	-1.95	
			For >500, Deduct	-2.33	
05 05 23 00-0696	EA		3/8" Diameter x 3-1/2" Length, Hot Dipped Galvanized Steel, Low Carbon/Grade 2, Hex Head Bolt .....	8.85	
			For >100 To 250, Deduct	-1.56	
			For >250 To 500, Deduct	-1.95	
			For >500, Deduct	-2.33	
05 05 23 00-0697	EA		3/8" Diameter x 4" Length, Hot Dipped Galvanized Steel, Low Carbon/Grade 2, Hex Head Bolt .....	9.23	
			For >100 To 250, Deduct	-1.60	
			For >250 To 500, Deduct	-2.00	
			For >500, Deduct	-2.40	
05 05 23 00-0698	EA		3/8" Diameter x 4-1/2" Length, Hot Dipped Galvanized Steel, Low Carbon/Grade 2, Hex Head Bolt .....	9.32	
			For >100 To 250, Deduct	-1.60	
			For >250 To 500, Deduct	-2.00	
			For >500, Deduct	-2.40	
05 05 23 00-0699	EA		3/8" Diameter x 5" Length, Hot Dipped Galvanized Steel, Low Carbon/Grade 2, Hex Head Bolt .....	9.54	
			For >100 To 250, Deduct	-1.60	
			For >250 To 500, Deduct	-2.00	
			For >500, Deduct	-2.40	
05 05 23 00-0700	EA		3/8" Diameter x 5-1/2" Length, Hot Dipped Galvanized Steel, Low Carbon/Grade 2, Hex Head Bolt .....	9.85	
			For >100 To 250, Deduct	-1.64	
			For >250 To 500, Deduct	-2.05	
			For >500, Deduct	-2.46	
05 05 23 00-0701	EA		3/8" Diameter x 6" Length, Hot Dipped Galvanized Steel, Low Carbon/Grade 2, Hex Head Bolt .....	10.15	
			For >100 To 250, Deduct	-1.64	
			For >250 To 500, Deduct	-2.05	
			For >500, Deduct	-2.46	
05 05 23 00-0702	EA		3/8" Diameter x 6-1/2" Length, Hot Dipped Galvanized Steel, Low Carbon/Grade 2, Hex Head Bolt .....	10.20	
			For >100 To 250, Deduct	-1.64	
			For >250 To 500, Deduct	-2.05	
			For >500, Deduct	-2.46	
05 05 23 00-0703	EA		3/8" Diameter x 7" Length, Hot Dipped Galvanized Steel, Low Carbon/Grade 2, Hex Head Bolt .....	10.43	
			For >100 To 250, Deduct	-1.68	
			For >250 To 500, Deduct	-2.11	
			For >500, Deduct	-2.53	
05 05 23 00-0704	EA		3/8" Diameter x 7-1/2" Length, Hot Dipped Galvanized Steel, Low Carbon/Grade 2, Hex Head Bolt .....	10.46	
			For >100 To 250, Deduct	-1.68	
			For >250 To 500, Deduct	-2.11	
			For >500, Deduct	-2.53	
05 05 23 00-0705	EA		3/8" Diameter x 8" Length, Hot Dipped Galvanized Steel, Low Carbon/Grade 2, Hex Head Bolt .....	10.81	
			For >100 To 250, Deduct	-1.68	
			For >250 To 500, Deduct	-2.11	
			For >500, Deduct	-2.53	

**05 05 23 00-0706 7/16" Diameter, Hot Dipped Galvanized Steel, Low Carbon/Grade 2, Hex Head Bolts**  
(05 05 23 00-0654)

05 05 23 00-0707	EA		7/16" Diameter x 1" Length, Hot Dipped Galvanized Steel, Low Carbon/Grade 2, Hex Head Bolt .....	9.46	
			For >100 To 250, Deduct	-1.73	
			For >250 To 500, Deduct	-2.16	
			For >500, Deduct	-2.59	
05 05 23 00-0708	EA		7/16" Diameter x 1-1/2" Length, Hot Dipped Galvanized Steel, Low Carbon/Grade 2, Hex Head Bolt .....	9.84	
			For >100 To 250, Deduct	-1.73	
			For >250 To 500, Deduct	-2.16	
			For >500, Deduct	-2.59	
05 05 23 00-0709	EA		7/16" Diameter x 2" Length, Hot Dipped Galvanized Steel, Low Carbon/Grade 2, Hex Head Bolt .....	10.14	
			For >100 To 250, Deduct	-1.73	
			For >250 To 500, Deduct	-2.16	
			For >500, Deduct	-2.59	
05 05 23 00-0710	EA		7/16" Diameter x 2-1/2" Length, Hot Dipped Galvanized Steel, Low Carbon/Grade 2, Hex Head Bolt .....	10.85	
			For >100 To 250, Deduct	-1.77	
			For >250 To 500, Deduct	-2.21	
			For >500, Deduct	-2.66	
05 05 23 00-0711	EA		7/16" Diameter x 3" Length, Hot Dipped Galvanized Steel, Low Carbon/Grade 2, Hex Head Bolt .....	10.87	
			For >100 To 250, Deduct	-1.77	
			For >250 To 500, Deduct	-2.21	
			For >500, Deduct	-2.66	
05 05 23 00-0712	EA		7/16" Diameter x 3-1/2" Length, Hot Dipped Galvanized Steel, Low Carbon/Grade 2, Hex Head Bolt .....	10.90	
			For >100 To 250, Deduct	-1.77	
			For >250 To 500, Deduct	-2.21	
			For >500, Deduct	-2.66	
05 05 23 00-0713	EA		7/16" Diameter x 4" Length, Hot Dipped Galvanized Steel, Low Carbon/Grade 2, Hex Head Bolt .....	11.37	
			For >100 To 250, Deduct	-1.81	
			For >250 To 500, Deduct	-2.27	
			For >500, Deduct	-2.72	



		<b>Metals</b>	<b>05</b>
		<b>Common Work Results for Metals</b>	<b>05 05</b>
		<b>Metal Fastenings</b>	<b>05 05 23</b>

05

MINOR CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
05 05 23 00-0714	EA	7/16" Diameter x 4-1/2" Length, Hot Dipped Galvanized Steel, Low Carbon/Grade 2, Hex Head Bolt.....	11.65	
		For >100 To 250, Deduct	-1.81	
		For >250 To 500, Deduct	-2.27	
		For >500, Deduct	-2.72	
05 05 23 00-0715	EA	7/16" Diameter x 5" Length, Hot Dipped Galvanized Steel, Low Carbon/Grade 2, Hex Head Bolt.....	11.89	
		For >100 To 250, Deduct	-1.81	
		For >250 To 500, Deduct	-2.27	
		For >500, Deduct	-2.72	
05 05 23 00-0716	EA	7/16" Diameter x 5-1/2" Length, Hot Dipped Galvanized Steel, Low Carbon/Grade 2, Hex Head Bolt.....	12.39	
		For >100 To 250, Deduct	-1.86	
		For >250 To 500, Deduct	-2.32	
		For >500, Deduct	-2.79	
05 05 23 00-0717	EA	7/16" Diameter x 6" Length, Hot Dipped Galvanized Steel, Low Carbon/Grade 2, Hex Head Bolt.....	12.68	
		For >100 To 250, Deduct	-1.86	
		For >250 To 500, Deduct	-2.32	
		For >500, Deduct	-2.79	
<b>05 05 23 00-0718      1/2" Diameter, Hot Dipped Galvanized Steel, Low Carbon/Grade 2, Hex</b>				
<b>Head Bolts</b> (05 05 23 00-0654)				
05 05 23 00-0719	EA	1/2" Diameter x 1" Length, Hot Dipped Galvanized Steel, Low Carbon/Grade 2, Hex Head Bolt.....	9.28	
		For >100 To 250, Deduct	-1.73	
		For >250 To 500, Deduct	-2.16	
		For >500, Deduct	-2.59	
05 05 23 00-0720	EA	1/2" Diameter x 1-1/2" Length, Hot Dipped Galvanized Steel, Low Carbon/Grade 2, Hex Head Bolt.....	9.41	
		For >100 To 250, Deduct	-1.73	
		For >250 To 500, Deduct	-2.16	
		For >500, Deduct	-2.59	
05 05 23 00-0721	EA	1/2" Diameter x 2" Length, Hot Dipped Galvanized Steel, Low Carbon/Grade 2, Hex Head Bolt.....	9.66	
		For >100 To 250, Deduct	-1.73	
		For >250 To 500, Deduct	-2.16	
		For >500, Deduct	-2.59	
05 05 23 00-0722	EA	1/2" Diameter x 2-1/2" Length, Hot Dipped Galvanized Steel, Low Carbon/Grade 2, Hex Head Bolt.....	10.16	
		For >100 To 250, Deduct	-1.77	
		For >250 To 500, Deduct	-2.21	
		For >500, Deduct	-2.66	
05 05 23 00-0723	EA	1/2" Diameter x 3" Length, Hot Dipped Galvanized Steel, Low Carbon/Grade 2, Hex Head Bolt.....	10.36	
		For >100 To 250, Deduct	-1.77	
		For >250 To 500, Deduct	-2.21	
		For >500, Deduct	-2.66	
05 05 23 00-0724	EA	1/2" Diameter x 3-1/2" Length, Hot Dipped Galvanized Steel, Low Carbon/Grade 2, Hex Head Bolt.....	10.72	
		For >100 To 250, Deduct	-1.77	
		For >250 To 500, Deduct	-2.21	
		For >500, Deduct	-2.66	
05 05 23 00-0725	EA	1/2" Diameter x 4" Length, Hot Dipped Galvanized Steel, Low Carbon/Grade 2, Hex Head Bolt.....	11.00	
		For >100 To 250, Deduct	-1.81	
		For >250 To 500, Deduct	-2.27	
		For >500, Deduct	-2.72	
05 05 23 00-0726	EA	1/2" Diameter x 4-1/2" Length, Hot Dipped Galvanized Steel, Low Carbon/Grade 2, Hex Head Bolt.....	11.13	
		For >100 To 250, Deduct	-1.81	
		For >250 To 500, Deduct	-2.27	
		For >500, Deduct	-2.72	
05 05 23 00-0727	EA	1/2" Diameter x 5" Length, Hot Dipped Galvanized Steel, Low Carbon/Grade 2, Hex Head Bolt.....	11.42	
		For >100 To 250, Deduct	-1.81	
		For >250 To 500, Deduct	-2.27	
		For >500, Deduct	-2.72	
05 05 23 00-0728	EA	1/2" Diameter x 5-1/2" Length, Hot Dipped Galvanized Steel, Low Carbon/Grade 2, Hex Head Bolt.....	11.77	
		For >100 To 250, Deduct	-1.86	
		For >250 To 500, Deduct	-2.32	
		For >500, Deduct	-2.79	
05 05 23 00-0729	EA	1/2" Diameter x 6" Length, Hot Dipped Galvanized Steel, Low Carbon/Grade 2, Hex Head Bolt.....	12.09	
		For >100 To 250, Deduct	-1.86	
		For >250 To 500, Deduct	-2.32	
		For >500, Deduct	-2.79	
05 05 23 00-0730	EA	1/2" Diameter x 6-1/2" Length, Hot Dipped Galvanized Steel, Low Carbon/Grade 2, Hex Head Bolt.....	12.12	
		For >100 To 250, Deduct	-1.86	
		For >250 To 500, Deduct	-2.32	
		For >500, Deduct	-2.79	
05 05 23 00-0731	EA	1/2" Diameter x 7" Length, Hot Dipped Galvanized Steel, Low Carbon/Grade 2, Hex Head Bolt.....	12.40	
		For >100 To 250, Deduct	-1.90	
		For >250 To 500, Deduct	-2.38	
		For >500, Deduct	-2.85	
05 05 23 00-0732	EA	1/2" Diameter x 7-1/2" Length, Hot Dipped Galvanized Steel, Low Carbon/Grade 2, Hex Head Bolt.....	12.49	
		For >100 To 250, Deduct	-1.90	
		For >250 To 500, Deduct	-2.38	
		For >500, Deduct	-2.85	
05 05 23 00-0733	EA	1/2" Diameter x 8" Length, Hot Dipped Galvanized Steel, Low Carbon/Grade 2, Hex Head Bolt.....	12.73	
		For >100 To 250, Deduct	-1.90	
		For >250 To 500, Deduct	-2.38	
		For >500, Deduct	-2.85	
05 05 23 00-0734	EA	1/2" Diameter x 8-1/2" Length, Hot Dipped Galvanized Steel, Low Carbon/Grade 2, Hex Head Bolt.....	14.09	
		For >100 To 250, Deduct	-1.94	
		For >250 To 500, Deduct	-2.43	
		For >500, Deduct	-2.92	

**05 Metals****05 05 Common Work Results for Metals****05 05 23 Metal Fastenings**

MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
05 05 23 00-0735 EA 1/2" Diameter x 9" Length, Hot Dipped Galvanized Steel, Low Carbon/Grade 2, Hex Head Bolt .....	14.29	
For >100 To 250, Deduct	-1.94	
For >250 To 500, Deduct	-2.43	
For >500, Deduct	-2.92	
05 05 23 00-0736 EA 1/2" Diameter x 9-1/2" Length, Hot Dipped Galvanized Steel, Low Carbon/Grade 2, Hex Head Bolt .....	14.33	
For >100 To 250, Deduct	-1.94	
For >250 To 500, Deduct	-2.43	
For >500, Deduct	-2.92	
05 05 23 00-0737 EA 1/2" Diameter x 10" Length, Hot Dipped Galvanized Steel, Low Carbon/Grade 2, Hex Head Bolt .....	14.44	
For >100 To 250, Deduct	-1.94	
For >250 To 500, Deduct	-2.43	
For >500, Deduct	-2.92	
<b>05 05 23 00-0738 5/8" Diameter, Hot Dipped Galvanized Steel, Low Carbon/Grade 2, Hex Head Bolts (05 05 23 00-0654)</b>		
05 05 23 00-0739 EA 5/8" Diameter x 1" Length, Hot Dipped Galvanized Steel, Low Carbon/Grade 2, Hex Head Bolt .....	10.82	
For >100 To 250, Deduct	-1.94	
For >250 To 500, Deduct	-2.43	
For >500, Deduct	-2.92	
05 05 23 00-0740 EA 5/8" Diameter x 1-1/2" Length, Hot Dipped Galvanized Steel, Low Carbon/Grade 2, Hex Head Bolt .....	11.01	
For >100 To 250, Deduct	-1.94	
For >250 To 500, Deduct	-2.43	
For >500, Deduct	-2.92	
05 05 23 00-0741 EA 5/8" Diameter x 2" Length, Hot Dipped Galvanized Steel, Low Carbon/Grade 2, Hex Head Bolt .....	11.15	
For >100 To 250, Deduct	-1.94	
For >250 To 500, Deduct	-2.43	
For >500, Deduct	-2.92	
05 05 23 00-0742 EA 5/8" Diameter x 2-1/2" Length, Hot Dipped Galvanized Steel, Low Carbon/Grade 2, Hex Head Bolt .....	11.58	
For >100 To 250, Deduct	-1.99	
For >250 To 500, Deduct	-2.49	
For >500, Deduct	-2.98	
05 05 23 00-0743 EA 5/8" Diameter x 3" Length, Hot Dipped Galvanized Steel, Low Carbon/Grade 2, Hex Head Bolt .....	11.87	
For >100 To 250, Deduct	-1.99	
For >250 To 500, Deduct	-2.49	
For >500, Deduct	-2.98	
05 05 23 00-0744 EA 5/8" Diameter x 3-1/2" Length, Hot Dipped Galvanized Steel, Low Carbon/Grade 2, Hex Head Bolt .....	12.51	
For >100 To 250, Deduct	-1.99	
For >250 To 500, Deduct	-2.49	
For >500, Deduct	-2.98	
05 05 23 00-0745 EA 5/8" Diameter x 4" Length, Hot Dipped Galvanized Steel, Low Carbon/Grade 2, Hex Head Bolt .....	12.82	
For >100 To 250, Deduct	-2.03	
For >250 To 500, Deduct	-2.54	
For >500, Deduct	-3.05	
05 05 23 00-0746 EA 5/8" Diameter x 4-1/2" Length, Hot Dipped Galvanized Steel, Low Carbon/Grade 2, Hex Head Bolt .....	12.93	
For >100 To 250, Deduct	-2.03	
For >250 To 500, Deduct	-2.54	
For >500, Deduct	-3.05	
05 05 23 00-0747 EA 5/8" Diameter x 5" Length, Hot Dipped Galvanized Steel, Low Carbon/Grade 2, Hex Head Bolt .....	13.13	
For >100 To 250, Deduct	-2.03	
For >250 To 500, Deduct	-2.54	
For >500, Deduct	-3.05	
05 05 23 00-0748 EA 5/8" Diameter x 5-1/2" Length, Hot Dipped Galvanized Steel, Low Carbon/Grade 2, Hex Head Bolt .....	13.60	
For >100 To 250, Deduct	-2.07	
For >250 To 500, Deduct	-2.59	
For >500, Deduct	-3.11	
05 05 23 00-0749 EA 5/8" Diameter x 6" Length, Hot Dipped Galvanized Steel, Low Carbon/Grade 2, Hex Head Bolt .....	13.83	
For >100 To 250, Deduct	-2.07	
For >250 To 500, Deduct	-2.59	
For >500, Deduct	-3.11	
05 05 23 00-0750 EA 5/8" Diameter x 6-1/2" Length, Hot Dipped Galvanized Steel, Low Carbon/Grade 2, Hex Head Bolt .....	14.49	
For >100 To 250, Deduct	-2.07	
For >250 To 500, Deduct	-2.59	
For >500, Deduct	-3.11	
05 05 23 00-0751 EA 5/8" Diameter x 7" Length, Hot Dipped Galvanized Steel, Low Carbon/Grade 2, Hex Head Bolt .....	14.74	
For >100 To 250, Deduct	-2.12	
For >250 To 500, Deduct	-2.65	
For >500, Deduct	-3.17	
05 05 23 00-0752 EA 5/8" Diameter x 7-1/2" Length, Hot Dipped Galvanized Steel, Low Carbon/Grade 2, Hex Head Bolt .....	15.89	
For >100 To 250, Deduct	-2.12	
For >250 To 500, Deduct	-2.65	
For >500, Deduct	-3.17	
05 05 23 00-0753 EA 5/8" Diameter x 8" Length, Hot Dipped Galvanized Steel, Low Carbon/Grade 2, Hex Head Bolt .....	16.23	
For >100 To 250, Deduct	-2.12	
For >250 To 500, Deduct	-2.65	
For >500, Deduct	-3.17	
05 05 23 00-0754 EA 5/8" Diameter x 8-1/2" Length, Hot Dipped Galvanized Steel, Low Carbon/Grade 2, Hex Head Bolt .....	16.93	
For >100 To 250, Deduct	-2.16	
For >250 To 500, Deduct	-2.70	
For >500, Deduct	-3.24	
05 05 23 00-0755 EA 5/8" Diameter x 9" Length, Hot Dipped Galvanized Steel, Low Carbon/Grade 2, Hex Head Bolt .....	17.47	
For >100 To 250, Deduct	-2.16	
For >250 To 500, Deduct	-2.70	
For >500, Deduct	-3.24	



		<b>Metals</b>	<b>05</b>
		<b>Common Work Results for Metals</b>	<b>05 05</b>
		<b>Metal Fastenings</b>	<b>05 05 23</b>

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MINOR CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
05 05 23 00-0756	EA	5/8" Diameter x 9-1/2" Length, Hot Dipped Galvanized Steel, Low Carbon/Grade 2, Hex Head Bolt.....	18.71	
		For >100 To 250, Deduct	-2.16	
		For >250 To 500, Deduct	-2.70	
		For >500, Deduct	-3.24	
05 05 23 00-0757	EA	5/8" Diameter x 10" Length, Hot Dipped Galvanized Steel, Low Carbon/Grade 2, Hex Head Bolt.....	18.81	
		For >100 To 250, Deduct	-2.16	
		For >250 To 500, Deduct	-2.70	
		For >500, Deduct	-3.24	
05 05 23 00-0758		<b>3/4" Diameter, Hot Dipped Galvanized Steel, Low Carbon/Grade 2, Hex Head Bolts</b> (05 05 23 00-0654)		
05 05 23 00-0759	EA	3/4" Diameter x 1" Length, Hot Dipped Galvanized Steel, Low Carbon/Grade 2, Hex Head Bolt.....	11.75	
		For >100 To 250, Deduct	-1.94	
		For >250 To 500, Deduct	-2.43	
		For >500, Deduct	-2.92	
05 05 23 00-0760	EA	3/4" Diameter x 1-1/2" Length, Hot Dipped Galvanized Steel, Low Carbon/Grade 2, Hex Head Bolt.....	11.79	
		For >100 To 250, Deduct	-1.94	
		For >250 To 500, Deduct	-2.43	
		For >500, Deduct	-2.92	
05 05 23 00-0761	EA	3/4" Diameter x 2" Length, Hot Dipped Galvanized Steel, Low Carbon/Grade 2, Hex Head Bolt.....	12.03	
		For >100 To 250, Deduct	-1.94	
		For >250 To 500, Deduct	-2.43	
		For >500, Deduct	-2.92	
05 05 23 00-0762	EA	3/4" Diameter x 2-1/2" Length, Hot Dipped Galvanized Steel, Low Carbon/Grade 2, Hex Head Bolt.....	12.78	
		For >100 To 250, Deduct	-1.99	
		For >250 To 500, Deduct	-2.49	
		For >500, Deduct	-2.98	
05 05 23 00-0763	EA	3/4" Diameter x 3" Length, Hot Dipped Galvanized Steel, Low Carbon/Grade 2, Hex Head Bolt.....	13.68	
		For >100 To 250, Deduct	-1.99	
		For >250 To 500, Deduct	-2.49	
		For >500, Deduct	-2.98	
05 05 23 00-0764	EA	3/4" Diameter x 3-1/2" Length, Hot Dipped Galvanized Steel, Low Carbon/Grade 2, Hex Head Bolt.....	14.25	
		For >100 To 250, Deduct	-1.99	
		For >250 To 500, Deduct	-2.49	
		For >500, Deduct	-2.98	
05 05 23 00-0765	EA	3/4" Diameter x 4" Length, Hot Dipped Galvanized Steel, Low Carbon/Grade 2, Hex Head Bolt.....	14.77	
		For >100 To 250, Deduct	-2.03	
		For >250 To 500, Deduct	-2.54	
		For >500, Deduct	-3.05	
05 05 23 00-0766	EA	3/4" Diameter x 4-1/2" Length, Hot Dipped Galvanized Steel, Low Carbon/Grade 2, Hex Head Bolt.....	14.82	
		For >100 To 250, Deduct	-2.03	
		For >250 To 500, Deduct	-2.54	
		For >500, Deduct	-3.05	
05 05 23 00-0767	EA	3/4" Diameter x 5" Length, Hot Dipped Galvanized Steel, Low Carbon/Grade 2, Hex Head Bolt.....	14.94	
		For >100 To 250, Deduct	-2.03	
		For >250 To 500, Deduct	-2.54	
		For >500, Deduct	-3.05	
05 05 23 00-0768	EA	3/4" Diameter x 5-1/2" Length, Hot Dipped Galvanized Steel, Low Carbon/Grade 2, Hex Head Bolt.....	15.25	
		For >100 To 250, Deduct	-2.07	
		For >250 To 500, Deduct	-2.59	
		For >500, Deduct	-3.11	
05 05 23 00-0769	EA	3/4" Diameter x 6" Length, Hot Dipped Galvanized Steel, Low Carbon/Grade 2, Hex Head Bolt.....	16.01	
		For >100 To 250, Deduct	-2.07	
		For >250 To 500, Deduct	-2.59	
		For >500, Deduct	-3.11	
05 05 23 00-0770	EA	3/4" Diameter x 6-1/2" Length, Hot Dipped Galvanized Steel, Low Carbon/Grade 2, Hex Head Bolt.....	16.32	
		For >100 To 250, Deduct	-2.07	
		For >250 To 500, Deduct	-2.59	
		For >500, Deduct	-3.11	
05 05 23 00-0771	EA	3/4" Diameter x 7" Length, Hot Dipped Galvanized Steel, Low Carbon/Grade 2, Hex Head Bolt.....	17.15	
		For >100 To 250, Deduct	-2.12	
		For >250 To 500, Deduct	-2.65	
		For >500, Deduct	-3.17	
05 05 23 00-0772	EA	3/4" Diameter x 7-1/2" Length, Hot Dipped Galvanized Steel, Low Carbon/Grade 2, Hex Head Bolt.....	17.25	
		For >100 To 250, Deduct	-2.12	
		For >250 To 500, Deduct	-2.65	
		For >500, Deduct	-3.17	
05 05 23 00-0773	EA	3/4" Diameter x 8" Length, Hot Dipped Galvanized Steel, Low Carbon/Grade 2, Hex Head Bolt.....	17.56	
		For >100 To 250, Deduct	-2.12	
		For >250 To 500, Deduct	-2.65	
		For >500, Deduct	-3.17	
05 05 23 00-0774	EA	3/4" Diameter x 8-1/2" Length, Hot Dipped Galvanized Steel, Low Carbon/Grade 2, Hex Head Bolt.....	18.24	
		For >100 To 250, Deduct	-2.16	
		For >250 To 500, Deduct	-2.70	
		For >500, Deduct	-3.24	
05 05 23 00-0775	EA	3/4" Diameter x 9" Length, Hot Dipped Galvanized Steel, Low Carbon/Grade 2, Hex Head Bolt.....	18.57	
		For >100 To 250, Deduct	-2.16	
		For >250 To 500, Deduct	-2.70	
		For >500, Deduct	-3.24	
05 05 23 00-0776	EA	3/4" Diameter x 9-1/2" Length, Hot Dipped Galvanized Steel, Low Carbon/Grade 2, Hex Head Bolt.....	18.76	
		For >100 To 250, Deduct	-2.16	
		For >250 To 500, Deduct	-2.70	
		For >500, Deduct	-3.24	

**05 Metals****05 05 Common Work Results for Metals****05 05 23 Metal Fastenings**

MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
05 05 23 00-0777 EA 3/4" Diameter x 10" Length, Hot Dipped Galvanized Steel, Low Carbon/Grade 2, Hex Head Bolt .....	18.85	
For >100 To 250, Deduct	-2.16	
For >250 To 500, Deduct	-2.70	
For >500, Deduct	-3.24	
<b>05 05 23 00-0778 7/8" Diameter, Hot Dipped Galvanized Steel, Low Carbon/Grade 2, Hex Head Bolts (05 05 23 00-0654)</b>		
05 05 23 00-0779 EA 7/8" Diameter x 1-1/2" Length, Hot Dipped Galvanized Steel, Low Carbon/Grade 2, Hex Head Bolt .....	14.69	
For >100 To 250, Deduct	-2.16	
For >250 To 500, Deduct	-2.70	
For >500, Deduct	-3.24	
05 05 23 00-0780 EA 7/8" Diameter x 2" Length, Hot Dipped Galvanized Steel, Low Carbon/Grade 2, Hex Head Bolt .....	15.06	
For >100 To 250, Deduct	-2.16	
For >250 To 500, Deduct	-2.70	
For >500, Deduct	-3.24	
05 05 23 00-0781 EA 7/8" Diameter x 2-1/2" Length, Hot Dipped Galvanized Steel, Low Carbon/Grade 2, Hex Head Bolt .....	15.49	
For >100 To 250, Deduct	-2.20	
For >250 To 500, Deduct	-2.76	
For >500, Deduct	-3.31	
05 05 23 00-0782 EA 7/8" Diameter x 3" Length, Hot Dipped Galvanized Steel, Low Carbon/Grade 2, Hex Head Bolt .....	17.40	
For >100 To 250, Deduct	-2.20	
For >250 To 500, Deduct	-2.76	
For >500, Deduct	-3.31	
05 05 23 00-0783 EA 7/8" Diameter x 3-1/2" Length, Hot Dipped Galvanized Steel, Low Carbon/Grade 2, Hex Head Bolt .....	17.69	
For >100 To 250, Deduct	-2.20	
For >250 To 500, Deduct	-2.76	
For >500, Deduct	-3.31	
05 05 23 00-0784 EA 7/8" Diameter x 4" Length, Hot Dipped Galvanized Steel, Low Carbon/Grade 2, Hex Head Bolt .....	18.27	
For >100 To 250, Deduct	-2.25	
For >250 To 500, Deduct	-2.81	
For >500, Deduct	-3.37	
05 05 23 00-0785 EA 7/8" Diameter x 4-1/2" Length, Hot Dipped Galvanized Steel, Low Carbon/Grade 2, Hex Head Bolt .....	18.67	
For >100 To 250, Deduct	-2.25	
For >250 To 500, Deduct	-2.81	
For >500, Deduct	-3.37	
05 05 23 00-0786 EA 7/8" Diameter x 5" Length, Hot Dipped Galvanized Steel, Low Carbon/Grade 2, Hex Head Bolt .....	19.19	
For >100 To 250, Deduct	-2.25	
For >250 To 500, Deduct	-2.81	
For >500, Deduct	-3.37	
05 05 23 00-0787 EA 7/8" Diameter x 5-1/2" Length, Hot Dipped Galvanized Steel, Low Carbon/Grade 2, Hex Head Bolt .....	19.76	
For >100 To 250, Deduct	-2.29	
For >250 To 500, Deduct	-2.86	
For >500, Deduct	-3.44	
05 05 23 00-0788 EA 7/8" Diameter x 6" Length, Hot Dipped Galvanized Steel, Low Carbon/Grade 2, Hex Head Bolt .....	20.16	
For >100 To 250, Deduct	-2.29	
For >250 To 500, Deduct	-2.86	
For >500, Deduct	-3.44	
05 05 23 00-0789 EA 7/8" Diameter x 6-1/2" Length, Hot Dipped Galvanized Steel, Low Carbon/Grade 2, Hex Head Bolt .....	23.34	
For >100 To 250, Deduct	-2.29	
For >250 To 500, Deduct	-2.86	
For >500, Deduct	-3.44	
05 05 23 00-0790 EA 7/8" Diameter x 7" Length, Hot Dipped Galvanized Steel, Low Carbon/Grade 2, Hex Head Bolt .....	23.99	
For >100 To 250, Deduct	-2.33	
For >250 To 500, Deduct	-2.92	
For >500, Deduct	-3.50	
05 05 23 00-0791 EA 7/8" Diameter x 7-1/2" Length, Hot Dipped Galvanized Steel, Low Carbon/Grade 2, Hex Head Bolt .....	24.73	
For >100 To 250, Deduct	-2.33	
For >250 To 500, Deduct	-2.92	
For >500, Deduct	-3.50	
05 05 23 00-0792 EA 7/8" Diameter x 8" Length, Hot Dipped Galvanized Steel, Low Carbon/Grade 2, Hex Head Bolt .....	24.90	
For >100 To 250, Deduct	-2.33	
For >250 To 500, Deduct	-2.92	
For >500, Deduct	-3.50	
05 05 23 00-0793 EA 7/8" Diameter x 8-1/2" Length, Hot Dipped Galvanized Steel, Low Carbon/Grade 2, Hex Head Bolt .....	25.33	
For >100 To 250, Deduct	-2.38	
For >250 To 500, Deduct	-2.97	
For >500, Deduct	-3.56	
05 05 23 00-0794 EA 7/8" Diameter x 9" Length, Hot Dipped Galvanized Steel, Low Carbon/Grade 2, Hex Head Bolt .....	25.74	
For >100 To 250, Deduct	-2.38	
For >250 To 500, Deduct	-2.97	
For >500, Deduct	-3.56	
05 05 23 00-0795 EA 7/8" Diameter x 9-1/2" Length, Hot Dipped Galvanized Steel, Low Carbon/Grade 2, Hex Head Bolt .....	26.25	
For >100 To 250, Deduct	-2.38	
For >250 To 500, Deduct	-2.97	
For >500, Deduct	-3.56	
05 05 23 00-0796 EA 7/8" Diameter x 10" Length, Hot Dipped Galvanized Steel, Low Carbon/Grade 2, Hex Head Bolt .....	26.73	
For >100 To 250, Deduct	-2.38	
For >250 To 500, Deduct	-2.97	
For >500, Deduct	-3.56	

**05 05 23 00-0797 1" Diameter, Hot Dipped Galvanized Steel, Low Carbon/Grade 2, Hex Head Bolts (05 05 23 00-0654)**





		<b>Metals</b>	<b>05</b>
		<b>Common Work Results for Metals</b>	<b>05 05</b>
		<b>Metal Fastenings</b>	<b>05 05 23</b>

05

MINOR CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
05 05 23 00-0798	EA	1" Diameter x 2" Length, Hot Dipped Galvanized Steel, Low Carbon/Grade 2, Hex Head Bolt.....	17.27	
		For >100 To 250, Deduct	-2.16	
		For >250 To 500, Deduct	-2.70	
		For >500, Deduct	-3.24	
05 05 23 00-0799	EA	1" Diameter x 2-1/2" Length, Hot Dipped Galvanized Steel, Low Carbon/Grade 2, Hex Head Bolt.....	17.60	
		For >100 To 250, Deduct	-2.20	
		For >250 To 500, Deduct	-2.76	
		For >500, Deduct	-3.31	
05 05 23 00-0800	EA	1" Diameter x 3" Length, Hot Dipped Galvanized Steel, Low Carbon/Grade 2, Hex Head Bolt.....	18.29	
		For >100 To 250, Deduct	-2.20	
		For >250 To 500, Deduct	-2.76	
		For >500, Deduct	-3.31	
05 05 23 00-0801	EA	1" Diameter x 3-1/2" Length, Hot Dipped Galvanized Steel, Low Carbon/Grade 2, Hex Head Bolt.....	18.83	
		For >100 To 250, Deduct	-2.20	
		For >250 To 500, Deduct	-2.76	
		For >500, Deduct	-3.31	
05 05 23 00-0802	EA	1" Diameter x 4" Length, Hot Dipped Galvanized Steel, Low Carbon/Grade 2, Hex Head Bolt.....	20.28	
		For >100 To 250, Deduct	-2.25	
		For >250 To 500, Deduct	-2.81	
		For >500, Deduct	-3.37	
05 05 23 00-0803	EA	1" Diameter x 4-1/2" Length, Hot Dipped Galvanized Steel, Low Carbon/Grade 2, Hex Head Bolt.....	20.56	
		For >100 To 250, Deduct	-2.25	
		For >250 To 500, Deduct	-2.81	
		For >500, Deduct	-3.37	
05 05 23 00-0804	EA	1" Diameter x 5" Length, Hot Dipped Galvanized Steel, Low Carbon/Grade 2, Hex Head Bolt.....	21.36	
		For >100 To 250, Deduct	-2.25	
		For >250 To 500, Deduct	-2.81	
		For >500, Deduct	-3.37	
05 05 23 00-0805	EA	1" Diameter x 5-1/2" Length, Hot Dipped Galvanized Steel, Low Carbon/Grade 2, Hex Head Bolt.....	21.66	
		For >100 To 250, Deduct	-2.29	
		For >250 To 500, Deduct	-2.86	
		For >500, Deduct	-3.44	
05 05 23 00-0806	EA	1" Diameter x 6" Length, Hot Dipped Galvanized Steel, Low Carbon/Grade 2, Hex Head Bolt.....	21.96	
		For >100 To 250, Deduct	-2.29	
		For >250 To 500, Deduct	-2.86	
		For >500, Deduct	-3.44	
05 05 23 00-0807	EA	1" Diameter x 6-1/2" Length, Hot Dipped Galvanized Steel, Low Carbon/Grade 2, Hex Head Bolt.....	24.68	
		For >100 To 250, Deduct	-2.29	
		For >250 To 500, Deduct	-2.86	
		For >500, Deduct	-3.44	
05 05 23 00-0808	EA	1" Diameter x 7" Length, Hot Dipped Galvanized Steel, Low Carbon/Grade 2, Hex Head Bolt.....	25.40	
		For >100 To 250, Deduct	-2.33	
		For >250 To 500, Deduct	-2.92	
		For >500, Deduct	-3.50	
05 05 23 00-0809	EA	1" Diameter x 7-1/2" Length, Hot Dipped Galvanized Steel, Low Carbon/Grade 2, Hex Head Bolt.....	26.54	
		For >100 To 250, Deduct	-2.33	
		For >250 To 500, Deduct	-2.92	
		For >500, Deduct	-3.50	
05 05 23 00-0810	EA	1" Diameter x 8" Length, Hot Dipped Galvanized Steel, Low Carbon/Grade 2, Hex Head Bolt.....	27.67	
		For >100 To 250, Deduct	-2.33	
		For >250 To 500, Deduct	-2.92	
		For >500, Deduct	-3.50	
05 05 23 00-0811	EA	1" Diameter x 8-1/2" Length, Hot Dipped Galvanized Steel, Low Carbon/Grade 2, Hex Head Bolt.....	28.23	
		For >100 To 250, Deduct	-2.38	
		For >250 To 500, Deduct	-2.97	
		For >500, Deduct	-3.56	
05 05 23 00-0812	EA	1" Diameter x 9" Length, Hot Dipped Galvanized Steel, Low Carbon/Grade 2, Hex Head Bolt.....	29.14	
		For >100 To 250, Deduct	-2.38	
		For >250 To 500, Deduct	-2.97	
		For >500, Deduct	-3.56	
05 05 23 00-0813	EA	1" Diameter x 9-1/2" Length, Hot Dipped Galvanized Steel, Low Carbon/Grade 2, Hex Head Bolt.....	29.84	
		For >100 To 250, Deduct	-2.38	
		For >250 To 500, Deduct	-2.97	
		For >500, Deduct	-3.56	
05 05 23 00-0814	EA	1" Diameter x 10" Length, Hot Dipped Galvanized Steel, Low Carbon/Grade 2, Hex Head Bolt.....	30.87	
		For >100 To 250, Deduct	-2.38	
		For >250 To 500, Deduct	-2.97	
		For >500, Deduct	-3.56	
05 05 23 00-0815		304/18-8 Stainless Steel, Hex Head Bolts (05 05 23 00-0807)		
05 05 23 00-0816		1/4" Diameter, 304/18-8 Stainless Steel, Hex Head Bolts (05 05 23 00-0815)		
05 05 23 00-0817	EA	1/4" Diameter x 1/2" Length, 304/18-8 Stainless Steel, Hex Head Bolt.....	7.80	
		For >100 To 250, Deduct	-1.51	
		For >250 To 500, Deduct	-1.89	
		For >500, Deduct	-2.27	
05 05 23 00-0818	EA	1/4" Diameter x 1" Length, 304/18-8 Stainless Steel, Hex Head Bolt.....	7.90	
		For >100 To 250, Deduct	-1.51	
		For >250 To 500, Deduct	-1.89	
		For >500, Deduct	-2.27	
05 05 23 00-0819	EA	1/4" Diameter x 1-1/2" Length, 304/18-8 Stainless Steel, Hex Head Bolt.....	8.02	
		For >100 To 250, Deduct	-1.51	
		For >250 To 500, Deduct	-1.89	
		For >500, Deduct	-2.27	

**05 Metals****05 05 Common Work Results for Metals****05 05 23 Metal Fastenings**

MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
05 05 23 00-0820 EA 1/4" Diameter x 2" Length, 304/18-8 Stainless Steel, Hex Head Bolt .....8.15 For >100 To 250, Deduct -1.51 For >250 To 500, Deduct -1.89 For >500, Deduct -2.27		
05 05 23 00-0821 EA 1/4" Diameter x 2-1/2" Length, 304/18-8 Stainless Steel, Hex Head Bolt .....8.50 For >100 To 250, Deduct -1.56 For >250 To 500, Deduct -1.95 For >500, Deduct -2.33		
05 05 23 00-0822 EA 1/4" Diameter x 3" Length, 304/18-8 Stainless Steel, Hex Head Bolt .....8.69 For >100 To 250, Deduct -1.56 For >250 To 500, Deduct -1.95 For >500, Deduct -2.33		
05 05 23 00-0823 EA 1/4" Diameter x 3-1/2" Length, 304/18-8 Stainless Steel, Hex Head Bolt .....8.92 For >100 To 250, Deduct -1.56 For >250 To 500, Deduct -1.95 For >500, Deduct -2.33		
05 05 23 00-0824 EA 1/4" Diameter x 4" Length, 304/18-8 Stainless Steel, Hex Head Bolt .....9.30 For >100 To 250, Deduct -1.60 For >250 To 500, Deduct -2.00 For >500, Deduct -2.40		
05 05 23 00-0825 EA 1/4" Diameter x 4-1/2" Length, 304/18-8 Stainless Steel, Hex Head Bolt .....9.58 For >100 To 250, Deduct -1.60 For >250 To 500, Deduct -2.00 For >500, Deduct -2.40		
05 05 23 00-0826 EA 1/4" Diameter x 5" Length, 304/18-8 Stainless Steel, Hex Head Bolt .....9.83 For >100 To 250, Deduct -1.60 For >250 To 500, Deduct -2.00 For >500, Deduct -2.40		
05 05 23 00-0827 EA 1/4" Diameter x 5-1/2" Length, 304/18-8 Stainless Steel, Hex Head Bolt .....10.26 For >100 To 250, Deduct -1.64 For >250 To 500, Deduct -2.05 For >500, Deduct -2.46		
05 05 23 00-0828 EA 1/4" Diameter x 6" Length, 304/18-8 Stainless Steel, Hex Head Bolt .....10.68 For >100 To 250, Deduct -1.64 For >250 To 500, Deduct -2.05 For >500, Deduct -2.46		
05 05 23 00-0829 EA 1/4" Diameter x 6-1/2" Length, 304/18-8 Stainless Steel, Hex Head Bolt .....15.75 For >100 To 250, Deduct -1.64 For >250 To 500, Deduct -2.05 For >500, Deduct -2.46		
05 05 23 00-0830 EA 1/4" Diameter x 7" Length, 304/18-8 Stainless Steel, Hex Head Bolt .....18.44 For >100 To 250, Deduct -1.68 For >250 To 500, Deduct -2.11 For >500, Deduct -2.53		
05 05 23 00-0831 EA 1/4" Diameter x 7-1/2" Length, 304/18-8 Stainless Steel, Hex Head Bolt .....18.68 For >100 To 250, Deduct -1.68 For >250 To 500, Deduct -2.11 For >500, Deduct -2.53		
05 05 23 00-0832 EA 1/4" Diameter x 8" Length, 304/18-8 Stainless Steel, Hex Head Bolt .....19.24 For >100 To 250, Deduct -1.68 For >250 To 500, Deduct -2.11 For >500, Deduct -2.53		
<b>05 05 23 00-0833 5/16" Diameter, 304/18-8 Stainless Steel, Hex Head Bolts (05 05 23 00-0815) .....7.98</b>		
05 05 23 00-0834 EA 5/16" Diameter x 1/2" Length, 304/18-8 Stainless Steel, Hex Head Bolt .....7.98 For >100 To 250, Deduct -1.51 For >250 To 500, Deduct -1.89 For >500, Deduct -2.27		
05 05 23 00-0835 EA 5/16" Diameter x 1" Length, 304/18-8 Stainless Steel, Hex Head Bolt .....8.07 For >100 To 250, Deduct -1.51 For >250 To 500, Deduct -1.89 For >500, Deduct -2.27		
05 05 23 00-0836 EA 5/16" Diameter x 1-1/2" Length, 304/18-8 Stainless Steel, Hex Head Bolt .....8.25 For >100 To 250, Deduct -1.51 For >250 To 500, Deduct -1.89 For >500, Deduct -2.27		
05 05 23 00-0837 EA 5/16" Diameter x 2" Length, 304/18-8 Stainless Steel, Hex Head Bolt .....8.40 For >100 To 250, Deduct -1.51 For >250 To 500, Deduct -1.89 For >500, Deduct -2.27		
05 05 23 00-0838 EA 5/16" Diameter x 2-1/2" Length, 304/18-8 Stainless Steel, Hex Head Bolt .....8.88 For >100 To 250, Deduct -1.56 For >250 To 500, Deduct -1.95 For >500, Deduct -2.33		
05 05 23 00-0839 EA 5/16" Diameter x 3" Length, 304/18-8 Stainless Steel, Hex Head Bolt .....8.97 For >100 To 250, Deduct -1.56 For >250 To 500, Deduct -1.95 For >500, Deduct -2.33		
05 05 23 00-0840 EA 5/16" Diameter x 3-1/2" Length, 304/18-8 Stainless Steel, Hex Head Bolt .....9.45 For >100 To 250, Deduct -1.56 For >250 To 500, Deduct -1.95 For >500, Deduct -2.33		



		<b>Metals</b>	<b>05</b>
		<b>Common Work Results for Metals</b>	<b>05 05</b>
		<b>Metal Fastenings</b>	<b>05 05 23</b>

05

MINOR	CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
05 05 23 00-0841	EA		5/16" Diameter x 4" Length, 304/18-8 Stainless Steel, Hex Head Bolt .....	9.99	
			For >100 To 250, Deduct	-1.60	
			For >250 To 500, Deduct	-2.00	
			For >500, Deduct	-2.40	
05 05 23 00-0842	EA		5/16" Diameter x 4-1/2" Length, 304/18-8 Stainless Steel, Hex Head Bolt .....	10.52	
			For >100 To 250, Deduct	-1.60	
			For >250 To 500, Deduct	-2.00	
			For >500, Deduct	-2.40	
05 05 23 00-0843	EA		5/16" Diameter x 5" Length, 304/18-8 Stainless Steel, Hex Head Bolt .....	10.78	
			For >100 To 250, Deduct	-1.60	
			For >250 To 500, Deduct	-2.00	
			For >500, Deduct	-2.40	
05 05 23 00-0844	EA		5/16" Diameter x 5-1/2" Length, 304/18-8 Stainless Steel, Hex Head Bolt .....	11.81	
			For >100 To 250, Deduct	-1.64	
			For >250 To 500, Deduct	-2.05	
			For >500, Deduct	-2.46	
05 05 23 00-0845	EA		5/16" Diameter x 6" Length, 304/18-8 Stainless Steel, Hex Head Bolt .....	13.13	
			For >100 To 250, Deduct	-1.64	
			For >250 To 500, Deduct	-2.05	
			For >500, Deduct	-2.46	
05 05 23 00-0846	EA		5/16" Diameter x 6-1/2" Length, 304/18-8 Stainless Steel, Hex Head Bolt .....	16.15	
			For >100 To 250, Deduct	-1.64	
			For >250 To 500, Deduct	-2.05	
			For >500, Deduct	-2.46	
05 05 23 00-0847	EA		5/16" Diameter x 7" Length, 304/18-8 Stainless Steel, Hex Head Bolt .....	21.24	
			For >100 To 250, Deduct	-1.68	
			For >250 To 500, Deduct	-2.11	
			For >500, Deduct	-2.53	
05 05 23 00-0848			<b>3/8" Diameter, 304/18-8 Stainless Steel, Hex Head Bolts</b> (05 05 23 00-0815)		
05 05 23 00-0849	EA		3/8" Diameter x 1/2" Length, 304/18-8 Stainless Steel, Hex Head Bolt .....	8.21	
			For >100 To 250, Deduct	-1.51	
			For >250 To 500, Deduct	-1.89	
			For >500, Deduct	-2.27	
05 05 23 00-0850	EA		3/8" Diameter x 1" Length, 304/18-8 Stainless Steel, Hex Head Bolt .....	8.32	
			For >100 To 250, Deduct	-1.51	
			For >250 To 500, Deduct	-1.89	
			For >500, Deduct	-2.27	
05 05 23 00-0851	EA		3/8" Diameter x 1-1/2" Length, 304/18-8 Stainless Steel, Hex Head Bolt .....	8.60	
			For >100 To 250, Deduct	-1.51	
			For >250 To 500, Deduct	-1.89	
			For >500, Deduct	-2.27	
05 05 23 00-0852	EA		3/8" Diameter x 2" Length, 304/18-8 Stainless Steel, Hex Head Bolt .....	8.96	
			For >100 To 250, Deduct	-1.51	
			For >250 To 500, Deduct	-1.89	
			For >500, Deduct	-2.27	
05 05 23 00-0853	EA		3/8" Diameter x 2-1/2" Length, 304/18-8 Stainless Steel, Hex Head Bolt .....	9.37	
			For >100 To 250, Deduct	-1.56	
			For >250 To 500, Deduct	-1.95	
			For >500, Deduct	-2.33	
05 05 23 00-0854	EA		3/8" Diameter x 3" Length, 304/18-8 Stainless Steel, Hex Head Bolt .....	9.66	
			For >100 To 250, Deduct	-1.56	
			For >250 To 500, Deduct	-1.95	
			For >500, Deduct	-2.33	
05 05 23 00-0855	EA		3/8" Diameter x 3-1/2" Length, 304/18-8 Stainless Steel, Hex Head Bolt .....	10.04	
			For >100 To 250, Deduct	-1.56	
			For >250 To 500, Deduct	-1.95	
			For >500, Deduct	-2.33	
05 05 23 00-0856	EA		3/8" Diameter x 4" Length, 304/18-8 Stainless Steel, Hex Head Bolt .....	10.60	
			For >100 To 250, Deduct	-1.60	
			For >250 To 500, Deduct	-2.00	
			For >500, Deduct	-2.40	
05 05 23 00-0857	EA		3/8" Diameter x 4-1/2" Length, 304/18-8 Stainless Steel, Hex Head Bolt .....	11.05	
			For >100 To 250, Deduct	-1.60	
			For >250 To 500, Deduct	-2.00	
			For >500, Deduct	-2.40	
05 05 23 00-0858	EA		3/8" Diameter x 5" Length, 304/18-8 Stainless Steel, Hex Head Bolt .....	12.04	
			For >100 To 250, Deduct	-1.60	
			For >250 To 500, Deduct	-2.00	
			For >500, Deduct	-2.40	
05 05 23 00-0859	EA		3/8" Diameter x 5-1/2" Length, 304/18-8 Stainless Steel, Hex Head Bolt .....	12.38	
			For >100 To 250, Deduct	-1.64	
			For >250 To 500, Deduct	-2.05	
			For >500, Deduct	-2.46	
05 05 23 00-0860	EA		3/8" Diameter x 6" Length, 304/18-8 Stainless Steel, Hex Head Bolt .....	13.20	
			For >100 To 250, Deduct	-1.64	
			For >250 To 500, Deduct	-2.05	
			For >500, Deduct	-2.46	
05 05 23 00-0861	EA		3/8" Diameter x 6-1/2" Length, 304/18-8 Stainless Steel, Hex Head Bolt .....	14.95	
			For >100 To 250, Deduct	-1.64	
			For >250 To 500, Deduct	-2.05	
			For >500, Deduct	-2.46	

**05 Metals****05 05 Common Work Results for Metals****05 05 23 Metal Fastenings**

MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
05 05 23 00-0862 EA 3/8" Diameter x 7" Length, 304/18-8 Stainless Steel, Hex Head Bolt .....	15.57	
For >100 To 250, Deduct	-1.68	
For >250 To 500, Deduct	-2.11	
For >500, Deduct	-2.53	
05 05 23 00-0863 EA 3/8" Diameter x 7-1/2" Length, 304/18-8 Stainless Steel, Hex Head Bolt .....	15.82	
For >100 To 250, Deduct	-1.68	
For >250 To 500, Deduct	-2.11	
For >500, Deduct	-2.53	
05 05 23 00-0864 EA 3/8" Diameter x 8" Length, 304/18-8 Stainless Steel, Hex Head Bolt .....	17.56	
For >100 To 250, Deduct	-1.68	
For >250 To 500, Deduct	-2.11	
For >500, Deduct	-2.53	
<b>05 05 23 00-0865 7/16" Diameter, 304/18-8 Stainless Steel, Hex Head Bolts (05 05 23 00-0815)</b>		
05 05 23 00-0866 EA 7/16" Diameter x 1" Length, 304/18-8 Stainless Steel, Hex Head Bolt .....	10.21	
For >100 To 250, Deduct	-1.73	
For >250 To 500, Deduct	-2.16	
For >500, Deduct	-2.59	
05 05 23 00-0867 EA 7/16" Diameter x 1-1/2" Length, 304/18-8 Stainless Steel, Hex Head Bolt .....	10.33	
For >100 To 250, Deduct	-1.73	
For >250 To 500, Deduct	-2.16	
For >500, Deduct	-2.59	
05 05 23 00-0868 EA 7/16" Diameter x 2" Length, 304/18-8 Stainless Steel, Hex Head Bolt .....	10.80	
For >100 To 250, Deduct	-1.73	
For >250 To 500, Deduct	-2.16	
For >500, Deduct	-2.59	
05 05 23 00-0869 EA 7/16" Diameter x 2-1/2" Length, 304/18-8 Stainless Steel, Hex Head Bolt .....	11.28	
For >100 To 250, Deduct	-1.77	
For >250 To 500, Deduct	-2.21	
For >500, Deduct	-2.66	
05 05 23 00-0870 EA 7/16" Diameter x 3" Length, 304/18-8 Stainless Steel, Hex Head Bolt .....	11.84	
For >100 To 250, Deduct	-1.77	
For >250 To 500, Deduct	-2.21	
For >500, Deduct	-2.66	
05 05 23 00-0871 EA 7/16" Diameter x 3-1/2" Length, 304/18-8 Stainless Steel, Hex Head Bolt .....	12.77	
For >100 To 250, Deduct	-1.77	
For >250 To 500, Deduct	-2.21	
For >500, Deduct	-2.66	
05 05 23 00-0872 EA 7/16" Diameter x 4" Length, 304/18-8 Stainless Steel, Hex Head Bolt .....	13.41	
For >100 To 250, Deduct	-1.81	
For >250 To 500, Deduct	-2.27	
For >500, Deduct	-2.72	
05 05 23 00-0873 EA 7/16" Diameter x 4-1/2" Length, 304/18-8 Stainless Steel, Hex Head Bolt .....	14.50	
For >100 To 250, Deduct	-1.81	
For >250 To 500, Deduct	-2.27	
For >500, Deduct	-2.72	
05 05 23 00-0874 EA 7/16" Diameter x 5" Length, 304/18-8 Stainless Steel, Hex Head Bolt .....	14.97	
For >100 To 250, Deduct	-1.81	
For >250 To 500, Deduct	-2.27	
For >500, Deduct	-2.72	
05 05 23 00-0875 EA 7/16" Diameter x 5-1/2" Length, 304/18-8 Stainless Steel, Hex Head Bolt .....	16.67	
For >100 To 250, Deduct	-1.86	
For >250 To 500, Deduct	-2.32	
For >500, Deduct	-2.79	
05 05 23 00-0876 EA 7/16" Diameter x 6" Length, 304/18-8 Stainless Steel, Hex Head Bolt .....	18.33	
For >100 To 250, Deduct	-1.86	
For >250 To 500, Deduct	-2.32	
For >500, Deduct	-2.79	
05 05 23 00-0877 EA 7/16" Diameter x 6-1/2" Length, 304/18-8 Stainless Steel, Hex Head Bolt .....	18.55	
For >100 To 250, Deduct	-1.86	
For >250 To 500, Deduct	-2.32	
For >500, Deduct	-2.79	
05 05 23 00-0878 EA 7/16" Diameter x 7" Length, 304/18-8 Stainless Steel, Hex Head Bolt .....	18.97	
For >100 To 250, Deduct	-1.90	
For >250 To 500, Deduct	-2.38	
For >500, Deduct	-2.85	
<b>05 05 23 00-0879 1/2" Diameter, 304/18-8 Stainless Steel, Hex Head Bolts (05 05 23 00-0815)</b>		
05 05 23 00-0880 EA 1/2" Diameter x 1" Length, 304/18-8 Stainless Steel, Hex Head Bolt .....	10.20	
For >100 To 250, Deduct	-1.73	
For >250 To 500, Deduct	-2.16	
For >500, Deduct	-2.59	
05 05 23 00-0881 EA 1/2" Diameter x 1-1/2" Length, 304/18-8 Stainless Steel, Hex Head Bolt .....	10.33	
For >100 To 250, Deduct	-1.73	
For >250 To 500, Deduct	-2.16	
For >500, Deduct	-2.59	
05 05 23 00-0882 EA 1/2" Diameter x 2" Length, 304/18-8 Stainless Steel, Hex Head Bolt .....	11.06	
For >100 To 250, Deduct	-1.73	
For >250 To 500, Deduct	-2.16	
For >500, Deduct	-2.59	



		<b>Metals</b>	<b>05</b>	<b>05</b>
		<b>Common Work Results for Metals</b>	<b>05 05</b>	
		<b>Metal Fastenings</b>	<b>05 05 23</b>	

MINOR				TOTAL DIRECT	DEMOLITION
CSI	UOM	DESCRIPTION		UNIT COST	UNIT COST
05 05 23 00-0883	EA	1/2" Diameter x 2-1/2" Length, 304/18-8 Stainless Steel, Hex Head Bolt .....		11.56	
		For >100 To 250, Deduct		-1.77	
		For >250 To 500, Deduct		-2.21	
		For >500, Deduct		-2.66	
05 05 23 00-0884	EA	1/2" Diameter x 3" Length, 304/18-8 Stainless Steel, Hex Head Bolt .....		12.22	
		For >100 To 250, Deduct		-1.77	
		For >250 To 500, Deduct		-2.21	
		For >500, Deduct		-2.66	
05 05 23 00-0885	EA	1/2" Diameter x 3-1/2" Length, 304/18-8 Stainless Steel, Hex Head Bolt .....		12.58	
		For >100 To 250, Deduct		-1.77	
		For >250 To 500, Deduct		-2.21	
		For >500, Deduct		-2.66	
05 05 23 00-0886	EA	1/2" Diameter x 4" Length, 304/18-8 Stainless Steel, Hex Head Bolt .....		13.24	
		For >100 To 250, Deduct		-1.81	
		For >250 To 500, Deduct		-2.27	
		For >500, Deduct		-2.72	
05 05 23 00-0887	EA	1/2" Diameter x 4-1/2" Length, 304/18-8 Stainless Steel, Hex Head Bolt .....		13.56	
		For >100 To 250, Deduct		-1.81	
		For >250 To 500, Deduct		-2.27	
		For >500, Deduct		-2.72	
05 05 23 00-0888	EA	1/2" Diameter x 5" Length, 304/18-8 Stainless Steel, Hex Head Bolt .....		15.29	
		For >100 To 250, Deduct		-1.81	
		For >250 To 500, Deduct		-2.27	
		For >500, Deduct		-2.72	
05 05 23 00-0889	EA	1/2" Diameter x 5-1/2" Length, 304/18-8 Stainless Steel, Hex Head Bolt .....		15.99	
		For >100 To 250, Deduct		-1.86	
		For >250 To 500, Deduct		-2.32	
		For >500, Deduct		-2.79	
05 05 23 00-0890	EA	1/2" Diameter x 6" Length, 304/18-8 Stainless Steel, Hex Head Bolt .....		16.77	
		For >100 To 250, Deduct		-1.86	
		For >250 To 500, Deduct		-2.32	
		For >500, Deduct		-2.79	
05 05 23 00-0891	EA	1/2" Diameter x 6-1/2" Length, 304/18-8 Stainless Steel, Hex Head Bolt .....		17.65	
		For >100 To 250, Deduct		-1.86	
		For >250 To 500, Deduct		-2.32	
		For >500, Deduct		-2.79	
05 05 23 00-0892	EA	1/2" Diameter x 7" Length, 304/18-8 Stainless Steel, Hex Head Bolt .....		19.18	
		For >100 To 250, Deduct		-1.90	
		For >250 To 500, Deduct		-2.38	
		For >500, Deduct		-2.85	
05 05 23 00-0893	EA	1/2" Diameter x 7-1/2" Length, 304/18-8 Stainless Steel, Hex Head Bolt .....		19.71	
		For >100 To 250, Deduct		-1.90	
		For >250 To 500, Deduct		-2.38	
		For >500, Deduct		-2.85	
05 05 23 00-0894	EA	1/2" Diameter x 8" Length, 304/18-8 Stainless Steel, Hex Head Bolt .....		20.55	
		For >100 To 250, Deduct		-1.90	
		For >250 To 500, Deduct		-2.38	
		For >500, Deduct		-2.85	
05 05 23 00-0895	EA	1/2" Diameter x 8-1/2" Length, 304/18-8 Stainless Steel, Hex Head Bolt .....		24.83	
		For >100 To 250, Deduct		-1.94	
		For >250 To 500, Deduct		-2.43	
		For >500, Deduct		-2.92	
05 05 23 00-0896	EA	1/2" Diameter x 9" Length, 304/18-8 Stainless Steel, Hex Head Bolt .....		25.16	
		For >100 To 250, Deduct		-1.94	
		For >250 To 500, Deduct		-2.43	
		For >500, Deduct		-2.92	
05 05 23 00-0897	EA	1/2" Diameter x 9-1/2" Length, 304/18-8 Stainless Steel, Hex Head Bolt .....		27.47	
		For >100 To 250, Deduct		-1.94	
		For >250 To 500, Deduct		-2.43	
		For >500, Deduct		-2.92	
05 05 23 00-0898	EA	1/2" Diameter x 10" Length, 304/18-8 Stainless Steel, Hex Head Bolt .....		29.75	
		For >100 To 250, Deduct		-1.94	
		For >250 To 500, Deduct		-2.43	
		For >500, Deduct		-2.92	
05 05 23 00-0899		9/16" Diameter, 304/18-8 Stainless Steel, Hex Head Bolts (05 05 23 00-0815)			
05 05 23 00-0900	EA	9/16" Diameter x 1" Length, 304/18-8 Stainless Steel, Hex Head Bolt .....		14.01	
		For >100 To 250, Deduct		-1.73	
		For >250 To 500, Deduct		-2.16	
		For >500, Deduct		-2.59	
05 05 23 00-0901	EA	9/16" Diameter x 1-1/2" Length, 304/18-8 Stainless Steel, Hex Head Bolt .....		15.52	
		For >100 To 250, Deduct		-1.73	
		For >250 To 500, Deduct		-2.16	
		For >500, Deduct		-2.59	
05 05 23 00-0902	EA	9/16" Diameter x 2" Length, 304/18-8 Stainless Steel, Hex Head Bolt .....		18.17	
		For >100 To 250, Deduct		-1.73	
		For >250 To 500, Deduct		-2.16	
		For >500, Deduct		-2.59	
05 05 23 00-0903	EA	9/16" Diameter x 2-1/2" Length, 304/18-8 Stainless Steel, Hex Head Bolt .....		18.91	
		For >100 To 250, Deduct		-1.77	
		For >250 To 500, Deduct		-2.21	
		For >500, Deduct		-2.66	

**05 Metals****05 05 Common Work Results for Metals****05 05 23 Metal Fastenings**

MINOR	CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
05 05 23 00-0904	EA		9/16" Diameter x 3" Length, 304/18-8 Stainless Steel, Hex Head Bolt .....	19.85	
			For >100 To 250, Deduct	-1.77	
			For >250 To 500, Deduct	-2.21	
			For >500, Deduct	-2.66	
05 05 23 00-0905	EA		9/16" Diameter x 3-1/2" Length, 304/18-8 Stainless Steel, Hex Head Bolt .....	21.49	
			For >100 To 250, Deduct	-1.77	
			For >250 To 500, Deduct	-2.21	
			For >500, Deduct	-2.66	
05 05 23 00-0906	EA		9/16" Diameter x 4" Length, 304/18-8 Stainless Steel, Hex Head Bolt .....	24.12	
			For >100 To 250, Deduct	-1.81	
			For >250 To 500, Deduct	-2.27	
			For >500, Deduct	-2.72	
05 05 23 00-0907	EA		9/16" Diameter x 4-1/2" Length, 304/18-8 Stainless Steel, Hex Head Bolt .....	24.49	
			For >100 To 250, Deduct	-1.81	
			For >250 To 500, Deduct	-2.27	
			For >500, Deduct	-2.72	
05 05 23 00-0908	EA		9/16" Diameter x 5" Length, 304/18-8 Stainless Steel, Hex Head Bolt .....	27.95	
			For >100 To 250, Deduct	-1.81	
			For >250 To 500, Deduct	-2.27	
			For >500, Deduct	-2.72	
05 05 23 00-0909	EA		9/16" Diameter x 5-1/2" Length, 304/18-8 Stainless Steel, Hex Head Bolt .....	29.80	
			For >100 To 250, Deduct	-1.86	
			For >250 To 500, Deduct	-2.32	
			For >500, Deduct	-2.79	
05 05 23 00-0910	EA		9/16" Diameter x 6" Length, 304/18-8 Stainless Steel, Hex Head Bolt .....	31.65	
			For >100 To 250, Deduct	-1.86	
			For >250 To 500, Deduct	-2.32	
			For >500, Deduct	-2.79	
<b>05 05 23 00-0911 5/8" Diameter, 304/18-8 Stainless Steel, Hex Head Bolts (05 05 23 00-0815)</b>					
05 05 23 00-0912	EA		5/8" Diameter x 1" Length, 304/18-8 Stainless Steel, Hex Head Bolt .....	12.57	
			For >100 To 250, Deduct	-1.94	
			For >250 To 500, Deduct	-2.43	
			For >500, Deduct	-2.92	
05 05 23 00-0913	EA		5/8" Diameter x 1-1/2" Length, 304/18-8 Stainless Steel, Hex Head Bolt .....	12.91	
			For >100 To 250, Deduct	-1.94	
			For >250 To 500, Deduct	-2.43	
			For >500, Deduct	-2.92	
05 05 23 00-0914	EA		5/8" Diameter x 2" Length, 304/18-8 Stainless Steel, Hex Head Bolt .....	14.35	
			For >100 To 250, Deduct	-1.94	
			For >250 To 500, Deduct	-2.43	
			For >500, Deduct	-2.92	
05 05 23 00-0915	EA		5/8" Diameter x 2-1/2" Length, 304/18-8 Stainless Steel, Hex Head Bolt .....	14.81	
			For >100 To 250, Deduct	-1.99	
			For >250 To 500, Deduct	-2.49	
			For >500, Deduct	-2.98	
05 05 23 00-0916	EA		5/8" Diameter x 3" Length, 304/18-8 Stainless Steel, Hex Head Bolt .....	15.50	
			For >100 To 250, Deduct	-1.99	
			For >250 To 500, Deduct	-2.49	
			For >500, Deduct	-2.98	
05 05 23 00-0917	EA		5/8" Diameter x 3-1/2" Length, 304/18-8 Stainless Steel, Hex Head Bolt .....	16.48	
			For >100 To 250, Deduct	-1.99	
			For >250 To 500, Deduct	-2.49	
			For >500, Deduct	-2.98	
05 05 23 00-0918	EA		5/8" Diameter x 4" Length, 304/18-8 Stainless Steel, Hex Head Bolt .....	17.92	
			For >100 To 250, Deduct	-2.03	
			For >250 To 500, Deduct	-2.54	
			For >500, Deduct	-3.05	
05 05 23 00-0919	EA		5/8" Diameter x 4-1/2" Length, 304/18-8 Stainless Steel, Hex Head Bolt .....	17.93	
			For >100 To 250, Deduct	-2.03	
			For >250 To 500, Deduct	-2.54	
			For >500, Deduct	-3.05	
05 05 23 00-0920	EA		5/8" Diameter x 5" Length, 304/18-8 Stainless Steel, Hex Head Bolt .....	19.03	
			For >100 To 250, Deduct	-2.03	
			For >250 To 500, Deduct	-2.54	
			For >500, Deduct	-3.05	
05 05 23 00-0921	EA		5/8" Diameter x 5-1/2" Length, 304/18-8 Stainless Steel, Hex Head Bolt .....	19.87	
			For >100 To 250, Deduct	-2.07	
			For >250 To 500, Deduct	-2.59	
			For >500, Deduct	-3.11	
05 05 23 00-0922	EA		5/8" Diameter x 6" Length, 304/18-8 Stainless Steel, Hex Head Bolt .....	20.86	
			For >100 To 250, Deduct	-2.07	
			For >250 To 500, Deduct	-2.59	
			For >500, Deduct	-3.11	
05 05 23 00-0923	EA		5/8" Diameter x 6-1/2" Length, 304/18-8 Stainless Steel, Hex Head Bolt .....	24.49	
			For >100 To 250, Deduct	-2.07	
			For >250 To 500, Deduct	-2.59	
			For >500, Deduct	-3.11	
05 05 23 00-0924	EA		5/8" Diameter x 7" Length, 304/18-8 Stainless Steel, Hex Head Bolt .....	26.68	
			For >100 To 250, Deduct	-2.12	
			For >250 To 500, Deduct	-2.65	
			For >500, Deduct	-3.17	



		<b>Metals</b>	<b>05</b>
		<b>Common Work Results for Metals</b>	<b>05 05</b>
		<b>Metal Fastenings</b>	<b>05 05 23</b>

05

MINOR CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
05 05 23 00-0925	EA	5/8" Diameter x 7-1/2" Length, 304/18-8 Stainless Steel, Hex Head Bolt.....	28.33	
		For >100 To 250, Deduct	-2.12	
		For >250 To 500, Deduct	-2.65	
		For >500, Deduct	-3.17	
05 05 23 00-0926	EA	5/8" Diameter x 8" Length, 304/18-8 Stainless Steel, Hex Head Bolt .....	29.07	
		For >100 To 250, Deduct	-2.12	
		For >250 To 500, Deduct	-2.65	
		For >500, Deduct	-3.17	
05 05 23 00-0927	EA	5/8" Diameter x 8-1/2" Length, 304/18-8 Stainless Steel, Hex Head Bolt .....	32.32	
		For >100 To 250, Deduct	-2.16	
		For >250 To 500, Deduct	-2.70	
		For >500, Deduct	-3.24	
05 05 23 00-0928	EA	5/8" Diameter x 9" Length, 304/18-8 Stainless Steel, Hex Head Bolt .....	33.28	
		For >100 To 250, Deduct	-2.16	
		For >250 To 500, Deduct	-2.70	
		For >500, Deduct	-3.24	
05 05 23 00-0929	EA	5/8" Diameter x 9-1/2" Length, 304/18-8 Stainless Steel, Hex Head Bolt .....	37.60	
		For >100 To 250, Deduct	-2.16	
		For >250 To 500, Deduct	-2.70	
		For >500, Deduct	-3.24	
05 05 23 00-0930	EA	5/8" Diameter x 10" Length, 304/18-8 Stainless Steel, Hex Head Bolt .....	39.37	
		For >100 To 250, Deduct	-2.16	
		For >250 To 500, Deduct	-2.70	
		For >500, Deduct	-3.24	
05 05 23 00-0931		3/4" Diameter, 304/18-8 Stainless Steel, Hex Head Bolts (05 05 23 00-0815)		
05 05 23 00-0932	EA	3/4" Diameter x 1" Length, 304/18-8 Stainless Steel, Hex Head Bolt .....	14.14	
		For >100 To 250, Deduct	-1.94	
		For >250 To 500, Deduct	-2.43	
		For >500, Deduct	-2.92	
05 05 23 00-0933	EA	3/4" Diameter x 1-1/2" Length, 304/18-8 Stainless Steel, Hex Head Bolt .....	14.81	
		For >100 To 250, Deduct	-1.94	
		For >250 To 500, Deduct	-2.43	
		For >500, Deduct	-2.92	
05 05 23 00-0934	EA	3/4" Diameter x 2" Length, 304/18-8 Stainless Steel, Hex Head Bolt .....	15.70	
		For >100 To 250, Deduct	-1.94	
		For >250 To 500, Deduct	-2.43	
		For >500, Deduct	-2.92	
05 05 23 00-0935	EA	3/4" Diameter x 2-1/2" Length, 304/18-8 Stainless Steel, Hex Head Bolt .....	16.89	
		For >100 To 250, Deduct	-1.99	
		For >250 To 500, Deduct	-2.49	
		For >500, Deduct	-2.98	
05 05 23 00-0936	EA	3/4" Diameter x 3" Length, 304/18-8 Stainless Steel, Hex Head Bolt .....	17.87	
		For >100 To 250, Deduct	-1.99	
		For >250 To 500, Deduct	-2.49	
		For >500, Deduct	-2.98	
05 05 23 00-0937	EA	3/4" Diameter x 3-1/2" Length, 304/18-8 Stainless Steel, Hex Head Bolt .....	19.52	
		For >100 To 250, Deduct	-1.99	
		For >250 To 500, Deduct	-2.49	
		For >500, Deduct	-2.98	
05 05 23 00-0938	EA	3/4" Diameter x 4" Length, 304/18-8 Stainless Steel, Hex Head Bolt .....	20.71	
		For >100 To 250, Deduct	-2.03	
		For >250 To 500, Deduct	-2.54	
		For >500, Deduct	-3.05	
05 05 23 00-0939	EA	3/4" Diameter x 4-1/2" Length, 304/18-8 Stainless Steel, Hex Head Bolt .....	22.25	
		For >100 To 250, Deduct	-2.03	
		For >250 To 500, Deduct	-2.54	
		For >500, Deduct	-3.05	
05 05 23 00-0940	EA	3/4" Diameter x 5" Length, 304/18-8 Stainless Steel, Hex Head Bolt .....	23.48	
		For >100 To 250, Deduct	-2.03	
		For >250 To 500, Deduct	-2.54	
		For >500, Deduct	-3.05	
05 05 23 00-0941	EA	3/4" Diameter x 5-1/2" Length, 304/18-8 Stainless Steel, Hex Head Bolt .....	24.97	
		For >100 To 250, Deduct	-2.07	
		For >250 To 500, Deduct	-2.59	
		For >500, Deduct	-3.11	
05 05 23 00-0942	EA	3/4" Diameter x 6" Length, 304/18-8 Stainless Steel, Hex Head Bolt .....	26.40	
		For >100 To 250, Deduct	-2.07	
		For >250 To 500, Deduct	-2.59	
		For >500, Deduct	-3.11	
05 05 23 00-0943	EA	3/4" Diameter x 6-1/2" Length, 304/18-8 Stainless Steel, Hex Head Bolt .....	29.08	
		For >100 To 250, Deduct	-2.07	
		For >250 To 500, Deduct	-2.59	
		For >500, Deduct	-3.11	
05 05 23 00-0944	EA	3/4" Diameter x 7" Length, 304/18-8 Stainless Steel, Hex Head Bolt .....	36.42	
		For >100 To 250, Deduct	-2.12	
		For >250 To 500, Deduct	-2.65	
		For >500, Deduct	-3.17	
05 05 23 00-0945	EA	3/4" Diameter x 7-1/2" Length, 304/18-8 Stainless Steel, Hex Head Bolt .....	38.70	
		For >100 To 250, Deduct	-2.12	
		For >250 To 500, Deduct	-2.65	
		For >500, Deduct	-3.17	

**05 Metals****05 05 Common Work Results for Metals****05 05 23 Metal Fastenings**

MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
05 05 23 00-0946 EA 3/4" Diameter x 8" Length, 304/18-8 Stainless Steel, Hex Head Bolt .....	43.57	
For >100 To 250, Deduct	-2.12	
For >250 To 500, Deduct	-2.65	
For >500, Deduct	-3.17	
05 05 23 00-0947 EA 3/4" Diameter x 8-1/2" Length, 304/18-8 Stainless Steel, Hex Head Bolt .....	44.01	
For >100 To 250, Deduct	-2.16	
For >250 To 500, Deduct	-2.70	
For >500, Deduct	-3.24	
05 05 23 00-0948 EA 3/4" Diameter x 9" Length, 304/18-8 Stainless Steel, Hex Head Bolt .....	44.78	
For >100 To 250, Deduct	-2.16	
For >250 To 500, Deduct	-2.70	
For >500, Deduct	-3.24	
05 05 23 00-0949 EA 3/4" Diameter x 9-1/2" Length, 304/18-8 Stainless Steel, Hex Head Bolt .....	46.86	
For >100 To 250, Deduct	-2.16	
For >250 To 500, Deduct	-2.70	
For >500, Deduct	-3.24	
05 05 23 00-0950 EA 3/4" Diameter x 10" Length, 304/18-8 Stainless Steel, Hex Head Bolt .....	48.46	
For >100 To 250, Deduct	-2.16	
For >250 To 500, Deduct	-2.70	
For >500, Deduct	-3.24	
<b>05 05 23 00-0951 7/8" Diameter, 304/18-8 Stainless Steel, Hex Head Bolts (05 05 23 00-0815)</b>		
05 05 23 00-0952 EA 7/8" Diameter x 1-1/2" Length, 304/18-8 Stainless Steel, Hex Head Bolt .....	19.45	
For >100 To 250, Deduct	-2.16	
For >250 To 500, Deduct	-2.70	
For >500, Deduct	-3.24	
05 05 23 00-0953 EA 7/8" Diameter x 2" Length, 304/18-8 Stainless Steel, Hex Head Bolt .....	21.14	
For >100 To 250, Deduct	-2.16	
For >250 To 500, Deduct	-2.70	
For >500, Deduct	-3.24	
05 05 23 00-0954 EA 7/8" Diameter x 2-1/2" Length, 304/18-8 Stainless Steel, Hex Head Bolt .....	22.64	
For >100 To 250, Deduct	-2.20	
For >250 To 500, Deduct	-2.76	
For >500, Deduct	-3.31	
05 05 23 00-0955 EA 7/8" Diameter x 3" Length, 304/18-8 Stainless Steel, Hex Head Bolt .....	24.35	
For >100 To 250, Deduct	-2.20	
For >250 To 500, Deduct	-2.76	
For >500, Deduct	-3.31	
05 05 23 00-0956 EA 7/8" Diameter x 3-1/2" Length, 304/18-8 Stainless Steel, Hex Head Bolt .....	24.90	
For >100 To 250, Deduct	-2.20	
For >250 To 500, Deduct	-2.76	
For >500, Deduct	-3.31	
05 05 23 00-0957 EA 7/8" Diameter x 4" Length, 304/18-8 Stainless Steel, Hex Head Bolt .....	26.51	
For >100 To 250, Deduct	-2.25	
For >250 To 500, Deduct	-2.81	
For >500, Deduct	-3.37	
05 05 23 00-0958 EA 7/8" Diameter x 4-1/2" Length, 304/18-8 Stainless Steel, Hex Head Bolt .....	27.06	
For >100 To 250, Deduct	-2.25	
For >250 To 500, Deduct	-2.81	
For >500, Deduct	-3.37	
05 05 23 00-0959 EA 7/8" Diameter x 5" Length, 304/18-8 Stainless Steel, Hex Head Bolt .....	30.78	
For >100 To 250, Deduct	-2.25	
For >250 To 500, Deduct	-2.81	
For >500, Deduct	-3.37	
05 05 23 00-0960 EA 7/8" Diameter x 5-1/2" Length, 304/18-8 Stainless Steel, Hex Head Bolt .....	31.55	
For >100 To 250, Deduct	-2.29	
For >250 To 500, Deduct	-2.86	
For >500, Deduct	-3.44	
05 05 23 00-0961 EA 7/8" Diameter x 6" Length, 304/18-8 Stainless Steel, Hex Head Bolt .....	32.98	
For >100 To 250, Deduct	-2.29	
For >250 To 500, Deduct	-2.86	
For >500, Deduct	-3.44	
05 05 23 00-0962 EA 7/8" Diameter x 6-1/2" Length, 304/18-8 Stainless Steel, Hex Head Bolt .....	40.85	
For >100 To 250, Deduct	-2.29	
For >250 To 500, Deduct	-2.86	
For >500, Deduct	-3.44	
05 05 23 00-0963 EA 7/8" Diameter x 7" Length, 304/18-8 Stainless Steel, Hex Head Bolt .....	44.08	
For >100 To 250, Deduct	-2.33	
For >250 To 500, Deduct	-2.92	
For >500, Deduct	-3.50	
05 05 23 00-0964 EA 7/8" Diameter x 7-1/2" Length, 304/18-8 Stainless Steel, Hex Head Bolt .....	47.61	
For >100 To 250, Deduct	-2.33	
For >250 To 500, Deduct	-2.92	
For >500, Deduct	-3.50	
05 05 23 00-0965 EA 7/8" Diameter x 8" Length, 304/18-8 Stainless Steel, Hex Head Bolt .....	50.46	
For >100 To 250, Deduct	-2.33	
For >250 To 500, Deduct	-2.92	
For >500, Deduct	-3.50	
05 05 23 00-0966 EA 7/8" Diameter x 8-1/2" Length, 304/18-8 Stainless Steel, Hex Head Bolt .....	59.32	
For >100 To 250, Deduct	-2.38	
For >250 To 500, Deduct	-2.97	
For >500, Deduct	-3.56	





		Metals	05	05
		Common Work Results for Metals	05 05	
		Metal Fastenings	05 05 23	

MINOR CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
05 05 23 00-0967	EA	7/8" Diameter x 9" Length, 304/18-8 Stainless Steel, Hex Head Bolt .....	66.24	
		For >100 To 250, Deduct	-2.38	
		For >250 To 500, Deduct	-2.97	
		For >500, Deduct	-3.56	
05 05 23 00-0968	EA	7/8" Diameter x 9-1/2" Length, 304/18-8 Stainless Steel, Hex Head Bolt .....	69.44	
		For >100 To 250, Deduct	-2.38	
		For >250 To 500, Deduct	-2.97	
		For >500, Deduct	-3.56	
05 05 23 00-0969	EA	7/8" Diameter x 10" Length, 304/18-8 Stainless Steel, Hex Head Bolt .....	72.63	
		For >100 To 250, Deduct	-2.38	
		For >250 To 500, Deduct	-2.97	
		For >500, Deduct	-3.56	
05 05 23 00-0970		1" Diameter, 304/18-8 Stainless Steel, Hex Head Bolts (05 05 23 00-0815)		
05 05 23 00-0971	EA	1" Diameter x 1-1/2" Length, 304/18-8 Stainless Steel, Hex Head Bolt .....	23.53	
		For >100 To 250, Deduct	-2.16	
		For >250 To 500, Deduct	-2.70	
		For >500, Deduct	-3.24	
05 05 23 00-0972	EA	1" Diameter x 2" Length, 304/18-8 Stainless Steel, Hex Head Bolt .....	24.76	
		For >100 To 250, Deduct	-2.16	
		For >250 To 500, Deduct	-2.70	
		For >500, Deduct	-3.24	
05 05 23 00-0973	EA	1" Diameter x 2-1/2" Length, 304/18-8 Stainless Steel, Hex Head Bolt .....	26.81	
		For >100 To 250, Deduct	-2.20	
		For >250 To 500, Deduct	-2.76	
		For >500, Deduct	-3.31	
05 05 23 00-0974	EA	1" Diameter x 3" Length, 304/18-8 Stainless Steel, Hex Head Bolt .....	28.36	
		For >100 To 250, Deduct	-2.20	
		For >250 To 500, Deduct	-2.76	
		For >500, Deduct	-3.31	
05 05 23 00-0975	EA	1" Diameter x 3-1/2" Length, 304/18-8 Stainless Steel, Hex Head Bolt .....	30.90	
		For >100 To 250, Deduct	-2.20	
		For >250 To 500, Deduct	-2.76	
		For >500, Deduct	-3.31	
05 05 23 00-0976	EA	1" Diameter x 4" Length, 304/18-8 Stainless Steel, Hex Head Bolt .....	33.96	
		For >100 To 250, Deduct	-2.25	
		For >250 To 500, Deduct	-2.81	
		For >500, Deduct	-3.37	
05 05 23 00-0977	EA	1" Diameter x 4-1/2" Length, 304/18-8 Stainless Steel, Hex Head Bolt .....	35.74	
		For >100 To 250, Deduct	-2.25	
		For >250 To 500, Deduct	-2.81	
		For >500, Deduct	-3.37	
05 05 23 00-0978	EA	1" Diameter x 5" Length, 304/18-8 Stainless Steel, Hex Head Bolt .....	38.36	
		For >100 To 250, Deduct	-2.25	
		For >250 To 500, Deduct	-2.81	
		For >500, Deduct	-3.37	
05 05 23 00-0979	EA	1" Diameter x 5-1/2" Length, 304/18-8 Stainless Steel, Hex Head Bolt .....	41.04	
		For >100 To 250, Deduct	-2.29	
		For >250 To 500, Deduct	-2.86	
		For >500, Deduct	-3.44	
05 05 23 00-0980	EA	1" Diameter x 6" Length, 304/18-8 Stainless Steel, Hex Head Bolt .....	41.18	
		For >100 To 250, Deduct	-2.29	
		For >250 To 500, Deduct	-2.86	
		For >500, Deduct	-3.44	
05 05 23 00-0981	EA	1" Diameter x 6-1/2" Length, 304/18-8 Stainless Steel, Hex Head Bolt .....	48.21	
		For >100 To 250, Deduct	-2.29	
		For >250 To 500, Deduct	-2.86	
		For >500, Deduct	-3.44	
05 05 23 00-0982	EA	1" Diameter x 7" Length, 304/18-8 Stainless Steel, Hex Head Bolt .....	57.31	
		For >100 To 250, Deduct	-2.33	
		For >250 To 500, Deduct	-2.92	
		For >500, Deduct	-3.50	
05 05 23 00-0983	EA	1" Diameter x 7-1/2" Length, 304/18-8 Stainless Steel, Hex Head Bolt .....	58.64	
		For >100 To 250, Deduct	-2.33	
		For >250 To 500, Deduct	-2.92	
		For >500, Deduct	-3.50	
05 05 23 00-0984	EA	1" Diameter x 8" Length, 304/18-8 Stainless Steel, Hex Head Bolt .....	59.96	
		For >100 To 250, Deduct	-2.33	
		For >250 To 500, Deduct	-2.92	
		For >500, Deduct	-3.50	
05 05 23 00-0985	EA	1" Diameter x 8-1/2" Length, 304/18-8 Stainless Steel, Hex Head Bolt .....	62.83	
		For >100 To 250, Deduct	-2.38	
		For >250 To 500, Deduct	-2.97	
		For >500, Deduct	-3.56	
05 05 23 00-0986	EA	1" Diameter x 9" Length, 304/18-8 Stainless Steel, Hex Head Bolt .....	66.89	
		For >100 To 250, Deduct	-2.38	
		For >250 To 500, Deduct	-2.97	
		For >500, Deduct	-3.56	
05 05 23 00-0987	EA	1" Diameter x 9-1/2" Length, 304/18-8 Stainless Steel, Hex Head Bolt .....	85.32	
		For >100 To 250, Deduct	-2.38	
		For >250 To 500, Deduct	-2.97	
		For >500, Deduct	-3.56	

**05 Metals****05 05 Common Work Results for Metals****05 05 23 Metal Fastenings**

MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
05 05 23 00-0988 EA 1" Diameter x 10" Length, 304/18-8 Stainless Steel, Hex Head Bolt .....106.80 For >100 To 250, Deduct -2.38 For >250 To 500, Deduct -2.97 For >500, Deduct -3.56		
<b>05 05 23 00-0989 316 Stainless Steel, Hex Head Bolts (05 05 23 00-0987)</b>		
<b>05 05 23 00-0990 1/4" Diameter, 316 Stainless Steel, Hex Head Bolts (05 05 23 00-0989)</b>		
05 05 23 00-0991 EA 1/2" Length x 1/4" Diameter, 316 Stainless Steel, Hex Head Bolt .....7.99 For >100 To 250, Deduct -1.51 For >250 To 500, Deduct -1.89 For >500, Deduct -2.27		
05 05 23 00-0992 EA 1" Length x 1/4" Diameter, 316 Stainless Steel, Hex Head Bolt .....8.18 For >100 To 250, Deduct -1.51 For >250 To 500, Deduct -1.89 For >500, Deduct -2.27		
05 05 23 00-0993 EA 1-1/2" Length x 1/4" Diameter, 316 Stainless Steel, Hex Head Bolt .....8.32 For >100 To 250, Deduct -1.51 For >250 To 500, Deduct -1.89 For >500, Deduct -2.27		
05 05 23 00-0994 EA 2" Length x 1/4" Diameter, 316 Stainless Steel, Hex Head Bolt .....8.42 For >100 To 250, Deduct -1.51 For >250 To 500, Deduct -1.89 For >500, Deduct -2.27		
05 05 23 00-0995 EA 2-1/2" Length x 1/4" Diameter, 316 Stainless Steel, Hex Head Bolt .....8.92 For >100 To 250, Deduct -1.56 For >250 To 500, Deduct -1.95 For >500, Deduct -2.33		
05 05 23 00-0996 EA 3" Length x 1/4" Diameter, 316 Stainless Steel, Hex Head Bolt .....9.17 For >100 To 250, Deduct -1.56 For >250 To 500, Deduct -1.95 For >500, Deduct -2.33		
05 05 23 00-0997 EA 3-1/2" Length x 1/4" Diameter, 316 Stainless Steel, Hex Head Bolt .....9.42 For >100 To 250, Deduct -1.56 For >250 To 500, Deduct -1.95 For >500, Deduct -2.33		
05 05 23 00-0998 EA 4" Length x 1/4" Diameter, 316 Stainless Steel, Hex Head Bolt .....9.83 For >100 To 250, Deduct -1.60 For >250 To 500, Deduct -2.00 For >500, Deduct -2.40		
05 05 23 00-0999 EA 4-1/2" Length x 1/4" Diameter, 316 Stainless Steel, Hex Head Bolt .....10.04 For >100 To 250, Deduct -1.60 For >250 To 500, Deduct -2.00 For >500, Deduct -2.40		
05 05 23 00-1000 EA 5" Length x 1/4" Diameter, 316 Stainless Steel, Hex Head Bolt .....10.13 For >100 To 250, Deduct -1.60 For >250 To 500, Deduct -2.00 For >500, Deduct -2.40		
05 05 23 00-1001 EA 5-1/2" Length x 1/4" Diameter, 316 Stainless Steel, Hex Head Bolt .....11.00 For >100 To 250, Deduct -1.64 For >250 To 500, Deduct -2.05 For >500, Deduct -2.46		
05 05 23 00-1002 EA 6" Length x 1/4" Diameter, 316 Stainless Steel, Hex Head Bolt .....11.17 For >100 To 250, Deduct -1.64 For >250 To 500, Deduct -2.05 For >500, Deduct -2.46		
05 05 23 00-1003 EA 6-1/2" Length x 1/4" Diameter, 316 Stainless Steel, Hex Head Bolt .....17.63 For >100 To 250, Deduct -1.64 For >250 To 500, Deduct -2.05 For >500, Deduct -2.46		
05 05 23 00-1004 EA 7" Length x 1/4" Diameter, 316 Stainless Steel, Hex Head Bolt .....25.66 For >100 To 250, Deduct -1.68 For >250 To 500, Deduct -2.11 For >500, Deduct -2.53		
05 05 23 00-1005 EA 7-1/2" Length x 1/4" Diameter, 316 Stainless Steel, Hex Head Bolt .....42.89 For >100 To 250, Deduct -1.68 For >250 To 500, Deduct -2.11 For >500, Deduct -2.53		
05 05 23 00-1006 EA 8" Length x 1/4" Diameter, 316 Stainless Steel, Hex Head Bolt .....46.82 For >100 To 250, Deduct -1.68 For >250 To 500, Deduct -2.11 For >500, Deduct -2.53		
<b>05 05 23 00-1007 5/16" Diameter, 316 Stainless Steel, Hex Head Bolts (05 05 23 00-0989)</b>		
05 05 23 00-1008 EA 5/16" Diameter x 1/2" Length, 316 Stainless Steel, Hex Head Bolt .....8.25 For >100 To 250, Deduct -1.51 For >250 To 500, Deduct -1.89 For >500, Deduct -2.27		
05 05 23 00-1009 EA 5/16" Diameter x 1" Length, 316 Stainless Steel, Hex Head Bolt .....8.47 For >100 To 250, Deduct -1.51 For >250 To 500, Deduct -1.89 For >500, Deduct -2.27		



MINOR CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
05 05 23 00-1010	EA	5/16" Diameter x 1-1/2" Length, 316 Stainless Steel, Hex Head Bolt .....	8.84	
		For >100 To 250, Deduct	-1.51	
		For >250 To 500, Deduct	-1.89	
		For >500, Deduct	-2.27	
05 05 23 00-1011	EA	5/16" Diameter x 2" Length, 316 Stainless Steel, Hex Head Bolt .....	9.12	
		For >100 To 250, Deduct	-1.51	
		For >250 To 500, Deduct	-1.89	
		For >500, Deduct	-2.27	
05 05 23 00-1012	EA	5/16" Diameter x 2-1/2" Length, 316 Stainless Steel, Hex Head Bolt .....	9.46	
		For >100 To 250, Deduct	-1.56	
		For >250 To 500, Deduct	-1.95	
		For >500, Deduct	-2.33	
05 05 23 00-1013	EA	5/16" Diameter x 3" Length, 316 Stainless Steel, Hex Head Bolt .....	10.03	
		For >100 To 250, Deduct	-1.56	
		For >250 To 500, Deduct	-1.95	
		For >500, Deduct	-2.33	
05 05 23 00-1014	EA	5/16" Diameter x 3-1/2" Length, 316 Stainless Steel, Hex Head Bolt .....	10.43	
		For >100 To 250, Deduct	-1.56	
		For >250 To 500, Deduct	-1.95	
		For >500, Deduct	-2.33	
05 05 23 00-1015	EA	5/16" Diameter x 4" Length, 316 Stainless Steel, Hex Head Bolt .....	10.81	
		For >100 To 250, Deduct	-1.60	
		For >250 To 500, Deduct	-2.00	
		For >500, Deduct	-2.40	
05 05 23 00-1016	EA	5/16" Diameter x 4-1/2" Length, 316 Stainless Steel, Hex Head Bolt .....	11.66	
		For >100 To 250, Deduct	-1.60	
		For >250 To 500, Deduct	-2.00	
		For >500, Deduct	-2.40	
05 05 23 00-1017	EA	5/16" Diameter x 5" Length, 316 Stainless Steel, Hex Head Bolt .....	11.83	
		For >100 To 250, Deduct	-1.60	
		For >250 To 500, Deduct	-2.00	
		For >500, Deduct	-2.40	
05 05 23 00-1018	EA	5/16" Diameter x 5-1/2" Length, 316 Stainless Steel, Hex Head Bolt .....	12.64	
		For >100 To 250, Deduct	-1.64	
		For >250 To 500, Deduct	-2.05	
		For >500, Deduct	-2.46	
05 05 23 00-1019	EA	5/16" Diameter x 6" Length, 316 Stainless Steel, Hex Head Bolt .....	13.30	
		For >100 To 250, Deduct	-1.64	
		For >250 To 500, Deduct	-2.05	
		For >500, Deduct	-2.46	
05 05 23 00-1020	EA	5/16" Diameter x 6-1/2" Length, 316 Stainless Steel, Hex Head Bolt .....	18.80	
		For >100 To 250, Deduct	-1.64	
		For >250 To 500, Deduct	-2.05	
		For >500, Deduct	-2.46	
05 05 23 00-1021	EA	5/16" Diameter x 7" Length, 316 Stainless Steel, Hex Head Bolt .....	26.81	
		For >100 To 250, Deduct	-1.68	
		For >250 To 500, Deduct	-2.11	
		For >500, Deduct	-2.53	
05 05 23 00-1022		3/8" Diameter, 316 Stainless Steel, Hex Head Bolts (05 05 23 00-0989) .....		
05 05 23 00-1023	EA	3/8" Diameter x 1/2" Length, 316 Stainless Steel, Hex Head Bolt .....	8.84	
		For >100 To 250, Deduct	-1.51	
		For >250 To 500, Deduct	-1.89	
		For >500, Deduct	-2.27	
05 05 23 00-1024	EA	3/8" Diameter x 1" Length, 316 Stainless Steel, Hex Head Bolt .....	8.92	
		For >100 To 250, Deduct	-1.51	
		For >250 To 500, Deduct	-1.89	
		For >500, Deduct	-2.27	
05 05 23 00-1025	EA	3/8" Diameter x 1-1/2" Length, 316 Stainless Steel, Hex Head Bolt .....	9.27	
		For >100 To 250, Deduct	-1.51	
		For >250 To 500, Deduct	-1.89	
		For >500, Deduct	-2.27	
05 05 23 00-1026	EA	3/8" Diameter x 2" Length, 316 Stainless Steel, Hex Head Bolt .....	10.09	
		For >100 To 250, Deduct	-1.51	
		For >250 To 500, Deduct	-1.89	
		For >500, Deduct	-2.27	
05 05 23 00-1027	EA	3/8" Diameter x 2-1/2" Length, 316 Stainless Steel, Hex Head Bolt .....	10.60	
		For >100 To 250, Deduct	-1.56	
		For >250 To 500, Deduct	-1.95	
		For >500, Deduct	-2.33	
05 05 23 00-1028	EA	3/8" Diameter x 3" Length, 316 Stainless Steel, Hex Head Bolt .....	10.74	
		For >100 To 250, Deduct	-1.56	
		For >250 To 500, Deduct	-1.95	
		For >500, Deduct	-2.33	
05 05 23 00-1029	EA	3/8" Diameter x 3-1/2" Length, 316 Stainless Steel, Hex Head Bolt .....	11.46	
		For >100 To 250, Deduct	-1.56	
		For >250 To 500, Deduct	-1.95	
		For >500, Deduct	-2.33	
05 05 23 00-1030	EA	3/8" Diameter x 4" Length, 316 Stainless Steel, Hex Head Bolt .....	11.77	
		For >100 To 250, Deduct	-1.60	
		For >250 To 500, Deduct	-2.00	
		For >500, Deduct	-2.40	

**05 Metals****05 05 Common Work Results for Metals****05 05 23 Metal Fastenings**

MINOR	CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
05 05 23 00-1031	EA		3/8" Diameter x 4-1/2" Length, 316 Stainless Steel, Hex Head Bolt .....	12.22	
			For >100 To 250, Deduct .....	-1.60	
			For >250 To 500, Deduct .....	-2.00	
			For >500, Deduct .....	-2.40	
05 05 23 00-1032	EA		3/8" Diameter x 5" Length, 316 Stainless Steel, Hex Head Bolt.....	12.53	
			For >100 To 250, Deduct .....	-1.60	
			For >250 To 500, Deduct .....	-2.00	
			For >500, Deduct .....	-2.40	
05 05 23 00-1033	EA		3/8" Diameter x 5-1/2" Length, 316 Stainless Steel, Hex Head Bolt .....	13.74	
			For >100 To 250, Deduct .....	-1.64	
			For >250 To 500, Deduct .....	-2.05	
			For >500, Deduct .....	-2.46	
05 05 23 00-1034	EA		3/8" Diameter x 6" Length, 316 Stainless Steel, Hex Head Bolt.....	14.95	
			For >100 To 250, Deduct .....	-1.64	
			For >250 To 500, Deduct .....	-2.05	
			For >500, Deduct .....	-2.46	
05 05 23 00-1035	EA		3/8" Diameter x 6-1/2" Length, 316 Stainless Steel, Hex Head Bolt .....	15.00	
			For >100 To 250, Deduct .....	-1.64	
			For >250 To 500, Deduct .....	-2.05	
			For >500, Deduct .....	-2.46	
05 05 23 00-1036	EA		3/8" Diameter x 7" Length, 316 Stainless Steel, Hex Head Bolt.....	18.27	
			For >100 To 250, Deduct .....	-1.68	
			For >250 To 500, Deduct .....	-2.11	
			For >500, Deduct .....	-2.53	
05 05 23 00-1037	EA		3/8" Diameter x 7-1/2" Length, 316 Stainless Steel, Hex Head Bolt .....	23.24	
			For >100 To 250, Deduct .....	-1.68	
			For >250 To 500, Deduct .....	-2.11	
			For >500, Deduct .....	-2.53	
05 05 23 00-1038	EA		3/8" Diameter x 8" Length, 316 Stainless Steel, Hex Head Bolt.....	28.61	
			For >100 To 250, Deduct .....	-1.68	
			For >250 To 500, Deduct .....	-2.11	
			For >500, Deduct .....	-2.53	
<b>05 05 23 00-1039 7/16" Diameter, 316 Stainless Steel, Hex Head Bolts (05 05 23 00-0989)</b>					
05 05 23 00-1040	EA		7/16" Diameter x 1" Length, 316 Stainless Steel, Hex Head Bolt.....	11.29	
			For >100 To 250, Deduct .....	-1.73	
			For >250 To 500, Deduct .....	-2.16	
			For >500, Deduct .....	-2.59	
05 05 23 00-1041	EA		7/16" Diameter x 1-1/2" Length, 316 Stainless Steel, Hex Head Bolt .....	11.80	
			For >100 To 250, Deduct .....	-1.73	
			For >250 To 500, Deduct .....	-2.16	
			For >500, Deduct .....	-2.59	
05 05 23 00-1042	EA		7/16" Diameter x 2" Length, 316 Stainless Steel, Hex Head Bolt.....	12.77	
			For >100 To 250, Deduct .....	-1.73	
			For >250 To 500, Deduct .....	-2.16	
			For >500, Deduct .....	-2.59	
05 05 23 00-1043	EA		7/16" Diameter x 2-1/2" Length, 316 Stainless Steel, Hex Head Bolt .....	13.81	
			For >100 To 250, Deduct .....	-1.77	
			For >250 To 500, Deduct .....	-2.21	
			For >500, Deduct .....	-2.66	
05 05 23 00-1044	EA		7/16" Diameter x 3" Length, 316 Stainless Steel, Hex Head Bolt.....	14.74	
			For >100 To 250, Deduct .....	-1.77	
			For >250 To 500, Deduct .....	-2.21	
			For >500, Deduct .....	-2.66	
05 05 23 00-1045	EA		7/16" Diameter x 3-1/2" Length, 316 Stainless Steel, Hex Head Bolt .....	16.26	
			For >100 To 250, Deduct .....	-1.77	
			For >250 To 500, Deduct .....	-2.21	
			For >500, Deduct .....	-2.66	
05 05 23 00-1046	EA		7/16" Diameter x 4" Length, 316 Stainless Steel, Hex Head Bolt.....	17.94	
			For >100 To 250, Deduct .....	-1.81	
			For >250 To 500, Deduct .....	-2.27	
			For >500, Deduct .....	-2.72	
05 05 23 00-1047	EA		7/16" Diameter x 4-1/2" Length, 316 Stainless Steel, Hex Head Bolt .....	18.20	
			For >100 To 250, Deduct .....	-1.81	
			For >250 To 500, Deduct .....	-2.27	
			For >500, Deduct .....	-2.72	
05 05 23 00-1048	EA		7/16" Diameter x 5" Length, 316 Stainless Steel, Hex Head Bolt.....	18.76	
			For >100 To 250, Deduct .....	-1.81	
			For >250 To 500, Deduct .....	-2.27	
			For >500, Deduct .....	-2.72	
05 05 23 00-1049	EA		7/16" Diameter x 5-1/2" Length, 316 Stainless Steel, Hex Head Bolt .....	19.35	
			For >100 To 250, Deduct .....	-1.86	
			For >250 To 500, Deduct .....	-2.32	
			For >500, Deduct .....	-2.79	
05 05 23 00-1050	EA		7/16" Diameter x 6" Length, 316 Stainless Steel, Hex Head Bolt.....	19.74	
			For >100 To 250, Deduct .....	-1.86	
			For >250 To 500, Deduct .....	-2.32	
			For >500, Deduct .....	-2.79	
05 05 23 00-1051	EA		7/16" Diameter x 6-1/2" Length, 316 Stainless Steel, Hex Head Bolt .....	20.14	
			For >100 To 250, Deduct .....	-1.86	
			For >250 To 500, Deduct .....	-2.32	
			For >500, Deduct .....	-2.79	



		<b>Metals</b>	<b>05</b>
		<b>Common Work Results for Metals</b>	<b>05 05</b>
		<b>Metal Fastenings</b>	<b>05 05 23</b>

05

MINOR	CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
05 05 23 00-1052	EA		7/16" Diameter x 7" Length, 316 Stainless Steel, Hex Head Bolt .....	20.68	
			For >100 To 250, Deduct	-1.90	
			For >250 To 500, Deduct	-2.38	
			For >500, Deduct	-2.85	
<b>05 05 23 00-1053 1/2" Diameter, 316 Stainless Steel, Hex Head Bolts (05 05 23 00-0989)</b>					
05 05 23 00-1054	EA		1/2" Diameter x 1" Length, 316 Stainless Steel, Hex Head Bolt .....	11.26	
			For >100 To 250, Deduct	-1.73	
			For >250 To 500, Deduct	-2.16	
			For >500, Deduct	-2.59	
05 05 23 00-1055	EA		1/2" Diameter x 1-1/2" Length, 316 Stainless Steel, Hex Head Bolt .....	11.82	
			For >100 To 250, Deduct	-1.73	
			For >250 To 500, Deduct	-2.16	
			For >500, Deduct	-2.59	
05 05 23 00-1056	EA		1/2" Diameter x 2" Length, 316 Stainless Steel, Hex Head Bolt .....	12.60	
			For >100 To 250, Deduct	-1.73	
			For >250 To 500, Deduct	-2.16	
			For >500, Deduct	-2.59	
05 05 23 00-1057	EA		1/2" Diameter x 2-1/2" Length, 316 Stainless Steel, Hex Head Bolt .....	13.73	
			For >100 To 250, Deduct	-1.77	
			For >250 To 500, Deduct	-2.21	
			For >500, Deduct	-2.66	
05 05 23 00-1058	EA		1/2" Diameter x 3" Length, 316 Stainless Steel, Hex Head Bolt .....	14.59	
			For >100 To 250, Deduct	-1.77	
			For >250 To 500, Deduct	-2.21	
			For >500, Deduct	-2.66	
05 05 23 00-1059	EA		1/2" Diameter x 3-1/2" Length, 316 Stainless Steel, Hex Head Bolt .....	14.80	
			For >100 To 250, Deduct	-1.77	
			For >250 To 500, Deduct	-2.21	
			For >500, Deduct	-2.66	
05 05 23 00-1060	EA		1/2" Diameter x 4" Length, 316 Stainless Steel, Hex Head Bolt .....	15.38	
			For >100 To 250, Deduct	-1.81	
			For >250 To 500, Deduct	-2.27	
			For >500, Deduct	-2.72	
05 05 23 00-1061	EA		1/2" Diameter x 4-1/2" Length, 316 Stainless Steel, Hex Head Bolt .....	17.04	
			For >100 To 250, Deduct	-1.81	
			For >250 To 500, Deduct	-2.27	
			For >500, Deduct	-2.72	
05 05 23 00-1062	EA		1/2" Diameter x 5" Length, 316 Stainless Steel, Hex Head Bolt .....	20.40	
			For >100 To 250, Deduct	-1.81	
			For >250 To 500, Deduct	-2.27	
			For >500, Deduct	-2.72	
05 05 23 00-1063	EA		1/2" Diameter x 5-1/2" Length, 316 Stainless Steel, Hex Head Bolt .....	20.87	
			For >100 To 250, Deduct	-1.86	
			For >250 To 500, Deduct	-2.32	
			For >500, Deduct	-2.79	
05 05 23 00-1064	EA		1/2" Diameter x 6" Length, 316 Stainless Steel, Hex Head Bolt .....	21.40	
			For >100 To 250, Deduct	-1.86	
			For >250 To 500, Deduct	-2.32	
			For >500, Deduct	-2.79	
05 05 23 00-1065	EA		1/2" Diameter x 6-1/2" Length, 316 Stainless Steel, Hex Head Bolt .....	25.55	
			For >100 To 250, Deduct	-1.86	
			For >250 To 500, Deduct	-2.32	
			For >500, Deduct	-2.79	
05 05 23 00-1066	EA		1/2" Diameter x 7" Length, 316 Stainless Steel, Hex Head Bolt .....	28.55	
			For >100 To 250, Deduct	-1.90	
			For >250 To 500, Deduct	-2.38	
			For >500, Deduct	-2.85	
05 05 23 00-1067	EA		1/2" Diameter x 7-1/2" Length, 316 Stainless Steel, Hex Head Bolt .....	30.35	
			For >100 To 250, Deduct	-1.90	
			For >250 To 500, Deduct	-2.38	
			For >500, Deduct	-2.85	
05 05 23 00-1068	EA		1/2" Diameter x 8" Length, 316 Stainless Steel, Hex Head Bolt .....	33.33	
			For >100 To 250, Deduct	-1.90	
			For >250 To 500, Deduct	-2.38	
			For >500, Deduct	-2.85	
05 05 23 00-1069	EA		1/2" Diameter x 8-1/2" Length, 316 Stainless Steel, Hex Head Bolt .....	41.41	
			For >100 To 250, Deduct	-1.94	
			For >250 To 500, Deduct	-2.43	
			For >500, Deduct	-2.92	
05 05 23 00-1070	EA		1/2" Diameter x 9" Length, 316 Stainless Steel, Hex Head Bolt .....	46.49	
			For >100 To 250, Deduct	-1.94	
			For >250 To 500, Deduct	-2.43	
			For >500, Deduct	-2.92	
05 05 23 00-1071	EA		1/2" Diameter x 9-1/2" Length, 316 Stainless Steel, Hex Head Bolt .....	47.33	
			For >100 To 250, Deduct	-1.94	
			For >250 To 500, Deduct	-2.43	
			For >500, Deduct	-2.92	
05 05 23 00-1072	EA		1/2" Diameter x 10" Length, 316 Stainless Steel, Hex Head Bolt .....	48.62	
			For >100 To 250, Deduct	-1.94	
			For >250 To 500, Deduct	-2.43	
			For >500, Deduct	-2.92	

**05 Metals****05 05 Common Work Results for Metals****05 05 23 Metal Fastenings**

MINOR	CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
05 05 23 00-1073			9/16" Diameter, 316 Stainless Steel, Hex Head Bolts (05 05 23 00-0989)		
05 05 23 00-1074	EA		9/16" Diameter x 1" Length, 316 Stainless Steel, Hex Head Bolt.....	25.18	
			For >100 To 250, Deduct	-1.73	
			For >250 To 500, Deduct	-2.16	
			For >500, Deduct	-2.59	
05 05 23 00-1075	EA		9/16" Diameter x 1-1/2" Length, 316 Stainless Steel, Hex Head Bolt .....	27.01	
			For >100 To 250, Deduct	-1.73	
			For >250 To 500, Deduct	-2.16	
			For >500, Deduct	-2.59	
05 05 23 00-1076	EA		9/16" Diameter x 2" Length, 316 Stainless Steel, Hex Head Bolt.....	33.12	
			For >100 To 250, Deduct	-1.73	
			For >250 To 500, Deduct	-2.16	
			For >500, Deduct	-2.59	
05 05 23 00-1077	EA		9/16" Diameter x 2-1/2" Length, 316 Stainless Steel, Hex Head Bolt .....	36.76	
			For >100 To 250, Deduct	-1.77	
			For >250 To 500, Deduct	-2.21	
			For >500, Deduct	-2.66	
05 05 23 00-1078	EA		9/16" Diameter x 3" Length, 316 Stainless Steel, Hex Head Bolt.....	40.37	
			For >100 To 250, Deduct	-1.77	
			For >250 To 500, Deduct	-2.21	
			For >500, Deduct	-2.66	
05 05 23 00-1079	EA		9/16" Diameter x 3-1/2" Length, 316 Stainless Steel, Hex Head Bolt .....	43.98	
			For >100 To 250, Deduct	-1.77	
			For >250 To 500, Deduct	-2.21	
			For >500, Deduct	-2.66	
05 05 23 00-1080	EA		9/16" Diameter x 4" Length, 316 Stainless Steel, Hex Head Bolt.....	46.45	
			For >100 To 250, Deduct	-1.81	
			For >250 To 500, Deduct	-2.27	
			For >500, Deduct	-2.72	
05 05 23 00-1081	EA		9/16" Diameter x 4-1/2" Length, 316 Stainless Steel, Hex Head Bolt .....	49.43	
			For >100 To 250, Deduct	-1.81	
			For >250 To 500, Deduct	-2.27	
			For >500, Deduct	-2.72	
05 05 23 00-1082	EA		9/16" Diameter x 5" Length, 316 Stainless Steel, Hex Head Bolt.....	52.08	
			For >100 To 250, Deduct	-1.81	
			For >250 To 500, Deduct	-2.27	
			For >500, Deduct	-2.72	
05 05 23 00-1083	EA		9/16" Diameter x 5-1/2" Length, 316 Stainless Steel, Hex Head Bolt .....	53.09	
			For >100 To 250, Deduct	-1.86	
			For >250 To 500, Deduct	-2.32	
			For >500, Deduct	-2.79	
05 05 23 00-1084	EA		9/16" Diameter x 6" Length, 316 Stainless Steel, Hex Head Bolt.....	55.42	
			For >100 To 250, Deduct	-1.86	
			For >250 To 500, Deduct	-2.32	
			For >500, Deduct	-2.79	
05 05 23 00-1085			5/8" Diameter, 316 Stainless Steel, Hex Head Bolts (05 05 23 00-0989)		
05 05 23 00-1086	EA		5/8" Diameter x 1" Length, 316 Stainless Steel, Hex Head Bolt.....	15.17	
			For >100 To 250, Deduct	-1.94	
			For >250 To 500, Deduct	-2.43	
			For >500, Deduct	-2.92	
05 05 23 00-1087	EA		5/8" Diameter x 1-1/2" Length, 316 Stainless Steel, Hex Head Bolt .....	15.33	
			For >100 To 250, Deduct	-1.94	
			For >250 To 500, Deduct	-2.43	
			For >500, Deduct	-2.92	
05 05 23 00-1088	EA		5/8" Diameter x 2" Length, 316 Stainless Steel, Hex Head Bolt.....	15.38	
			For >100 To 250, Deduct	-1.94	
			For >250 To 500, Deduct	-2.43	
			For >500, Deduct	-2.92	
05 05 23 00-1089	EA		5/8" Diameter x 2-1/2" Length, 316 Stainless Steel, Hex Head Bolt .....	16.65	
			For >100 To 250, Deduct	-1.99	
			For >250 To 500, Deduct	-2.49	
			For >500, Deduct	-2.98	
05 05 23 00-1090	EA		5/8" Diameter x 3" Length, 316 Stainless Steel, Hex Head Bolt.....	17.72	
			For >100 To 250, Deduct	-1.99	
			For >250 To 500, Deduct	-2.49	
			For >500, Deduct	-2.98	
05 05 23 00-1091	EA		5/8" Diameter x 3-1/2" Length, 316 Stainless Steel, Hex Head Bolt .....	21.12	
			For >100 To 250, Deduct	-1.99	
			For >250 To 500, Deduct	-2.49	
			For >500, Deduct	-2.98	
05 05 23 00-1092	EA		5/8" Diameter x 4" Length, 316 Stainless Steel, Hex Head Bolt.....	22.05	
			For >100 To 250, Deduct	-2.03	
			For >250 To 500, Deduct	-2.54	
			For >500, Deduct	-3.05	
05 05 23 00-1093	EA		5/8" Diameter x 4-1/2" Length, 316 Stainless Steel, Hex Head Bolt .....	25.02	
			For >100 To 250, Deduct	-2.03	
			For >250 To 500, Deduct	-2.54	
			For >500, Deduct	-3.05	
05 05 23 00-1094	EA		5/8" Diameter x 5" Length, 316 Stainless Steel, Hex Head Bolt.....	26.06	
			For >100 To 250, Deduct	-2.03	
			For >250 To 500, Deduct	-2.54	
			For >500, Deduct	-3.05	



		<b>Metals</b>	<b>05</b>
		<b>Common Work Results for Metals</b>	<b>05 05</b>
		<b>Metal Fastenings</b>	<b>05 05 23</b>

05

MINOR	CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
05 05 23 00-1095	EA		5/8" Diameter x 5-1/2" Length, 316 Stainless Steel, Hex Head Bolt .....	28.23	
			For >100 To 250, Deduct .....	-2.07	
			For >250 To 500, Deduct .....	-2.59	
			For >500, Deduct .....	-3.11	
05 05 23 00-1096	EA		5/8" Diameter x 6" Length, 316 Stainless Steel, Hex Head Bolt .....	29.08	
			For >100 To 250, Deduct .....	-2.07	
			For >250 To 500, Deduct .....	-2.59	
			For >500, Deduct .....	-3.11	
05 05 23 00-1097	EA		5/8" Diameter x 6-1/2" Length, 316 Stainless Steel, Hex Head Bolt .....	34.30	
			For >100 To 250, Deduct .....	-2.07	
			For >250 To 500, Deduct .....	-2.59	
			For >500, Deduct .....	-3.11	
05 05 23 00-1098	EA		5/8" Diameter x 7" Length, 316 Stainless Steel, Hex Head Bolt .....	36.38	
			For >100 To 250, Deduct .....	-2.12	
			For >250 To 500, Deduct .....	-2.65	
			For >500, Deduct .....	-3.17	
05 05 23 00-1099	EA		5/8" Diameter x 7-1/2" Length, 316 Stainless Steel, Hex Head Bolt .....	37.05	
			For >100 To 250, Deduct .....	-2.12	
			For >250 To 500, Deduct .....	-2.65	
			For >500, Deduct .....	-3.17	
05 05 23 00-1100	EA		5/8" Diameter x 8" Length, 316 Stainless Steel, Hex Head Bolt .....	39.48	
			For >100 To 250, Deduct .....	-2.12	
			For >250 To 500, Deduct .....	-2.65	
			For >500, Deduct .....	-3.17	
05 05 23 00-1101	EA		5/8" Diameter x 8-1/2" Length, 316 Stainless Steel, Hex Head Bolt .....	41.90	
			For >100 To 250, Deduct .....	-2.16	
			For >250 To 500, Deduct .....	-2.70	
			For >500, Deduct .....	-3.24	
05 05 23 00-1102	EA		5/8" Diameter x 9" Length, 316 Stainless Steel, Hex Head Bolt .....	43.96	
			For >100 To 250, Deduct .....	-2.16	
			For >250 To 500, Deduct .....	-2.70	
			For >500, Deduct .....	-3.24	
05 05 23 00-1103	EA		5/8" Diameter x 9-1/2" Length, 316 Stainless Steel, Hex Head Bolt .....	53.81	
			For >100 To 250, Deduct .....	-2.16	
			For >250 To 500, Deduct .....	-2.70	
			For >500, Deduct .....	-3.24	
05 05 23 00-1104	EA		5/8" Diameter x 10" Length, 316 Stainless Steel, Hex Head Bolt .....	64.33	
			For >100 To 250, Deduct .....	-2.16	
			For >250 To 500, Deduct .....	-2.70	
			For >500, Deduct .....	-3.24	
<b>05 05 23 00-1105      3/4" Diameter, 316 Stainless Steel, Hex Head Bolts (05 05 23 00-0989)</b>					
05 05 23 00-1106	EA		3/4" Diameter x 1" Length, 316 Stainless Steel, Hex Head Bolt .....	19.31	
			For >100 To 250, Deduct .....	-1.94	
			For >250 To 500, Deduct .....	-2.43	
			For >500, Deduct .....	-2.92	
05 05 23 00-1107	EA		3/4" Diameter x 1-1/2" Length, 316 Stainless Steel, Hex Head Bolt .....	19.68	
			For >100 To 250, Deduct .....	-1.94	
			For >250 To 500, Deduct .....	-2.43	
			For >500, Deduct .....	-2.92	
05 05 23 00-1108	EA		3/4" Diameter x 2" Length, 316 Stainless Steel, Hex Head Bolt .....	21.10	
			For >100 To 250, Deduct .....	-1.94	
			For >250 To 500, Deduct .....	-2.43	
			For >500, Deduct .....	-2.92	
05 05 23 00-1109	EA		3/4" Diameter x 2-1/2" Length, 316 Stainless Steel, Hex Head Bolt .....	22.56	
			For >100 To 250, Deduct .....	-1.99	
			For >250 To 500, Deduct .....	-2.49	
			For >500, Deduct .....	-2.98	
05 05 23 00-1110	EA		3/4" Diameter x 3" Length, 316 Stainless Steel, Hex Head Bolt .....	25.21	
			For >100 To 250, Deduct .....	-1.99	
			For >250 To 500, Deduct .....	-2.49	
			For >500, Deduct .....	-2.98	
05 05 23 00-1111	EA		3/4" Diameter x 3-1/2" Length, 316 Stainless Steel, Hex Head Bolt .....	26.75	
			For >100 To 250, Deduct .....	-1.99	
			For >250 To 500, Deduct .....	-2.49	
			For >500, Deduct .....	-2.98	
05 05 23 00-1112	EA		3/4" Diameter x 4" Length, 316 Stainless Steel, Hex Head Bolt .....	30.22	
			For >100 To 250, Deduct .....	-2.03	
			For >250 To 500, Deduct .....	-2.54	
			For >500, Deduct .....	-3.05	
05 05 23 00-1113	EA		3/4" Diameter x 4-1/2" Length, 316 Stainless Steel, Hex Head Bolt .....	31.57	
			For >100 To 250, Deduct .....	-2.03	
			For >250 To 500, Deduct .....	-2.54	
			For >500, Deduct .....	-3.05	
05 05 23 00-1114	EA		3/4" Diameter x 5" Length, 316 Stainless Steel, Hex Head Bolt .....	32.32	
			For >100 To 250, Deduct .....	-2.03	
			For >250 To 500, Deduct .....	-2.54	
			For >500, Deduct .....	-3.05	
05 05 23 00-1115	EA		3/4" Diameter x 5-1/2" Length, 316 Stainless Steel, Hex Head Bolt .....	33.53	
			For >100 To 250, Deduct .....	-2.07	
			For >250 To 500, Deduct .....	-2.59	
			For >500, Deduct .....	-3.11	

**05 Metals****05 05 Common Work Results for Metals****05 05 23 Metal Fastenings**

MINOR	CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
05 05 23 00-1116	EA		3/4" Diameter x 6" Length, 316 Stainless Steel, Hex Head Bolt.....	35.22	
			For >100 To 250, Deduct	-2.07	
			For >250 To 500, Deduct	-2.59	
			For >500, Deduct	-3.11	
05 05 23 00-1117	EA		3/4" Diameter x 6-1/2" Length, 316 Stainless Steel, Hex Head Bolt .....	40.44	
			For >100 To 250, Deduct	-2.07	
			For >250 To 500, Deduct	-2.59	
			For >500, Deduct	-3.11	
05 05 23 00-1118	EA		3/4" Diameter x 7" Length, 316 Stainless Steel, Hex Head Bolt.....	48.19	
			For >100 To 250, Deduct	-2.12	
			For >250 To 500, Deduct	-2.65	
			For >500, Deduct	-3.17	
05 05 23 00-1119	EA		3/4" Diameter x 7-1/2" Length, 316 Stainless Steel, Hex Head Bolt .....	54.06	
			For >100 To 250, Deduct	-2.12	
			For >250 To 500, Deduct	-2.65	
			For >500, Deduct	-3.17	
05 05 23 00-1120	EA		3/4" Diameter x 8" Length, 316 Stainless Steel, Hex Head Bolt.....	54.95	
			For >100 To 250, Deduct	-2.12	
			For >250 To 500, Deduct	-2.65	
			For >500, Deduct	-3.17	
05 05 23 00-1121	EA		3/4" Diameter x 8-1/2" Length, 316 Stainless Steel, Hex Head Bolt .....	58.70	
			For >100 To 250, Deduct	-2.16	
			For >250 To 500, Deduct	-2.70	
			For >500, Deduct	-3.24	
05 05 23 00-1122	EA		3/4" Diameter x 9" Length, 316 Stainless Steel, Hex Head Bolt.....	67.61	
			For >100 To 250, Deduct	-2.16	
			For >250 To 500, Deduct	-2.70	
			For >500, Deduct	-3.24	
05 05 23 00-1123	EA		3/4" Diameter x 9-1/2" Length, 316 Stainless Steel, Hex Head Bolt .....	68.36	
			For >100 To 250, Deduct	-2.16	
			For >250 To 500, Deduct	-2.70	
			For >500, Deduct	-3.24	
05 05 23 00-1124	EA		3/4" Diameter x 10" Length, 316 Stainless Steel, Hex Head Bolt.....	70.24	
			For >100 To 250, Deduct	-2.16	
			For >250 To 500, Deduct	-2.70	
			For >500, Deduct	-3.24	
05 05 23 00-1125			7/8" Diameter, 316 Stainless Steel, Hex Head Bolts (05 05 23 00-0989)		
05 05 23 00-1126	EA		7/8" Diameter x 1-1/2" Length, 316 Stainless Steel, Hex Head Bolt .....	21.74	
			For >100 To 250, Deduct	-2.16	
			For >250 To 500, Deduct	-2.70	
			For >500, Deduct	-3.24	
05 05 23 00-1127	EA		7/8" Diameter x 2" Length, 316 Stainless Steel, Hex Head Bolt.....	24.19	
			For >100 To 250, Deduct	-2.16	
			For >250 To 500, Deduct	-2.70	
			For >500, Deduct	-3.24	
05 05 23 00-1128	EA		7/8" Diameter x 2-1/2" Length, 316 Stainless Steel, Hex Head Bolt .....	25.75	
			For >100 To 250, Deduct	-2.20	
			For >250 To 500, Deduct	-2.76	
			For >500, Deduct	-3.31	
05 05 23 00-1129	EA		7/8" Diameter x 3" Length, 316 Stainless Steel, Hex Head Bolt.....	29.18	
			For >100 To 250, Deduct	-2.20	
			For >250 To 500, Deduct	-2.76	
			For >500, Deduct	-3.31	
05 05 23 00-1130	EA		7/8" Diameter x 3-1/2" Length, 316 Stainless Steel, Hex Head Bolt .....	30.71	
			For >100 To 250, Deduct	-2.20	
			For >250 To 500, Deduct	-2.76	
			For >500, Deduct	-3.31	
05 05 23 00-1131	EA		7/8" Diameter x 4" Length, 316 Stainless Steel, Hex Head Bolt.....	32.27	
			For >100 To 250, Deduct	-2.25	
			For >250 To 500, Deduct	-2.81	
			For >500, Deduct	-3.37	
05 05 23 00-1132	EA		7/8" Diameter x 4-1/2" Length, 316 Stainless Steel, Hex Head Bolt .....	34.35	
			For >100 To 250, Deduct	-2.25	
			For >250 To 500, Deduct	-2.81	
			For >500, Deduct	-3.37	
05 05 23 00-1133	EA		7/8" Diameter x 5" Length, 316 Stainless Steel, Hex Head Bolt.....	39.02	
			For >100 To 250, Deduct	-2.25	
			For >250 To 500, Deduct	-2.81	
			For >500, Deduct	-3.37	
05 05 23 00-1134	EA		7/8" Diameter x 5-1/2" Length, 316 Stainless Steel, Hex Head Bolt .....	39.36	
			For >100 To 250, Deduct	-2.29	
			For >250 To 500, Deduct	-2.86	
			For >500, Deduct	-3.44	
05 05 23 00-1135	EA		7/8" Diameter x 6" Length, 316 Stainless Steel, Hex Head Bolt.....	40.91	
			For >100 To 250, Deduct	-2.29	
			For >250 To 500, Deduct	-2.86	
			For >500, Deduct	-3.44	
05 05 23 00-1136	EA		7/8" Diameter x 6-1/2" Length, 316 Stainless Steel, Hex Head Bolt .....	53.98	
			For >100 To 250, Deduct	-2.29	
			For >250 To 500, Deduct	-2.86	
			For >500, Deduct	-3.44	





		<b>Metals</b>	<b>05</b>
		<b>Common Work Results for Metals</b>	<b>05 05</b>
		<b>Metal Fastenings</b>	<b>05 05 23</b>

05

MINOR CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
05 05 23 00-1137	EA	7/8" Diameter x 7" Length, 316 Stainless Steel, Hex Head Bolt .....	59.96	
		For >100 To 250, Deduct	-2.33	
		For >250 To 500, Deduct	-2.92	
		For >500, Deduct	-3.50	
05 05 23 00-1138	EA	7/8" Diameter x 7-1/2" Length, 316 Stainless Steel, Hex Head Bolt .....	66.17	
		For >100 To 250, Deduct	-2.33	
		For >250 To 500, Deduct	-2.92	
		For >500, Deduct	-3.50	
05 05 23 00-1139	EA	7/8" Diameter x 8" Length, 316 Stainless Steel, Hex Head Bolt .....	69.22	
		For >100 To 250, Deduct	-2.33	
		For >250 To 500, Deduct	-2.92	
		For >500, Deduct	-3.50	
05 05 23 00-1140	EA	7/8" Diameter x 8-1/2" Length, 316 Stainless Steel, Hex Head Bolt .....	73.41	
		For >100 To 250, Deduct	-2.38	
		For >250 To 500, Deduct	-2.97	
		For >500, Deduct	-3.56	
05 05 23 00-1141	EA	7/8" Diameter x 9" Length, 316 Stainless Steel, Hex Head Bolt .....	76.07	
		For >100 To 250, Deduct	-2.38	
		For >250 To 500, Deduct	-2.97	
		For >500, Deduct	-3.56	
05 05 23 00-1142	EA	7/8" Diameter x 9-1/2" Length, 316 Stainless Steel, Hex Head Bolt .....	78.71	
		For >100 To 250, Deduct	-2.38	
		For >250 To 500, Deduct	-2.97	
		For >500, Deduct	-3.56	
05 05 23 00-1143	EA	7/8" Diameter x 10" Length, 316 Stainless Steel, Hex Head Bolt .....	81.67	
		For >100 To 250, Deduct	-2.38	
		For >250 To 500, Deduct	-2.97	
		For >500, Deduct	-3.56	
<b>05 05 23 00-1144 1" Diameter, 316 Stainless Steel, Hex Head Bolts (05 05 23 00-0989)</b>				
05 05 23 00-1145	EA	1" Diameter x 2" Length, 316 Stainless Steel, Hex Head Bolt .....	27.13	
		For >100 To 250, Deduct	-2.16	
		For >250 To 500, Deduct	-2.70	
		For >500, Deduct	-3.24	
05 05 23 00-1146	EA	1" Diameter x 2-1/2" Length, 316 Stainless Steel, Hex Head Bolt .....	31.12	
		For >100 To 250, Deduct	-2.20	
		For >250 To 500, Deduct	-2.76	
		For >500, Deduct	-3.31	
05 05 23 00-1147	EA	1" Diameter x 3" Length, 316 Stainless Steel, Hex Head Bolt .....	33.65	
		For >100 To 250, Deduct	-2.20	
		For >250 To 500, Deduct	-2.76	
		For >500, Deduct	-3.31	
05 05 23 00-1148	EA	1" Diameter x 3-1/2" Length, 316 Stainless Steel, Hex Head Bolt .....	37.68	
		For >100 To 250, Deduct	-2.20	
		For >250 To 500, Deduct	-2.76	
		For >500, Deduct	-3.31	
05 05 23 00-1149	EA	1" Diameter x 4" Length, 316 Stainless Steel, Hex Head Bolt .....	39.34	
		For >100 To 250, Deduct	-2.25	
		For >250 To 500, Deduct	-2.81	
		For >500, Deduct	-3.37	
05 05 23 00-1150	EA	1" Diameter x 4-1/2" Length, 316 Stainless Steel, Hex Head Bolt .....	42.08	
		For >100 To 250, Deduct	-2.25	
		For >250 To 500, Deduct	-2.81	
		For >500, Deduct	-3.37	
05 05 23 00-1151	EA	1" Diameter x 5" Length, 316 Stainless Steel, Hex Head Bolt .....	44.84	
		For >100 To 250, Deduct	-2.25	
		For >250 To 500, Deduct	-2.81	
		For >500, Deduct	-3.37	
05 05 23 00-1152	EA	1" Diameter x 5-1/2" Length, 316 Stainless Steel, Hex Head Bolt .....	47.84	
		For >100 To 250, Deduct	-2.29	
		For >250 To 500, Deduct	-2.86	
		For >500, Deduct	-3.44	
05 05 23 00-1153	EA	1" Diameter x 6" Length, 316 Stainless Steel, Hex Head Bolt .....	54.99	
		For >100 To 250, Deduct	-2.29	
		For >250 To 500, Deduct	-2.86	
		For >500, Deduct	-3.44	
05 05 23 00-1154	EA	1" Diameter x 6-1/2" Length, 316 Stainless Steel, Hex Head Bolt .....	62.03	
		For >100 To 250, Deduct	-2.29	
		For >250 To 500, Deduct	-2.86	
		For >500, Deduct	-3.44	
05 05 23 00-1155	EA	1" Diameter x 7" Length, 316 Stainless Steel, Hex Head Bolt .....	71.87	
		For >100 To 250, Deduct	-2.33	
		For >250 To 500, Deduct	-2.92	
		For >500, Deduct	-3.50	
05 05 23 00-1156	EA	1" Diameter x 7-1/2" Length, 316 Stainless Steel, Hex Head Bolt .....	79.97	
		For >100 To 250, Deduct	-2.33	
		For >250 To 500, Deduct	-2.92	
		For >500, Deduct	-3.50	
05 05 23 00-1157	EA	1" Diameter x 8" Length, 316 Stainless Steel, Hex Head Bolt .....	81.13	
		For >100 To 250, Deduct	-2.33	
		For >250 To 500, Deduct	-2.92	
		For >500, Deduct	-3.50	

**05 Metals****05 05 Common Work Results for Metals****05 05 23 Metal Fastenings**

MINOR	CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
05 05 23 00-1158	EA		1" Diameter x 8-1/2" Length, 316 Stainless Steel, Hex Head Bolt .....	84.00	
			For >100 To 250, Deduct .....	-2.38	
			For >250 To 500, Deduct .....	-2.97	
			For >500, Deduct .....	-3.56	
05 05 23 00-1159	EA		1" Diameter x 9" Length, 316 Stainless Steel, Hex Head Bolt.....	85.11	
			For >100 To 250, Deduct .....	-2.38	
			For >250 To 500, Deduct .....	-2.97	
			For >500, Deduct .....	-3.56	
05 05 23 00-1160	EA		1" Diameter x 9-1/2" Length, 316 Stainless Steel, Hex Head Bolt .....	98.56	
			For >100 To 250, Deduct .....	-2.38	
			For >250 To 500, Deduct .....	-2.97	
			For >500, Deduct .....	-3.56	
05 05 23 00-1161	EA		1" Diameter x 10" Length, 316 Stainless Steel, Hex Head Bolt.....	111.54	
			For >100 To 250, Deduct .....	-2.38	
			For >250 To 500, Deduct .....	-2.97	
			For >500, Deduct .....	-3.56	
05 05 23 00-1162			<b>Screws</b> (05 05 23)		
05 05 23 00-1163			<b>Teks® 5 Self Drilling Screws</b> (05 05 23 00-1162)		
			Note: Includes Climaseal® finish, self-drill point and tapping threads.		
05 05 23 00-1164	EA		12-24 x 1-1/4", Hex Washer Head, Teks® 5 Self Drilling Screw.....	4.10	
			For >10 To 50, Deduct .....	-0.18	
			For >50 To 100, Deduct .....	-0.37	
			For >100, Deduct .....	-0.75	
05 05 23 00-1165	EA		12-24 x 1-1/2", Hex Washer Head, Teks® 5 Self Drilling Screw.....	4.27	
			For >10 To 50, Deduct .....	-0.18	
			For >50 To 100, Deduct .....	-0.38	
			For >100, Deduct .....	-0.75	
05 05 23 00-1166	EA		12-24 x 2", Hex Washer Head, Teks® 5 Self Drilling Screw .....	4.77	
			For >10 To 50, Deduct .....	-0.19	
			For >50 To 100, Deduct .....	-0.41	
			For >100, Deduct .....	-0.81	
05 05 23 00-1167	EA		1/4"-28 x 3", Hex Washer Head, Teks® 5 Self Drilling Screw.....	6.56	
			For >10 To 50, Deduct .....	-0.24	
			For >50 To 100, Deduct .....	-0.52	
			For >100, Deduct .....	-1.05	
05 05 23 00-1168	EA		1/4"-28 x 4", Hex Washer Head, Teks® 5 Self Drilling Screw.....	7.01	
			For >10 To 50, Deduct .....	-0.25	
			For >50 To 100, Deduct .....	-0.55	
			For >100, Deduct .....	-1.11	
05 05 23 00-1169	EA		1/4"-28 x 6", Hex Washer Head, Teks® 5 Self Drilling Screw.....	8.68	
			For >10 To 50, Deduct .....	-0.26	
			For >50 To 100, Deduct .....	-0.61	
			For >100, Deduct .....	-1.23	
05 05 23 00-1170	EA		1/4"-28 x 8", Hex Washer Head, Teks® 5 Self Drilling Screw.....	9.70	
			For >10 To 50, Deduct .....	-0.28	
			For >50 To 100, Deduct .....	-0.66	
			For >100, Deduct .....	-1.31	
05 05 23 00-1171			<b>Security Screws</b> (05 05 23 00-1162)		
05 05 23 00-1172			<b>304/18-8 Stainless Steel, Security Screws</b> (05 05 23 00-1171)		
			Note: Includes "security" style drive in machine or sheet metal screw threads.		
05 05 23 00-1173	EA		#4 Diameter x 1/2" Length, 304/18-8 Stainless Steel, Security Screws.....	3.16	
			For >10 To 50, Deduct .....	-0.15	
			For >50 To 100, Deduct .....	-0.31	
			For >100, Deduct .....	-0.61	
05 05 23 00-1174	EA		#6 Diameter x 1/2" Length, 304/18-8 Stainless Steel, Security Screw.....	3.54	
			For >10 To 50, Deduct .....	-0.15	
			For >50 To 100, Deduct .....	-0.32	
			For >100, Deduct .....	-0.63	
05 05 23 00-1175	EA		#6 Diameter x 1" Length, 304/18-8 Stainless Steel, Security Screw.....	3.87	
			For >10 To 50, Deduct .....	-0.15	
			For >50 To 100, Deduct .....	-0.32	
			For >100, Deduct .....	-0.65	
05 05 23 00-1176	EA		#6 Diameter x 1-1/2" Length, 304/18-8 Stainless Steel, Security Screw.....	3.98	
			For >10 To 50, Deduct .....	-0.15	
			For >50 To 100, Deduct .....	-0.33	
			For >100, Deduct .....	-0.65	
05 05 23 00-1177	EA		#6 Diameter x 2" Length, 304/18-8 Stainless Steel, Security Screw.....	4.19	
			For >10 To 50, Deduct .....	-0.15	
			For >50 To 100, Deduct .....	-0.33	
			For >100, Deduct .....	-0.66	
05 05 23 00-1178	EA		#8 Diameter x 1/2" Length, 304/18-8 Stainless Steel, Security Screw.....	3.63	
			For >10 To 50, Deduct .....	-0.15	
			For >50 To 100, Deduct .....	-0.32	
			For >100, Deduct .....	-0.63	
05 05 23 00-1179	EA		#8 Diameter x 1" Length, 304/18-8 Stainless Steel, Security Screw.....	3.78	
			For >10 To 50, Deduct .....	-0.15	
			For >50 To 100, Deduct .....	-0.32	
			For >100, Deduct .....	-0.64	



MINOR	CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
05 05 23 00-1180	EA	#8 Diameter x 1-1/2" Length, 304/18-8 Stainless Steel, Security Screw.....	4.11		
		For >10 To 50, Deduct	-0.15		
		For >50 To 100, Deduct	-0.33		
		For >100, Deduct	-0.66		
05 05 23 00-1181	EA	#8 Diameter x 2" Length, 304/18-8 Stainless Steel, Security Screw.....	4.21		
		For >10 To 50, Deduct	-0.15		
		For >50 To 100, Deduct	-0.33		
		For >100, Deduct	-0.66		
05 05 23 00-1182	EA	#10 Diameter x 1/2" Length, 304/18-8 Stainless Steel, Security Screw.....	3.73		
		For >10 To 50, Deduct	-0.15		
		For >50 To 100, Deduct	-0.32		
		For >100, Deduct	-0.64		
05 05 23 00-1183	EA	#10 Diameter x 1" Length, 304/18-8 Stainless Steel, Security Screw.....	3.77		
		For >10 To 50, Deduct	-0.15		
		For >50 To 100, Deduct	-0.32		
		For >100, Deduct	-0.64		
05 05 23 00-1184	EA	#10 Diameter x 1-1/2" Length, 304/18-8 Stainless Steel, Security Screw.....	3.91		
		For >10 To 50, Deduct	-0.15		
		For >50 To 100, Deduct	-0.32		
		For >100, Deduct	-0.65		
05 05 23 00-1185	EA	#10 Diameter x 2" Length, 304/18-8 Stainless Steel, Security Screw.....	4.35		
		For >10 To 50, Deduct	-0.15		
		For >50 To 100, Deduct	-0.34		
		For >100, Deduct	-0.67		
05 05 23 00-1186	EA	1/4" Diameter x 1/2" Length, 304/18-8 Stainless Steel, Security Screw .....	3.98		
		For >10 To 50, Deduct	-0.15		
		For >50 To 100, Deduct	-0.33		
		For >100, Deduct	-0.65		
05 05 23 00-1187	EA	1/4" Diameter x 1" Length, 304/18-8 Stainless Steel, Security Screw .....	4.08		
		For >10 To 50, Deduct	-0.15		
		For >50 To 100, Deduct	-0.33		
		For >100, Deduct	-0.66		
05 05 23 00-1188	EA	1/4" Diameter x 1-1/2" Length, 304/18-8 Stainless Steel, Security Screw .....	4.50		
		For >10 To 50, Deduct	-0.15		
		For >50 To 100, Deduct	-0.34		
		For >100, Deduct	-0.68		
05 05 23 00-1189	EA	1/4" Diameter x 2" Length, 304/18-8 Stainless Steel, Security Screw .....	5.17		
		For >10 To 50, Deduct	-0.15		
		For >50 To 100, Deduct	-0.36		
		For >100, Deduct	-0.71		
05 05 23 00-1190		<b>Drilling In Steel Plates</b> (05 05 23)			
05 05 23 00-1191	EA	Up To 1/2" Diameter Drill Through Up To 1/4" Steel Plate.....	20.10		
		For Aluminum, Deduct	-2.01		
		For Stainless Steel, Add	2.51		
		For >5 To 10, Deduct	-2.01		
		For >10 To 25, Deduct	-5.03		
		For >25 To 50, Deduct	-7.04		
		For >50, Deduct	-10.05		
05 05 23 00-1192	EA	>1/2" To 7/8" Diameter Drill Through Up To 1/4" Steel Plate.....	23.64		
		For Aluminum, Deduct	-2.36		
		For Stainless Steel, Add	2.96		
		For >5 To 10, Deduct	-2.36		
		For >10 To 25, Deduct	-5.91		
		For >25 To 50, Deduct	-8.27		
		For >50, Deduct	-11.82		
05 05 23 00-1193	EA	>7/8" To 1-1/2" Diameter Drill Through Up To 1/4" Steel Plate.....	28.38		
		For Aluminum, Deduct	-2.84		
		For Stainless Steel, Add	3.55		
		For >5 To 10, Deduct	-2.84		
		For >10 To 25, Deduct	-7.10		
		For >25 To 50, Deduct	-9.93		
		For >50, Deduct	-14.19		
05 05 23 00-1194	EA	>1-1/2" To 4" Diameter Drill Through Up To 1/4" Steel Plate.....	33.11		
		For Aluminum, Deduct	-3.31		
		For Stainless Steel, Add	4.14		
		For >5 To 10, Deduct	-3.31		
		For >10 To 25, Deduct	-8.28		
		For >25 To 50, Deduct	-11.59		
		For >50, Deduct	-16.56		
05 05 23 00-1195	EA	>4" To 10" Diameter Drill Through Up To 1/4" Steel Plate.....	44.34		
		For Aluminum, Deduct	-4.43		
		For Stainless Steel, Add	5.54		
		For >5 To 10, Deduct	-4.43		
		For >10 To 25, Deduct	-11.09		
		For >25 To 50, Deduct	-15.52		
		For >50, Deduct	-22.17		
05 05 23 00-1196	EA	Up To 1/2" Diameter Drill Through >1/4" To 1/2" Steel Plate.....	23.64		
		For Aluminum, Deduct	-2.36		
		For Stainless Steel, Add	2.96		
		For >5 To 10, Deduct	-2.36		
		For >10 To 25, Deduct	-5.91		
		For >25 To 50, Deduct	-8.27		
		For >50, Deduct	-11.82		

**05 Metals****05 05 Common Work Results for Metals****05 05 23 Metal Fastenings**

MINOR	CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
05 05 23 00-1197	EA		>1/2" To 7/8" Diameter Drill Through >1/4" To 1/2" Steel Plate .....	29.56	
			For Aluminum, Deduct	-2.96	
			For Stainless Steel, Add	3.70	
			For >5 To 10, Deduct	-2.96	
			For >10 To 25, Deduct	-7.39	
			For >25 To 50, Deduct	-10.35	
			For >50, Deduct	-14.78	
05 05 23 00-1198	EA		>7/8" To 1-1/2" Diameter Drill Through >1/4" To 1/2" Steel Plate .....	35.47	
			For Aluminum, Deduct	-3.55	
			For Stainless Steel, Add	4.43	
			For >5 To 10, Deduct	-3.55	
			For >10 To 25, Deduct	-8.87	
			For >25 To 50, Deduct	-12.41	
			For >50, Deduct	-17.74	
05 05 23 00-1199	EA		>1-1/2" To 4" Diameter Drill Through >1/4" To 1/2" Steel Plate .....	44.34	
			For Aluminum, Deduct	-4.43	
			For Stainless Steel, Add	5.54	
			For >5 To 10, Deduct	-4.43	
			For >10 To 25, Deduct	-11.09	
			For >25 To 50, Deduct	-15.52	
			For >50, Deduct	-22.17	
05 05 23 00-1200	EA		Up To 1/2" Diameter Drill Through >1/2" To 1" Steel Plate .....	29.56	
			For Aluminum, Deduct	-2.96	
			For Stainless Steel, Add	3.70	
			For >5 To 10, Deduct	-2.96	
			For >10 To 25, Deduct	-7.39	
			For >25 To 50, Deduct	-10.35	
			For >50, Deduct	-14.78	
05 05 23 00-1201	EA		>1/2" To 7/8" Diameter Drill Through >1/2" To 1" Steel Plate .....	39.02	
			For Aluminum, Deduct	-3.90	
			For Stainless Steel, Add	4.88	
			For >5 To 10, Deduct	-3.90	
			For >10 To 25, Deduct	-9.76	
			For >25 To 50, Deduct	-13.66	
			For >50, Deduct	-19.51	
05 05 23 00-1202	EA		>7/8" To 1-1/2" Diameter Drill Through >1/2" To 1" Steel Plate .....	47.30	
			For Aluminum, Deduct	-4.73	
			For Stainless Steel, Add	5.91	
			For >5 To 10, Deduct	-4.73	
			For >10 To 25, Deduct	-11.83	
			For >25 To 50, Deduct	-16.56	
			For >50, Deduct	-23.65	

**END OF SECTION 05**



		<b>Finishes</b>	<b>09</b>	<b>09</b>
		<b>Painting and Coating</b>	<b>09 90</b>	
		<b>Painting</b>	<b>09 91</b>	

MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
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## 09 Finishes

### 09 90 Painting and Coating<sup>(09)</sup>

Note: Includes masking, safety signs, cleaning of area (dry wiping down walls, floors, doors, etc.), removal of loose paint (paint, caulk, etc.), feathering rough edges, sanding between coats, protective work to contain dust and paint splatters (drop cloths), unless otherwise noted, removal and installation of cabinet hardware, switch covers and outlet plates, equipment to place paint and ladders. New construction work additionally includes filling knots, divots, depressions, holes (screw and nail holes in drywall to 1/4" diameter of unlimited quantity). All work designated as "brush/roller" includes brush work for cut and roller work up to cut in.

### 09 91 Painting<sup>(09 90)</sup>

#### 09 91 13 Exterior Painting<sup>(09 91)</sup>

Note: Acrylic latex paint unless otherwise stated. Paint tasks covers all paint sheens: flat, eggshell, satin, semi-gloss, or gloss.

#### 09 91 13 00-0001 Paint Exterior Walls/Siding<sup>(09 91 13)</sup>

#### 09 91 13 00-0002 Paint Exterior Concrete Walls<sup>(09 91 13 00-0001)</sup>

09 91 13 00-0003	SF 1 Coat Filler, Brush Work, Paint Exterior Concrete Walls .....	0.84
	For Oil Based Paint, Add	0.05
	For Epoxy Paint, Add	0.08
	For Up To 100, Add	0.55
	For >100 To 250, Add	0.26
	For >250 To 500, Add	0.11
	For >2,500 To 5,000, Deduct	-0.04
09 91 13 00-0004	SF 1 Coat Filler, Brush Work, Paint Exterior Concrete Walls .....	0.93
	For Oil Based Paint, Add	0.05
	For Epoxy Paint, Add	0.08
	For Up To 100, Add	0.63
	For >100 To 250, Add	0.30
	For >250 To 500, Add	0.13
	For >2,500 To 5,000, Deduct	-0.05
09 91 13 00-0005	SF 2 Coats Paint, Brush Work, Paint Exterior Concrete Walls .....	1.75
	For Oil Based Paint, Add	0.10
	For Epoxy Paint, Add	0.15
	For Up To 100, Add	1.18
	For >100 To 250, Add	0.56
	For >250 To 500, Add	0.24
	For >2,500 To 5,000, Deduct	-0.09
09 91 13 00-0006	SF 1 Coat Filler, Brush/Roller Work, Paint Exterior Concrete Walls .....	0.68
	For Oil Based Paint, Add	0.04
	For Epoxy Paint, Add	0.07
	For Up To 100, Add	0.43
	For >100 To 250, Add	0.21
	For >250 To 500, Add	0.09
	For >2,500 To 5,000, Deduct	-0.03
09 91 13 00-0007	SF 1 Coat Paint, Brush/Roller Work, Paint Exterior Concrete Walls .....	0.78
	For Oil Based Paint, Add	0.04
	For Epoxy Paint, Add	0.07
	For Up To 100, Add	0.52
	For >100 To 250, Add	0.25
	For >250 To 500, Add	0.11
	For >2,500 To 5,000, Deduct	-0.04
09 91 13 00-0008	SF 2 Coats Paint, Brush/Roller Work, Paint Exterior Concrete Walls .....	1.31
	For Oil Based Paint, Add	0.08
	For Epoxy Paint, Add	0.13
	For Up To 100, Add	0.85
	For >100 To 250, Add	0.40
	For >250 To 500, Add	0.17
	For >2,500 To 5,000, Deduct	-0.07
09 91 13 00-0009	SF 1 Coat Filler, Sprayed, Paint Exterior Concrete Walls .....	0.55
	For Oil Based Paint, Add	0.04
	For Epoxy Paint, Add	0.08
	For Up To 100, Add	0.32
	For >100 To 250, Add	0.15
	For >250 To 500, Add	0.07
	For >2,500 To 5,000, Deduct	-0.03
09 91 13 00-0010	SF 1 Coat Paint, Sprayed, Paint Exterior Concrete Walls .....	0.49
	For Oil Based Paint, Add	0.03
	For Epoxy Paint, Add	0.06
	For Up To 100, Add	0.29
	For >100 To 250, Add	0.14
	For >250 To 500, Add	0.06
	For >2,500 To 5,000, Deduct	-0.02
09 91 13 00-0011	SF 2 Coats Paint, Sprayed, Paint Exterior Concrete Walls .....	0.86
	For Oil Based Paint, Add	0.06
	For Epoxy Paint, Add	0.12
	For Up To 100, Add	0.48
	For >100 To 250, Add	0.23
	For >250 To 500, Add	0.10
	For >2,500 To 5,000, Deduct	-0.04

#### 09 91 13 00-0012 Paint Exterior Metal Walls<sup>(09 91 13 00-0001)</sup>

**09 Finishes****09 90 Painting and Coating****09 91 Painting**

MINOR				TOTAL DIRECT	DEMOLITION
CSI	UOM	DESCRIPTION		UNIT COST	UNIT COST
<b>09 91 13 00-0013 Paint Exterior Galvanized Walls</b> (09 91 13 00-0012)					
Note: Linseed oil or acrylic latex paint.					
09 91 13 00-0014	SF	1 Coat Primer, Brush Work, Paint Exterior Galvanized Wall Surfaces.....	1.13		
		For Up To 100, Add	0.67		
		For >100 To 250, Add	0.32		
		For >250 To 500, Add	0.14		
		For >2,500 To 5,000, Deduct	-0.06		
09 91 13 00-0015	SF	1 Coat Paint, Brush Work, Paint Exterior Galvanized Wall Surfaces.....	1.25		
		For Up To 100, Add	0.76		
		For >100 To 250, Add	0.36		
		For >250 To 500, Add	0.16		
		For >2,500 To 5,000, Deduct	-0.06		
09 91 13 00-0016	SF	2 Coats Paint, Brush Work, Paint Exterior Galvanized Wall Surfaces.....	2.28		
		For Up To 100, Add	1.34		
		For >100 To 250, Add	0.65		
		For >250 To 500, Add	0.28		
		For >2,500 To 5,000, Deduct	-0.11		
09 91 13 00-0017	SF	1 Coat Primer, Brush/Roller Work, Paint Exterior Galvanized Walls.....	0.85		
		For Up To 100, Add	0.49		
		For >100 To 250, Add	0.24		
		For >250 To 500, Add	0.10		
		For >2,500 To 5,000, Deduct	-0.04		
09 91 13 00-0018	SF	1 Coat Paint, Brush/Roller Work, Paint Exterior Galvanized Walls.....	0.98		
		For Up To 100, Add	0.58		
		For >100 To 250, Add	0.28		
		For >250 To 500, Add	0.12		
		For >2,500 To 5,000, Deduct	-0.05		
09 91 13 00-0019	SF	2 Coats Paint, Brush/Roller Work, Paint Exterior Galvanized Walls.....	1.83		
		For Up To 100, Add	1.06		
		For >100 To 250, Add	0.51		
		For >250 To 500, Add	0.22		
		For >2,500 To 5,000, Deduct	-0.09		
09 91 13 00-0020	SF	1 Coat Primer, Sprayed, Paint Exterior Galvanized Walls.....	0.69		
		For Up To 100, Add	0.31		
		For >100 To 250, Add	0.15		
		For >250 To 500, Add	0.07		
		For >2,500 To 5,000, Deduct	-0.03		
09 91 13 00-0021	SF	1 Coat Paint, Sprayed, Paint Exterior Galvanized Walls.....	0.89		
		For Up To 100, Add	0.46		
		For >100 To 250, Add	0.22		
		For >250 To 500, Add	0.10		
		For >2,500 To 5,000, Deduct	-0.04		
09 91 13 00-0022	SF	2 Coats Paint, Sprayed, Paint Exterior Galvanized Walls.....	1.51		
		For Up To 100, Add	0.71		
		For >100 To 250, Add	0.35		
		For >250 To 500, Add	0.16		
		For >2,500 To 5,000, Deduct	-0.08		
<b>09 91 13 00-0023 Paint Exterior Corrugated Metal Walls</b> (09 91 13 00-0012)					
09 91 13 00-0024	SF	1 Coat Primer, Sprayed, Paint Exterior Corrugated Metal Walls.....	0.85		
		For Up To 100, Add	0.40		
		For >100 To 250, Add	0.20		
		For >250 To 500, Add	0.09		
		For >2,500 To 5,000, Deduct	-0.04		
09 91 13 00-0025	SF	1 Coat Paint, Sprayed, Paint Exterior Corrugated Metal Walls.....	1.12		
		For Up To 100, Add	0.60		
		For >100 To 250, Add	0.29		
		For >250 To 500, Add	0.13		
		For >2,500 To 5,000, Deduct	-0.06		
09 91 13 00-0026	SF	2 Coats Paint, Sprayed, Paint Exterior Corrugated Metal Walls.....	1.88		
		For Up To 100, Add	0.93		
		For >100 To 250, Add	0.46		
		For >250 To 500, Add	0.20		
		For >2,500 To 5,000, Deduct	-0.09		
<b>09 91 13 00-0027 Paint Metal Surfaces</b> (09 91 13)					
Note: Tasks can be used for exterior or interior applications.					
<b>09 91 13 00-0028 Paint Metal Louvers</b> (09 91 13 00-0027)					
09 91 13 00-0029	SF	1 Coat Primer, Brush/Roller Work, Paint Ventilation Louver, SF Of Opening Area.....	1.49		
		For Electrostatic Painting, Add	0.18		
09 91 13 00-0030	SF	1 Coat Alkyd Paint, Brush/Roller Work, Paint Ventilation Louver, SF Of Opening Area.....	1.51		
		For Electrostatic Painting, Add	0.18		
09 91 13 00-0031	SF	2 Coats Alkyd Paint, Brush/Roller Work, Paint Ventilation Louver, SF Of Opening Area.....	3.09		
		For Electrostatic Painting, Add	0.38		
<b>09 91 13 00-0032 Paint Exterior Miscellaneous Metal Surfaces</b> (09 91 13)					
09 91 13 00-0033	SF	1 Coat Alkyd Anticorrosive Metal Primer, Brush/Roller Work, Paint Exterior Miscellaneous Metal Surfaces.....	1.44		
		For Epoxy Paint, Add	0.17		
		For Electrostatic Painting, Add	0.19		



		<b>Finishes</b>	<b>09</b>	<b>09</b>
		Painting and Coating	09 90	
		Painting	09 91	

MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
09 91 13 00-0034 SF 1 Coat Alkyd Enamel Paint, Brush/Roller Work, Paint Exterior Miscellaneous Metal Surfaces .....	1.33	
For Epoxy Paint, Add	0.13	
For Electrostatic Painting, Add	0.16	
09 91 13 00-0035 SF 2 Coats Alkyd Enamel Paint, Brush/Roller Work, Paint Exterior Miscellaneous Metal Surfaces .....	2.69	
For Epoxy Paint, Add	0.27	
For Electrostatic Painting, Add	0.34	

**END OF SECTION 09**

09	09	Finishes
	09 90	Painting and Coating
	09 91	Painting



MINOR				TOTAL DIRECT		DEMOLITION
CSI UOM DESCRIPTION				UNIT COST		UNIT COST

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Specialties			10
Information Specialties			10 10
Signage			10 14

MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
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## 10 Specialties

### 10 10 Information Specialties <sup>(10)</sup>

#### 10 14 Signage <sup>(10 10)</sup>

Note: Where required, signage excludes electrical connection, disconnect, or terminations unless title states otherwise. See CSI section 26 05 19 16-0007 for electrical connection wiring.

##### 10 14 53 Traffic Signage <sup>(10 14)</sup>

###### 10 14 53 11 Traffic Signage <sup>(10 14 53)</sup>

###### 10 14 53 11-0001 Traffic Signs <sup>(10 14 53 11)</sup>

###### 10 14 53 11-0002 Reflectorized Stop Signs And Other Traffic Signs <sup>(10 14 53 11-0001)</sup>

Note: Excludes posts.

###### 10 14 53 11-0003 Aluminum Engineer Grade Stop Signs <sup>(10 14 53 11-0002)</sup>

10 14 53 11-0004	EA 18" x 18" Aluminum Engineer Grade Stop Sign.....	60.53	18.20
	For Hi-Intensity Grade, Add	7.24	
	For Diamond Grade, Add	13.76	
10 14 53 11-0005	EA 18" x 24" Aluminum Engineer Grade Stop Sign.....	69.99	19.24
	For Hi-Intensity Grade, Add	9.47	
	For Diamond Grade, Add	17.99	
10 14 53 11-0006	EA 24" x 24" Aluminum Engineer Grade Stop Sign.....	75.73	20.22
	For Hi-Intensity Grade, Add	14.47	
	For Diamond Grade, Add	22.94	
10 14 53 11-0007	EA 30" x 30" Aluminum Engineer Grade Stop Sign.....	87.66	21.27
	For Hi-Intensity Grade, Add	5.42	
	For Diamond Grade, Add	29.37	
10 14 53 11-0008	EA 36" x 36" Aluminum Engineer Grade Stop Sign.....	116.91	22.25
	For Hi-Intensity Grade, Add	15.93	
	For Diamond Grade, Add	49.98	

###### 10 14 53 11-0009 Other Reflectorized Traffic Signs <sup>(10 14 53 11-0002)</sup>

Note: Other traffic signs includes reserve, handicap, visitor, no parking, property, speed limit, tow away, ADA, parking time limit, parking exclusive area, school, traffic/caution, etc. Excludes posts.

###### 10 14 53 11-0010 Aluminum Engineer Grade Traffic Signs <sup>(10 14 53 11-0009)</sup>

10 14 53 11-0011	EA 6" x 12" Aluminum Engineer Grade Traffic Sign.....	38.34	16.17
	For Hi-Intensity Grade, Add	1.79	
10 14 53 11-0012	EA 6" x 18" Aluminum Engineer Grade Traffic Sign.....	41.33	16.17
	For Hi-Intensity Grade, Add	2.69	
10 14 53 11-0013	EA 9" x 12" Aluminum Engineer Grade Traffic Sign.....	41.33	16.17
	For Hi-Intensity Grade, Add	2.69	
10 14 53 11-0014	EA 9" x 15" Aluminum Engineer Grade Traffic Sign.....	43.57	16.17
	For Hi-Intensity Grade, Add	3.36	
10 14 53 11-0015	EA 9" x 18" Aluminum Engineer Grade Traffic Sign.....	45.82	16.17
	For Hi-Intensity Grade, Add	4.04	
10 14 53 11-0016	EA 9" x 24" Aluminum Engineer Grade Traffic Sign.....	52.31	17.19
	For Hi-Intensity Grade, Add	5.38	
10 14 53 11-0017	EA 9" x 48" Aluminum Engineer Grade Traffic Sign.....	70.26	17.19
	For Hi-Intensity Grade, Add	10.77	
10 14 53 11-0018	EA 12" x 12" Aluminum Engineer Grade Traffic Sign.....	44.32	16.17
	For Hi-Intensity Grade, Add	3.59	
10 14 53 11-0019	EA 12" x 18" Aluminum Engineer Grade Traffic Sign.....	52.31	17.19
	For Hi-Intensity Grade, Add	5.38	
10 14 53 11-0020	EA 12" x 24" Aluminum Engineer Grade Traffic Sign.....	58.29	17.19
	For Hi-Intensity Grade, Add	7.18	
10 14 53 11-0021	EA 12" x 30" Aluminum Engineer Grade Traffic Sign.....	64.27	17.19
	For Hi-Intensity Grade, Add	8.97	
10 14 53 11-0022	EA 12" x 36" Aluminum Engineer Grade Traffic Sign.....	70.26	17.19
	For Hi-Intensity Grade, Add	10.77	
10 14 53 11-0023	EA 18" x 18" Aluminum Engineer Grade Traffic Sign.....	61.28	17.19
	For Hi-Intensity Grade, Add	8.07	
10 14 53 11-0024	EA 18" x 24" Aluminum Engineer Grade Traffic Sign.....	70.26	17.19
	For Hi-Intensity Grade, Add	10.77	
10 14 53 11-0025	EA 18" x 30" Aluminum Engineer Grade Traffic Sign.....	81.25	18.20
	For Hi-Intensity Grade, Add	13.46	
10 14 53 11-0026	EA 18" x 36" Aluminum Engineer Grade Traffic Sign.....	90.22	18.20
	For Hi-Intensity Grade, Add	16.15	
10 14 53 11-0027	EA 18" x 48" Aluminum Engineer Grade Traffic Sign.....	116.25	22.25
	For Hi-Intensity Grade, Add	21.53	
10 14 53 11-0028	EA 18" x 54" Aluminum Engineer Grade Traffic Sign.....	125.22	22.25
	For Hi-Intensity Grade, Add	24.22	
10 14 53 11-0029	EA 24" x 24" Aluminum Engineer Grade Traffic Sign.....	84.24	18.20
	For Hi-Intensity Grade, Add	14.36	
10 14 53 11-0030	EA 24" x 30" Aluminum Engineer Grade Traffic Sign.....	96.20	18.20
	For Hi-Intensity Grade, Add	17.94	
10 14 53 11-0031	EA 24" x 36" Aluminum Engineer Grade Traffic Sign.....	108.16	18.20
	For Hi-Intensity Grade, Add	21.53	

**10 Specialties****10 10 Information Specialties****10 14 Signage**

MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
10 14 53 11-0032 EA 24" x 42" Aluminum Engineer Grade Traffic Sign ..... For Hi-Intensity Grade, Add	128.21 25.12	22.25
10 14 53 11-0033 EA 24" x 48" Aluminum Engineer Grade Traffic Sign ..... For Hi-Intensity Grade, Add	140.18 28.71	22.25
10 14 53 11-0034 EA 24" x 54" Aluminum Engineer Grade Traffic Sign ..... For Hi-Intensity Grade, Add	152.14 32.30	22.25
10 14 53 11-0035 EA 24" x 60" Aluminum Engineer Grade Traffic Sign ..... For Hi-Intensity Grade, Add	164.10 35.89	22.25
10 14 53 11-0036 EA 30" x 30" Aluminum Engineer Grade Traffic Sign ..... For Hi-Intensity Grade, Add	111.15 22.43	18.20
10 14 53 11-0037 EA 30" x 36" Aluminum Engineer Grade Traffic Sign ..... For Hi-Intensity Grade, Add	134.19 26.91	22.25
10 14 53 11-0038 EA 30" x 42" Aluminum Engineer Grade Traffic Sign ..... For Hi-Intensity Grade, Add	149.15 31.40	22.25
10 14 53 11-0039 EA 30" x 48" Aluminum Engineer Grade Traffic Sign ..... For Hi-Intensity Grade, Add	172.19 35.89	26.28
10 14 53 11-0040 EA 30" x 60" Aluminum Engineer Grade Traffic Sign ..... For Hi-Intensity Grade, Add	210.18 44.86	30.33
10 14 53 11-0041 EA 36" x 36" Aluminum Engineer Grade Traffic Sign ..... For Hi-Intensity Grade, Add	152.14 32.30	22.25
10 14 53 11-0042 EA 36" x 42" Aluminum Engineer Grade Traffic Sign ..... For Hi-Intensity Grade, Add	178.17 37.68	26.28
10 14 53 11-0043 EA 36" x 48" Aluminum Engineer Grade Traffic Sign ..... For Hi-Intensity Grade, Add	204.20 43.06	30.33
10 14 53 11-0044 EA 36" x 54" Aluminum Engineer Grade Traffic Sign ..... For Hi-Intensity Grade, Add	222.15 48.45	30.33
10 14 53 11-0045 EA 36" x 60" Aluminum Engineer Grade Traffic Sign ..... For Hi-Intensity Grade, Add	248.18 53.83	34.37
10 14 53 11-0046 EA 36" x 73" Aluminum Engineer Grade Traffic Sign ..... For Hi-Intensity Grade, Add	295.15 65.49	38.42
10 14 53 11-0047 EA 36" x 78" Aluminum Engineer Grade Traffic Sign ..... For Hi-Intensity Grade, Add	310.10 69.98	38.42
10 14 53 11-0048 EA 36" x 108" Aluminum Engineer Grade Traffic Sign ..... For Hi-Intensity Grade, Add	411.94 96.89	44.48
10 14 53 11-0049 EA 42" x 42" Aluminum Engineer Grade Traffic Sign ..... For Hi-Intensity Grade, Add	207.19 43.96	30.33
10 14 53 11-0050 EA 48" x 48" Aluminum Engineer Grade Traffic Sign ..... For Hi-Intensity Grade, Add	260.14 57.42	34.37
10 14 53 11-0051 EA 48" x 54" Aluminum Engineer Grade Traffic Sign ..... For Hi-Intensity Grade, Add	292.16 64.60	38.42
10 14 53 11-0052 EA 48" x 60" Aluminum Engineer Grade Traffic Sign ..... For Hi-Intensity Grade, Add	316.08 71.77	38.42
10 14 53 11-0053 EA 48" x 66" Aluminum Engineer Grade Traffic Sign ..... For Hi-Intensity Grade, Add	352.13 78.95	44.48
10 14 53 11-0054 EA 48" x 72" Aluminum Engineer Grade Traffic Sign ..... For Hi-Intensity Grade, Add	376.06 86.13	44.48
10 14 53 11-0055 EA 48" x 84" Aluminum Engineer Grade Traffic Sign ..... For Hi-Intensity Grade, Add	432.00 100.48	48.53
10 14 53 11-0056 EA 48" x 96" Aluminum Engineer Grade Traffic Sign ..... For Hi-Intensity Grade, Add	479.84 114.83	48.53
10 14 53 11-0057 EA 48" x 102" Aluminum Engineer Grade Traffic Sign ..... For Hi-Intensity Grade, Add	503.77 122.01	48.53
10 14 53 11-0058 EA 48" x 108" Aluminum Engineer Grade Traffic Sign ..... For Hi-Intensity Grade, Add	531.73 129.19	50.55
10 14 53 11-0059 EA 60" x 72" Aluminum Engineer Grade Traffic Sign ..... For Hi-Intensity Grade, Add	455.92 107.66	48.53
10 14 53 11-0060 EA 72" x 144" Aluminum Engineer Grade Traffic Sign ..... For Hi-Intensity Grade, Add	990.66 258.38	64.70
10 14 53 11-0061 EA 78" x 96" Aluminum Engineer Grade Traffic Sign ..... For Hi-Intensity Grade, Add	723.12 186.61	50.55
<b>10 14 53 11-0062 Non-Reflectorized Traffic Signs (10 14 53 11-0001)</b>		
Note: Includes reserved parking, handicap parking, visitor parking, no parking, tow away zones, etc. Excludes posts.		
<b>10 14 53 11-0063 Steel Non-Reflectorized Traffic Signs (10 14 53 11-0062)</b>		
10 14 53 11-0064 EA 6" x 12" Steel Non Reflectorized Traffic Sign .....	37.53	16.17
10 14 53 11-0065 EA 6" x 18" Steel Non Reflectorized Traffic Sign .....	40.12	16.17
10 14 53 11-0066 EA 9" x 12" Steel Non Reflectorized Traffic Sign .....	40.12	16.17
10 14 53 11-0067 EA 9" x 15" Steel Non Reflectorized Traffic Sign .....	42.05	16.17
10 14 53 11-0068 EA 9" x 18" Steel Non Reflectorized Traffic Sign .....	43.99	16.17
10 14 53 11-0069 EA 9" x 24" Steel Non Reflectorized Traffic Sign .....	49.88	17.19
10 14 53 11-0070 EA 9" x 48" Steel Non Reflectorized Traffic Sign .....	65.39	17.19
10 14 53 11-0071 EA 12" x 12" Steel Non Reflectorized Traffic Sign .....	42.70	16.17
10 14 53 11-0072 EA 12" x 18" Steel Non Reflectorized Traffic Sign .....	49.88	17.19
10 14 53 11-0073 EA 12" x 24" Steel Non Reflectorized Traffic Sign .....	55.05	17.19
10 14 53 11-0074 EA 12" x 30" Steel Non Reflectorized Traffic Sign .....	60.22	17.19
10 14 53 11-0075 EA 12" x 36" Steel Non Reflectorized Traffic Sign .....	65.39	17.19
10 14 53 11-0076 EA 18" x 18" Steel Non Reflectorized Traffic Sign .....	57.64	17.19
10 14 53 11-0077 EA 18" x 24" Steel Non Reflectorized Traffic Sign .....	65.39	17.19
10 14 53 11-0078 EA 18" x 30" Steel Non Reflectorized Traffic Sign .....	75.17	18.20
10 14 53 11-0079 EA 18" x 36" Steel Non Reflectorized Traffic Sign .....	82.93	18.20
10 14 53 11-0080 EA 18" x 48" Steel Non Reflectorized Traffic Sign .....	106.53	22.25



		<b>Specialties</b>	<b>10</b>
		<b>Information Specialties</b>	<b>10 10</b>
		<b>Signage</b>	<b>10 14</b>

MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
10 14 53 11-0081 EA 18" x 54" Steel Non ReflectORIZED Traffic Sign.....	114.28	22.25
10 14 53 11-0082 EA 24" x 24" Steel Non ReflectORIZED Traffic Sign.....	77.75	18.20
10 14 53 11-0083 EA 24" x 30" Steel Non ReflectORIZED Traffic Sign.....	88.10	18.20
10 14 53 11-0084 EA 24" x 36" Steel Non ReflectORIZED Traffic Sign.....	98.44	18.20
10 14 53 11-0085 EA 24" x 42" Steel Non ReflectORIZED Traffic Sign.....	116.87	22.25
10 14 53 11-0086 EA 24" x 48" Steel Non ReflectORIZED Traffic Sign.....	127.21	22.25
10 14 53 11-0087 EA 24" x 54" Steel Non ReflectORIZED Traffic Sign.....	137.55	22.25
10 14 53 11-0088 EA 24" x 60" Steel Non ReflectORIZED Traffic Sign.....	147.89	22.25
10 14 53 11-0089 EA 30" x 30" Steel Non ReflectORIZED Traffic Sign.....	101.02	18.20
10 14 53 11-0090 EA 30" x 36" Steel Non ReflectORIZED Traffic Sign.....	122.04	22.25
10 14 53 11-0091 EA 30" x 42" Steel Non ReflectORIZED Traffic Sign.....	134.96	22.25
10 14 53 11-0092 EA 30" x 48" Steel Non ReflectORIZED Traffic Sign.....	155.98	26.28
10 14 53 11-0093 EA 30" x 60" Steel Non ReflectORIZED Traffic Sign.....	189.92	30.33
10 14 53 11-0094 EA 36" x 36" Steel Non ReflectORIZED Traffic Sign.....	137.55	22.25
10 14 53 11-0095 EA 36" x 42" Steel Non ReflectORIZED Traffic Sign.....	161.15	26.28
10 14 53 11-0096 EA 36" x 48" Steel Non ReflectORIZED Traffic Sign.....	184.75	30.33
10 14 53 11-0097 EA 36" x 54" Steel Non ReflectORIZED Traffic Sign.....	200.26	30.33
10 14 53 11-0098 EA 36" x 60" Steel Non ReflectORIZED Traffic Sign.....	223.87	34.37
10 14 53 11-0099 EA 36" x 73" Steel Non ReflectORIZED Traffic Sign.....	265.57	38.42
10 14 53 11-0100 EA 36" x 78" Steel Non ReflectORIZED Traffic Sign.....	278.49	38.42
10 14 53 11-0101 EA 36" x 108" Steel Non ReflectORIZED Traffic Sign.....	368.18	44.48
10 14 53 11-0102 EA 42" x 42" Steel Non ReflectORIZED Traffic Sign.....	187.34	30.33
10 14 53 11-0103 EA 48" x 48" Steel Non ReflectORIZED Traffic Sign.....	234.21	34.37
10 14 53 11-0104 EA 48" x 54" Steel Non ReflectORIZED Traffic Sign.....	262.98	38.42
10 14 53 11-0105 EA 48" x 60" Steel Non ReflectORIZED Traffic Sign.....	283.66	38.42
10 14 53 11-0106 EA 48" x 66" Steel Non ReflectORIZED Traffic Sign.....	316.47	44.48
10 14 53 11-0107 EA 48" x 72" Steel Non ReflectORIZED Traffic Sign.....	337.16	44.48
10 14 53 11-0108 EA 48" x 84" Steel Non ReflectORIZED Traffic Sign.....	386.61	48.53
10 14 53 11-0109 EA 48" x 96" Steel Non ReflectORIZED Traffic Sign.....	427.98	48.53
10 14 53 11-0110 EA 48" x 102" Steel Non ReflectORIZED Traffic Sign.....	448.66	48.53
10 14 53 11-0111 EA 48" x 108" Steel Non ReflectORIZED Traffic Sign.....	473.38	50.55
10 14 53 11-0112 EA 60" x 72" Steel Non ReflectORIZED Traffic Sign.....	407.29	48.53
10 14 53 11-0113 EA 72" x 144" Steel Non ReflectORIZED Traffic Sign.....	873.96	64.70
10 14 53 11-0114 EA 78" x 96" Steel Non ReflectORIZED Traffic Sign.....	638.84	50.55
<b>10 14 53 11-0115 Aluminum Non-ReflectORIZED Traffic Signs (10 14 53 11-0062)</b>		
10 14 53 11-0116 EA 6" x 12" Aluminum Non ReflectORIZED Traffic Sign.....	37.74	16.17
10 14 53 11-0117 EA 6" x 18" Aluminum Non ReflectORIZED Traffic Sign.....	40.43	16.17
10 14 53 11-0118 EA 9" x 12" Aluminum Non ReflectORIZED Traffic Sign.....	40.43	16.17
10 14 53 11-0119 EA 9" x 15" Aluminum Non ReflectORIZED Traffic Sign.....	42.45	16.17
10 14 53 11-0120 EA 9" x 18" Aluminum Non ReflectORIZED Traffic Sign.....	44.47	16.17
10 14 53 11-0121 EA 9" x 24" Aluminum Non ReflectORIZED Traffic Sign.....	50.51	17.19
10 14 53 11-0122 EA 9" x 48" Aluminum Non ReflectORIZED Traffic Sign.....	66.66	17.19
10 14 53 11-0123 EA 12" x 12" Aluminum Non ReflectORIZED Traffic Sign.....	43.12	16.17
10 14 53 11-0124 EA 12" x 18" Aluminum Non ReflectORIZED Traffic Sign.....	50.51	17.19
10 14 53 11-0125 EA 12" x 24" Aluminum Non ReflectORIZED Traffic Sign.....	55.90	17.19
10 14 53 11-0126 EA 12" x 30" Aluminum Non ReflectORIZED Traffic Sign.....	61.28	17.19
10 14 53 11-0127 EA 12" x 36" Aluminum Non ReflectORIZED Traffic Sign.....	66.66	17.19
10 14 53 11-0128 EA 18" x 18" Aluminum Non ReflectORIZED Traffic Sign.....	58.59	17.19
10 14 53 11-0129 EA 18" x 24" Aluminum Non ReflectORIZED Traffic Sign.....	66.66	17.19
10 14 53 11-0130 EA 18" x 30" Aluminum Non ReflectORIZED Traffic Sign.....	76.75	18.20
10 14 53 11-0131 EA 18" x 36" Aluminum Non ReflectORIZED Traffic Sign.....	84.82	18.20
10 14 53 11-0132 EA 18" x 48" Aluminum Non ReflectORIZED Traffic Sign.....	109.06	22.25
10 14 53 11-0133 EA 18" x 54" Aluminum Non ReflectORIZED Traffic Sign.....	117.13	22.25
10 14 53 11-0134 EA 24" x 24" Aluminum Non ReflectORIZED Traffic Sign.....	79.44	18.20
10 14 53 11-0135 EA 24" x 30" Aluminum Non ReflectORIZED Traffic Sign.....	90.20	18.20
10 14 53 11-0136 EA 24" x 36" Aluminum Non ReflectORIZED Traffic Sign.....	100.97	18.20
10 14 53 11-0137 EA 24" x 42" Aluminum Non ReflectORIZED Traffic Sign.....	119.82	22.25
10 14 53 11-0138 EA 24" x 48" Aluminum Non ReflectORIZED Traffic Sign.....	130.58	22.25
10 14 53 11-0139 EA 24" x 54" Aluminum Non ReflectORIZED Traffic Sign.....	141.34	22.25
10 14 53 11-0140 EA 24" x 60" Aluminum Non ReflectORIZED Traffic Sign.....	152.11	22.25
10 14 53 11-0141 EA 30" x 30" Aluminum Non ReflectORIZED Traffic Sign.....	103.66	18.20
10 14 53 11-0142 EA 30" x 36" Aluminum Non ReflectORIZED Traffic Sign.....	125.20	22.25
10 14 53 11-0143 EA 30" x 42" Aluminum Non ReflectORIZED Traffic Sign.....	138.65	22.25
10 14 53 11-0144 EA 30" x 48" Aluminum Non ReflectORIZED Traffic Sign.....	160.20	26.28
10 14 53 11-0145 EA 30" x 60" Aluminum Non ReflectORIZED Traffic Sign.....	195.19	30.33
10 14 53 11-0146 EA 36" x 36" Aluminum Non ReflectORIZED Traffic Sign.....	141.34	22.25
10 14 53 11-0147 EA 36" x 42" Aluminum Non ReflectORIZED Traffic Sign.....	165.58	26.28
10 14 53 11-0148 EA 36" x 48" Aluminum Non ReflectORIZED Traffic Sign.....	189.81	30.33
10 14 53 11-0149 EA 36" x 54" Aluminum Non ReflectORIZED Traffic Sign.....	205.95	30.33
10 14 53 11-0150 EA 36" x 60" Aluminum Non ReflectORIZED Traffic Sign.....	230.19	34.37
10 14 53 11-0151 EA 36" x 73" Aluminum Non ReflectORIZED Traffic Sign.....	273.26	38.42
10 14 53 11-0152 EA 36" x 78" Aluminum Non ReflectORIZED Traffic Sign.....	286.71	38.42
10 14 53 11-0153 EA 36" x 108" Aluminum Non ReflectORIZED Traffic Sign.....	379.56	44.48
10 14 53 11-0154 EA 42" x 42" Aluminum Non ReflectORIZED Traffic Sign.....	192.50	30.33
10 14 53 11-0155 EA 48" x 48" Aluminum Non ReflectORIZED Traffic Sign.....	240.95	34.37
10 14 53 11-0156 EA 48" x 54" Aluminum Non ReflectORIZED Traffic Sign.....	270.57	38.42
10 14 53 11-0157 EA 48" x 60" Aluminum Non ReflectORIZED Traffic Sign.....	292.09	38.42
10 14 53 11-0158 EA 48" x 66" Aluminum Non ReflectORIZED Traffic Sign.....	325.75	44.48
10 14 53 11-0159 EA 48" x 72" Aluminum Non ReflectORIZED Traffic Sign.....	347.27	44.48

**10 Specialties****10 10 Information Specialties****10 14 Signage**

MINOR	CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
10 14 53 11-0160	EA		48" x 84" Aluminum Non Reflectorized Traffic Sign .....	398.41	48.53
10 14 53 11-0161	EA		48" x 96" Aluminum Non Reflectorized Traffic Sign .....	441.46	48.53
10 14 53 11-0162	EA		48" x 102" Aluminum Non Reflectorized Traffic Sign .....	462.99	48.53
10 14 53 11-0163	EA		48" x 108" Aluminum Non Reflectorized Traffic Sign .....	488.55	50.55
10 14 53 11-0164	EA		60" x 72" Aluminum Non Reflectorized Traffic Sign .....	419.94	48.53
10 14 53 11-0165	EA		72" x 144" Aluminum Non Reflectorized Traffic Sign .....	904.30	64.70
10 14 53 11-0166	EA		78" x 96" Aluminum Non Reflectorized Traffic Sign .....	660.75	50.55
10 14 53 11-0167			<b>Aluminum Street Signs</b> (10 14 53 11-0001) Note: Excludes posts.		
10 14 53 11-0168			<b>Aluminum Engineer Grade Street Signs</b> (10 14 53 11-0167)		
10 14 53 11-0169	EA		6" High, Aluminum Engineer Grade Street Sign .....	65.63	8.09
10 14 53 11-0170	EA		8" High, Aluminum Engineer Grade Street Sign .....	74.36	8.09
10 14 53 11-0171	EA		9" High, Aluminum Engineer Grade Street Sign .....	80.86	8.09
10 14 53 11-0172			<b>Street Sign Accessories</b> (10 14 53 11-0167)		
10 14 53 11-0173	EA		Single Bracket And Post Cap For Street Sign .....	19.99	4.05
10 14 53 11-0174	EA		Double Bracket And Post Cap For Street Sign .....	19.99	4.05
10 14 53 11-0175			<b>Sign Posts</b> (10 14 53 11-0001) Note: Excludes sign. See CSI section 32 31 13 13-0001 for auguring of holes and backfill.		
10 14 53 11-0176			<b>U-Channel Sign Posts</b> (10 14 53 11-0175) Note: Excludes digging and concrete.		
10 14 53 11-0177			<b>Baked Enamel U-Channel Sign Posts</b> (10 14 53 11-0176)		
10 14 53 11-0178	EA		3' To 4' Baked Enamel U-Channel Sign Post Base .....	53.77	16.56
10 14 53 11-0179	EA		6' Baked Enamel U-Channel Sign Post .....	70.44	20.70
10 14 53 11-0180	EA		7' Baked Enamel U-Channel Sign Post .....	84.12	24.85
10 14 53 11-0181	EA		8' Baked Enamel U-Channel Sign Post .....	98.49	28.99
10 14 53 11-0182	EA		10' Baked Enamel U-Channel Sign Post .....	118.87	35.20
10 14 53 11-0183	EA		12' Baked Enamel U-Channel Sign Post .....	122.18	35.20
10 14 53 11-0184			<b>Galvanized Steel U-Channel Sign Posts</b> (10 14 53 11-0176)		
10 14 53 11-0185	EA		3' To 4' Galvanized Steel U-Channel Sign Post Base .....	58.03	16.56
10 14 53 11-0186	EA		6' Galvanized Steel U-Channel Sign Post .....	77.19	20.70
10 14 53 11-0187	EA		7' Galvanized Steel U-Channel Sign Post .....	99.40	24.85
10 14 53 11-0188	EA		8' Galvanized Steel U-Channel Sign Post .....	115.37	28.99
10 14 53 11-0189	EA		10' Galvanized Steel U-Channel Sign Post .....	131.16	35.20
10 14 53 11-0190	EA		12' Galvanized Steel U-Channel Sign Post .....	132.87	35.20
10 14 53 11-0191			<b>Fiberglass Or Composite Plastic U-Channel Sign Posts</b> (10 14 53 11-0176)		
10 14 53 11-0192	EA		3' To 4' Fiberglass Or Composite Plastic U-Channel Sign Post Base .....	52.77	16.56
10 14 53 11-0193	EA		6' Fiberglass Or Composite Plastic U-Channel Sign Post .....	68.26	20.70
10 14 53 11-0194	EA		7' Fiberglass Or Composite Plastic U-Channel Sign Post .....	81.49	24.85
10 14 53 11-0195	EA		8' Fiberglass Or Composite Plastic U-Channel Sign Post .....	95.35	28.99
10 14 53 11-0196	EA		10' Fiberglass Or Composite Plastic U-Channel Sign Post .....	113.17	35.20
10 14 53 11-0197	EA		12' Fiberglass Or Composite Plastic U-Channel Sign Post .....	118.80	35.20
10 14 53 11-0198			<b>Tubular Sign Posts</b> (10 14 53 11-0175) Note: Excludes digging and concrete.		
10 14 53 11-0199			<b>2-3/8" Diameter, Galvanized Steel Tubular Sign Post</b> (10 14 53 11-0198)		
10 14 53 11-0200	EA		6", 2-3/8" Diameter, Galvanized Steel Tubular Sign Post .....	77.89	20.70
10 14 53 11-0201	EA		7", 2-3/8" Diameter, Galvanized Steel Tubular Sign Post .....	92.46	24.85
10 14 53 11-0202	EA		8", 2-3/8" Diameter, Galvanized Steel Tubular Sign Post .....	109.18	28.99
10 14 53 11-0203	EA		10", 2-3/8" Diameter, Galvanized Steel Tubular Sign Post .....	140.40	35.20
10 14 53 11-0204	EA		12", 2-3/8" Diameter, Galvanized Steel Tubular Sign Post .....	151.99	35.20
10 14 53 11-0205			<b>Square Sign Posts</b> (10 14 53 11-0175) Note: Excludes digging and concrete.		
10 14 53 11-0206			<b>Galvanized Steel Square Sign Posts</b> (10 14 53 11-0205)		
10 14 53 11-0207	EA		3' To 4' Galvanized Steel Square Sign Post Base .....	58.97	16.56
10 14 53 11-0208	EA		6' Galvanized Steel Square Sign Post .....	93.19	20.70
10 14 53 11-0209	EA		7' Galvanized Steel Square Sign Post .....	109.35	24.85
10 14 53 11-0210	EA		8' Galvanized Steel Square Sign Post .....	127.55	28.99
10 14 53 11-0211	EA		10' Galvanized Steel Square Sign Post .....	155.73	35.20
10 14 53 11-0212	EA		12' Galvanized Steel Square Sign Post .....	163.82	35.20
10 14 53 11-0213			<b>Other Sign Posts And Bases</b> (10 14 53 11-0001) Note: For breakaway post systems, base posts are driven in, sign posts bolted to base post using lap splice hardware kit.		



<b>Specialties</b>			<b>10</b>
<b>Information Specialties</b>			<b>10 10</b>
<b>Signage</b>			<b>10 14</b>

MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
10 14 53 11-0214 2.5 LB/FT Breakaway Sign Posts And Base Posts (10 14 53 11-0213)		
10 14 53 11-0215 Base Posts, 2.5 LB/LF, For Breakaway Sign Posts (10 14 53 11-0214)		
10 14 53 11-0216 EA Base Post for 2.5 LB/LF Breakaway Sign Post.....	87.00	20.22
10 14 53 11-0217 EA Lap Splice Hardware For 2.5 LB/LF Breakaway Sign Post.....	54.64	16.17
10 14 53 11-0218 Breakaway Sign Posts, 2.5 LB/LF (10 14 53 11-0214)		
10 14 53 11-0219 LF 2.5 LB/LF Breakaway Sign Post.....	11.51	2.02
10 14 53 11-0220 4 LB/FT Breakaway Sign Posts And Base Posts (10 14 53 11-0213)		
10 14 53 11-0221 Base Posts, 4 LB/LF, For Breakaway Sign Posts (10 14 53 11-0220)		
10 14 53 11-0222 EA Base Post For 4 LB/LF Breakaway Sign Post.....	91.27	24.26
10 14 53 11-0223 EA Lap Splice Hardware for 4 LB/LF Breakaway Sign Post.....	54.64	16.17
10 14 53 11-0224 Breakaway Sign Posts, 4 LB/LF (10 14 53 11-0220)		
10 14 53 11-0225 LF 4 LB/LF Breakaway Sign Post.....	14.16	2.02
10 14 53 11-0226 Driven Sign Posts (10 14 53 11-0213)		
10 14 53 11-0227 Driven Posts, 2.5 LB/LF (10 14 53 11-0226)		
10 14 53 11-0228 LF 2.5 LB/LF Driven Post.....	12.32	2.83
10 14 53 11-0229 Driven Posts, 4 LB/LF (10 14 53 11-0226)		
10 14 53 11-0230 LF 4 LB/LF Driven Post.....	15.37	3.23
10 14 53 11-0231 Omni-Directional Breakaway System For Sign Posts And Light Poles (10 14 53 11-0213)		
10 14 53 11-0232 Omni-Directional Breakaway Systems For Signs (10 14 53 11-0231) Note: Break-Safe as manufactured by Trampo Industries. Tasks are organized by post type and size. Includes hinges, anchors, all associated parts and drilling.		
10 14 53 11-0233 EA Omni-Directional Breakaway System For 6" To 8" Wide Flange (Trampo B525).....	1,348.88	
10 14 53 11-0234 EA Omni-Directional Breakaway System For 10" To 21" Wide Flange (Trampo B650).....	1,437.24	
10 14 53 11-0235 EA Omni-Directional Breakaway System For Standard I Beam Or W6x9 Flange (Trampo A14 And A16).....	985.34	
10 14 53 11-0236 EA Omni-Directional Breakaway System For 3" To 4.5" Outside Diameter Pipe (Trampo A3 And A4.5).....	863.01	
10 14 53 11-0237 EA Omni-Directional Breakaway System For Square Tube (Trampo AS3 And AS4).....	978.54	
10 14 53 11-0238 EA Omni-Directional Breakaway System For U-Channels (Trampo AU4 To AU6).....	930.98	
10 14 53 11-0239 EA Omni-Directional Breakaway System For U-Channels Embedded (Trampo AUX4 To AUX6).....	1,009.12	
10 14 53 11-0240 Omni-Directional Breakaway Systems For Poles (10 14 53 11-0231) Note: Pole-Safe as Manufactured by Trampo Industries. Tasks are organized by bolt size. Includes four couplings, all associated parts, drilling and can be for new or for retro-fitting existing poles.		
10 14 53 11-0241 EA Omni-Directional Breakaway System For Poles With 5/8" Couplings.....	453.11	
10 14 53 11-0242 EA Omni-Directional Breakaway System For Poles With 3/4" Couplings.....	475.04	
10 14 53 11-0243 EA Omni-Directional Breakaway System For Poles With 1" Couplings.....	493.30	
10 14 53 11-0244 EA Omni-Directional Breakaway System For Poles With 1 1/4" Couplings.....	749.10	
10 14 53 11-0245 EA Skirt For Omni-Directional Breakaway System For Poles With Bolt Circle Diameter Of 10" To Less Than 15".....	65.77	
10 14 53 11-0246 EA Skirt For Omni-Directional Breakaway System For Poles With Bolt Circle Diameter Of 15" To 20".....	87.70	
10 14 53 11-0247 Wood Posts (10 14 53 11-0213) Note: The quantity is the total length, including the buried portion. See CSI section 32 31 13 13-0001 for augering and filling holes for bollards, 32 31 13 13-0018 for concrete fill.		
10 14 53 11-0248 LF 4" x 4" Pressure Treated Wood Sign Post.....	12.04	
10 14 53 11-0249 Sign Post Accessories (10 14 53 11-0001)		
10 14 53 11-0250 Sign Post Brackets (10 14 53 11-0249)		
10 14 53 11-0251 EA 2-3/8" Outside Diameter, Single Side Sign Bracket Set..... Note: Includes 2 single side sign post brackets	39.20	6.06
10 14 53 11-0252 EA 2-3/8" Outside Diameter, Double Side Sign Bracket Set..... Note: Includes 2 double side sign post brackets	52.75	10.11
10 14 53 11-0253 EA 4" To 12" Diameter, Buckle Bracket Set..... Note: Includes 2 stainless steel straps, 2 brackets and fastener hardware	47.52	8.09
10 14 53 11-0254 Sign Post Caps (10 14 53 11-0249)		
10 14 53 11-0255 EA 2-3/8" Diameter, Galvanized, Flat Traffic Sign Post Cap (EC-2).....	18.19	4.05
10 14 53 11-0256 Sign Post Replacement Bolts (10 14 53 11-0249)		

**10 Specialties****10 10 Information Specialties****10 14 Signage**

MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
10 14 53 11-0257 EA Signage Fasteners Replacement..... Note: Includes two 5/16" x 2" long bolts, two 5/16" nuts And four 5/16" washers	12.93	
<b>10 14 53 11-0258 Reflective Panels For "U" Channel Post</b> <small>(10 14 53 11-0249)</small>		
10 14 53 11-0259 EA 3" x 72" Reflective Panel For "U-Channel" Post..... Note: Diamond grade panel including mounting hardware.	51.98	
<b>10 14 53 11-0260 Removal Of Signs</b> <small>(10 14 53 11)</small>		
Note: Includes structural supports.		
10 14 53 11-0261 EA >4 To 10 SF Sign Area, Sign Removal .....	161.76	
10 14 53 11-0262 EA >10 To 20 SF Sign Area, Sign Removal .....	388.22	
10 14 53 11-0263 EA >20 To 40 SF Sign Area, Sign Removal .....	582.33	
10 14 53 11-0264 EA >40 To 100 SF Sign Area, Sign Removal .....	1,016.55	
<b>10 14 53 11-0265 Removal And Reinstallation Of Signs</b> <small>(10 14 53 11)</small>		
Note: Includes structural supports.		
10 14 53 11-0266 EA >4 To 10 SF Sign Area, Removal And Reinstallation Of Sign.....	246.34	
10 14 53 11-0267 EA >10 To 20 SF Sign Area, Removal And Reinstallation Of Sign.....	584.98	
10 14 53 11-0268 EA >20 SF To 40 SF Sign Area, Removal And Reinstallation Of Sign.....	875.75	
10 14 53 11-0269 EA >40 SF To 100 SF Sign Area, Removal And Reinstallation Of Sign.....	1,526.90	
10 14 53 11-0270 EA Removal And Reinstallation Of Street Sign On Post.....	93.01	
10 14 53 11-0271 EA Removal And Relocation Of Traffic Light..... Note: Excludes electrical hookup.	341.48	

**END OF SECTION 10**



Special Construction	13	13
Integrated Construction	13 40	
Lightning Protection Systems	13 46	

MINOR	CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
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## 13 Special Construction

### 13 40 Integrated Construction <sup>(13)</sup>

#### 13 46 Lightning Protection Systems <sup>(13 40)</sup>

##### 13 46 13 Lightning Protection for Structures <sup>(13 46)</sup>

13 46 13 00-0001 Lightning Protection <sup>(13 46 13)</sup>

13 46 13 00-0002 Air Terminals For Lightning Protection <sup>(13 46 13 00-0001)</sup>

13 46 13 00-0003 Copper Lightning Protection Air Terminals <sup>(13 46 13 00-0002)</sup>

13 46 13 00-0004	EA	3/8" x 10" Copper Lightning Protection Air Terminal.....	69.51	15.04
13 46 13 00-0005	EA	1/2" x 12" Copper Lightning Protection Air Terminal.....	87.00	15.04
13 46 13 00-0006	EA	5/8" x 12" Copper Lightning Protection Air Terminal.....	111.41	15.04
13 46 13 00-0007	EA	1/2" x 24" Copper Lightning Protection Air Terminal.....	124.12	15.04
13 46 13 00-0008	EA	1/2" x 60" Copper Lightning Protection Air Terminal.....	237.02	30.08

13 46 13 00-0009 Aluminum Lightning Protection Air Terminals <sup>(13 46 13 00-0002)</sup>

13 46 13 00-0010	EA	3/8" x 10" Aluminum Lightning Protection Air Terminal.....	69.99	15.04
13 46 13 00-0011	EA	1/2" x 12" Aluminum Lightning Protection Air Terminal.....	89.71	15.04
13 46 13 00-0012	EA	5/8" x 12" Aluminum Lightning Protection Air Terminal.....	112.22	15.04
13 46 13 00-0013	EA	1/2" x 24" Aluminum Lightning Protection Air Terminal.....	125.01	15.04
13 46 13 00-0014	EA	1/2" x 60" Aluminum Lightning Protection Air Terminal.....	238.83	30.08

13 46 13 00-0015 Terminal Bases For Lightning Protection <sup>(13 46 13 00-0001)</sup>

13 46 13 00-0016 Copper Lightning Protection Terminal Bases <sup>(13 46 13 00-0015)</sup>

13 46 13 00-0017	EA	Adhesive Base For Copper Lightning Protection Terminal.....	107.69	45.12
13 46 13 00-0018	EA	Bolted Base For Copper Lightning Protection Terminal.....	148.64	60.17
13 46 13 00-0019	EA	Hinged Base For Copper Lightning Protection Terminal.....	197.03	75.20
13 46 13 00-0020	EA	Side Mounted Base For Copper Lightning Protection Terminal.....	148.64	60.17
13 46 13 00-0021	EA	Offset Point Support For Copper Lightning Protection Terminal.....	156.15	60.17
13 46 13 00-0022	EA	Concealed Base Assembly For Copper Lightning Protection Terminal.....	280.89	120.33
13 46 13 00-0023	EA	36" Tripod Base For 60" Copper Lightning Protection Terminal.....	195.06	75.20
13 46 13 00-0024	EA	Intermediate Base For Copper Lightning Protection Terminal.....	107.69	45.12

13 46 13 00-0025 Aluminum Lightning Protection Terminal Bases <sup>(13 46 13 00-0015)</sup>

13 46 13 00-0026	EA	Adhesive Base For Aluminum Lightning Protection Terminal.....	105.31	45.12
13 46 13 00-0027	EA	Bolted Base For Aluminum Lightning Protection Terminal.....	149.35	60.17
13 46 13 00-0028	EA	Hinged Base For Aluminum Lightning Protection Terminal.....	197.44	75.20
13 46 13 00-0029	EA	Side Mounted Base For Aluminum Lightning Protection Terminal.....	149.72	60.17
13 46 13 00-0030	EA	Offset Point Support For Aluminum Lightning Protection Terminal.....	154.87	60.17
13 46 13 00-0031	EA	Concealed Base Assembly For Aluminum Lightning Protection Terminal.....	283.45	120.33
13 46 13 00-0032	EA	36" Tripod Base For 60" Aluminum Lightning Protection Terminal.....	189.81	75.20
13 46 13 00-0033	EA	Intermediate Base For Aluminum Lightning Protection Terminal.....	105.31	45.12

13 46 13 00-0034 Connectors <sup>(13 46 13 00-0001)</sup>

13 46 13 00-0035 Copper Cable Connectors <sup>(13 46 13 00-0034)</sup>

13 46 13 00-0036	EA	Thru Wall Cable Connector For Copper Lightning Protection System.....	216.91	75.20
13 46 13 00-0037	EA	Thru Roof Adapter Assembly For Copper Lightning Protection System.....	301.18	120.33
13 46 13 00-0038	EA	Beam Connector For Copper Lightning Protection System.....	198.39	75.20
13 46 13 00-0039	EA	Double Bolt Cable Connector For Copper Lightning Protection System.....	45.80	15.04
13 46 13 00-0040	EA	Cable To Bar Connector For Copper Lightning Protection System.....	46.19	15.04
13 46 13 00-0041	EA	Tee Connector For Copper Lightning Protection Terminal.....	141.79	45.12

13 46 13 00-0042 Aluminum Cable Connectors <sup>(13 46 13 00-0034)</sup>

13 46 13 00-0043	EA	Thru Wall Cable Connector For Aluminum Lightning Protection System.....	213.26	75.20
13 46 13 00-0044	EA	Thru Roof Adapter Assembly For Aluminum Lightning Protection System.....	304.61	120.33
13 46 13 00-0045	EA	Beam Connector For Aluminum Lightning Protection System.....	202.22	75.20
13 46 13 00-0046	EA	Double Bolt Cable Connector For Aluminum Lightning Protection System.....	46.26	15.04
13 46 13 00-0047	EA	Tee Connector For Aluminum Lightning Protection Terminal.....	137.21	45.12

13 46 13 00-0048 Bonding Plates <sup>(13 46 13 00-0001)</sup>

13 46 13 00-0049 Copper Bonding Plates <sup>(13 46 13 00-0048)</sup>

13 46 13 00-0050	EA	8" Square I Beam Bonding Plate For Copper Lightning Protection System.....	180.50	75.20
13 46 13 00-0051	EA	8" Square Purlin Bonding Plate For Copper Lightning Protection System.....	185.09	75.20
13 46 13 00-0052	EA	16" Square Bonding Plate For Copper Lightning Protection System.....	273.54	120.33

**13 Special Construction****13 40 Integrated Construction****13 46 Lightning Protection Systems**

MINOR			TOTAL DIRECT		DEMOLITION
CSI	UOM	DESCRIPTION	UNIT COST	UNIT COST	UNIT COST
13 46 13 00-0053		Aluminum Bonding Plates <small>(13 46 13 00-0048)</small>			
13 46 13 00-0054	EA	8" Square I Beam Bonding Plate For Aluminum Lightning Protection System.....	178.30		75.20
13 46 13 00-0055	EA	8" Square Purlin Bonding Plate For Aluminum Lightning Protection System.....	184.19		75.20
13 46 13 00-0056	EA	16" Square Bonding Plate For Aluminum Lightning Protection System.....	268.36		120.33
13 46 13 00-0057		Cable Supports <small>(13 46 13 00-0001)</small>			
13 46 13 00-0058		Copper Cable Supports <small>(13 46 13 00-0057)</small>			
13 46 13 00-0059	EA	Loop Fastener, Copper Cable Supports For Lightning Protection System.....	34.00		15.04
13 46 13 00-0060	EA	Adhesive Cable Holder, Copper Cable Support For Lightning Protection System.....	34.55		15.04
13 46 13 00-0061		Aluminum Cable Supports <small>(13 46 13 00-0057)</small>			
13 46 13 00-0062	EA	Loop Fastener, Aluminum Cable Supports For Lightning Protection System.....	33.57		15.04
13 46 13 00-0063	EA	Adhesive Cable Holder, Aluminum Cable Support For Lightning Protection System.....	33.39		15.04
13 46 13 00-0064		Bonding Straps <small>(13 46 13 00-0001)</small>			
13 46 13 00-0065		Copper Bonding Straps <small>(13 46 13 00-0064)</small>			
13 46 13 00-0066	EA	3/4" x 9-1/2" Flex Braided Strap For Copper Lightning Protection System.....	93.90		45.12
13 46 13 00-0067		Aluminum Bonding Straps <small>(13 46 13 00-0064)</small>			
13 46 13 00-0068	EA	3/4" x 9-1/2" Flex Braided Strap For Aluminum Lightning Protection System.....	92.79		45.12
13 46 13 00-0069		Accessories For Lightning Protection <small>(13 46 13 00-0001)</small>			
13 46 13 00-0070		Copper Adapters <small>(13 46 13 00-0069)</small>			
13 46 13 00-0071	EA	Swivel Adapters For Copper Lightning Protection System.....	32.39		7.52
13 46 13 00-0072		Aluminum Adapters <small>(13 46 13 00-0069)</small>			
13 46 13 00-0073	EA	Swivel Adapters For Aluminum Lightning Protection System.....	36.04		7.52
13 46 13 00-0074	EA	Floor Ground Receptacle For Aluminum Lightning Protection System.....	218.82		75.20

**END OF SECTION 13**





	<b>Electrical</b>	<b>26</b>	
	<b>Operation and Maintenance of Electrical Systems</b>	<b>26 01</b>	<b>26</b>
	<b>Operation and Maintenance of Low-Voltage Electrical Distribution</b>	<b>26 01 20</b>	

MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
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## 26 Electrical

Note: Termination costs are included with all electrical equipment, panel boards, fixtures and devices. Terminations are not included with patch panels. Electrical equipment and lighting shall conform to California Title 24.

### 26 01 Operation and Maintenance of Electrical Systems <sup>(26)</sup>

#### 26 01 20 Operation and Maintenance of Low-Voltage Electrical Distribution <sup>(26 01)</sup>

##### 26 01 20 91 Low-Voltage Electrical Distribution Restoration <sup>(26 01 20)</sup>

26 01 20 91-0001	Lock Out/Tag Out Devices <sup>(26 01 20 91)</sup>		
	Note: Includes following OSHA procedures and completing Owner's paperwork. Excludes circuit tracing.		
26 01 20 91-0002	EA Lock Out/Tag Out Local Disconnect .....	54.22	
	Note: Excludes tag or padlock See CSI section 26 01 20 91-0004 for padlock, 26 01 20 91-0005 for tag(s).		
26 01 20 91-0003	EA Lock Out/Tag Out Breaker Or Motor Starter .....	54.22	
	Note: Excludes tag or padlock See CSI section 26 01 20 91-0004 for padlock, 26 01 20 91-0005 for tag(s).		
26 01 20 91-0004	EA Lock Out Padlock Device.....	15.06	
	Note: Includes the installation and removal of pad lock when required		
26 01 20 91-0005	EA Lock Out Tags .....	5.32	
	Note: Includes filling out tag information, installation and removal of identifying tags.		
26 01 20 91-0006	Existing Circuit Tracing <sup>(26 01 20 91)</sup>		
26 01 20 91-0007	EA Motors, Disconnects And Other Single Source Devices, Existing Circuit Tracing Per Device.....	31.34	
26 01 20 91-0008	EA Lighting, Existing Circuit Tracing Per Circuit.....	31.34	

#### 26 01 30 Operation and Maintenance of Facility Electrical Power Generating and Storing Equipment <sup>(26 01)</sup>

##### 26 01 30 91 Facility Electrical Power Generating and Storing Equipment Restoration <sup>(26 01 30)</sup>

26 01 30 91-0001	Emergency Generator Permits <sup>(26 01 30 91)</sup>		
26 01 30 91-0002	Air Pollution Control Board <sup>(26 01 30 91-0001)</sup>		
26 01 30 91-0003	EA APCD Permit To Construct And Operate Emergency Generator.....	4,654.79	

## 26 05 Common Work Results for Electrical <sup>(26)</sup>

### 26 05 19 Low-Voltage Electrical Power Conductors and Cables <sup>(26 05)</sup>

#### 26 05 19 16 Low-Voltage, Single-and Multi-Conductor Cables <sup>(26 05 19)</sup>

26 05 19 16-0001	Cable Installation Methods <sup>(26 05 19 16)</sup>		
26 05 19 16-0002	Pull Cord <sup>(26 05 19 16-0001)</sup>		
	Note: Left in conduit for others to pull cable. Not to be used when contractor has priced new wire in a conduit. Priced when owner wants a pull cord left in a conduit for owner to pull wire at a later time.		
26 05 19 16-0003	LF Pull String Installed To Remain In Place, In Existing Conduit.....	0.47	
26 05 19 16-0004	LF Pull String Installed To Remain In Place, In New Conduits .....	0.25	
26 05 19 16-0005	LF 1/4" Nylon Pull Cord Installed To Remain In Place, In Existing Conduit.....	0.77	
26 05 19 16-0006	LF 1/4" Nylon Pull Cord Installed To Remain In Place, In New Conduits.....	0.47	
26 05 19 16-0007	Wire and Cable <sup>(26 05 19 16)</sup>		
	Note: Pulled in conduit except as noted. Includes pull wires, pulling branch circuit conductors, testing, and splicing (#8 and lighter). All conductors are copper except as otherwise noted. No special set-up is required. For tasks installed in conduit, tasks exclude conduit. Excludes terminations. See CSI section 26 05 33 13-0032 for various conduit types.		
26 05 19 16-0008	600 Volt Wire <sup>(26 05 19 16-0007)</sup>		
26 05 19 16-0009	Single Solid Conductor, Copper <sup>(26 05 19 16-0008)</sup>		
26 05 19 16-0010	MLF #14 AWG, Type THHN-THWN, 600 Volt, Copper, Single Solid Cable, Installed In Conduit.....	824.01	333.56
26 05 19 16-0011	MLF #12 AWG, Type THHN-THWN, 600 Volt, Copper, Single Solid Cable, Installed In Conduit.....	1,030.10	392.38
26 05 19 16-0012	MLF #10 AWG, Type THHN-THWN, 600 Volt, Copper, Single Solid Cable, Installed In Conduit.....	1,272.34	479.79
26 05 19 16-0013	MLF #14 AWG, Type XHHW, 600 Volt, Copper, Single Solid Cable, Installed In Conduit.....	1,076.39	333.56
26 05 19 16-0014	MLF #12 AWG, Type XHHW, 600 Volt, Copper, Single Solid Cable, Installed In Conduit.....	1,302.78	392.38
26 05 19 16-0015	MLF #10 AWG, Type XHHW, 600 Volt, Copper, Single Solid Cable, Installed In Conduit.....	1,565.76	479.79
26 05 19 16-0016	Underground Feeder And Branch Circuit Suitable, Single Stranded Copper <sup>(26 05 19 16-0008)</sup>		
	Note: Direct bury.		
26 05 19 16-0017	MLF #14 AWG, Type THHN-THWN, 600 Volt, Underground Feeder And Branch Circuits, Single Stranded Copper Cable.....	848.49	

**26 Electrical****26 05 Common Work Results for Electrical****26 05 19 Low-Voltage Electrical Power Conductors and Cables**

MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
26 05 19 16-0018 MLF #12 AWG, Type THHN-THWN, 600 Volt, Underground Feeder And Branch Circuits, Single Stranded Copper Cable.....	1,055.39	
26 05 19 16-0019 MLF #10 AWG, Type THHN-THWN, 600 Volt, Underground Feeder And Branch Circuits, Single Stranded Copper Cable.....	1,308.73	
26 05 19 16-0020 MLF #8 AWG, Type THHN-THWN, 600 Volt, Underground Feeder And Branch Circuits, Single Stranded Copper Cable.....	1,840.38	
26 05 19 16-0021 MLF #6 AWG, Type THHN-THWN, 600 Volt, Underground Feeder And Branch Circuits, Single Stranded Copper Cable.....	2,509.53	
26 05 19 16-0022 MLF #4 AWG, Type THHN-THWN, 600 Volt, Underground Feeder And Branch Circuits, Single Stranded Copper Cable.....	3,324.35	
26 05 19 16-0023 MLF #2 AWG, Type THHN-THWN, 600 Volt, Underground Feeder And Branch Circuits, Single Stranded Copper Cable.....	4,756.28	
26 05 19 16-0024 MLF #1 AWG, Type THHN-THWN, 600 Volt, Underground Feeder And Branch Circuits, Single Stranded Copper Cable.....	5,671.54	
26 05 19 16-0025 MLF 1/0 AWG, Type THHN-THWN, 600 Volt, Underground Feeder And Branch Circuits, Single Stranded Copper Cable.....	6,598.51	
26 05 19 16-0026 MLF 2/0 AWG, Type THHN-THWN, 600 Volt, Underground Feeder And Branch Circuits, Single Stranded Copper Cable.....	7,493.62	
26 05 19 16-0027 MLF 3/0 AWG, Type THHN-THWN, 600 Volt, Underground Feeder And Branch Circuits, Single Stranded Copper Cable.....	8,902.57	
26 05 19 16-0028 MLF 4/0 AWG, Type THHN-THWN, 600 Volt, Underground Feeder And Branch Circuits, Single Stranded Copper Cable.....	10,617.53	
26 05 19 16-0029 MLF 250 MCM, Type THHN-THWN, 600 Volt, Underground Feeder And Branch Circuits, Single Stranded Copper Cable.....	12,474.05	
26 05 19 16-0030 MLF 300 MCM, Type THHN-THWN, 600 Volt, Underground Feeder And Branch Circuits, Single Stranded Copper Cable.....	14,408.99	
26 05 19 16-0031 MLF 350 MCM, Type THHN-THWN, 600 Volt, Underground Feeder And Branch Circuits, Single Stranded Copper Cable.....	16,489.89	
26 05 19 16-0032 MLF 400 MCM, Type THHN-THWN, 600 Volt, Underground Feeder And Branch Circuits, Single Stranded Copper Cable.....	18,497.15	
26 05 19 16-0033 MLF 500 MCM, Type THHN-THWN, 600 Volt, Underground Feeder And Branch Circuits, Single Stranded Copper Cable.....	21,986.28	
26 05 19 16-0034 MLF 600 MCM, Type THHN-THWN, 600 Volt, Underground Feeder And Branch Circuits, Single Stranded Copper Cable.....	26,449.78	
26 05 19 16-0035 MLF 750 MCM, Type THHN-THWN, 600 Volt, Underground Feeder And Branch Circuits, Single Stranded Copper Cable.....	41,908.83	
26 05 19 16-0036 MLF #2 AWG, Type EPR, 600 Volt, Underground Feeder And Branch Circuits, Single Stranded Copper Cable.....	7,232.50	
26 05 19 16-0037 MLF 1/0 AWG, Type EPR, 600 Volt, Underground Feeder And Branch Circuits, Single Stranded Copper Cable.....	10,400.42	
26 05 19 16-0038 MLF 2/0 AWG, Type EPR, 600 Volt, Underground Feeder And Branch Circuits, Single Stranded Copper Cable.....	11,545.56	
26 05 19 16-0039 MLF 3/0 AWG, Type EPR, 600 Volt, Underground Feeder And Branch Circuits, Single Stranded Copper Cable.....	13,117.33	
26 05 19 16-0040 MLF 4/0 AWG, Type EPR, 600 Volt, Underground Feeder And Branch Circuits, Single Stranded Copper Cable.....	14,580.18	
26 05 19 16-0041 MLF 250 MCM, Type EPR, 600 Volt, Underground Feeder And Branch Circuits, Single Stranded Copper Cable.....	15,710.36	
26 05 19 16-0042 MLF 350 MCM, Type EPR, 600 Volt, Underground Feeder And Branch Circuits, Single Stranded Copper Cable.....	22,575.74	
26 05 19 16-0043 MLF 400 MCM, Type EPR, 600 Volt, Underground Feeder And Branch Circuits, Single Stranded Copper Cable.....	24,546.23	
26 05 19 16-0044 MLF 500 MCM, Type EPR, 600 Volt, Underground Feeder And Branch Circuits, Single Stranded Copper Cable.....	28,011.83	
<b>26 05 19 16-0045 600 Volt, Feeder Wire, Single Stranded Copper (26 05 19 16-0008)</b>		
26 05 19 16-0046 MLF #12 AWG, Type THW, 600 Volt, Copper, Single Stranded Cable, Installed In Conduit.....	1,132.52	333.69
26 05 19 16-0047 MLF #10 AWG, Type THW, 600 Volt, Copper, Single Stranded Cable, Installed In Conduit.....	1,424.63	392.38
26 05 19 16-0048 MLF #8 AWG, Type THW, 600 Volt, Copper, Single Stranded Cable, Installed In Conduit.....	2,042.09	533.66
26 05 19 16-0049 MLF #6 AWG, Type THW, 600 Volt, Copper, Single Stranded Cable, Installed In Conduit.....	2,843.01	638.81
26 05 19 16-0050 MLF #4 AWG, Type THW, 600 Volt, Copper, Single Stranded Cable, Installed In Conduit.....	3,838.27	744.76
26 05 19 16-0051 MLF #2 AWG, Type THW, 600 Volt, Copper, Single Stranded Cable, Installed In Conduit.....	5,565.07	959.44
26 05 19 16-0052 MLF #1 AWG, Type THW, 600 Volt, Copper, Single Stranded Cable, Installed In Conduit.....	6,694.38	1,067.46
26 05 19 16-0053 MLF 1/0 AWG, Type THW, 600 Volt, Copper, Single Stranded Cable, Installed In Conduit.....	7,793.32	1,202.70
26 05 19 16-0054 MLF 2/0 AWG, Type THW, 600 Volt, Copper, Single Stranded Cable, Installed In Conduit.....	8,895.78	1,334.23
26 05 19 16-0055 MLF 3/0 AWG, Type THW, 600 Volt, Copper, Single Stranded Cable, Installed In Conduit.....	10,683.75	1,498.20
26 05 19 16-0056 MLF 4/0 AWG, Type THW, 600 Volt, Copper, Single Stranded Cable, Installed In Conduit.....	12,834.11	1,652.81
26 05 19 16-0057 MLF 250 MCM, Type THW, 600 Volt, Copper, Single Stranded Cable, Installed In Conduit.....	15,173.32	1,816.91
26 05 19 16-0058 MLF 300 MCM, Type THW, 600 Volt, Copper, Single Stranded Cable, Installed In Conduit.....	17,617.17	1,985.95
26 05 19 16-0059 MLF 350 MCM, Type THW, 600 Volt, Copper, Single Stranded Cable, Installed In Conduit.....	20,255.77	2,134.80
26 05 19 16-0060 MLF 400 MCM, Type THW, 600 Volt, Copper, Single Stranded Cable, Installed In Conduit.....	22,796.14	2,372.01
26 05 19 16-0061 MLF 500 MCM, Type THW, 600 Volt, Copper, Single Stranded Cable, Installed In Conduit.....	27,313.69	2,614.04
26 05 19 16-0062 MLF #14 AWG, XLPE-USE-RHH-RHW, 600 Volt, Copper, Single Stranded Cable, Installed In Conduit.....	1,147.28	220.31
For EPR Insulation, Add	48.40	
For Chlorosulfonated Polyethylene (CSPE) Synthetic Rubber Jacket, Add	112.93	
26 05 19 16-0063 MLF #12 AWG, XLPE-USE-RHH-RHW, 600 Volt, Copper, Single Stranded Cable, Installed In Conduit.....	1,290.98	243.95
For EPR Insulation, Add	49.34	
For Chlorosulfonated Polyethylene (CSPE) Synthetic Rubber Jacket, Add	115.12	
26 05 19 16-0064 MLF #10 AWG, XLPE-USE-RHH-RHW, 600 Volt, Copper, Single Stranded Cable, Installed In Conduit.....	1,579.71	304.97
For EPR Insulation, Add	72.03	
For Chlorosulfonated Polyethylene (CSPE) Synthetic Rubber Jacket, Add	168.08	
26 05 19 16-0065 MLF #8 AWG, XLPE-USE-RHH-RHW, 600 Volt, Copper, Single Stranded Cable, Installed In Conduit.....	2,163.84	485.15
For EPR Insulation, Add	118.42	
For Chlorosulfonated Polyethylene (CSPE) Synthetic Rubber Jacket, Add	276.32	
26 05 19 16-0066 MLF #6 AWG, XLPE-USE-RHH-RHW, 600 Volt, Copper, Single Stranded Cable, Installed In Conduit.....	2,975.86	582.18
For EPR Insulation, Add	198.99	
For Chlorosulfonated Polyethylene (CSPE) Synthetic Rubber Jacket, Add	464.32	
26 05 19 16-0067 MLF #4 AWG, XLPE-USE-RHH-RHW, 600 Volt, Copper, Single Stranded Cable, Installed In Conduit.....	4,068.57	675.91
For EPR Insulation, Add	301.05	
For Chlorosulfonated Polyethylene (CSPE) Synthetic Rubber Jacket, Add	702.46	
26 05 19 16-0068 MLF #3 AWG, XLPE-USE-RHH-RHW, 600 Volt, Copper, Single Stranded Cable, Installed In Conduit.....	4,642.98	773.63
For EPR Insulation, Add	345.99	
For Chlorosulfonated Polyethylene (CSPE) Synthetic Rubber Jacket, Add	807.30	
26 05 19 16-0069 MLF #2 AWG, XLPE-USE-RHH-RHW, 600 Volt, Copper, Single Stranded Cable, Installed In Conduit.....	5,870.97	871.34
For EPR Insulation, Add	488.95	
For Chlorosulfonated Polyethylene (CSPE) Synthetic Rubber Jacket, Add	1,140.89	



MINOR CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
26 05 19 16-0070	MLF	#1 AWG, XLPE-USE-RHH-RHW, 600 Volt, Copper, Single Stranded Cable, Installed In Conduit..... For EPR Insulation, Add For Chlorosulfonated Polyethylene (CSPE) Synthetic Rubber Jacket, Add	7,290.53 660.66 1,541.53	970.44
26 05 19 16-0071	MLF	1/0 AWG, XLPE-USE-RHH-RHW, 600 Volt, Copper, Single Stranded Cable, Installed In Conduit..... For EPR Insulation, Add For Chlorosulfonated Polyethylene (CSPE) Synthetic Rubber Jacket, Add	8,799.23 825.11 1,925.27	1,094.82
26 05 19 16-0072	MLF	2/0 AWG, XLPE-USE-RHH-RHW, 600 Volt, Copper, Single Stranded Cable, Installed In Conduit..... For EPR Insulation, Add For Chlorosulfonated Polyethylene (CSPE) Synthetic Rubber Jacket, Add	10,625.36 1,037.19 2,420.10	1,214.11
26 05 19 16-0073	MLF	3/0 AWG, XLPE-USE-RHH-RHW, 600 Volt, Copper, Single Stranded Cable, Installed In Conduit..... For EPR Insulation, Add For Chlorosulfonated Polyethylene (CSPE) Synthetic Rubber Jacket, Add	12,763.70 1,296.09 3,024.21	1,355.39
26 05 19 16-0074	MLF	4/0 AWG, XLPE-USE-RHH-RHW, 600 Volt, Copper, Single Stranded Cable, Installed In Conduit..... For EPR Insulation, Add For Chlorosulfonated Polyethylene (CSPE) Synthetic Rubber Jacket, Add	14,402.93 1,480.13 3,453.64	1,506.99
26 05 19 16-0075	MLF	250 MCM, XLPE-USE-RHH-RHW, 600 Volt, Copper, Single Stranded Cable, Installed In Conduit..... For EPR Insulation, Add For Chlorosulfonated Polyethylene (CSPE) Synthetic Rubber Jacket, Add	15,332.14 1,557.67 3,634.55	1,652.81
26 05 19 16-0076	MLF	300 MCM, XLPE-USE-RHH-RHW, 600 Volt, Copper, Single Stranded Cable, Installed In Conduit..... For EPR Insulation, Add For Chlorosulfonated Polyethylene (CSPE) Synthetic Rubber Jacket, Add	18,115.61 1,913.34 4,464.46	1,816.91
26 05 19 16-0077	MLF	350 MCM, XLPE-USE-RHH-RHW, 600 Volt, Copper, Single Stranded Cable, Installed In Conduit..... For EPR Insulation, Add For Chlorosulfonated Polyethylene (CSPE) Synthetic Rubber Jacket, Add	20,218.59 2,166.94 5,056.19	1,926.17
26 05 19 16-0078	MLF	400 MCM, XLPE-USE-RHH-RHW, 600 Volt, Copper, Single Stranded Cable, Installed In Conduit..... For EPR Insulation, Add For Chlorosulfonated Polyethylene (CSPE) Synthetic Rubber Jacket, Add	22,667.09 2,472.37 5,768.86	2,152.81
26 05 19 16-0079	MLF	500 MCM, XLPE-USE-RHH-RHW, 600 Volt, Copper, Single Stranded Cable, Installed In Conduit..... For EPR Insulation, Add For Chlorosulfonated Polyethylene (CSPE) Synthetic Rubber Jacket, Add	25,924.22 2,899.09 6,764.54	2,394.28
26 05 19 16-0080	MLF	600 MCM, XLPE-USE-RHH-RHW, 600 Volt, Copper, Single Stranded Cable, Installed In Conduit..... For EPR Insulation, Add For Chlorosulfonated Polyethylene (CSPE) Synthetic Rubber Jacket, Add	30,381.75 3,485.26 8,132.27	2,491.04
26 05 19 16-0081	MLF	750 MCM, XLPE-USE-RHH-RHW, 600 Volt, Copper, Single Stranded Cable, Installed In Conduit..... For EPR Insulation, Add For Chlorosulfonated Polyethylene (CSPE) Synthetic Rubber Jacket, Add	49,464.27 6,223.94 14,522.54	2,587.65
26 05 19 16-0082	MLF	1,000 MCM, XLPE-USE-RHH-RHW, 600 Volt, Copper, Single Stranded Cable, Installed In Conduit..... For EPR Insulation, Add For Chlorosulfonated Polyethylene (CSPE) Synthetic Rubber Jacket, Add	62,356.70 8,075.35 18,842.47	2,764.95
26 05 19 16-0083	MLF	#16 AWG, Type SFF-2, 600 Volt, Copper, Single Stranded Cable, Installed In Conduit .....	1,960.24	494.49
26 05 19 16-0084	MLF	#14 AWG, Type SFF-2, 600 Volt, Copper, Single Stranded Cable, Installed In Conduit .....	2,448.76	549.74
26 05 19 16-0085	MLF	#12 AWG, Type SFF-2, 600 Volt, Copper, Single Stranded Cable, Installed In Conduit .....	3,072.32	660.24
26 05 19 16-0086	MLF	#10 AWG, Type SFF-2, 600 Volt, Copper, Single Stranded Cable, Installed In Conduit .....	3,641.99	769.36
26 05 19 16-0087	MLF	#8 AWG, Type SFF-2, 600 Volt, Copper, Single Stranded Cable, Installed In Conduit .....	5,414.33	823.80
26 05 19 16-0088	MLF	#18 AWG, Type TFFN, 600 Volt, Copper, Single Stranded Cable, Installed In Conduit .....	647.08	274.87
26 05 19 16-0089	MLF	#16 AWG, Type TFFN, 600 Volt, Copper, Single Stranded Cable, Installed In Conduit .....	806.99	302.36
26 05 19 16-0090	MLF	#14 AWG, Type THHN-THWN, 600 Volt, Copper, Single Stranded Cable, Installed In Conduit .....	840.81	220.45
26 05 19 16-0091	MLF	#12 AWG, Type THHN-THWN, 600 Volt, Copper, Single Stranded Cable, Installed In Conduit .....	1,044.40	262.78
26 05 19 16-0092	MLF	#10 AWG, Type THHN-THWN, 600 Volt, Copper, Single Stranded Cable, Installed In Conduit .....	1,292.26	330.54
26 05 19 16-0093	MLF	#8 AWG, Type THHN-THWN, 600 Volt, Copper, Single Stranded Cable, Installed In Conduit .....	1,811.64	435.67
26 05 19 16-0094	MLF	#6 AWG, Type THHN-THWN, 600 Volt, Copper, Single Stranded Cable, Installed In Conduit .....	2,462.02	526.11
26 05 19 16-0095	MLF	#4 AWG, Type THHN-THWN, 600 Volt, Copper, Single Stranded Cable, Installed In Conduit .....	3,251.13	621.76
26 05 19 16-0096	MLF	#3 AWG, Type THHN-THWN, 600 Volt, Copper, Single Stranded Cable, Installed In Conduit .....	3,884.58	703.81
26 05 19 16-0097	MLF	#2 AWG, Type THHN-THWN, 600 Volt, Copper, Single Stranded Cable, Installed In Conduit .....	4,641.05	788.19
26 05 19 16-0098	MLF	#1 AWG, Type THHN-THWN, 600 Volt, Copper, Single Stranded Cable, Installed In Conduit .....	5,525.82	889.49
26 05 19 16-0099	MLF	1/0 AWG, Type THHN-THWN, 600 Volt, Copper, Single Stranded Cable, Installed In Conduit .....	6,428.28	974.01
26 05 19 16-0100	MLF	2/0 AWG, Type THHN-THWN, 600 Volt, Copper, Single Stranded Cable, Installed In Conduit .....	7,293.85	1,076.40
26 05 19 16-0101	MLF	3/0 AWG, Type THHN-THWN, 600 Volt, Copper, Single Stranded Cable, Installed In Conduit .....	8,648.80	1,138.52
26 05 19 16-0102	MLF	4/0 AWG, Type THHN-THWN, 600 Volt, Copper, Single Stranded Cable, Installed In Conduit .....	10,301.74	1,280.91
26 05 19 16-0103	MLF	250 MCM, Type THHN-THWN, 600 Volt, Copper, Single Stranded Cable, Installed In Conduit .....	12,089.48	1,362.68
26 05 19 16-0104	MLF	300 MCM, Type THHN-THWN, 600 Volt, Copper, Single Stranded Cable, Installed In Conduit .....	13,951.91	1,543.27
26 05 19 16-0105	MLF	350 MCM, Type THHN-THWN, 600 Volt, Copper, Single Stranded Cable, Installed In Conduit .....	15,953.36	1,707.92
26 05 19 16-0106	MLF	400 MCM, Type THHN-THWN, 600 Volt, Copper, Single Stranded Cable, Installed In Conduit .....	17,884.68	1,754.65
26 05 19 16-0107	MLF	500 MCM, Type THHN-THWN, 600 Volt, Copper, Single Stranded Cable, Installed In Conduit .....	21,227.28	1,856.35
26 05 19 16-0108	MLF	600 MCM, Type THHN-THWN, 600 Volt, Copper, Single Stranded Cable, Installed In Conduit .....	26,312.35	2,184.55
26 05 19 16-0109	MLF	750 MCM, Type THHN-THWN, 600 Volt, Copper, Single Stranded Cable, Installed In Conduit .....	40,266.56	2,587.65
26 05 19 16-0110	MLF	1,000 MCM, Type THHN-THWN, 600 Volt, Copper, Single Stranded Cable, Installed In Conduit .....	48,237.13	3,124.20
26 05 19 16-0111		Non-Metallic Sheathed Cable (26 05 19 16-0008)		
26 05 19 16-0112		Direct Burial Cable (26 05 19 16-0111) Note: Excludes trench and backfill. For NM, NM-B, NMC-B and NMS-B. Copper.		
26 05 19 16-0113	MLF	#14 AWG, 2 Conductors, 600 Volt, Type UF Copper, Direct Burial Non-Metallic Sheathed Cable, Placed In Trench .....	3,116.63	
26 05 19 16-0114	MLF	#14 AWG, 3 Conductors, 600 Volt, Type UF Copper, Direct Burial Non-Metallic Sheathed Cable, Placed In Trench .....	4,066.46	
26 05 19 16-0115	MLF	#12 AWG, 2 Conductors, 600 Volt, Type UF Copper, Direct Burial Non-Metallic Sheathed Cable, Placed In Trench .....	3,955.64	
26 05 19 16-0116	MLF	#12 AWG, 3 Conductors, 600 Volt, Type UF Copper, Direct Burial Non-Metallic Sheathed Cable, Placed In Trench .....	5,079.42	
26 05 19 16-0117	MLF	#10 AWG, 2 Conductors, 600 Volt, Type UF Copper, Direct Burial Non-Metallic Sheathed Cable, Placed In Trench .....	4,305.58	

**26 Electrical****26 05 Common Work Results for Electrical****26 05 19 Low-Voltage Electrical Power Conductors and Cables**

MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
26 05 19 16-0118 MLF #10 AWG, 3 Conductors, 600 Volt, Type UF Copper, Direct Burial Non-Metallic Sheathed Cable, Placed In Trench .....	6,183.11	
26 05 19 16-0119 MLF #8 AWG, 2 Conductors, 600 Volt, Type UF Copper, Direct Burial Non-Metallic Sheathed Cable, Placed In Trench.....	6,684.18	
26 05 19 16-0120 MLF #8 AWG, 3 Conductors, 600 Volt, Type UF Copper, Direct Burial Non-Metallic Sheathed Cable, Placed In Trench.....	8,555.29	
26 05 19 16-0121 MLF #6 AWG, 2 Conductors, 600 Volt, Type UF Copper, Direct Burial Non-Metallic Sheathed Cable, Placed In Trench.....	8,431.63	
26 05 19 16-0122 MLF #6 AWG, 3 Conductors, 600 Volt, Type UF Copper, Direct Burial Non-Metallic Sheathed Cable, Placed In Trench.....	11,102.05	
<b>26 05 19 16-0123 Single Conductor Installed On Poles (26 05 19 16-0007)</b>		
<b>26 05 19 16-0124 Bare Stranded Conductor (26 05 19 16-0123)</b>		
26 05 19 16-0125 MLF #12 AWG, Single Conductor, Bare Stranded Copper Cable, Installed On Poles.....	1,697.93	573.77
26 05 19 16-0126 MLF #10 AWG, Single Conductor, Bare Stranded Copper Cable, Installed On Poles.....	1,978.54	625.40
26 05 19 16-0127 MLF #8 AWG, Single Conductor, Bare Stranded Copper Cable, Installed On Poles.....	2,260.80	677.66
26 05 19 16-0128 MLF #6 AWG, Single Conductor, Bare Stranded Copper Cable, Installed On Poles.....	2,746.59	730.23
26 05 19 16-0129 MLF #4 AWG, Single Conductor, Bare Stranded Copper Cable, Installed On Poles.....	3,315.32	782.96
26 05 19 16-0130 MLF #2 AWG, Single Conductor, Bare Stranded Copper Cable, Installed On Poles.....	4,706.05	939.12
26 05 19 16-0131 MLF #1 AWG, Single Conductor, Bare Stranded Copper Cable, Installed On Poles.....	5,399.63	1,043.18
26 05 19 16-0132 MLF 1/0 AWG, Single Conductor, Bare Stranded Copper Cable, Installed On Poles.....	6,151.47	1,145.34
26 05 19 16-0133 MLF 2/0 AWG, Single Conductor, Bare Stranded Copper Cable, Installed On Poles.....	8,208.72	1,358.46
26 05 19 16-0134 MLF 3/0 AWG, Single Conductor, Bare Stranded Copper Cable, Installed On Poles.....	9,941.16	1,561.87
26 05 19 16-0135 MLF 4/0 AWG, Single Conductor, Bare Stranded Copper Cable, Installed On Poles.....	10,691.82	1,770.12
26 05 19 16-0136 MLF 250 MCM, Single Conductor, Bare Stranded Copper Cable, Installed On Poles.....	13,498.01	2,086.18
26 05 19 16-0137 MLF 300 MCM, Single Conductor, Bare Stranded Copper Cable, Installed On Poles.....	13,821.90	2,196.03
26 05 19 16-0138 MLF 350 MCM, Single Conductor, Bare Stranded Copper Cable, Installed On Poles.....	17,154.49	2,299.77
26 05 19 16-0139 MLF 400 MCM, Single Conductor, Bare Stranded Copper Cable, Installed On Poles.....	18,923.23	2,394.12
26 05 19 16-0140 MLF 500 MCM, Single Conductor, Bare Stranded Copper Cable, Installed On Poles.....	21,992.53	2,496.29
<b>26 05 19 16-0141 Insulated Stranded Conductor (26 05 19 16-0123)</b>		
26 05 19 16-0142 MLF #12 AWG, Single Conductor, Insulated Stranded Copper Cable, Installed On Poles.....	1,825.00	573.77
26 05 19 16-0143 MLF #10 AWG, Single Conductor, Insulated Stranded Copper Cable, Installed On Poles.....	2,142.49	625.40
26 05 19 16-0144 MLF #8 AWG, Single Conductor, Insulated Stranded Copper Cable, Installed On Poles.....	2,584.46	677.66
26 05 19 16-0145 MLF #6 AWG, Single Conductor, Insulated Stranded Copper Cable, Installed On Poles.....	2,807.85	730.23
26 05 19 16-0146 MLF #4 AWG, Single Conductor, Insulated Stranded Copper Cable, Installed On Poles.....	3,408.79	782.96
26 05 19 16-0147 MLF #2 AWG, Single Conductor, Insulated Stranded Copper Cable, Installed On Poles.....	4,571.07	939.12
26 05 19 16-0148 MLF #1 AWG, Single Conductor, Insulated Stranded Copper Cable, Installed On Poles.....	5,386.16	1,043.18
26 05 19 16-0149 MLF 1/0 AWG, Single Conductor, Insulated Stranded Copper Cable, Installed On Poles.....	6,339.41	1,145.34
26 05 19 16-0150 MLF 2/0 AWG, Single Conductor, Insulated Stranded Copper Cable, Installed On Poles.....	7,631.56	1,358.46
26 05 19 16-0151 MLF 3/0 AWG, Single Conductor, Insulated Stranded Copper Cable, Installed On Poles.....	9,136.66	1,561.87
26 05 19 16-0152 MLF 4/0 AWG, Single Conductor, Insulated Stranded Copper Cable, Installed On Poles.....	10,754.58	1,770.12
26 05 19 16-0153 MLF 250 MCM, Single Conductor, Insulated Stranded Copper Cable, Installed On Poles.....	13,114.01	2,086.18
26 05 19 16-0154 MLF 300 MCM, Single Conductor, Insulated Stranded Copper Cable, Installed On Poles.....	14,838.35	2,196.03
26 05 19 16-0155 MLF 350 MCM, Single Conductor, Insulated Stranded Copper Cable, Installed On Poles.....	16,247.78	2,299.77
26 05 19 16-0156 MLF 400 MCM, Single Conductor, Insulated Stranded Copper Cable, Installed On Poles.....	18,171.44	2,394.12
26 05 19 16-0157 MLF 500 MCM, Single Conductor, Insulated Stranded Copper Cable, Installed On Poles.....	20,393.50	2,496.29
<b>26 05 26 Grounding and Bonding for Electrical Systems (26 05)</b>		
<b>26 05 26 00-0001 Conductors, Straps And Conduit Jumpers (26 05 26)</b>		
<b>26 05 26 00-0002 Single Conductor (26 05 26 00-0001)</b>		
<b>26 05 26 00-0003 Copper Bare Stranded Conductors (26 05 26 00-0002)</b>		
26 05 26 00-0004 MLF 12 AWG Copper Bare Single Stranded Conductor .....	717.58	262.81
26 05 26 00-0005 MLF 10 AWG Copper Bare Single Stranded Conductor .....	953.52	262.81
26 05 26 00-0006 MLF 8 AWG Copper Bare Single Stranded Conductor .....	1,190.51	316.58
26 05 26 00-0007 MLF 6 AWG Copper Bare Single Stranded Conductor .....	1,648.04	316.58
26 05 26 00-0008 MLF 4 AWG Copper Bare Single Stranded Conductor .....	2,222.06	382.27
26 05 26 00-0009 MLF 2 AWG Copper Bare Single Stranded Conductor .....	3,511.72	382.27
26 05 26 00-0010 MLF 1 AWG Copper Bare Single Stranded Conductor .....	4,068.78	459.92
26 05 26 00-0011 MLF 1/0 AWG Copper Bare Single Stranded Conductor .....	4,774.22	459.92
26 05 26 00-0012 MLF 2/0 AWG Copper Bare Single Stranded Conductor .....	6,705.66	579.38
26 05 26 00-0013 MLF 3/0 AWG Copper Bare Single Stranded Conductor .....	8,274.83	579.38
26 05 26 00-0014 MLF 4/0 AWG Copper Bare Single Stranded Conductor .....	8,768.95	770.53
26 05 26 00-0015 MLF 250 MCM Copper Bare Single Stranded Conductor .....	11,277.32	770.53
26 05 26 00-0016 MLF 300 MCM Copper Bare Single Stranded Conductor .....	11,307.07	889.99
26 05 26 00-0017 MLF 350 MCM Copper Bare Single Stranded Conductor .....	15,264.26	889.99
26 05 26 00-0018 MLF 500 MCM Copper Bare Single Stranded Conductor .....	20,853.83	1,099.04
<b>26 05 26 00-0019 Copper Insulated Single Stranded Conductors (26 05 26 00-0002)</b>		
26 05 26 00-0020 MLF 12 AWG Copper Insulated Single Stranded Conductor .....	1,365.26	358.38
26 05 26 00-0021 MLF 10 AWG Copper Insulated Single Stranded Conductor .....	1,447.77	358.38
26 05 26 00-0022 MLF 8 AWG Copper Insulated Single Stranded Conductor .....	1,862.44	358.38
26 05 26 00-0023 MLF 6 AWG Copper Insulated Single Stranded Conductor .....	2,107.66	621.19
26 05 26 00-0024 MLF 4 AWG Copper Insulated Single Stranded Conductor .....	2,863.37	621.19
26 05 26 00-0025 MLF 2 AWG Copper Insulated Single Stranded Conductor .....	4,062.19	621.19
26 05 26 00-0026 MLF 1 AWG Copper Insulated Single Stranded Conductor .....	4,920.02	1,087.09
26 05 26 00-0027 MLF 1/0 AWG Copper Insulated Single Stranded Conductor .....	6,012.82	1,087.09



<b>Electrical</b>		<b>26</b>
<b>Common Work Results for Electrical</b>		<b>26 05</b>
<b>Grounding and Bonding for Electrical Systems</b>		<b>26 05 26</b>

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MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
26 05 26 00-0028 MLF 2/0 AWG Copper Insulated Single Stranded Conductor.....	7,063.27	1,087.09
26 05 26 00-0029 MLF 3/0 AWG Copper Insulated Single Stranded Conductor.....	8,432.22	1,087.09
26 05 26 00-0030 MLF 4/0 AWG Copper Insulated Single Stranded Conductor.....	9,961.40	1,421.58
26 05 26 00-0031 MLF 250 MCM Copper Insulated Single Stranded Conductor.....	12,068.98	1,421.58
26 05 26 00-0032 MLF 300 MCM Copper Insulated Single Stranded Conductor.....	14,074.70	1,421.58
26 05 26 00-0033 MLF 350 MCM Copper Insulated Single Stranded Conductor.....	16,438.89	2,210.03
26 05 26 00-0034 MLF 500 MCM Copper Insulated Single Stranded Conductor.....	21,511.28	2,210.03
<b>26 05 26 00-0035 Copper Bare Single Solid Conductors (26 05 26 00-0002)</b>		
26 05 26 00-0036 MLF 12 AWG Copper Bare Single Solid Conductor.....	717.58	262.81
26 05 26 00-0037 MLF 10 AWG Copper Bare Single Solid Conductor.....	953.52	262.81
26 05 26 00-0038 MLF 8 AWG Copper Bare Single Solid Conductor.....	1,190.51	316.58
26 05 26 00-0039 MLF 6 AWG Copper Bare Single Solid Conductor.....	1,648.04	316.58
26 05 26 00-0040 MLF 4 AWG Copper Bare Single Solid Conductor.....	2,222.06	382.27
26 05 26 00-0041 MLF 2 AWG Copper Bare Single Solid Conductor.....	3,511.72	382.27
26 05 26 00-0042 MLF 1/0 AWG Copper Bare Single Solid Conductor.....	4,774.22	459.92
26 05 26 00-0043 MLF 4/0 AWG Copper Bare Single Solid Conductor.....	8,768.95	609.25
<b>26 05 26 00-0044 Copper Flexible Braid Connector Jumper Strap (26 05 26 00-0001)</b>		
Note: Manufactured from flat extra flexible tinned braid. Ferrules are tin plated pure electrolytic copper with 2 holes, on each end.		
26 05 26 00-0045 EA 100 Amperes, Copper Flexible Braid Jumper Strap, 12" Length.....	149.03	37.61
For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add	22.56	
26 05 26 00-0046 EA 225 Amperes, Copper Flexible Braid Jumper Strap, 12" Length.....	247.15	45.12
For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add	27.08	
26 05 26 00-0047 EA 225 Amperes, Copper Flexible Braid Jumper Strap, 18" Length.....	309.97	45.12
For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add	27.08	
26 05 26 00-0048 EA 225 Amperes, Copper Flexible Braid Jumper Strap, 24" Length.....	371.93	45.12
For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add	27.08	
26 05 26 00-0049 EA 400 Amperes, Copper Flexible Braid Jumper Strap, 12" Length.....	330.53	48.89
For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add	33.84	
26 05 26 00-0050 EA 400 Amperes, Copper Flexible Braid Jumper Strap, 18" Length.....	420.90	48.89
For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add	33.84	
26 05 26 00-0051 EA 400 Amperes, Copper Flexible Braid Jumper Strap, 24" Length.....	499.42	48.89
For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add	33.84	
26 05 26 00-0052 EA 600 Amperes, Copper Flexible Braid Jumper Strap, 12" Length.....	424.47	62.05
For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add	37.23	
26 05 26 00-0053 EA 800 Amperes, Copper Flexible Braid Jumper Strap, 12" Length.....	510.76	75.20
For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add	45.13	
<b>26 05 26 00-0054 Bonding Jumper For Metallic Conduit (26 05 26 00-0001)</b>		
26 05 26 00-0055 EA 1/2" To 1" Conductor, Bonding Jumper, Metallic Conduit.....	213.03	82.73
For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add	47.00	
26 05 26 00-0056 EA 1-1/4" To 2" Conductor, Bonding Jumper, Metallic Conduit.....	262.40	82.73
For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add	57.85	
26 05 26 00-0057 EA 2-1/2" To 4" Conductor, Bonding Jumper, Metallic Conduit.....	370.76	127.85
For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add	68.37	
26 05 26 00-0058 EA 5" To 6" Conductor, Bonding Jumper, Metallic Conduit.....	533.48	127.85
For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add	83.57	
<b>26 05 26 00-0059 Ground Rods (26 05 26)</b>		
<b>26 05 26 00-0060 Copper-Clad Ground Rods (26 05 26 00-0059)</b>		
26 05 26 00-0061 EA 1/2" Diameter x 8' Long Copper-Clad Ground Rods.....	120.86	112.81
26 05 26 00-0062 EA 5/8" Diameter x 8' Long Copper-Clad Ground Rods.....	124.99	112.81
26 05 26 00-0063 EA 3/4" Diameter x 8' Long Copper-Clad Ground Rods.....	141.63	112.81
26 05 26 00-0064 EA 1/2" Diameter x 10' Long Copper-Clad Ground Rods.....	141.68	112.81
26 05 26 00-0065 EA 5/8" Diameter x 10' Long Copper-Clad Ground Rods.....	146.84	112.81
26 05 26 00-0066 EA 3/4" Diameter x 10' Long Copper-Clad Ground Rods.....	167.65	112.81
<b>26 05 26 00-0067 Copper Grounding Shaft (26 05 26 00-0059)</b>		
26 05 26 00-0068 EA 2-1/8" Diameter x 10' Long Copper Grounding Shaft.....	325.35	112.81
26 05 26 00-0069 EA 2-1/8" Diameter "L" Shaped; 3' Riser x 10' Horizontal Copper Grounding Shaft.....	398.88	112.81
26 05 26 00-0070 EA 2-1/8" Diameter "L" Shaped; 3' Riser x 20' Horizontal Copper Grounding Shaft.....	588.86	112.81
<b>26 05 26 00-0071 Ground Access Wells (26 05 26 00-0059)</b>		
<b>26 05 26 00-0072 Precast Ground Access Wells (26 05 26 00-0071)</b>		
26 05 26 00-0073 EA 8" Diameter x 24" Deep Precast Ground Access Well.....	269.69	
Note: With cast iron grate.		
26 05 26 00-0074 EA 10" Diameter x 24" Deep Precast Ground Access Well.....	279.39	
Note: With cast iron grate.		
26 05 26 00-0075 EA 12" Diameter x 24" Deep Precast Ground Access Well.....	818.81	
Note: With cast iron grate.		
26 05 26 00-0076 EA 18" Diameter x 24" Deep Precast Ground Access Well.....	828.51	
Note: With cast iron grate.		

**26 Electrical****26 05 Common Work Results for Electrical****26 05 26 Grounding and Bonding for Electrical Systems**

MINOR CSI UOM DESCRIPTION			TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
<b>26 05 26 00-0077 Polyvinyl Chloride (PVC) Ground Access Well (26 05 26 00-0071)</b>				
26 05 26 00-0078	EA	10" Diameter x 24" Deep Polyvinyl Chloride (PVC) Belled Hub Ground Access Well..... Note: Schedule 40 with cast iron grated cover.	449.75	
26 05 26 00-0079	EA	12" Diameter x 24" Deep Polyvinyl Chloride (PVC) Belled Hub Ground Access Well..... Note: Schedule 40 with cast iron grated cover.	527.72	
26 05 26 00-0080	EA	18" Diameter x 24" Deep Polyvinyl Chloride (PVC) Belled Hub Ground Access Well..... Note: Schedule 40 with cast iron grated cover.	975.01	
26 05 26 00-0081	EA	10" Diameter x 24" Deep Polyvinyl Chloride (PVC) Belled Hub Ground Access Well..... Note: Schedule 40 with flat steel cover.	430.15	
26 05 26 00-0082	EA	12" Diameter x 24" Deep Polyvinyl Chloride (PVC) Belled Hub Ground Access Well..... Note: Schedule 40 with flat steel cover.	503.67	
26 05 26 00-0083	EA	18" Diameter x 24" Deep Polyvinyl Chloride (PVC) Belled Hub Ground Access Well..... Note: Schedule 40 with flat steel cover.	935.31	
26 05 26 00-0084	EA	8" Diameter x 24" Deep Polyvinyl Chloride (PVC) Ground Access Well..... Note: Schedule 40 with flat steel cover.	243.18	
26 05 26 00-0085	EA	10" Diameter x 24" Deep Polyvinyl Chloride (PVC) Ground Access Well..... Note: Schedule 40 with flat steel cover.	260.14	
26 05 26 00-0086	EA	12" Diameter x 24" Deep Polyvinyl Chloride (PVC) Ground Access Well..... Note: Schedule 40 with flat steel cover.	274.70	
26 05 26 00-0087	EA	8" Diameter x 24" Deep Schedule 40 Polyvinyl Chloride (PVC) Ground Access Well, Plastic Cover.....	188.34	
26 05 26 00-0088	EA	10" Diameter x 24" Deep Schedule 40 Polyvinyl Chloride (PVC) Ground Access Well, Plastic Cover.....	275.95	
26 05 26 00-0089	EA	8" Diameter x 42" Deep Polyvinyl Chloride (PVC) Slotted Ground Access Well..... Note: Schedule 40 with flat steel cover.	482.99	
26 05 26 00-0090	EA	10" Diameter x 42" Deep Polyvinyl Chloride (PVC) Slotted Ground Access Well..... Note: Schedule 40 with flat steel cover.	639.78	
26 05 26 00-0091	EA	8" Diameter x 42" Deep Polyvinyl Chloride (PVC) Slotted Ground Access Well..... Note: Schedule 40 with plastic cover.	390.12	
26 05 26 00-0092	EA	10" Diameter x 42" Deep Polyvinyl Chloride (PVC) Slotted Ground Access Well..... Note: Schedule 40 with plastic cover.	563.88	
26 05 26 00-0093	EA	10" Diameter x 36" Deep Polyvinyl Chloride (PVC) Schedule 80 Ground Access Well..... Note: With cast iron grate, heavy duty.	594.98	
26 05 26 00-0094	EA	10" Diameter x 42" Deep Polyvinyl Chloride (PVC) Schedule 80 Ground Access Well..... Note: With cast iron grate, heavy duty.	724.72	
26 05 26 00-0095	EA	12" Diameter x 12" Deep Polyvinyl Chloride (PVC) Schedule 80 Ground Access Well..... Note: With cast iron grate, heavy duty.	323.54	
26 05 26 00-0096	EA	12" Diameter x 24" Deep Polyvinyl Chloride (PVC) Schedule 80 Ground Access Well..... Note: With cast iron grate, heavy duty.	560.88	
26 05 26 00-0097	EA	12" Diameter x 30" Deep Polyvinyl Chloride (PVC) Schedule 80 Ground Access Well..... Note: With cast iron grate, heavy duty.	603.54	
<b>26 05 26 00-0098 Polymer Concrete Ground Access Well (26 05 26 00-0071)</b>				
26 05 26 00-0099	EA	12" x 12" x 12" Polymer Concrete Ground Access Well.....	515.99	
26 05 26 00-0100	EA	12" x 12" x 12" Heavy Duty Polymer Concrete Ground Access Well.....	566.32	
26 05 26 00-0101	EA	12" x 12" x 18" Polymer Concrete Ground Access Well.....	568.75	
26 05 26 00-0102	EA	12" x 12" x 18" Heavy Duty Polymer Concrete Ground Access Well.....	624.15	
26 05 26 00-0103	EA	12" x 12" x 24" Polymer Concrete Ground Access Well.....	623.53	
26 05 26 00-0104	EA	12" x 12" x 24" Heavy Duty Polymer Concrete Ground Access Well.....	684.47	
26 05 26 00-0105	EA	13" x 24" x 18" Polymer Concrete Ground Access Well.....	832.98	
26 05 26 00-0106	EA	13" x 24" x 18" Heavy Duty Polymer Concrete Ground Access Well.....	916.12	
<b>26 05 26 00-0107 High Density Polyethylene (HDPE) Ground Access Well (26 05 26 00-0071)</b>				
26 05 26 00-0108	EA	9" Diameter x 10" Deep High Density Polyethylene (HDPE) Ground Access Well..... Note: With cover.	186.49	
26 05 26 00-0109	EA	14" Diameter x 18" Deep High Density Polyethylene (HDPE) Ground Access Well..... Note: With cover.	260.35	
<b>26 05 26 00-0110 Clay Tile Ground Access Wells (26 05 26 00-0071)</b>				
26 05 26 00-0111	EA	8" Diameter x 24" Deep Clay Tile Ground Access Well With Concrete Cover.....	295.02	
26 05 26 00-0112	EA	8" Diameter x 24" Deep Clay Tile Ground Access Well With Cast Iron Grated Cover.....	310.45	
26 05 26 00-0113	EA	Concrete Cover For 8" Diameter x 24" Deep Clay Tile Ground Access Well.....	94.79	
<b>26 05 26 00-0114 Ground Rod Clamps And Fittings (26 05 26)</b>				
<b>26 05 26 00-0115 Bronze Ground Rod Clamp (26 05 26 00-0114)</b>				
26 05 26 00-0116	EA	1/2" Bronze Ground Rod Clamp.....	28.40	17.00
26 05 26 00-0117	EA	5/8" Bronze Ground Rod Clamp.....	29.44	17.00
26 05 26 00-0118	EA	3/4" Bronze Ground Rod Clamp.....	30.92	17.00
<b>26 05 26 00-0119 Bronze Pipe Clamps (26 05 26 00-0114)</b>				
26 05 26 00-0120	EA	1/2" To 1" Bronze Pipe Ground Clamps.....	40.38	28.28
26 05 26 00-0121	EA	1-1/4" To 2" Bronze Ground Clamps For Pipe.....	51.26	33.84
26 05 26 00-0122	EA	2-1/2" To 3" Bronze Ground Clamps For Pipe.....	75.71	39.56
26 05 26 00-0123	EA	2-1/2" To 4" Bronze Ground Clamps For Pipe.....	92.73	50.84
26 05 26 00-0124	EA	4" To 6" Bronze Ground Clamps For Pipe.....	141.72	73.40



Electrical		26
Common Work Results for Electrical		26 05
Grounding and Bonding for Electrical Systems		26 05 26

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MINOR CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
26 05 26 00-0125		Grounding Fittings (26 05 26 00-0114)		
26 05 26 00-0126		Embedded Fittings (26 05 26 00-0125)		
26 05 26 00-0127	EA	Ground Insert With Two 3/8 x 16 Holes #2 To 250 MCM Cable Range, Embedded .....	190.87	
26 05 26 00-0128	EA	Ground Insert With Four 3/8 x 16 Holes #2 To 250 MCM Cable Range, Embedded .....	200.29	
26 05 26 00-0129	EA	Ground Insert With Four 3/8 x 16 Holes 250 To 500 MCM Cable Range, Embedded .....	217.01	
26 05 26 00-0130		Ground Rod Receptacle (26 05 26 00-0125)		
26 05 26 00-0131	EA	1/2" Ground Rod Receptacle .....	409.02	156.43
26 05 26 00-0132	EA	5/8" Ground Rod Receptacle .....	426.03	160.84
26 05 26 00-0133	EA	3/4" Ground Rod Receptacle .....	443.50	165.21
26 05 26 00-0134		Ground Kits For Circuit Breaker Panels (26 05 26 00-0125)		
26 05 26 00-0135	EA	14-8 AWG Copper Ground Kit .....	92.95	37.61
26 05 26 00-0136		Insulated Grounding Bars (26 05 26 00-0114)		
26 05 26 00-0137	EA	1/2" x 4" x 10" Insulated Ground Bar .....	365.00	37.76
		For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add .....	67.68	
26 05 26 00-0138	EA	Insulated Ground Bar SK 9560 1/2" x 4" x 20" .....	380.30	37.76
		For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add .....	67.68	
26 05 33		Raceway and Boxes for Electrical Systems (26 05)		
26 05 33 13		Conduit for Electrical Systems (26 05 33)		
26 05 33 13-0001		Conduit Assemblies With Wire (26 05 33 13)		
		Note: Includes conduit, fittings and wire. Excludes hangers or supports.		
26 05 33 13-0002		Electrical Metallic Tubing (EMT) Conduit Assemblies (26 05 33 13-0001)		
		Note: Includes conduit, field bends, set screw connectors, set screw couplings, straps, and copper wire as indicated. Per CLF.		
26 05 33 13-0003	CLF	1/2" Electrical Metallic Tubing (EMT) Conduit Assembly With 2 #12 Copper THHN And 1 #12 Copper Insulated Grounding Conductor .....	1,121.96	335.90
		Note: Includes conduit, set screw connectors, set screw couplings, straps, wire as indicated. Not for use where detail is available.		
		For 2 #12 THWN Conductor Instead Of THHN, Add .....	2.20	
26 05 33 13-0004	CLF	1/2" Electrical Metallic Tubing (EMT) Conduit Assembly With 3 #12 Copper THHN And 1 #12 Copper Insulated Grounding Conductor .....	1,226.39	364.76
		Note: Includes conduit, set screw connectors, set screw couplings, straps, wire as indicated. Not for use where detail is available.		
		For 3 #12 THWN Conductor Instead Of THHN, Add .....	3.30	
26 05 33 13-0005	CLF	1/2" Electrical Metallic Tubing (EMT) Conduit Assembly With 4 #12 Copper THHN And 1 #12 Copper Insulated Grounding Conductor .....	1,330.84	393.62
		Note: Includes conduit, set screw connectors, set screw couplings, straps, wire as indicated. Not for use where detail is available.		
		For Work In Restricted Working Space, Add .....	337.43	
		For 4 #12 THWN Conductor Instead Of THHN, Add .....	4.40	
26 05 33 13-0006	CLF	1/2" Electrical Metallic Tubing (EMT) Conduit Assembly With 2 #10 Copper THHN And 1 #12 Copper Insulated Grounding Conductor .....	1,185.28	350.33
		Note: Includes conduit, set screw connectors, set screw couplings, straps, wire as indicated. Not for use where detail is available.		
		For 2 #10 THWN Conductor Instead Of THHN, Add .....	3.29	
26 05 33 13-0007	CLF	1/2" Electrical Metallic Tubing (EMT) Conduit Assembly With 3 #10 Copper THHN And 1 #12 Copper Insulated Grounding Conductor .....	1,314.51	384.00
		Note: Includes conduit, set screw connectors, set screw couplings, straps, wire as indicated. Not for use where detail is available.		
		For 3 #10 THWN Conductor Instead Of THHN, Add .....	4.94	
26 05 33 13-0008	CLF	1/2" Electrical Metallic Tubing (EMT) Conduit Assembly With 2 #8 Copper THHN And 1 #10 Copper Insulated Grounding Conductor .....	1,327.68	379.19
		Note: Includes conduit, set screw connectors, set screw couplings, straps, wire as indicated. Not for use where detail is available.		
		For Work In Restricted Working Space, Add .....	325.07	
		For 2 #8 THWN Conductor Instead Of THHN, Add .....	5.75	
26 05 33 13-0009	CLF	3/4" Electrical Metallic Tubing (EMT) Conduit Assembly With 2 #12 Copper THHN And 1 #12 Copper Insulated Grounding Conductor .....	1,248.12	362.14
		Note: Includes conduit, set screw connectors, set screw couplings, straps, wire as indicated. Not for use where detail is available.		
		For 2 #12 THWN Conductor Instead Of THHN, Add .....	2.20	
26 05 33 13-0010	CLF	3/4" Electrical Metallic Tubing (EMT) Conduit Assembly With 3 #12 Copper THHN And 1 #12 Copper Insulated Grounding Conductor .....	1,352.57	391.01
		Note: Includes conduit, set screw connectors, set screw couplings, straps, wire as indicated. Not for use where detail is available.		
		For 3 #12 THWN Conductor Instead Of THHN, Add .....	3.30	
26 05 33 13-0011	CLF	3/4" Electrical Metallic Tubing (EMT) Conduit Assembly With 4 #12 Copper THHN And 1 #12 Copper Insulated Grounding Conductor .....	1,456.99	419.87
		Note: Includes conduit, set screw connectors, set screw couplings, straps, wire as indicated. Not for use where detail is available.		

**26 Electrical****26 05 Common Work Results for Electrical****26 05 33 Raceway and Boxes for Electrical Systems**

MINOR	CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
26 05 33 13-0012	CLF		3/4" Electrical Metallic Tubing (EMT) Conduit Assembly With 5 #12 Copper THHN And 1 #12 Copper Insulated Grounding Conductor ..... Note: Includes conduit, set screw connectors, set screw couplings, straps, wire as indicated. Not for use where detail is available.	1,561.43	448.73
			<i>For 5 #12 THWN Conductor Instead Of THHN, Add</i>	5.49	
26 05 33 13-0013	CLF		3/4" Electrical Metallic Tubing (EMT) Conduit Assembly With 2 #10 Copper THHN And 1 #12 Copper Insulated Grounding Conductor ..... Note: Includes conduit, set screw connectors, set screw couplings, straps, wire as indicated. Not for use where detail is available.	1,311.43	376.58
			<i>For 2 #10 THWN Conductor Instead Of THHN, Add</i>	3.29	
26 05 33 13-0014	CLF		3/4" Electrical Metallic Tubing (EMT) Conduit Assembly With 3 #10 Copper THHN And 1 #12 Copper Insulated Grounding Conductor ..... Note: Includes conduit, set screw connectors, set screw couplings, straps, wire as indicated. Not for use where detail is available.	1,440.66	410.25
			<i>For 3 #10 THWN Conductor Instead Of THHN, Add</i>	4.94	
26 05 33 13-0015	CLF		3/4" Electrical Metallic Tubing (EMT) Conduit Assembly With 4 #10 Copper THHN And 1 #12 Copper Insulated Grounding Conductor ..... Note: Includes conduit, set screw connectors, set screw couplings, straps, wire as indicated. Not for use where detail is available.	1,569.89	443.92
			<i>For 4 #10 THWN Conductor Instead Of THHN, Add</i>	6.59	
26 05 33 13-0016	CLF		3/4" Electrical Metallic Tubing (EMT) Conduit Assembly With 5 #10 Copper THHN And 1 #12 Copper Insulated Grounding Conductor ..... Note: Includes conduit, set screw connectors, set screw couplings, straps, wire as indicated. Not for use where detail is available.	1,699.11	477.59
			<i>For 5 #10 THWN Conductor Instead Of THHN, Add</i>	8.24	
26 05 33 13-0017	CLF		3/4" Electrical Metallic Tubing (EMT) Conduit Assembly With 3 #8 Copper THHN And 1 #10 Copper Insulated Grounding Conductor ..... Note: Includes conduit, set screw connectors, set screw couplings, straps, wire as indicated. Not for use where detail is available.	1,635.00	448.73
			<i>For Work In Restricted Working Space, Add</i>	384.60	
			<i>For 3 #8 THWN Conductor Instead Of THHN, Add</i>	8.62	
26 05 33 13-0018	CLF		3/4" Electrical Metallic Tubing (EMT) Conduit Assembly With 4 #8 Copper THHN And 1 #10 Copper Insulated Grounding Conductor ..... Note: Includes conduit, set screw connectors, set screw couplings, straps, wire as indicated. Not for use where detail is available.	1,816.17	492.03
			<i>For Work In Restricted Working Space, Add</i>	421.71	
			<i>For 4 #8 THWN Conductor Instead Of THHN, Add</i>	11.49	
26 05 33 13-0019	CLF		3/4" Electrical Metallic Tubing (EMT) Conduit Assembly With 2 #6 Copper THHN And 1 #8 Copper Insulated Grounding Conductor ..... Note: Includes conduit, set screw connectors, set screw couplings, straps, wire as indicated. Not for use where detail is available.	1,635.86	434.30
			<i>For Work In Restricted Working Space, Add</i>	372.23	
			<i>For 2 #6 THWN Conductor Instead Of THHN, Add</i>	9.50	
26 05 33 13-0020	CLF		3/4" Electrical Metallic Tubing (EMT) Conduit Assembly With 3 #6 Copper THHN And 1 #8 Copper Insulated Grounding Conductor ..... Note: Includes conduit, set screw connectors, set screw couplings, straps, wire as indicated. Not for use where detail is available.	1,882.06	487.21
			<i>For Work In Restricted Working Space, Add</i>	417.59	
			<i>For 3 #6 THWN Conductor Instead Of THHN, Add</i>	14.25	
26 05 33 13-0021	CLF		1" Electrical Metallic Tubing (EMT) Conduit Assembly With 2 #12 Copper THHN And 1 #12 Copper Insulated Grounding Conductor ..... Note: Includes conduit, set screw connectors, set screw couplings, straps, wire as indicated. Not for use where detail is available.	1,423.60	389.77
			<i>For 2 #12 THWN Conductor Instead Of THHN, Add</i>	2.20	
26 05 33 13-0022	CLF		1" Electrical Metallic Tubing (EMT) Conduit Assembly With 3 #12 Copper THHN And 1 #12 Copper Insulated Grounding Conductor ..... Note: Includes conduit, set screw connectors, set screw couplings, straps, wire as indicated. Not for use where detail is available.	1,528.04	418.63
			<i>For 3 #12 THWN Conductor Instead Of THHN, Add</i>	3.30	
26 05 33 13-0023	CLF		1" Electrical Metallic Tubing (EMT) Conduit Assembly With 4 #12 Copper THHN And 1 #12 Copper Insulated Grounding Conductor ..... Note: Includes conduit, set screw connectors, set screw couplings, straps, wire as indicated. Not for use where detail is available.	1,632.48	447.50
26 05 33 13-0024	CLF		1" Electrical Metallic Tubing (EMT) Conduit Assembly With 5 #12 Copper THHN And 1 #12 Copper Insulated Grounding Conductor ..... Note: Includes conduit, set screw connectors, set screw couplings, straps, wire as indicated. Not for use where detail is available.	1,736.92	476.35
			<i>For 5 #12 THWN Conductor Instead Of THHN, Add</i>	5.49	
26 05 33 13-0025	CLF		1" Electrical Metallic Tubing (EMT) Conduit Assembly With 2 #10 Copper THHN And 1 #12 Copper Insulated Grounding Conductor ..... Note: Includes conduit, set screw connectors, set screw couplings, straps, wire as indicated. Not for use where detail is available.	1,486.90	404.20
			<i>For 2 #10 THWN Conductor Instead Of THHN, Add</i>	3.29	
26 05 33 13-0026	CLF		1" Electrical Metallic Tubing (EMT) Conduit Assembly With 3 #10 Copper THHN And 1 #12 Copper Insulated Grounding Conductor ..... Note: Includes conduit, set screw connectors, set screw couplings, straps, wire as indicated. Not for use where detail is available.	1,616.13	437.88
			<i>For 3 #10 THWN Conductor Instead Of THHN, Add</i>	4.94	
26 05 33 13-0027	CLF		1" Electrical Metallic Tubing (EMT) Conduit Assembly With 4 #10 Copper THHN And 1 #12 Copper Insulated Grounding Conductor ..... Note: Includes conduit, set screw connectors, set screw couplings, straps, wire as indicated. Not for use where detail is available.	1,745.36	471.54
			<i>For 4 #10 THWN Conductor Instead Of THHN, Add</i>	6.59	





<b>Electrical</b>		<b>26</b>
<b>Common Work Results for Electrical</b>		<b>26 05</b>
<b>Raceway and Boxes for Electrical Systems</b>		<b>26 05 33</b>

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MINOR CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
26 05 33 13-0028	CLF	1" Electrical Metallic Tubing (EMT) Conduit Assembly With 5 #10 Copper THHN And 1 #12 Copper Insulated Grounding Conductor ..... Note: Includes conduit, set screw connectors, set screw couplings, straps, wire as indicated. Not for use where detail is available.	1,874.58	505.21
		For 5 #10 THWN Conductor Instead Of THHN, Add	8.24	
26 05 33 13-0029	CLF	1" Electrical Metallic Tubing (EMT) Conduit Assembly With 3 #8 Copper THHN And 1 #10 Copper Insulated Grounding Conductor ..... Note: Includes conduit, set screw connectors, set screw couplings, straps, wire as indicated. Not for use where detail is available.	1,810.48	476.35
		For Work In Restricted Working Space, Add	408.35	
		For 3 #8 THWN Conductor Instead Of THHN, Add	8.62	
26 05 33 13-0030	CLF	1" Electrical Metallic Tubing (EMT) Conduit Assembly With 3 #6 Copper THHN And 1 #8 Copper Insulated Grounding Conductor ..... Note: Includes conduit, set screw connectors, set screw couplings, straps, wire as indicated. Not for use where detail is available.	2,057.53	514.83
		For Work In Restricted Working Space, Add	441.34	
		For 3 #6 THWN Conductor Instead Of THHN, Add	14.25	
26 05 33 13-0031	CLF	1" Electrical Metallic Tubing (EMT) Conduit Assembly With 4 #6 Copper THHN And 1 #8 Copper Insulated Grounding Conductor ..... Note: Includes conduit, set screw connectors, set screw couplings, straps, wire as indicated. Not for use where detail is available.	2,303.74	567.75
		For Work In Restricted Working Space, Add	486.69	
		For 4 #6 THWN Conductor Instead Of THHN, Add	19.00	
26 05 33 13-0032		<b>Conduit</b> <small>(26 05 33 13)</small> Note: Where 4-1/2" conduit is required, use tasks for 5" conduit. Add couplings as required at each fitting.		
26 05 33 13-0033		<b>Conduit Installed Above Grade</b> <small>(26 05 33 13-0032)</small>		
26 05 33 13-0034		<b>Intermediate Metal Conduit (IMC)</b> <small>(26 05 33 13-0033)</small> Note: Exposed installation, branch and feeder conduit. Excludes supporting strap, hanger and fastening.		
26 05 33 13-0035		<b>Intermediate Metal Conduit (IMC) Conduit</b> <small>(26 05 33 13-0034)</small> Note: Includes field bending conduit up to 1".		
26 05 33 13-0036	LF	1/2" Intermediate Metal Conduit (IMC) Conduit ..... For >250 To 500, Deduct For >500 To 1,000, Deduct For >1,000, Deduct For Installation In Metal Stud Wall, Add For Installation In Wood Stud Wall (Includes Drilling), Add For Installation In Concrete Beam, Slab, Etc. (Excludes Concrete), Add For Work In Restricted Working Space, Add For Elevated Installation >10' To 15', Add For Elevated Installation >15' To 20', Add For Elevated Installation >20' To 25', Add For Elevated Installation >25' To 30', Add For Elevated Installation >30' To 35', Add For Elevated Installation >35' To 40', Add For Elevated Installation >40', Add	9.43 -0.11 -0.17 -0.23 0.71 1.79 1.07 2.14 0.71 1.43 1.79 2.50 2.86 3.57 3.93	2.75
26 05 33 13-0037	LF	3/4" Intermediate Metal Conduit (IMC) Conduit ..... For >250 To 500, Deduct For >500 To 1,000, Deduct For >1,000, Deduct For Installation In Metal Stud Wall, Add For Installation In Wood Stud Wall (Includes Drilling), Add For Installation In Concrete Beam, Slab, Etc. (Excludes Concrete), Add For Work In Restricted Working Space, Add For Elevated Installation >10' To 15', Add For Elevated Installation >15' To 20', Add For Elevated Installation >20' To 25', Add For Elevated Installation >25' To 30', Add For Elevated Installation >30' To 35', Add For Elevated Installation >35' To 40', Add For Elevated Installation >40', Add	11.25 -0.14 -0.20 -0.27 0.85 2.13 1.28 2.56 0.85 1.70 2.13 2.98 3.41 4.26 4.69	3.03
26 05 33 13-0038	LF	1" Intermediate Metal Conduit (IMC) Conduit ..... For >250 To 500, Deduct For >500 To 1,000, Deduct For >1,000, Deduct For Installation In Metal Stud Wall, Add For Installation In Wood Stud Wall (Includes Drilling), Add For Installation In Concrete Beam, Slab, Etc. (Excludes Concrete), Add For Work In Restricted Working Space, Add For Elevated Installation >10' To 15', Add For Elevated Installation >15' To 20', Add For Elevated Installation >20' To 25', Add For Elevated Installation >25' To 30', Add For Elevated Installation >30' To 35', Add For Elevated Installation >35' To 40', Add For Elevated Installation >40', Add	14.93 -0.21 -0.32 -0.42 1.07 2.68 1.61 3.22 1.07 2.14 2.68 3.75 4.29 5.36 5.90	3.30

**26 Electrical****26 05 Common Work Results for Electrical****26 05 33 Raceway and Boxes for Electrical Systems**

MINOR	CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
26 05 33 13-0039	LF		1-1/4" Intermediate Metal Conduit (IMC) Conduit .....	17.16	6.59
			For >250 To 500, Deduct	-0.27	
			For >500 To 1,000, Deduct	-0.40	
			For >1,000, Deduct	-0.53	
			For Installation In Metal Stud Wall, Add	1.18	
			For Installation In Wood Stud Wall (Includes Drilling), Add	2.96	
			For Installation In Concrete Beam, Slab, Etc. (Excludes Concrete), Add	1.77	
			For Work In Restricted Working Space, Add	3.55	
			For Elevated Installation >10' To 15', Add	1.18	
			For Elevated Installation >15' To 20', Add	2.36	
			For Elevated Installation >20' To 25', Add	2.96	
			For Elevated Installation >25' To 30', Add	4.14	
			For Elevated Installation >30' To 35', Add	4.73	
			For Elevated Installation >35' To 40', Add	5.91	
			For Elevated Installation >40', Add	6.50	
26 05 33 13-0040	LF		1-1/2" Intermediate Metal Conduit (IMC) Conduit .....	19.22	4.40
			For >250 To 500, Deduct	-0.32	
			For >500 To 1,000, Deduct	-0.47	
			For >1,000, Deduct	-0.63	
			For Installation In Metal Stud Wall, Add	1.29	
			For Installation In Wood Stud Wall (Includes Drilling), Add	3.23	
			For Installation In Concrete Beam, Slab, Etc. (Excludes Concrete), Add	1.94	
			For Work In Restricted Working Space, Add	3.88	
			For Elevated Installation >10' To 15', Add	1.29	
			For Elevated Installation >15' To 20', Add	2.58	
			For Elevated Installation >20' To 25', Add	3.23	
			For Elevated Installation >25' To 30', Add	4.52	
			For Elevated Installation >30' To 35', Add	5.17	
			For Elevated Installation >35' To 40', Add	6.46	
			For Elevated Installation >40', Add	7.11	
26 05 33 13-0041	LF		2" Intermediate Metal Conduit (IMC) Conduit .....	24.22	4.95
			For >250 To 500, Deduct	-0.43	
			For >500 To 1,000, Deduct	-0.64	
			For >1,000, Deduct	-0.86	
			For Installation In Metal Stud Wall, Add	1.57	
			For Installation In Wood Stud Wall (Includes Drilling), Add	3.92	
			For Installation In Concrete Beam, Slab, Etc. (Excludes Concrete), Add	2.35	
			For Work In Restricted Working Space, Add	4.70	
			For Elevated Installation >10' To 15', Add	1.57	
			For Elevated Installation >15' To 20', Add	3.13	
			For Elevated Installation >20' To 25', Add	3.92	
			For Elevated Installation >25' To 30', Add	5.48	
			For Elevated Installation >30' To 35', Add	6.27	
			For Elevated Installation >35' To 40', Add	7.84	
			For Elevated Installation >40', Add	8.62	
26 05 33 13-0042	LF		2-1/2" Intermediate Metal Conduit (IMC) Conduit .....	39.69	6.59
			For >250 To 500, Deduct	-0.95	
			For >500 To 1,000, Deduct	-1.42	
			For >1,000, Deduct	-1.89	
			For Installation In Metal Stud Wall, Add	2.08	
			For Installation In Wood Stud Wall (Includes Drilling), Add	5.19	
			For Installation In Concrete Beam, Slab, Etc. (Excludes Concrete), Add	3.11	
			For Work In Restricted Working Space, Add	6.23	
			For Elevated Installation >10' To 15', Add	2.08	
			For Elevated Installation >15' To 20', Add	4.15	
			For Elevated Installation >20' To 25', Add	5.19	
			For Elevated Installation >25' To 30', Add	7.26	
			For Elevated Installation >30' To 35', Add	8.30	
			For Elevated Installation >35' To 40', Add	10.38	
			For Elevated Installation >40', Add	11.41	
26 05 33 13-0043	LF		3" Intermediate Metal Conduit (IMC) Conduit .....	50.81	8.25
			For >250 To 500, Deduct	-1.17	
			For >500 To 1,000, Deduct	-1.75	
			For >1,000, Deduct	-2.33	
			For Installation In Metal Stud Wall, Add	2.75	
			For Installation In Wood Stud Wall (Includes Drilling), Add	6.87	
			For Installation In Concrete Beam, Slab, Etc. (Excludes Concrete), Add	4.12	
			For Work In Restricted Working Space, Add	8.25	
			For Elevated Installation >10' To 15', Add	2.75	
			For Elevated Installation >15' To 20', Add	5.50	
			For Elevated Installation >20' To 25', Add	6.87	
			For Elevated Installation >25' To 30', Add	9.62	
			For Elevated Installation >30' To 35', Add	11.00	
			For Elevated Installation >35' To 40', Add	13.75	
			For Elevated Installation >40', Add	15.12	



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MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
26 05 33 13-0044 LF 3-1/2" Intermediate Metal Conduit (IMC) Conduit .....	58.48	9.90
For >250 To 500, Deduct	-1.35	
For >500 To 1,000, Deduct	-2.03	
For >1,000, Deduct	-2.70	
For Installation In Metal Stud Wall, Add	3.15	
For Installation In Wood Stud Wall (Includes Drilling), Add	7.87	
For Installation In Concrete Beam, Slab, Etc. (Excludes Concrete), Add	4.72	
For Work In Restricted Working Space, Add	9.44	
For Elevated Installation >10' To 15', Add	3.15	
For Elevated Installation >15' To 20', Add	6.29	
For Elevated Installation >20' To 25', Add	7.87	
For Elevated Installation >25' To 30', Add	11.01	
For Elevated Installation >30' To 35', Add	12.59	
For Elevated Installation >35' To 40', Add	15.74	
For Elevated Installation >40', Add	17.31	
26 05 33 13-0045 LF 4" Intermediate Metal Conduit (IMC) Conduit .....	68.49	11.54
For >250 To 500, Deduct	-1.59	
For >500 To 1,000, Deduct	-2.38	
For >1,000, Deduct	-3.18	
For Installation In Metal Stud Wall, Add	3.67	
For Installation In Wood Stud Wall (Includes Drilling), Add	9.18	
For Installation In Concrete Beam, Slab, Etc. (Excludes Concrete), Add	5.51	
For Work In Restricted Working Space, Add	11.01	
For Elevated Installation >10' To 15', Add	3.67	
For Elevated Installation >15' To 20', Add	7.34	
For Elevated Installation >20' To 25', Add	9.18	
For Elevated Installation >25' To 30', Add	12.85	
For Elevated Installation >30' To 35', Add	14.68	
For Elevated Installation >35' To 40', Add	18.35	
For Elevated Installation >40', Add	20.19	
26 05 33 13-0046 Intermediate Metal Conduit (IMC) 90 Degree Elbows (26 05 33 13-0034)		
See CSI section 26 05 33 13-0148 for conduit field bending.		
26 05 33 13-0047 EA 1/2" Intermediate Metal Conduit (IMC) 90 Degree Elbow .....	43.12	13.61
For Work In Restricted Working Space, Add	10.24	
For Elevated Installation >10' To 15', Add	3.41	
For Elevated Installation >15' To 20', Add	6.83	
For Elevated Installation >20' To 25', Add	8.53	
For Elevated Installation >25' To 30', Add	11.95	
For Elevated Installation >30' To 35', Add	13.65	
For Elevated Installation >35' To 40', Add	17.07	
For Elevated Installation >40', Add	18.77	
26 05 33 13-0048 EA 3/4" Intermediate Metal Conduit (IMC) 90 Degree Elbow .....	52.51	16.90
For Work In Restricted Working Space, Add	12.73	
For Elevated Installation >10' To 15', Add	4.24	
For Elevated Installation >15' To 20', Add	8.49	
For Elevated Installation >20' To 25', Add	10.61	
For Elevated Installation >25' To 30', Add	14.85	
For Elevated Installation >30' To 35', Add	16.97	
For Elevated Installation >35' To 40', Add	21.22	
For Elevated Installation >40', Add	23.34	
26 05 33 13-0049 EA 1" Intermediate Metal Conduit (IMC) 90 Degree Elbow .....	66.07	20.75
For Work In Restricted Working Space, Add	15.52	
For Elevated Installation >10' To 15', Add	5.17	
For Elevated Installation >15' To 20', Add	10.35	
For Elevated Installation >20' To 25', Add	12.94	
For Elevated Installation >25' To 30', Add	18.11	
For Elevated Installation >30' To 35', Add	20.70	
For Elevated Installation >35' To 40', Add	25.87	
For Elevated Installation >40', Add	28.46	
26 05 33 13-0050 EA 1-1/4" Intermediate Metal Conduit (IMC) 90 Degree Elbow .....	80.17	24.05
For Work In Restricted Working Space, Add	18.02	
For Elevated Installation >10' To 15', Add	6.01	
For Elevated Installation >15' To 20', Add	12.02	
For Elevated Installation >20' To 25', Add	15.02	
For Elevated Installation >25' To 30', Add	21.03	
For Elevated Installation >30' To 35', Add	24.03	
For Elevated Installation >35' To 40', Add	30.04	
For Elevated Installation >40', Add	33.04	
26 05 33 13-0051 EA 1-1/2" Intermediate Metal Conduit (IMC) 90 Degree Elbow .....	94.36	27.63
For Work In Restricted Working Space, Add	20.69	
For Elevated Installation >10' To 15', Add	6.90	
For Elevated Installation >15' To 20', Add	13.79	
For Elevated Installation >20' To 25', Add	17.24	
For Elevated Installation >25' To 30', Add	24.13	
For Elevated Installation >30' To 35', Add	27.58	
For Elevated Installation >35' To 40', Add	34.48	
For Elevated Installation >40', Add	37.92	

**26 Electrical****26 05 Common Work Results for Electrical****26 05 33 Raceway and Boxes for Electrical Systems**

MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
26 05 33 13-0052 EA 2" Intermediate Metal Conduit (IMC) 90 Degree Elbow .....112.44		30.37
For Work In Restricted Working Space, Add	22.76	
For Elevated Installation >10' To 15', Add	7.59	
For Elevated Installation >15' To 20', Add	15.17	
For Elevated Installation >20' To 25', Add	18.97	
For Elevated Installation >25' To 30', Add	26.55	
For Elevated Installation >30' To 35', Add	30.34	
For Elevated Installation >35' To 40', Add	37.93	
For Elevated Installation >40', Add	41.72	
26 05 33 13-0053 EA 2-1/2" Intermediate Metal Conduit (IMC) 90 Degree Elbow .....156.94		37.93
For Work In Restricted Working Space, Add	28.45	
For Elevated Installation >10' To 15', Add	9.48	
For Elevated Installation >15' To 20', Add	18.96	
For Elevated Installation >20' To 25', Add	23.71	
For Elevated Installation >25' To 30', Add	33.19	
For Elevated Installation >30' To 35', Add	37.93	
For Elevated Installation >35' To 40', Add	47.41	
For Elevated Installation >40', Add	52.15	
26 05 33 13-0054 EA 3" Intermediate Metal Conduit (IMC) 90 Degree Elbow .....224.26		51.68
For Work In Restricted Working Space, Add	38.75	
For Elevated Installation >10' To 15', Add	12.92	
For Elevated Installation >15' To 20', Add	25.83	
For Elevated Installation >20' To 25', Add	32.29	
For Elevated Installation >25' To 30', Add	45.21	
For Elevated Installation >30' To 35', Add	51.67	
For Elevated Installation >35' To 40', Add	64.59	
For Elevated Installation >40', Add	71.04	
26 05 33 13-0055 EA 3-1/2" Intermediate Metal Conduit (IMC) 90 Degree Elbow .....313.58		58.27
For Work In Restricted Working Space, Add	43.71	
For Elevated Installation >10' To 15', Add	14.57	
For Elevated Installation >15' To 20', Add	29.14	
For Elevated Installation >20' To 25', Add	36.43	
For Elevated Installation >25' To 30', Add	51.00	
For Elevated Installation >30' To 35', Add	58.28	
For Elevated Installation >35' To 40', Add	72.85	
For Elevated Installation >40', Add	80.14	
26 05 33 13-0056 EA 4" Intermediate Metal Conduit (IMC) 90 Degree Elbow .....384.37		75.87
For Work In Restricted Working Space, Add	56.89	
For Elevated Installation >10' To 15', Add	18.96	
For Elevated Installation >15' To 20', Add	37.93	
For Elevated Installation >20' To 25', Add	47.41	
For Elevated Installation >25' To 30', Add	66.37	
For Elevated Installation >30' To 35', Add	75.85	
For Elevated Installation >35' To 40', Add	94.82	
For Elevated Installation >40', Add	104.30	
<b>26 05 33 13-0057 Intermediate Metal Conduit (IMC) Bushing Sets With Locknut (26 05 33 13-0034)</b>		
26 05 33 13-0058 EA 1/2" Intermediate Metal Conduit (IMC) Bushing Set With Locknut.....18.49		7.14
For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add	5.36	
26 05 33 13-0059 EA 3/4" Intermediate Metal Conduit (IMC) Bushing Set With Locknut.....21.67		0.82
For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add	6.18	
26 05 33 13-0060 EA 1" Intermediate Metal Conduit (IMC) Bushing Set With Locknut.....27.88		10.44
For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add	7.83	
26 05 33 13-0061 EA 1-1/4" Intermediate Metal Conduit (IMC) Bushing Set With Locknut.....33.97		12.65
For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add	9.48	
26 05 33 13-0062 EA 1-1/2" Intermediate Metal Conduit (IMC) Bushing Set With Locknut.....37.73		13.75
For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add	10.31	
26 05 33 13-0063 EA 2" Intermediate Metal Conduit (IMC) Bushing Set With Locknut.....48.17		17.04
For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add	12.78	
26 05 33 13-0064 EA 2-1/2" Intermediate Metal Conduit (IMC) Bushing Set With Locknut.....86.04		27.49
For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add	20.62	
26 05 33 13-0065 EA 3" Intermediate Metal Conduit (IMC) Bushing Set With Locknut.....108.86		37.39
For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add	28.04	
26 05 33 13-0066 EA 3-1/2" Intermediate Metal Conduit (IMC) Bushing Set With Locknut.....139.17		44.53
For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add	33.40	
26 05 33 13-0067 EA 4" Intermediate Metal Conduit (IMC) Bushing Set With Locknut.....163.62		51.68
For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add	38.76	
<b>26 05 33 13-0068 Intermediate Metal Conduit (IMC) Erickson Or "Kwik-Couple" Fittings (26 05 33 13-0034)</b>		
Note: 3-Piece coupling.		
26 05 33 13-0069 EA 1/2" Intermediate Metal Conduit (IMC) Erickson Or "Kwik-Couple" Fitting.....59.86		21.98
For Work In Restricted Working Space, Add	16.51	
For Elevated Installation >10' To 15', Add	5.50	
For Elevated Installation >15' To 20', Add	11.01	
For Elevated Installation >20' To 25', Add	13.76	
For Elevated Installation >25' To 30', Add	19.26	
For Elevated Installation >30' To 35', Add	22.02	
For Elevated Installation >35' To 40', Add	27.52	
For Elevated Installation >40', Add	30.27	
For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add	16.51	



Electrical		26
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MINOR CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
26 05 33 13-0070	EA	3/4" Intermediate Metal Conduit (IMC) Erickson Or "Kwik-Couple" Fitting.....	67.64	24.60
		For Work In Restricted Working Space, Add	18.43	
		For Elevated Installation >10' To 15', Add	6.14	
		For Elevated Installation >15' To 20', Add	12.29	
		For Elevated Installation >20' To 25', Add	15.36	
		For Elevated Installation >25' To 30', Add	21.50	
		For Elevated Installation >30' To 35', Add	24.57	
		For Elevated Installation >35' To 40', Add	30.72	
		For Elevated Installation >40', Add	33.79	
		For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add	18.43	
26 05 33 13-0071	EA	1" Intermediate Metal Conduit (IMC) Erickson Or "Kwik-Couple" Fitting.....	80.39	27.35
		For Work In Restricted Working Space, Add	20.53	
		For Elevated Installation >10' To 15', Add	6.84	
		For Elevated Installation >15' To 20', Add	13.68	
		For Elevated Installation >20' To 25', Add	17.11	
		For Elevated Installation >25' To 30', Add	23.95	
		For Elevated Installation >30' To 35', Add	27.37	
		For Elevated Installation >35' To 40', Add	34.21	
		For Elevated Installation >40', Add	37.63	
		For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add	20.53	
26 05 33 13-0072	EA	1-1/4" Intermediate Metal Conduit (IMC) Erickson Or "Kwik-Couple" Fitting .....	96.90	29.96
		For Work In Restricted Working Space, Add	22.46	
		For Elevated Installation >10' To 15', Add	7.49	
		For Elevated Installation >15' To 20', Add	14.98	
		For Elevated Installation >20' To 25', Add	18.72	
		For Elevated Installation >25' To 30', Add	26.21	
		For Elevated Installation >30' To 35', Add	29.95	
		For Elevated Installation >35' To 40', Add	37.44	
		For Elevated Installation >40', Add	41.18	
		For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add	22.46	
26 05 33 13-0073	EA	1-1/2" Intermediate Metal Conduit (IMC) Erickson Or "Kwik-Couple" Fitting .....	109.55	32.71
		For Work In Restricted Working Space, Add	24.58	
		For Elevated Installation >10' To 15', Add	8.19	
		For Elevated Installation >15' To 20', Add	16.38	
		For Elevated Installation >20' To 25', Add	20.48	
		For Elevated Installation >25' To 30', Add	28.67	
		For Elevated Installation >30' To 35', Add	32.77	
		For Elevated Installation >35' To 40', Add	40.96	
		For Elevated Installation >40', Add	45.06	
		For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add	24.58	
26 05 33 13-0074	EA	2" Intermediate Metal Conduit (IMC) Erickson Or "Kwik-Couple" Fitting.....	143.98	35.46
		For Work In Restricted Working Space, Add	26.62	
		For Elevated Installation >10' To 15', Add	8.87	
		For Elevated Installation >15' To 20', Add	17.74	
		For Elevated Installation >20' To 25', Add	22.18	
		For Elevated Installation >25' To 30', Add	31.05	
		For Elevated Installation >30' To 35', Add	35.49	
		For Elevated Installation >35' To 40', Add	44.36	
		For Elevated Installation >40', Add	48.80	
		For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add	26.62	
26 05 33 13-0075	EA	2-1/2" Intermediate Metal Conduit (IMC) Erickson Or "Kwik-Couple" Fitting .....	228.14	43.98
		For Work In Restricted Working Space, Add	32.98	
		For Elevated Installation >10' To 15', Add	10.99	
		For Elevated Installation >15' To 20', Add	21.99	
		For Elevated Installation >20' To 25', Add	27.49	
		For Elevated Installation >25' To 30', Add	38.48	
		For Elevated Installation >30' To 35', Add	43.98	
		For Elevated Installation >35' To 40', Add	54.97	
		For Elevated Installation >40', Add	60.47	
		For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add	32.98	
26 05 33 13-0076	EA	3" Intermediate Metal Conduit (IMC) Erickson Or "Kwik-Couple" Fitting.....	317.70	54.97
		For Work In Restricted Working Space, Add	41.23	
		For Elevated Installation >10' To 15', Add	13.74	
		For Elevated Installation >15' To 20', Add	27.49	
		For Elevated Installation >20' To 25', Add	34.36	
		For Elevated Installation >25' To 30', Add	48.10	
		For Elevated Installation >30' To 35', Add	54.98	
		For Elevated Installation >35' To 40', Add	68.72	
		For Elevated Installation >40', Add	75.59	
		For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add	41.23	
26 05 33 13-0077	EA	3-1/2" Intermediate Metal Conduit (IMC) Erickson Or "Kwik-Couple" Fitting .....	454.58	65.97
		For Work In Restricted Working Space, Add	49.49	
		For Elevated Installation >10' To 15', Add	16.50	
		For Elevated Installation >15' To 20', Add	33.00	
		For Elevated Installation >20' To 25', Add	41.25	
		For Elevated Installation >25' To 30', Add	57.74	
		For Elevated Installation >30' To 35', Add	65.99	
		For Elevated Installation >35' To 40', Add	82.49	
		For Elevated Installation >40', Add	90.74	
		For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add	49.49	

**26 Electrical****26 05 Common Work Results for Electrical****26 05 33 Raceway and Boxes for Electrical Systems**

MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
26 05 33 13-0078 EA 4" Intermediate Metal Conduit (IMC) Erickson Or "Kwik-Couple" Fitting.....	521.44	71.47
For Work In Restricted Working Space, Add	53.60	
For Elevated Installation >10' To 15', Add	17.87	
For Elevated Installation >15' To 20', Add	35.73	
For Elevated Installation >20' To 25', Add	44.66	
For Elevated Installation >25' To 30', Add	62.53	
For Elevated Installation >30' To 35', Add	71.46	
For Elevated Installation >35' To 40', Add	89.33	
For Elevated Installation >40', Add	98.26	
For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add	53.60	
<b>26 05 33 13-0079 Rigid Galvanized Steel (RGS) Or Intermediate Metal Conduit (IMC) To Electrical Metallic Tubing (EMT) Connectors (26 05 33 13-0034)</b>		
26 05 33 13-0080 EA 1/2" Rigid Galvanized Steel (RGS) Or Intermediate Metal Conduit (IMC) To Electrical Metallic Tubing (EMT) Connector .....	32.74	10.99
For Work In Restricted Working Space, Add	8.25	
For Elevated Installation >10' To 15', Add	2.75	
For Elevated Installation >15' To 20', Add	5.50	
For Elevated Installation >20' To 25', Add	6.87	
For Elevated Installation >25' To 30', Add	9.62	
For Elevated Installation >30' To 35', Add	11.00	
For Elevated Installation >35' To 40', Add	13.75	
For Elevated Installation >40', Add	15.12	
26 05 33 13-0081 EA 3/4" Rigid Galvanized Steel (RGS) Or Intermediate Metal Conduit (IMC) To Electrical Metallic Tubing (EMT) Connector .....	36.45	12.09
For Work In Restricted Working Space, Add	9.07	
For Elevated Installation >10' To 15', Add	3.02	
For Elevated Installation >15' To 20', Add	6.05	
For Elevated Installation >20' To 25', Add	7.56	
For Elevated Installation >25' To 30', Add	10.58	
For Elevated Installation >30' To 35', Add	12.10	
For Elevated Installation >35' To 40', Add	15.12	
For Elevated Installation >40', Add	16.63	
26 05 33 13-0082 EA 1" Rigid Galvanized Steel (RGS) Or Intermediate Metal Conduit (IMC) To Electrical Metallic Tubing (EMT) Connector .....	41.75	13.75
For Work In Restricted Working Space, Add	10.31	
For Elevated Installation >10' To 15', Add	3.44	
For Elevated Installation >15' To 20', Add	6.87	
For Elevated Installation >20' To 25', Add	8.59	
For Elevated Installation >25' To 30', Add	12.03	
For Elevated Installation >30' To 35', Add	13.74	
For Elevated Installation >35' To 40', Add	17.18	
For Elevated Installation >40', Add	18.90	
26 05 33 13-0083 EA 1-1/4" Rigid Galvanized Steel (RGS) Or Intermediate Metal Conduit (IMC) To Electrical Metallic Tubing (EMT) Connector .....	46.86	14.84
For Work In Restricted Working Space, Add	11.13	
For Elevated Installation >10' To 15', Add	3.71	
For Elevated Installation >15' To 20', Add	7.42	
For Elevated Installation >20' To 25', Add	9.28	
For Elevated Installation >25' To 30', Add	12.99	
For Elevated Installation >30' To 35', Add	14.84	
For Elevated Installation >35' To 40', Add	18.56	
For Elevated Installation >40', Add	20.41	
26 05 33 13-0084 EA 1-1/2" Rigid Galvanized Steel (RGS) Or Intermediate Metal Conduit (IMC) To Electrical Metallic Tubing (EMT) Connector .....	54.82	16.49
For Work In Restricted Working Space, Add	12.37	
For Elevated Installation >10' To 15', Add	4.12	
For Elevated Installation >15' To 20', Add	8.25	
For Elevated Installation >20' To 25', Add	10.31	
For Elevated Installation >25' To 30', Add	14.43	
For Elevated Installation >30' To 35', Add	16.49	
For Elevated Installation >35' To 40', Add	20.62	
For Elevated Installation >40', Add	22.68	
26 05 33 13-0085 EA 2" Rigid Galvanized Steel (RGS) Or Intermediate Metal Conduit (IMC) To Electrical Metallic Tubing (EMT) Connector .....	65.44	18.14
For Work In Restricted Working Space, Add	13.61	
For Elevated Installation >10' To 15', Add	4.54	
For Elevated Installation >15' To 20', Add	9.07	
For Elevated Installation >20' To 25', Add	11.34	
For Elevated Installation >25' To 30', Add	15.87	
For Elevated Installation >30' To 35', Add	18.14	
For Elevated Installation >35' To 40', Add	22.68	
For Elevated Installation >40', Add	24.94	
26 05 33 13-0086 EA 2-1/2" Rigid Galvanized Steel (RGS) Or Intermediate Metal Conduit (IMC) To Electrical Metallic Tubing (EMT) Connector .....	87.18	21.98
For Work In Restricted Working Space, Add	16.49	
For Elevated Installation >10' To 15', Add	5.50	
For Elevated Installation >15' To 20', Add	10.99	
For Elevated Installation >20' To 25', Add	13.74	
For Elevated Installation >25' To 30', Add	19.24	
For Elevated Installation >30' To 35', Add	21.99	
For Elevated Installation >35' To 40', Add	27.49	
For Elevated Installation >40', Add	30.23	



		<b>Electrical</b>	<b>26</b>
		<b>Common Work Results for Electrical</b>	<b>26 05</b>
		<b>Raceway and Boxes for Electrical Systems</b>	<b>26 05 33</b>

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MINOR CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
26 05 33 13-0087	EA	3" Rigid Galvanized Steel (RGS) Or Intermediate Metal Conduit (IMC) To Electrical Metallic Tubing (EMT) Connector.....	108.02	27.49
		For Work In Restricted Working Space, Add	20.62	
		For Elevated Installation >10' To 15', Add	6.87	
		For Elevated Installation >15' To 20', Add	13.74	
		For Elevated Installation >20' To 25', Add	17.18	
		For Elevated Installation >25' To 30', Add	24.05	
		For Elevated Installation >30' To 35', Add	27.49	
		For Elevated Installation >35' To 40', Add	34.36	
		For Elevated Installation >40', Add	37.80	
26 05 33 13-0088	EA	3-1/2" Rigid Galvanized Steel (RGS) Or Intermediate Metal Conduit (IMC) To Electrical Metallic Tubing (EMT) Connector.....	129.74	32.99
		For Work In Restricted Working Space, Add	24.74	
		For Elevated Installation >10' To 15', Add	8.25	
		For Elevated Installation >15' To 20', Add	16.49	
		For Elevated Installation >20' To 25', Add	20.62	
		For Elevated Installation >25' To 30', Add	28.86	
		For Elevated Installation >30' To 35', Add	32.98	
		For Elevated Installation >35' To 40', Add	41.23	
		For Elevated Installation >40', Add	45.35	
26 05 33 13-0089	EA	4" Rigid Galvanized Steel (RGS) Or Intermediate Metal Conduit (IMC) To Electrical Metallic Tubing (EMT) Connector.....	145.48	35.73
		For Work In Restricted Working Space, Add	26.80	
		For Elevated Installation >10' To 15', Add	8.93	
		For Elevated Installation >15' To 20', Add	17.87	
		For Elevated Installation >20' To 25', Add	22.33	
		For Elevated Installation >25' To 30', Add	31.27	
		For Elevated Installation >30' To 35', Add	35.73	
		For Elevated Installation >35' To 40', Add	44.67	
		For Elevated Installation >40', Add	49.13	
<b>26 05 33 13-0090 Intermediate Metal Conduit (IMC) Rain Tight Threaded Hubs (26 05 33 13-0034)</b>				
26 05 33 13-0091	EA	1/2" Intermediate Metal Conduit (IMC) Rain Tight Threaded Hub .....	29.69	10.99
		For Work In Restricted Working Space, Add	8.25	
		For Elevated Installation >10' To 15', Add	2.75	
		For Elevated Installation >15' To 20', Add	5.50	
		For Elevated Installation >20' To 25', Add	6.88	
		For Elevated Installation >25' To 30', Add	9.63	
		For Elevated Installation >30' To 35', Add	11.00	
		For Elevated Installation >35' To 40', Add	13.75	
		For Elevated Installation >40', Add	15.13	
		For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add	8.25	
26 05 33 13-0092	EA	3/4" Intermediate Metal Conduit (IMC) Rain Tight Threaded Hub .....	37.64	13.75
		For Work In Restricted Working Space, Add	10.31	
		For Elevated Installation >10' To 15', Add	3.44	
		For Elevated Installation >15' To 20', Add	6.87	
		For Elevated Installation >20' To 25', Add	8.59	
		For Elevated Installation >25' To 30', Add	12.03	
		For Elevated Installation >30' To 35', Add	13.74	
		For Elevated Installation >35' To 40', Add	17.18	
		For Elevated Installation >40', Add	18.90	
		For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add	10.31	
26 05 33 13-0093	EA	1" Intermediate Metal Conduit (IMC) Rain Tight Threaded Hub .....	46.08	16.49
		For Work In Restricted Working Space, Add	12.37	
		For Elevated Installation >10' To 15', Add	4.12	
		For Elevated Installation >15' To 20', Add	8.25	
		For Elevated Installation >20' To 25', Add	10.31	
		For Elevated Installation >25' To 30', Add	14.43	
		For Elevated Installation >30' To 35', Add	16.49	
		For Elevated Installation >35' To 40', Add	20.62	
		For Elevated Installation >40', Add	22.68	
		For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add	12.37	
26 05 33 13-0094	EA	1-1/4" Intermediate Metal Conduit (IMC) Rain Tight Threaded Hub .....	54.97	19.24
		For Work In Restricted Working Space, Add	14.43	
		For Elevated Installation >10' To 15', Add	4.81	
		For Elevated Installation >15' To 20', Add	9.62	
		For Elevated Installation >20' To 25', Add	12.03	
		For Elevated Installation >25' To 30', Add	16.84	
		For Elevated Installation >30' To 35', Add	19.24	
		For Elevated Installation >35' To 40', Add	24.06	
		For Elevated Installation >40', Add	26.46	
		For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add	14.43	
26 05 33 13-0095	EA	1-1/2" Intermediate Metal Conduit (IMC) Rain Tight Threaded Hub .....	63.81	21.98
		For Work In Restricted Working Space, Add	16.49	
		For Elevated Installation >10' To 15', Add	5.50	
		For Elevated Installation >15' To 20', Add	10.99	
		For Elevated Installation >20' To 25', Add	13.74	
		For Elevated Installation >25' To 30', Add	19.24	
		For Elevated Installation >30' To 35', Add	21.99	
		For Elevated Installation >35' To 40', Add	27.49	
		For Elevated Installation >40', Add	30.23	
		For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add	16.49	

**26 Electrical****26 05 Common Work Results for Electrical****26 05 33 Raceway and Boxes for Electrical Systems**

MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
26 05 33 13-0096 EA 2" Intermediate Metal Conduit (IMC) Rain Tight Threaded Hub.....	74.61	24.74
For Work In Restricted Working Space, Add	18.55	
For Elevated Installation >10' To 15', Add	6.18	
For Elevated Installation >15' To 20', Add	12.37	
For Elevated Installation >20' To 25', Add	15.46	
For Elevated Installation >25' To 30', Add	21.64	
For Elevated Installation >30' To 35', Add	24.74	
For Elevated Installation >35' To 40', Add	30.92	
For Elevated Installation >40', Add	34.01	
For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add	18.55	
26 05 33 13-0097 EA 2-1/2" Intermediate Metal Conduit (IMC) Rain Tight Threaded Hub .....	90.11	27.49
For Work In Restricted Working Space, Add	20.62	
For Elevated Installation >10' To 15', Add	6.87	
For Elevated Installation >15' To 20', Add	13.74	
For Elevated Installation >20' To 25', Add	17.18	
For Elevated Installation >25' To 30', Add	24.05	
For Elevated Installation >30' To 35', Add	27.49	
For Elevated Installation >35' To 40', Add	34.36	
For Elevated Installation >40', Add	37.80	
For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add	20.62	
26 05 33 13-0098 EA 3" Intermediate Metal Conduit (IMC) Rain Tight Threaded Hub.....	104.39	30.23
For Work In Restricted Working Space, Add	22.67	
For Elevated Installation >10' To 15', Add	7.56	
For Elevated Installation >15' To 20', Add	15.12	
For Elevated Installation >20' To 25', Add	18.90	
For Elevated Installation >25' To 30', Add	26.45	
For Elevated Installation >30' To 35', Add	30.23	
For Elevated Installation >35' To 40', Add	37.79	
For Elevated Installation >40', Add	41.57	
For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add	22.67	
26 05 33 13-0099 EA 3-1/2" Intermediate Metal Conduit (IMC) Rain Tight Threaded Hub .....	126.68	35.73
For Work In Restricted Working Space, Add	26.80	
For Elevated Installation >10' To 15', Add	8.93	
For Elevated Installation >15' To 20', Add	17.87	
For Elevated Installation >20' To 25', Add	22.33	
For Elevated Installation >25' To 30', Add	31.27	
For Elevated Installation >30' To 35', Add	35.73	
For Elevated Installation >35' To 40', Add	44.67	
For Elevated Installation >40', Add	49.13	
For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add	26.80	
26 05 33 13-0100 EA 4" Intermediate Metal Conduit (IMC) Rain Tight Threaded Hub.....	143.33	38.48
For Work In Restricted Working Space, Add	28.86	
For Elevated Installation >10' To 15', Add	9.62	
For Elevated Installation >15' To 20', Add	19.24	
For Elevated Installation >20' To 25', Add	24.05	
For Elevated Installation >25' To 30', Add	33.67	
For Elevated Installation >30' To 35', Add	38.48	
For Elevated Installation >35' To 40', Add	48.10	
For Elevated Installation >40', Add	52.91	
For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add	28.86	
<b>26 05 33 13-0101 Intermediate Metal Conduit (IMC) Expansion Fittings (26 05 33 13-0034)</b>		
26 05 33 13-0102 EA 1/2" Intermediate Metal Conduit (IMC) Expansion Fitting .....	149.54	21.98
For Work In Restricted Working Space, Add	16.49	
For Elevated Installation >10' To 15', Add	5.50	
For Elevated Installation >15' To 20', Add	11.00	
For Elevated Installation >20' To 25', Add	13.75	
For Elevated Installation >25' To 30', Add	19.24	
For Elevated Installation >30' To 35', Add	21.99	
For Elevated Installation >35' To 40', Add	27.49	
For Elevated Installation >40', Add	30.24	
26 05 33 13-0103 EA 3/4" Intermediate Metal Conduit (IMC) Expansion Fitting .....	165.87	24.74
For Work In Restricted Working Space, Add	18.56	
For Elevated Installation >10' To 15', Add	6.19	
For Elevated Installation >15' To 20', Add	12.37	
For Elevated Installation >20' To 25', Add	15.46	
For Elevated Installation >25' To 30', Add	21.65	
For Elevated Installation >30' To 35', Add	24.74	
For Elevated Installation >35' To 40', Add	30.93	
For Elevated Installation >40', Add	34.02	
26 05 33 13-0104 EA 1" Intermediate Metal Conduit (IMC) Expansion Fitting .....	184.32	27.49
For Work In Restricted Working Space, Add	20.62	
For Elevated Installation >10' To 15', Add	6.87	
For Elevated Installation >15' To 20', Add	13.74	
For Elevated Installation >20' To 25', Add	17.18	
For Elevated Installation >25' To 30', Add	24.05	
For Elevated Installation >30' To 35', Add	27.49	
For Elevated Installation >35' To 40', Add	34.36	
For Elevated Installation >40', Add	37.80	





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MINOR CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
26 05 33 13-0105	EA	1-1/4" Intermediate Metal Conduit (IMC) Expansion Fitting.....	219.80	30.23
		For Work In Restricted Working Space, Add	22.68	
		For Elevated Installation >10' To 15', Add	7.56	
		For Elevated Installation >15' To 20', Add	15.12	
		For Elevated Installation >20' To 25', Add	18.90	
		For Elevated Installation >25' To 30', Add	26.46	
		For Elevated Installation >30' To 35', Add	30.24	
		For Elevated Installation >35' To 40', Add	37.80	
		For Elevated Installation >40', Add	41.57	
26 05 33 13-0106	EA	1-1/2" Intermediate Metal Conduit (IMC) Expansion Fitting.....	265.38	32.99
		For Work In Restricted Working Space, Add	24.74	
		For Elevated Installation >10' To 15', Add	8.25	
		For Elevated Installation >15' To 20', Add	16.49	
		For Elevated Installation >20' To 25', Add	20.62	
		For Elevated Installation >25' To 30', Add	28.86	
		For Elevated Installation >30' To 35', Add	32.98	
		For Elevated Installation >35' To 40', Add	41.23	
		For Elevated Installation >40', Add	45.35	
26 05 33 13-0107	EA	2" Intermediate Metal Conduit (IMC) Expansion Fitting.....	341.56	35.73
		For Work In Restricted Working Space, Add	26.80	
		For Elevated Installation >10' To 15', Add	8.93	
		For Elevated Installation >15' To 20', Add	17.86	
		For Elevated Installation >20' To 25', Add	22.33	
		For Elevated Installation >25' To 30', Add	31.26	
		For Elevated Installation >30' To 35', Add	35.73	
		For Elevated Installation >35' To 40', Add	44.66	
		For Elevated Installation >40', Add	49.13	
26 05 33 13-0108	EA	2-1/2" Intermediate Metal Conduit (IMC) Expansion Fitting.....	506.16	43.98
		For Work In Restricted Working Space, Add	32.98	
		For Elevated Installation >10' To 15', Add	10.99	
		For Elevated Installation >15' To 20', Add	21.99	
		For Elevated Installation >20' To 25', Add	27.49	
		For Elevated Installation >25' To 30', Add	38.48	
		For Elevated Installation >30' To 35', Add	43.98	
		For Elevated Installation >35' To 40', Add	54.97	
		For Elevated Installation >40', Add	60.47	
26 05 33 13-0109	EA	3" Intermediate Metal Conduit (IMC) Expansion Fitting.....	610.55	54.97
		For Work In Restricted Working Space, Add	41.23	
		For Elevated Installation >10' To 15', Add	13.74	
		For Elevated Installation >15' To 20', Add	27.49	
		For Elevated Installation >20' To 25', Add	34.36	
		For Elevated Installation >25' To 30', Add	48.10	
		For Elevated Installation >30' To 35', Add	54.98	
		For Elevated Installation >35' To 40', Add	68.72	
		For Elevated Installation >40', Add	75.59	
26 05 33 13-0110	EA	3-1/2" Intermediate Metal Conduit (IMC) Expansion Fitting.....	840.82	65.97
		For Work In Restricted Working Space, Add	49.48	
		For Elevated Installation >10' To 15', Add	16.49	
		For Elevated Installation >15' To 20', Add	32.99	
		For Elevated Installation >20' To 25', Add	41.24	
		For Elevated Installation >25' To 30', Add	57.73	
		For Elevated Installation >30' To 35', Add	65.98	
		For Elevated Installation >35' To 40', Add	82.47	
		For Elevated Installation >40', Add	90.72	
26 05 33 13-0111	EA	4" Intermediate Metal Conduit (IMC) Expansion Fitting.....	967.77	71.47
		For Work In Restricted Working Space, Add	53.60	
		For Elevated Installation >10' To 15', Add	17.87	
		For Elevated Installation >15' To 20', Add	35.73	
		For Elevated Installation >20' To 25', Add	44.66	
		For Elevated Installation >25' To 30', Add	62.53	
		For Elevated Installation >30' To 35', Add	71.46	
		For Elevated Installation >35' To 40', Add	89.33	
		For Elevated Installation >40', Add	98.26	
26 05 33 13-0112 Intermediate Metal Conduit (IMC) Sealing Fittings, Vertical/Horizontal (26 05 33 13-0034)				
26 05 33 13-0113	EA	1/2" Intermediate Metal Conduit (IMC) Sealing Fitting, Vertical/Horizontal.....	105.11	34.36
		For Work In Restricted Working Space, Add	20.62	
		For Elevated Installation >10' To 15', Add	6.87	
		For Elevated Installation >15' To 20', Add	13.74	
		For Elevated Installation >20' To 25', Add	17.18	
		For Elevated Installation >25' To 30', Add	24.05	
		For Elevated Installation >30' To 35', Add	27.49	
		For Elevated Installation >35' To 40', Add	34.36	
		For Elevated Installation >40', Add	37.80	
		For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add	20.62	
26 05 33 13-0114	EA	3/4" Intermediate Metal Conduit (IMC) Sealing Fitting, Vertical/Horizontal.....	125.19	41.23
		For Work In Restricted Working Space, Add	24.74	
		For Elevated Installation >10' To 15', Add	8.25	
		For Elevated Installation >15' To 20', Add	16.49	
		For Elevated Installation >20' To 25', Add	20.62	
		For Elevated Installation >25' To 30', Add	28.86	
		For Elevated Installation >30' To 35', Add	32.98	
		For Elevated Installation >35' To 40', Add	41.23	
		For Elevated Installation >40', Add	45.35	
		For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add	24.74	

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MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
26 05 33 13-0115 EA 1" Intermediate Metal Conduit (IMC) Sealing Fitting, Vertical/Horizontal .....	151.13	48.10
For Work In Restricted Working Space, Add	28.86	
For Elevated Installation >10' To 15', Add	9.62	
For Elevated Installation >15' To 20', Add	19.24	
For Elevated Installation >20' To 25', Add	24.05	
For Elevated Installation >25' To 30', Add	33.67	
For Elevated Installation >30' To 35', Add	38.48	
For Elevated Installation >35' To 40', Add	48.11	
For Elevated Installation >40', Add	52.92	
For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add	28.86	
26 05 33 13-0116 EA 1-1/4" Intermediate Metal Conduit (IMC) Sealing Fitting, Vertical/Horizontal .....	176.64	54.97
For Work In Restricted Working Space, Add	32.98	
For Elevated Installation >10' To 15', Add	10.99	
For Elevated Installation >15' To 20', Add	21.99	
For Elevated Installation >20' To 25', Add	27.49	
For Elevated Installation >25' To 30', Add	38.48	
For Elevated Installation >30' To 35', Add	43.98	
For Elevated Installation >35' To 40', Add	54.97	
For Elevated Installation >40', Add	60.47	
For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add	32.98	
26 05 33 13-0117 EA 1-1/2" Intermediate Metal Conduit (IMC) Sealing Fitting, Vertical/Horizontal .....	224.11	61.85
For Work In Restricted Working Space, Add	37.11	
For Elevated Installation >10' To 15', Add	12.37	
For Elevated Installation >15' To 20', Add	24.74	
For Elevated Installation >20' To 25', Add	30.92	
For Elevated Installation >25' To 30', Add	43.29	
For Elevated Installation >30' To 35', Add	49.48	
For Elevated Installation >35' To 40', Add	61.85	
For Elevated Installation >40', Add	68.03	
For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add	37.11	
26 05 33 13-0118 EA 2" Intermediate Metal Conduit (IMC) Sealing Fitting, Vertical/Horizontal .....	267.54	68.72
For Work In Restricted Working Space, Add	41.23	
For Elevated Installation >10' To 15', Add	13.74	
For Elevated Installation >15' To 20', Add	27.49	
For Elevated Installation >20' To 25', Add	34.36	
For Elevated Installation >25' To 30', Add	48.10	
For Elevated Installation >30' To 35', Add	54.98	
For Elevated Installation >35' To 40', Add	68.72	
For Elevated Installation >40', Add	75.59	
For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add	41.23	
26 05 33 13-0119 EA 2-1/2" Intermediate Metal Conduit (IMC) Sealing Fitting, Vertical/Horizontal .....	367.07	82.46
For Work In Restricted Working Space, Add	49.48	
For Elevated Installation >10' To 15', Add	16.49	
For Elevated Installation >15' To 20', Add	32.99	
For Elevated Installation >20' To 25', Add	41.23	
For Elevated Installation >25' To 30', Add	57.73	
For Elevated Installation >30' To 35', Add	65.97	
For Elevated Installation >35' To 40', Add	82.47	
For Elevated Installation >40', Add	90.71	
For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add	49.48	
26 05 33 13-0120 EA 3" Intermediate Metal Conduit (IMC) Sealing Fitting, Vertical/Horizontal .....	439.33	96.21
For Work In Restricted Working Space, Add	57.72	
For Elevated Installation >10' To 15', Add	19.24	
For Elevated Installation >15' To 20', Add	38.48	
For Elevated Installation >20' To 25', Add	48.10	
For Elevated Installation >25' To 30', Add	67.34	
For Elevated Installation >30' To 35', Add	76.96	
For Elevated Installation >35' To 40', Add	96.21	
For Elevated Installation >40', Add	105.83	
For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add	57.72	
26 05 33 13-0121 EA 3-1/2" Intermediate Metal Conduit (IMC) Sealing Fitting, Vertical/Horizontal .....	932.02	109.94
For Work In Restricted Working Space, Add	65.97	
For Elevated Installation >10' To 15', Add	21.99	
For Elevated Installation >15' To 20', Add	43.98	
For Elevated Installation >20' To 25', Add	54.98	
For Elevated Installation >25' To 30', Add	76.97	
For Elevated Installation >30' To 35', Add	87.96	
For Elevated Installation >35' To 40', Add	109.95	
For Elevated Installation >40', Add	120.95	
For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add	65.97	
26 05 33 13-0122 EA 4" Intermediate Metal Conduit (IMC) Sealing Fitting, Vertical/Horizontal .....	1,071.57	123.69
For Work In Restricted Working Space, Add	74.22	
For Elevated Installation >10' To 15', Add	24.74	
For Elevated Installation >15' To 20', Add	49.48	
For Elevated Installation >20' To 25', Add	61.85	
For Elevated Installation >25' To 30', Add	86.59	
For Elevated Installation >30' To 35', Add	98.96	
For Elevated Installation >35' To 40', Add	123.70	
For Elevated Installation >40', Add	136.06	
For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add	74.22	

26 05 33 13-0123 Intermediate Metal Conduit (IMC) Threaded Couplings (26 05 33 13-0034)



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MINOR CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
26 05 33 13-0124	EA	1/2" Intermediate Metal Conduit (IMC) Threaded Coupling .....	17.72	6.59
		For Work In Restricted Working Space, Add	4.94	
		For Elevated Installation >10' To 15', Add	1.65	
		For Elevated Installation >15' To 20', Add	3.30	
		For Elevated Installation >20' To 25', Add	4.12	
		For Elevated Installation >25' To 30', Add	5.77	
		For Elevated Installation >30' To 35', Add	6.59	
		For Elevated Installation >35' To 40', Add	8.24	
		For Elevated Installation >40', Add	9.06	
26 05 33 13-0125	EA	3/4" Intermediate Metal Conduit (IMC) Threaded Coupling .....	24.89	9.35
		For Work In Restricted Working Space, Add	7.01	
		For Elevated Installation >10' To 15', Add	2.34	
		For Elevated Installation >15' To 20', Add	4.68	
		For Elevated Installation >20' To 25', Add	5.85	
		For Elevated Installation >25' To 30', Add	8.18	
		For Elevated Installation >30' To 35', Add	9.35	
		For Elevated Installation >35' To 40', Add	11.69	
		For Elevated Installation >40', Add	12.86	
26 05 33 13-0126	EA	1" Intermediate Metal Conduit (IMC) Threaded Coupling .....	32.46	12.09
		For Work In Restricted Working Space, Add	9.06	
		For Elevated Installation >10' To 15', Add	3.02	
		For Elevated Installation >15' To 20', Add	6.04	
		For Elevated Installation >20' To 25', Add	7.55	
		For Elevated Installation >25' To 30', Add	10.57	
		For Elevated Installation >30' To 35', Add	12.08	
		For Elevated Installation >35' To 40', Add	15.11	
		For Elevated Installation >40', Add	16.62	
26 05 33 13-0127	EA	1-1/4" Intermediate Metal Conduit (IMC) Threaded Coupling .....	37.18	13.75
		For Work In Restricted Working Space, Add	10.31	
		For Elevated Installation >10' To 15', Add	3.44	
		For Elevated Installation >15' To 20', Add	6.87	
		For Elevated Installation >20' To 25', Add	8.59	
		For Elevated Installation >25' To 30', Add	12.03	
		For Elevated Installation >30' To 35', Add	13.75	
		For Elevated Installation >35' To 40', Add	17.19	
		For Elevated Installation >40', Add	18.90	
26 05 33 13-0128	EA	1-1/2" Intermediate Metal Conduit (IMC) Threaded Coupling .....	44.76	16.49
		For Work In Restricted Working Space, Add	12.36	
		For Elevated Installation >10' To 15', Add	4.12	
		For Elevated Installation >15' To 20', Add	8.24	
		For Elevated Installation >20' To 25', Add	10.30	
		For Elevated Installation >25' To 30', Add	14.42	
		For Elevated Installation >30' To 35', Add	16.48	
		For Elevated Installation >35' To 40', Add	20.61	
		For Elevated Installation >40', Add	22.67	
26 05 33 13-0129	EA	2" Intermediate Metal Conduit (IMC) Threaded Coupling .....	51.42	18.69
		For Work In Restricted Working Space, Add	14.03	
		For Elevated Installation >10' To 15', Add	4.68	
		For Elevated Installation >15' To 20', Add	9.35	
		For Elevated Installation >20' To 25', Add	11.69	
		For Elevated Installation >25' To 30', Add	16.36	
		For Elevated Installation >30' To 35', Add	18.70	
		For Elevated Installation >35' To 40', Add	23.38	
		For Elevated Installation >40', Add	25.71	
26 05 33 13-0130	EA	2-1/2" Intermediate Metal Conduit (IMC) Threaded Coupling .....	62.56	20.89
		For Work In Restricted Working Space, Add	15.67	
		For Elevated Installation >10' To 15', Add	5.22	
		For Elevated Installation >15' To 20', Add	10.44	
		For Elevated Installation >20' To 25', Add	13.06	
		For Elevated Installation >25' To 30', Add	18.28	
		For Elevated Installation >30' To 35', Add	20.89	
		For Elevated Installation >35' To 40', Add	26.11	
		For Elevated Installation >40', Add	28.72	
26 05 33 13-0131	EA	3" Intermediate Metal Conduit (IMC) Threaded Coupling .....	73.23	23.64
		For Work In Restricted Working Space, Add	17.73	
		For Elevated Installation >10' To 15', Add	5.91	
		For Elevated Installation >15' To 20', Add	11.82	
		For Elevated Installation >20' To 25', Add	14.78	
		For Elevated Installation >25' To 30', Add	20.69	
		For Elevated Installation >30' To 35', Add	23.64	
		For Elevated Installation >35' To 40', Add	29.55	
		For Elevated Installation >40', Add	32.51	
26 05 33 13-0132	EA	3-1/2" Intermediate Metal Conduit (IMC) Threaded Coupling .....	83.49	25.84
		For Work In Restricted Working Space, Add	19.38	
		For Elevated Installation >10' To 15', Add	6.46	
		For Elevated Installation >15' To 20', Add	12.92	
		For Elevated Installation >20' To 25', Add	16.15	
		For Elevated Installation >25' To 30', Add	22.61	
		For Elevated Installation >30' To 35', Add	25.84	
		For Elevated Installation >35' To 40', Add	32.31	
		For Elevated Installation >40', Add	35.54	

**26 Electrical****26 05 Common Work Results for Electrical****26 05 33 Raceway and Boxes for Electrical Systems**

MINOR	CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
26 05 33 13-0133	EA		4" Intermediate Metal Conduit (IMC) Threaded Coupling .....	87.73	27.49
			For Work In Restricted Working Space, Add .....	20.61	
			For Elevated Installation >10' To 15', Add .....	6.87	
			For Elevated Installation >15' To 20', Add .....	13.74	
			For Elevated Installation >20' To 25', Add .....	17.18	
			For Elevated Installation >25' To 30', Add .....	24.05	
			For Elevated Installation >30' To 35', Add .....	27.48	
			For Elevated Installation >35' To 40', Add .....	34.35	
			For Elevated Installation >40', Add .....	37.79	
26 05 33 13-0134			<b>Intermediate Metal Conduit (IMC) Reducer Bushings</b> (26 05 33 13-0034)		
26 05 33 13-0135	EA		1/2" To 3/4" Intermediate Metal Conduit (IMC) Reducing Bushing .....	8.26	2.75
			For Work In Restricted Working Space, Add .....	2.06	
			For Elevated Installation >10' To 15', Add .....	0.69	
			For Elevated Installation >15' To 20', Add .....	1.37	
			For Elevated Installation >20' To 25', Add .....	1.72	
			For Elevated Installation >25' To 30', Add .....	2.40	
			For Elevated Installation >30' To 35', Add .....	2.75	
			For Elevated Installation >35' To 40', Add .....	3.44	
			For Elevated Installation >40', Add .....	3.78	
26 05 33 13-0136	EA		3/4" To 1" Intermediate Metal Conduit (IMC) Reducing Bushing .....	9.06	2.75
			For Work In Restricted Working Space, Add .....	2.06	
			For Elevated Installation >10' To 15', Add .....	0.69	
			For Elevated Installation >15' To 20', Add .....	1.37	
			For Elevated Installation >20' To 25', Add .....	1.72	
			For Elevated Installation >25' To 30', Add .....	2.40	
			For Elevated Installation >30' To 35', Add .....	2.75	
			For Elevated Installation >35' To 40', Add .....	3.44	
			For Elevated Installation >40', Add .....	3.78	
26 05 33 13-0137			<b>Conduit Installed Below Grade</b> (26 05 33 13-0032)		
			Note: By direct burial in trench or in concrete slabs or duct banks. Includes detectable warning tape for underground conduits. Excludes trenching, backfilling and concrete.		
26 05 33 13-0138			<b>Rigid Galvanized Steel (RGS) Conduit And Fittings In Precast Concrete Panel</b> (26 05 33 13-0137)		
26 05 33 13-0139	LF		1" Rigid Galvanized Steel (RGS) Conduit With Fittings, Direct Burial .....	17.28	
26 05 33 13-0140	LF		1-1/4" Rigid Galvanized Steel (RGS) Conduit With Fittings, Direct Burial .....	23.29	
26 05 33 13-0141	LF		1-1/2" Rigid Galvanized Steel (RGS) Conduit With Fittings, Direct Burial .....	27.93	
26 05 33 13-0142	LF		2" Rigid Galvanized Steel (RGS) Conduit With Fittings, Direct Burial .....	37.60	
26 05 33 13-0143	LF		2-1/2" Rigid Galvanized Steel (RGS) Conduit With Fittings, Direct Burial .....	54.07	
26 05 33 13-0144	LF		3" Rigid Galvanized Steel (RGS) Conduit With Fittings, Direct Burial .....	68.03	
26 05 33 13-0145			<b>Spacers</b> (26 05 33 13-0137)		
			Note: For concrete encasement applications. See CSI section 26 05 33 13-0137 for conduit.		
26 05 33 13-0146	EA		1" Base Spacers, Average 4" Wide, Direct Burial .....	13.09	
26 05 33 13-0147			<b>Conduit Field Bending</b> (26 05 33 13-0032)		
26 05 33 13-0148			<b>Metallic Conduit Field Bending</b> (26 05 33 13-0147)		
			Note: For use with Rigid Galvanized Steel (RGS), Electrical Metallic Tubing (EMT), Intermediate Metal Conduit (IMC) and aluminum conduits.		
26 05 33 13-0149	EA		1-1/4" Metallic Conduit Field Bending .....	23.04	
26 05 33 13-0150	EA		1-1/2" Metallic Conduit Field Bending .....	30.72	
26 05 33 13-0151	EA		2" Metallic Conduit Field Bending .....	38.40	
26 05 33 13-0152	EA		2-1/2" Metallic Conduit Field Bending .....	53.75	
26 05 33 13-0153	EA		3" Metallic Conduit Field Bending .....	69.12	
26 05 33 13-0154	EA		3-1/2" Metallic Conduit Field Bending .....	84.47	
26 05 33 13-0155	EA		4" Metallic Conduit Field Bending .....	99.84	
26 05 33 13-0156	EA		5" Metallic Conduit Field Bending .....	122.87	
26 05 33 13-0157	EA		6" Metallic Conduit Field Bending .....	145.92	
26 05 33 13-0158			<b>Plastic Conduit Field Bending</b> (26 05 33 13-0147)		
			Note: For PVC conduits.		
26 05 33 13-0159	EA		1" Plastic Conduit Field Bending .....	35.32	
26 05 33 13-0160	EA		1-1/4" Plastic Conduit Field Bending .....	38.40	
26 05 33 13-0161	EA		1-1/2" Plastic Conduit Field Bending .....	46.08	
26 05 33 13-0162	EA		2" Plastic Conduit Field Bending .....	61.44	
26 05 33 13-0163	EA		2-1/2" Plastic Conduit Field Bending .....	76.80	
26 05 33 13-0164	EA		3" Plastic Conduit Field Bending .....	92.15	
26 05 33 13-0165	EA		3-1/2" Plastic Conduit Field Bending .....	107.52	
26 05 33 13-0166	EA		4" Plastic Conduit Field Bending .....	122.87	
26 05 33 13-0167	EA		5" Plastic Conduit Field Bending .....	138.23	
26 05 33 13-0168	EA		6" Plastic Conduit Field Bending .....	153.59	
26 05 33 13-0169			<b>Cut And Thread Existing In-Place Threaded Conduit</b> (26 05 33 13-0032)		
			Note: For use when connecting conduit to an existing in-place system.		



		<b>Electrical</b>	<b>26</b>
		<b>Common Work Results for Electrical</b>	<b>26 05</b>
		<b>Raceway and Boxes for Electrical Systems</b>	<b>26 05 33</b>

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MINOR CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
26 05 33 13-0170	EA	1/2", Cut And Thread Existing In-Place Threaded Conduit.....	45.18	
		For Work In Restricted Working Space, Add	13.55	
26 05 33 13-0171	EA	3/4", Cut And Thread Existing In-Place Threaded Conduit.....	49.70	
		For Work In Restricted Working Space, Add	14.91	
26 05 33 13-0172	EA	1", Cut And Thread Existing In-Place Threaded Conduit.....	54.22	
		For Work In Restricted Working Space, Add	16.27	
26 05 33 13-0173	EA	1-1/4", Cut And Thread Existing In-Place Threaded Conduit.....	58.74	
		For Work In Restricted Working Space, Add	17.62	
26 05 33 13-0174	EA	1-1/2", Cut And Thread Existing In-Place Threaded Conduit.....	61.75	
		For Work In Restricted Working Space, Add	18.53	
26 05 33 13-0175	EA	2", Cut And Thread Existing In-Place Threaded Conduit.....	64.76	
		For Work In Restricted Working Space, Add	19.43	
26 05 33 13-0176	EA	2-1/2", Cut And Thread Existing In-Place Threaded Conduit.....	67.78	
		For Work In Restricted Working Space, Add	20.33	
26 05 33 13-0177	EA	3", Cut And Thread Existing In-Place Threaded Conduit.....	70.79	
		For Work In Restricted Working Space, Add	21.24	
26 05 33 13-0178	EA	3-1/2", Cut And Thread Existing In-Place Threaded Conduit.....	72.29	
		For Work In Restricted Working Space, Add	21.69	
26 05 33 13-0179	EA	4", Cut And Thread Existing In-Place Threaded Conduit.....	73.80	
		For Work In Restricted Working Space, Add	22.14	
26 05 33 13-0180	EA	5", Cut And Thread Existing In-Place Threaded Conduit.....	76.81	
		For Work In Restricted Working Space, Add	23.04	
26 05 33 13-0181	EA	6", Cut And Thread Existing In-Place Threaded Conduit.....	79.83	
		For Work In Restricted Working Space, Add	23.95	
26 05 33 13-0182		<b>Flexible Conduit</b> (26 05 33 13-0032)		
26 05 33 13-0183		<b>Flexible Liquid Tight Metallic Conduit And Connectors</b> (26 05 33 13-0182) Note: Steel inner core with PVC cover.		
26 05 33 13-0184		<b>Flexible Liquid Tight Metallic Conduit</b> (26 05 33 13-0183)		
26 05 33 13-0185	LF	3/8" Flexible Liquid Tight Metallic Conduit.....	5.02	1.65
		For Installation In Concrete Beam, Slab, Etc. (Excludes Concrete), Add	0.62	
		For Work In Restricted Working Space, Add	1.24	
26 05 33 13-0186	LF	1/2" Flexible Liquid Tight Metallic Conduit.....	5.15	1.65
		For Installation In Concrete Beam, Slab, Etc. (Excludes Concrete), Add	0.62	
		For Work In Restricted Working Space, Add	1.24	
26 05 33 13-0187	LF	3/4" Flexible Liquid Tight Metallic Conduit.....	6.90	2.19
		For Installation In Concrete Beam, Slab, Etc. (Excludes Concrete), Add	0.83	
		For Work In Restricted Working Space, Add	1.65	
26 05 33 13-0188	LF	1" Flexible Liquid Tight Metallic Conduit.....	7.62	2.19
		For Installation In Concrete Beam, Slab, Etc. (Excludes Concrete), Add	0.83	
		For Work In Restricted Working Space, Add	1.65	
26 05 33 13-0189	LF	1-1/4" Flexible Liquid Tight Metallic Conduit.....	9.75	2.75
		For Installation In Concrete Beam, Slab, Etc. (Excludes Concrete), Add	1.03	
		For Work In Restricted Working Space, Add	2.06	
26 05 33 13-0190	LF	1-1/2" Flexible Liquid Tight Metallic Conduit.....	12.30	3.30
		For Installation In Concrete Beam, Slab, Etc. (Excludes Concrete), Add	1.24	
		For Work In Restricted Working Space, Add	2.48	
26 05 33 13-0191	LF	2" Flexible Liquid Tight Metallic Conduit.....	16.23	4.40
		For Installation In Concrete Beam, Slab, Etc. (Excludes Concrete), Add	1.65	
		For Work In Restricted Working Space, Add	3.30	
26 05 33 13-0192	LF	2-1/2" Flexible Liquid Tight Metallic Conduit.....	21.02	4.95
		For Installation In Concrete Beam, Slab, Etc. (Excludes Concrete), Add	1.86	
		For Work In Restricted Working Space, Add	3.71	
26 05 33 13-0193	LF	3" Flexible Liquid Tight Metallic Conduit.....	29.67	6.04
		For Installation In Concrete Beam, Slab, Etc. (Excludes Concrete), Add	2.27	
		For Work In Restricted Working Space, Add	4.54	
26 05 33 13-0194	LF	4" Flexible Liquid Tight Metallic Conduit.....	40.01	7.70
		For Installation In Concrete Beam, Slab, Etc. (Excludes Concrete), Add	2.89	
		For Work In Restricted Working Space, Add	5.77	
26 05 33 13-0195		<b>Straight Liquid Tight Connector</b> (26 05 33 13-0183)		
26 05 33 13-0196	EA	3/8" Straight Liquid Tight Connector.....	13.56	4.40
		For Work In Restricted Working Space, Add	3.30	
		For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add	3.30	
26 05 33 13-0197	EA	1/2" Straight Liquid Tight Connector.....	13.56	4.40
		For Work In Restricted Working Space, Add	3.30	
		For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add	3.30	
26 05 33 13-0198	EA	3/4" Straight Liquid Tight Connector.....	16.05	4.95
		For Work In Restricted Working Space, Add	3.71	
		For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add	3.71	
26 05 33 13-0199	EA	1" Straight Liquid Tight Connector.....	20.31	5.50
		For Work In Restricted Working Space, Add	4.13	
		For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add	4.13	
26 05 33 13-0200	EA	1-1/4" Straight Liquid Tight Connector.....	25.04	6.04
		For Work In Restricted Working Space, Add	4.54	
		For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add	4.54	
26 05 33 13-0201	EA	1-1/2" Straight Liquid Tight Connector.....	30.65	6.59
		For Work In Restricted Working Space, Add	4.95	
		For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add	4.95	

**26 Electrical****26 05 Common Work Results for Electrical****26 05 33 Raceway and Boxes for Electrical Systems**

MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
26 05 33 13-0202 EA 2" Straight Liquid Tight Connector .....40.81 For Work In Restricted Working Space, Add 5.77 For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add 5.77		7.70
26 05 33 13-0203 EA 2-1/2" Straight Liquid Tight Connector .....122.65 For Work In Restricted Working Space, Add 7.42 For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add 7.42		9.90
26 05 33 13-0204 EA 3" Straight Liquid Tight Connector .....155.77 For Work In Restricted Working Space, Add 7.83 For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add 7.83		10.44
26 05 33 13-0205 EA 4" Straight Liquid Tight Connector .....193.33 For Work In Restricted Working Space, Add 11.54 For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add 11.54		15.39
<b>26 05 33 13-0206 90 Degree Angle Liquid Tight Connector (26 05 33 13-0183)</b>		
26 05 33 13-0207 EA 3/8" 90 Degree Angle Liquid Tight Connector .....19.41 For Work In Restricted Working Space, Add 4.54 For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add 4.54		6.04
26 05 33 13-0208 EA 1/2" 90 Degree Angle Liquid Tight Connector .....19.96 For Work In Restricted Working Space, Add 4.54 For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add 4.54		6.04
26 05 33 13-0209 EA 3/4" 90 Degree Angle Liquid Tight Connector .....22.31 For Work In Restricted Working Space, Add 4.95 For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add 4.95		6.59
26 05 33 13-0210 EA 1" 90 Degree Angle Liquid Tight Connector .....29.82 For Work In Restricted Working Space, Add 5.77 For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add 5.77		7.70
26 05 33 13-0211 EA 1-1/4" 90 Degree Angle Liquid Tight Connector .....36.09 For Work In Restricted Working Space, Add 6.18 For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add 6.18		8.25
26 05 33 13-0212 EA 1-1/2" 90 Degree Angle Liquid Tight Connector .....42.54 For Work In Restricted Working Space, Add 6.59 For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add 6.59		8.80
26 05 33 13-0213 EA 2" 90 Degree Angle Liquid Tight Connector .....54.51 For Work In Restricted Working Space, Add 7.42 For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add 7.42		9.90
26 05 33 13-0214 EA 2-1/2" 90 Degree Angle Liquid Tight Connector .....167.89 For Work In Restricted Working Space, Add 7.83 For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add 7.83		10.44
26 05 33 13-0215 EA 3" 90 Degree Angle Liquid Tight Connector .....198.13 For Work In Restricted Working Space, Add 9.07 For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add 9.07		12.09
26 05 33 13-0216 EA 4" 90 Degree Angle Liquid Tight Connector .....276.65 For Work In Restricted Working Space, Add 14.43 For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add 14.43		19.24
<b>26 05 33 13-0217 45 Degree Angle Connector (26 05 33 13-0183)</b>		
26 05 33 13-0218 EA 3/8" 45 Degree Angle Liquid Tight Connector .....19.22 For Work In Restricted Working Space, Add 4.54 For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add 4.54		6.04
26 05 33 13-0219 EA 1/2" 45 Degree Angle Liquid Tight Connector .....19.35 For Work In Restricted Working Space, Add 4.54 For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add 4.54		6.04
26 05 33 13-0220 EA 3/4" 45 Degree Angle Liquid Tight Connector .....22.31 For Work In Restricted Working Space, Add 4.95 For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add 4.95		6.59
26 05 33 13-0221 EA 1" 45 Degree Angle Liquid Tight Connector .....31.33 For Work In Restricted Working Space, Add 5.77 For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add 5.77		7.70
26 05 33 13-0222 EA 1-1/4" 45 Degree Angle Liquid Tight Connector .....35.11 For Work In Restricted Working Space, Add 6.18 For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add 6.18		8.25
26 05 33 13-0223 EA 1-1/2" 45 Degree Angle Liquid Tight Connector .....38.89 For Work In Restricted Working Space, Add 6.59 For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add 6.59		8.80
<b>26 05 33 13-0224 Flexible Metallic Conduit And Connectors (26 05 33 13-0182)</b>		
<b>26 05 33 13-0225 Flexible Steel Conduit (26 05 33 13-0224)</b>		
26 05 33 13-0226 LF 3/8" Flexible Metallic Conduit .....5.27 For Flexible Aluminum Conduit, Add 0.14 For Installation In Concrete Beam, Slab, Etc. (Excludes Concrete), Add 0.66 For Installation In Metal Stud Wall, Add 0.44 For Installation In Wood Stud Wall (Includes Drilling), Add 1.10 For Work In Restricted Working Space, Add 1.32		1.80
26 05 33 13-0227 LF 1/2" Flexible Metallic Conduit .....5.46 For Flexible Aluminum Conduit, Add 0.16 For Installation In Concrete Beam, Slab, Etc. (Excludes Concrete), Add 0.68 For Installation In Metal Stud Wall, Add 0.45 For Installation In Wood Stud Wall (Includes Drilling), Add 1.13 For Work In Restricted Working Space, Add 1.35		1.80



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MINOR CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
26 05 33 13-0228	LF	3/4" Flexible Metallic Conduit.....	6.18	2.40
		For Flexible Aluminum Conduit, Add	0.21	
		For Installation In Concrete Beam, Slab, Etc. (Excludes Concrete), Add	0.73	
		For Installation In Metal Stud Wall, Add	0.49	
		For Installation In Wood Stud Wall (Includes Drilling), Add	1.22	
		For Work In Restricted Working Space, Add	1.47	
26 05 33 13-0229	LF	1" Flexible Metallic Conduit.....	7.68	2.40
		For Flexible Aluminum Conduit, Add	0.40	
		For Installation In Concrete Beam, Slab, Etc. (Excludes Concrete), Add	0.79	
		For Installation In Metal Stud Wall, Add	0.53	
		For Installation In Wood Stud Wall (Includes Drilling), Add	1.32	
		For Work In Restricted Working Space, Add	1.58	
26 05 33 13-0230	LF	1-1/4" Flexible Metallic Conduit .....	8.72	3.01
		For Flexible Aluminum Conduit, Add	0.52	
		For Installation In Concrete Beam, Slab, Etc. (Excludes Concrete), Add	0.84	
		For Installation In Metal Stud Wall, Add	0.56	
		For Installation In Wood Stud Wall (Includes Drilling), Add	1.39	
		For Work In Restricted Working Space, Add	1.67	
26 05 33 13-0231	LF	1-1/2" Flexible Metallic Conduit .....	11.31	3.61
		For Flexible Aluminum Conduit, Add	0.91	
		For Installation In Concrete Beam, Slab, Etc. (Excludes Concrete), Add	0.87	
		For Installation In Metal Stud Wall, Add	0.58	
		For Installation In Wood Stud Wall (Includes Drilling), Add	1.45	
		For Work In Restricted Working Space, Add	1.74	
26 05 33 13-0232	LF	2" Flexible Metallic Conduit.....	12.79	4.81
		For Flexible Aluminum Conduit, Add	1.12	
		For Installation In Concrete Beam, Slab, Etc. (Excludes Concrete), Add	0.90	
		For Installation In Metal Stud Wall, Add	0.60	
		For Installation In Wood Stud Wall (Includes Drilling), Add	1.51	
		For Work In Restricted Working Space, Add	1.81	
26 05 33 13-0233	LF	2-1/2" Flexible Steel Conduit .....	15.71	5.42
		For Flexible Aluminum Conduit, Add	1.35	
		For Installation In Concrete Beam, Slab, Etc. (Excludes Concrete), Add	1.13	
		For Installation In Metal Stud Wall, Add	0.75	
		For Installation In Wood Stud Wall (Includes Drilling), Add	1.88	
		For Work In Restricted Working Space, Add	2.26	
26 05 33 13-0234	LF	3" Flexible Metallic Conduit.....	23.26	6.62
		For Flexible Aluminum Conduit, Add	2.35	
		For Installation In Concrete Beam, Slab, Etc. (Excludes Concrete), Add	1.35	
		For Installation In Metal Stud Wall, Add	0.90	
		For Installation In Wood Stud Wall (Includes Drilling), Add	2.26	
		For Work In Restricted Working Space, Add	2.71	
26 05 33 13-0235	LF	3-1/2" Flexible Metallic Conduit .....	28.47	7.22
		For Flexible Aluminum Conduit, Add	2.96	
		For Installation In Concrete Beam, Slab, Etc. (Excludes Concrete), Add	1.58	
		For Installation In Metal Stud Wall, Add	1.05	
		For Installation In Wood Stud Wall (Includes Drilling), Add	2.63	
		For Work In Restricted Working Space, Add	3.16	
26 05 33 13-0236	LF	4" Flexible Metallic Conduit.....	32.72	8.43
		For Flexible Aluminum Conduit, Add	3.41	
		For Installation In Concrete Beam, Slab, Etc. (Excludes Concrete), Add	1.80	
		For Installation In Metal Stud Wall, Add	1.20	
		For Installation In Wood Stud Wall (Includes Drilling), Add	3.01	
		For Work In Restricted Working Space, Add	3.61	
26 05 33 13-0237 Plain Squeeze Type Straight Connector (26 05 33 13-0224)				
26 05 33 13-0238	EA	3/8" Flexible Straight Connectors, Plain.....	8.95	4.81
		For Work In Restricted Working Space, Add	2.03	
		For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add	2.03	
26 05 33 13-0239	EA	1/2" Flexible Straight Connectors, Plain.....	10.98	5.42
		For Work In Restricted Working Space, Add	2.26	
		For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add	2.26	
26 05 33 13-0240	EA	3/4" Flexible Straight Connectors, Plain.....	12.68	6.62
		For Work In Restricted Working Space, Add	2.71	
		For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add	2.71	
26 05 33 13-0241	EA	1" Flexible Straight Connectors, Plain.....	20.04	7.22
		For Work In Restricted Working Space, Add	3.61	
		For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add	3.61	
26 05 33 13-0242	EA	1-1/4" Flexible Straight Connectors, Plain .....	28.16	8.43
		For Work In Restricted Working Space, Add	4.51	
		For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add	4.51	
26 05 33 13-0243	EA	1-1/2" Flexible Straight Connectors, Plain .....	37.01	10.23
		For Work In Restricted Working Space, Add	5.64	
		For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add	5.64	
26 05 33 13-0244	EA	2" Flexible Straight Connectors, Plain.....	48.46	10.23
		For Work In Restricted Working Space, Add	6.77	
		For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add	6.77	
26 05 33 13-0245	EA	2-1/2" Flexible Straight Connectors, Plain .....	77.22	12.63
		For Work In Restricted Working Space, Add	7.90	
		For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add	7.90	
26 05 33 13-0246	EA	3" Flexible Straight Connectors, Plain.....	100.63	13.83
		For Work In Restricted Working Space, Add	9.02	
		For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add	9.02	

**26 Electrical****26 05 Common Work Results for Electrical****26 05 33 Raceway and Boxes for Electrical Systems**

MINOR	CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
26 05 33 13-0247	EA		3-1/2" Flexible Straight Connectors, Plain.....	306.68	16.25
			For Work In Restricted Working Space, Add	10.15	
			For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add	10.15	
26 05 33 13-0248	EA		4" Flexible Straight Connectors, Plain.....	382.78	19.86
			For Work In Restricted Working Space, Add	11.28	
			For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add	11.28	
<b>26 05 33 13-0249 Insulated Throat Squeeze Type Straight Connector (26 05 33 13-0224)</b>					
26 05 33 13-0250	EA		1/2" Flexible Straight Connectors, Insulated.....	12.18	5.42
			For Work In Restricted Working Space, Add	2.26	
			For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add	2.26	
26 05 33 13-0251	EA		3/4" Flexible Straight Connectors, Insulated.....	14.25	6.62
			For Work In Restricted Working Space, Add	2.71	
			For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add	2.71	
26 05 33 13-0252	EA		1" Flexible Straight Connectors, Insulated.....	22.17	7.22
			For Work In Restricted Working Space, Add	3.61	
			For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add	3.61	
26 05 33 13-0253	EA		1-1/4" Flexible Straight Connectors, Insulated.....	32.07	8.43
			For Work In Restricted Working Space, Add	4.51	
			For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add	4.51	
26 05 33 13-0254	EA		1-1/2" Flexible Straight Connectors, Insulated.....	43.98	9.03
			For Work In Restricted Working Space, Add	5.64	
			For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add	5.64	
26 05 33 13-0255	EA		2" Flexible Straight Connectors, Insulated.....	60.76	10.23
			For Work In Restricted Working Space, Add	6.77	
			For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add	6.77	
26 05 33 13-0256	EA		2-1/2" Flexible Straight Connectors, Insulated.....	103.53	12.63
			For Work In Restricted Working Space, Add	7.90	
			For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add	7.90	
26 05 33 13-0257	EA		3" Flexible Straight Connectors, Insulated.....	131.65	13.83
			For Work In Restricted Working Space, Add	9.02	
			For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add	9.02	
26 05 33 13-0258	EA		3-1/2" Flexible Straight Connectors, Insulated.....	354.49	16.25
			For Work In Restricted Working Space, Add	10.15	
			For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add	10.15	
26 05 33 13-0259	EA		4" Flexible Straight Connectors, Insulated.....	454.66	19.86
			For Work In Restricted Working Space, Add	11.28	
			For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add	11.28	
<b>26 05 33 13-0260 Plain Squeeze Type 90 Degree Connector (26 05 33 13-0224)</b>					
26 05 33 13-0261	EA		3/8" Flexible 90 Degree Connector, Plain.....	12.53	6.02
			For Work In Restricted Working Space, Add	2.71	
			For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add	2.71	
26 05 33 13-0262	EA		1/2" Flexible 90 Degree Connector, Plain.....	16.38	6.62
			For Work In Restricted Working Space, Add	3.16	
			For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add	3.16	
26 05 33 13-0263	EA		3/4" Flexible 90 Degree Connector, Plain.....	21.19	7.22
			For Work In Restricted Working Space, Add	3.61	
			For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add	3.61	
26 05 33 13-0264	EA		1" Flexible 90 Degree Connector, Plain.....	29.50	8.43
			For Work In Restricted Working Space, Add	4.51	
			For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add	4.51	
26 05 33 13-0265	EA		1-1/4" Flexible 90 Degree Connector, Plain.....	45.50	9.03
			For Work In Restricted Working Space, Add	5.42	
			For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add	5.42	
26 05 33 13-0266	EA		1-1/2" Flexible 90 Degree Connector, Plain.....	70.54	10.53
			For Work In Restricted Working Space, Add	6.77	
			For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add	6.77	
26 05 33 13-0267	EA		2" Flexible 90 Degree Connector, Plain.....	84.91	12.93
			For Work In Restricted Working Space, Add	7.67	
			For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add	7.67	
26 05 33 13-0268	EA		2-1/2" Flexible 90 Degree Connector, Plain.....	184.74	13.83
			For Work In Restricted Working Space, Add	9.02	
			For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add	9.02	
26 05 33 13-0269	EA		3" Flexible 90 Degree Connector, Plain.....	236.88	16.25
			For Work In Restricted Working Space, Add	10.15	
			For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add	10.15	
26 05 33 13-0270	EA		3-1/2" Flexible 90 Degree Connector, Plain.....	499.36	19.86
			For Work In Restricted Working Space, Add	11.28	
			For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add	11.28	
26 05 33 13-0271	EA		4" Flexible 90 Degree Connector, Plain.....	890.06	22.56
			For Work In Restricted Working Space, Add	13.54	
			For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add	13.54	
<b>26 05 33 13-0272 Insulated Throat Squeeze Type 90 Degree Connector (26 05 33 13-0224)</b>					
26 05 33 13-0273	EA		1/2" Flexible 90 Degree Connector, Insulated.....	18.04	6.62
			For Work In Restricted Working Space, Add	3.16	
			For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add	3.16	
26 05 33 13-0274	EA		3/4" Flexible 90 Degree Connector, Insulated.....	23.23	7.22
			For Work In Restricted Working Space, Add	3.61	
			For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add	3.61	





<b>Electrical</b>		<b>26</b>
<b>Common Work Results for Electrical</b>		<b>26 05</b>
<b>Raceway and Boxes for Electrical Systems</b>		<b>26 05 33</b>

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MINOR CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
26 05 33 13-0275	EA	1" Flexible 90 Degree Connector, Insulated ..... For Work In Restricted Working Space, Add ..... For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add .....	29.50 4.51 4.51	8.43
26 05 33 13-0276	EA	1-1/4" Flexible 90 Degree Connector, Insulated ..... For Work In Restricted Working Space, Add ..... For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add .....	52.76 5.42 5.42	9.03
26 05 33 13-0277	EA	1-1/2" Flexible 90 Degree Connector, Insulated ..... For Work In Restricted Working Space, Add ..... For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add .....	83.72 6.77 6.77	10.53
26 05 33 13-0278	EA	2" Flexible 90 Degree Connector, Insulated ..... For Work In Restricted Working Space, Add ..... For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add .....	106.33 7.67 7.67	12.93
26 05 33 13-0279	EA	2-1/2" Flexible 90 Degree Connector, Insulated ..... For Work In Restricted Working Space, Add ..... For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add .....	251.73 9.02 9.02	13.83
26 05 33 13-0280	EA	3" Flexible 90 Degree Connector, Insulated ..... For Work In Restricted Working Space, Add ..... For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add .....	309.46 10.15 10.15	16.25
26 05 33 13-0281	EA	3-1/2" Flexible 90 Degree Connector, Insulated ..... For Work In Restricted Working Space, Add ..... For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add .....	828.28 11.28 11.28	19.86
26 05 33 13-0282	EA	4" Flexible 90 Degree Connector, Insulated ..... For Work In Restricted Working Space, Add ..... For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add .....	1,234.57 13.54 13.54	22.56
<b>26 05 33 13-0283 Plain Squeeze Type 45 Degree Connector (26 05 33 13-0224)</b>				
26 05 33 13-0284	EA	3/8" Flexible 45 Degree Connector, Plain ..... For Work In Restricted Working Space, Add ..... For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add .....	13.86 2.71 2.71	6.02
26 05 33 13-0285	EA	1/2" Flexible 45 Degree Connector, Plain ..... For Work In Restricted Working Space, Add ..... For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add .....	18.52 3.16 3.16	6.62
26 05 33 13-0286	EA	3/4" Flexible 45 Degree Connector, Plain ..... For Work In Restricted Working Space, Add ..... For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add .....	23.58 3.61 3.61	7.22
<b>26 05 33 13-0287 Insulated Squeeze Type 45 Degree Connector (26 05 33 13-0224)</b>				
26 05 33 13-0288	EA	3/8" Flexible 45 Degree Connector, Insulated ..... For Work In Restricted Working Space, Add ..... For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add .....	14.78 2.71 2.71	7.22
26 05 33 13-0289	EA	1/2" Flexible 45 Degree Connector, Insulated ..... For Work In Restricted Working Space, Add ..... For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add .....	20.03 3.16 3.16	6.62
26 05 33 13-0290	EA	3/4" Flexible 45 Degree Connector, Insulated ..... For Work In Restricted Working Space, Add ..... For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add .....	25.72 3.61 3.61	7.22
<b>26 05 33 13-0291 Plain Screw-In Connector (26 05 33 13-0224)</b>				
26 05 33 13-0292	EA	3/8" Flexible Steel Screw-in Connector, Plain ..... For Work In Restricted Working Space, Add ..... For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add .....	7.58 2.03 2.03	4.81
26 05 33 13-0293	EA	1/2" Flexible Steel Screw-in Connector, Plain ..... For Work In Restricted Working Space, Add ..... For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add .....	8.19 2.26 2.26	5.42
26 05 33 13-0294	EA	3/4" Flexible Steel Screw-in Connector, Plain ..... For Work In Restricted Working Space, Add ..... For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add .....	10.39 2.71 2.71	6.62
26 05 33 13-0295	EA	1" Flexible Steel Screw-in Connector, Plain ..... For Work In Restricted Working Space, Add ..... For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add .....	14.77 3.61 3.61	7.22
26 05 33 13-0296	EA	1-1/4" Flexible Steel Screw-in Connector, Plain ..... For Work In Restricted Working Space, Add ..... For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add .....	21.44 4.51 4.51	8.43
26 05 33 13-0297	EA	1-1/2" Flexible Steel Screw-in Connector, Plain ..... For Work In Restricted Working Space, Add ..... For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add .....	26.25 5.64 5.64	9.03
26 05 33 13-0298	EA	2" Flexible Steel Screw-in Connector, Plain ..... For Work In Restricted Working Space, Add ..... For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add .....	38.03 6.77 6.77	10.23
<b>26 05 33 13-0299 Insulated Screw-In Connector (26 05 33 13-0224)</b>				
26 05 33 13-0300	EA	3/8" Flexible Steel Screw-in Connector, Insulated ..... For Work In Restricted Working Space, Add ..... For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add .....	7.97 2.03 2.03	4.81
26 05 33 13-0301	EA	1/2" Flexible Steel Screw-in Connector, Insulated ..... For Work In Restricted Working Space, Add ..... For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add .....	8.51 2.26 2.26	5.42
26 05 33 13-0302	EA	3/4" Flexible Steel Screw-in Connector, Insulated ..... For Work In Restricted Working Space, Add ..... For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add .....	11.20 2.71 2.71	6.62

**26 Electrical****26 05 Common Work Results for Electrical****26 05 33 Raceway and Boxes for Electrical Systems**

MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
26 05 33 13-0303 EA 1" Flexible Steel Screw-in Connector, Insulated .....	16.00	7.22
For Work In Restricted Working Space, Add .....	3.61	
For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add .....	3.61	
26 05 33 13-0304 EA 1-1/4" Flexible Steel Screw-in Connector, Insulated .....	23.20	8.43
For Work In Restricted Working Space, Add .....	4.51	
For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add .....	4.51	
26 05 33 13-0305 EA 1-1/2" Flexible Steel Screw-in Connector, Insulated .....	28.36	9.03
For Work In Restricted Working Space, Add .....	5.64	
For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add .....	5.64	
26 05 33 13-0306 EA 2" Flexible Steel Screw-in Connector, Insulated .....	39.89	10.23
For Work In Restricted Working Space, Add .....	6.77	
For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add .....	6.77	
<b>26 05 33 13-0307 Screw-In Coupling</b> (26 05 33 13-0224)		
26 05 33 13-0308 EA 1/2" Flexible Steel Screw-in Coupling .....	8.96	5.42
For Work In Restricted Working Space, Add .....	2.26	
26 05 33 13-0309 EA 3/4" Flexible Steel Screw-in Coupling .....	11.67	6.62
For Work In Restricted Working Space, Add .....	2.71	
<b>26 05 33 13-0310 Flexible To Electrical Metallic Tubing (EMT) Coupling</b> (26 05 33 13-0224)		
26 05 33 13-0311 EA 3/8" Flexible Steel To Electrical Metallic Tubing (EMT) Coupling .....	11.69	4.81
For Work In Restricted Working Space, Add .....	2.03	
26 05 33 13-0312 EA 1/2" Flexible Steel To Electrical Metallic Tubing (EMT) Coupling .....	15.72	5.42
For Work In Restricted Working Space, Add .....	2.26	
26 05 33 13-0313 EA 3/4" Flexible Steel To Electrical Metallic Tubing (EMT) Coupling .....	20.69	6.62
For Work In Restricted Working Space, Add .....	2.71	
<b>26 05 33 13-0314 Die Cast Squeeze Type Straight Connector</b> (26 05 33 13-0224)		
26 05 33 13-0315 EA 3/8" Flexible Straight Connector, Die Cast .....	7.82	4.81
For Work In Restricted Working Space, Add .....	2.03	
For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add .....	2.03	
26 05 33 13-0316 EA 1/2" Flexible Straight Connector, Die Cast .....	8.83	5.42
For Work In Restricted Working Space, Add .....	2.26	
For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add .....	2.26	
26 05 33 13-0317 EA 3/4" Flexible Straight Connector, Die Cast .....	10.93	6.62
For Work In Restricted Working Space, Add .....	2.71	
For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add .....	2.71	
26 05 33 13-0318 EA 1" Flexible Straight Connector, Die Cast .....	16.28	7.22
For Work In Restricted Working Space, Add .....	3.61	
For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add .....	3.61	
26 05 33 13-0319 EA 1-1/4" Flexible Straight Connector, Die Cast .....	21.81	8.43
For Work In Restricted Working Space, Add .....	4.51	
For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add .....	4.51	
26 05 33 13-0320 EA 1-1/2" Flexible Straight Connector, Die Cast .....	29.43	9.03
For Work In Restricted Working Space, Add .....	5.64	
For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add .....	5.64	
26 05 33 13-0321 EA 2" Flexible Straight Connector, Die Cast .....	37.86	10.23
For Work In Restricted Working Space, Add .....	6.77	
For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add .....	6.77	
<b>26 05 33 13-0322 Die Cast Squeeze Type 90 Degree Connector</b> (26 05 33 13-0224)		
26 05 33 13-0323 EA 3/8" Flexible 90 Degree Connector, Die Cast .....	10.37	6.02
For Work In Restricted Working Space, Add .....	2.71	
For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add .....	2.71	
26 05 33 13-0324 EA 1/2" Flexible 90 Degree Connector, Die Cast .....	12.78	6.62
For Work In Restricted Working Space, Add .....	3.16	
For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add .....	3.16	
26 05 33 13-0325 EA 3/4" Flexible 90 Degree Connector, Die Cast .....	15.43	7.22
For Work In Restricted Working Space, Add .....	3.61	
For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add .....	3.61	
26 05 33 13-0326 EA 1" Flexible 90 Degree Connector, Die Cast .....	24.02	8.43
For Work In Restricted Working Space, Add .....	4.51	
For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add .....	4.51	
26 05 33 13-0327 EA 1-1/4" Flexible 90 Degree Connector, Die Cast .....	33.72	9.03
For Work In Restricted Working Space, Add .....	5.42	
For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add .....	5.42	
26 05 33 13-0328 EA 1-1/2" Flexible 90 Degree Connector, Die Cast .....	51.80	10.53
For Work In Restricted Working Space, Add .....	6.77	
For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add .....	6.77	
26 05 33 13-0329 EA 2" Flexible 90 Degree Connector, Die Cast .....	61.79	12.93
For Work In Restricted Working Space, Add .....	7.67	
For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add .....	7.67	
<b>26 05 33 13-0330 Metallic Conduit Bodies</b> (26 05 33 13-0032)		
<b>26 05 33 13-0331 Threaded, Cast Aluminum Conduit Body</b> (26 05 33 13-0330)		
Note: For use with Rigid Galvanized Steel (RGS), Galvanized Rigid Steel Conduit (GRC), Intermediate Metal Conduit (IMC), or Aluminum Rigid Conduit (ARC)		



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MINOR CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
26 05 33 13-0332		Type LB, Threaded, Two Hub Cast Aluminum Conduit Body With Cover <sup>(26 05 33 13-0331)</sup>		
26 05 33 13-0333	EA	1/2" Type LB, Threaded, Two Hub Cast Aluminum Conduit Body With Cover .....	75.87	26.38
		For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add	19.79	
		For Mogul LB, Add	4.13	
		For Work In Restricted Working Space, Add	19.79	
		For Elevated Installation >10' To 15', Add	6.60	
		For Elevated Installation >15' To 20', Add	13.19	
		For Elevated Installation >20' To 25', Add	16.49	
		For Elevated Installation >25' To 30', Add	23.09	
		For Elevated Installation >30' To 35', Add	26.39	
		For Elevated Installation >35' To 40', Add	32.99	
		For Elevated Installation >40', Add	36.28	
26 05 33 13-0334	EA	3/4" Type LB, Threaded, Two Hub Cast Aluminum Conduit Body With Cover .....	89.03	30.23
		For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add	22.68	
		For Mogul LB, Add	6.30	
		For Work In Restricted Working Space, Add	22.68	
		For Elevated Installation >10' To 15', Add	7.56	
		For Elevated Installation >15' To 20', Add	15.12	
		For Elevated Installation >20' To 25', Add	18.90	
		For Elevated Installation >25' To 30', Add	26.46	
		For Elevated Installation >30' To 35', Add	30.24	
		For Elevated Installation >35' To 40', Add	37.80	
		For Elevated Installation >40', Add	41.57	
26 05 33 13-0335	EA	1" Type LB, Threaded, Two Hub Cast Aluminum Conduit Body With Cover .....	107.10	35.18
		For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add	26.39	
		For Mogul LB, Add	9.96	
		For Work In Restricted Working Space, Add	26.39	
		For Elevated Installation >10' To 15', Add	8.80	
		For Elevated Installation >15' To 20', Add	17.59	
		For Elevated Installation >20' To 25', Add	21.99	
		For Elevated Installation >25' To 30', Add	30.79	
		For Elevated Installation >30' To 35', Add	35.18	
		For Elevated Installation >35' To 40', Add	43.98	
		For Elevated Installation >40', Add	48.38	
26 05 33 13-0336	EA	1-1/4" Type LB, Threaded, Two Hub Cast Aluminum Conduit Body With Cover .....	128.91	40.13
		For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add	30.10	
		For Mogul LB, Add	16.42	
		For Work In Restricted Working Space, Add	30.10	
		For Elevated Installation >10' To 15', Add	10.03	
		For Elevated Installation >15' To 20', Add	20.07	
		For Elevated Installation >20' To 25', Add	25.08	
		For Elevated Installation >25' To 30', Add	35.12	
		For Elevated Installation >30' To 35', Add	40.13	
		For Elevated Installation >35' To 40', Add	50.17	
		For Elevated Installation >40', Add	55.18	
26 05 33 13-0337	EA	1-1/2" Type LB, Threaded, Two Hub Cast Aluminum Conduit Body With Cover .....	146.81	43.98
		For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add	32.98	
		For Mogul LB, Add	22.16	
		For Work In Restricted Working Space, Add	32.98	
		For Elevated Installation >10' To 15', Add	10.99	
		For Elevated Installation >15' To 20', Add	21.99	
		For Elevated Installation >20' To 25', Add	27.49	
		For Elevated Installation >25' To 30', Add	38.48	
		For Elevated Installation >30' To 35', Add	43.98	
		For Elevated Installation >35' To 40', Add	54.97	
		For Elevated Installation >40', Add	60.47	
26 05 33 13-0338	EA	2" Type LB, Threaded, Two Hub Cast Aluminum Conduit Body With Cover .....	191.50	52.78
		For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add	39.58	
		For Mogul LB, Add	38.07	
		For Work In Restricted Working Space, Add	39.58	
		For Elevated Installation >10' To 15', Add	13.19	
		For Elevated Installation >15' To 20', Add	26.39	
		For Elevated Installation >20' To 25', Add	32.99	
		For Elevated Installation >25' To 30', Add	46.18	
		For Elevated Installation >30' To 35', Add	52.78	
		For Elevated Installation >35' To 40', Add	65.97	
		For Elevated Installation >40', Add	72.57	
26 05 33 13-0339	EA	2-1/2" Type LB, Threaded, Two Hub Cast Aluminum Conduit Body With Cover .....	317.36	74.21
		For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add	55.66	
		For Mogul LB, Add	89.59	
		For Work In Restricted Working Space, Add	55.66	
		For Elevated Installation >10' To 15', Add	18.55	
		For Elevated Installation >15' To 20', Add	37.11	
		For Elevated Installation >20' To 25', Add	46.39	
		For Elevated Installation >25' To 30', Add	64.94	
		For Elevated Installation >30' To 35', Add	74.22	
		For Elevated Installation >35' To 40', Add	92.77	
		For Elevated Installation >40', Add	102.05	

**26 Electrical****26 05 Common Work Results for Electrical****26 05 33 Raceway and Boxes for Electrical Systems**

MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
26 05 33 13-0340 EA 3" Type LB, Threaded, Two Hub Cast Aluminum Conduit Body With Cover .....417.59		98.95
For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add	74.22	
For Mogul LB, Add	115.28	
For Work In Restricted Working Space, Add	74.22	
For Elevated Installation >10' To 15', Add	24.74	
For Elevated Installation >15' To 20', Add	49.48	
For Elevated Installation >20' To 25', Add	61.85	
For Elevated Installation >25' To 30', Add	86.59	
For Elevated Installation >30' To 35', Add	98.96	
For Elevated Installation >35' To 40', Add	123.70	
For Elevated Installation >40', Add	136.06	
26 05 33 13-0341 EA 3-1/2" Type LB, Threaded, Two Hub Cast Aluminum Conduit Body With Cover .....552.64		123.69
For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add	92.77	
For Mogul LB, Add	167.10	
For Work In Restricted Working Space, Add	92.77	
For Elevated Installation >10' To 15', Add	30.92	
For Elevated Installation >15' To 20', Add	61.85	
For Elevated Installation >20' To 25', Add	77.31	
For Elevated Installation >25' To 30', Add	108.23	
For Elevated Installation >30' To 35', Add	123.69	
For Elevated Installation >35' To 40', Add	154.62	
For Elevated Installation >40', Add	170.08	
26 05 33 13-0342 EA 4" Type LB, Threaded, Two Hub Cast Aluminum Conduit Body With Cover .....714.82		150.63
For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add	112.97	
For Mogul LB, Add	234.85	
For Work In Restricted Working Space, Add	112.97	
For Elevated Installation >10' To 15', Add	37.66	
For Elevated Installation >15' To 20', Add	75.32	
For Elevated Installation >20' To 25', Add	94.15	
For Elevated Installation >25' To 30', Add	131.80	
For Elevated Installation >30' To 35', Add	150.63	
For Elevated Installation >35' To 40', Add	188.29	
For Elevated Installation >40', Add	207.12	
26 05 33 13-0343 Threaded, Malleable Iron Conduit Body (26 05 33 13-0330)		
Note: For use with Rigid Galvanized Steel (RGS), Galvanized Rigid Steel Conduit (GRC), or Intermediate Metal Conduit (IMC)		
26 05 33 13-0344 Type LB, Threaded, Two Hub Malleable Iron Conduit Body With Cover (26 05 33 13-0343)		
26 05 33 13-0345 EA 1/2" Type LB, Threaded, Two Hub Malleable Iron Conduit Body With Cover .....79.25		26.38
For Work In Restricted Working Space, Add	19.79	
For Elevated Installation >10' To 15', Add	6.60	
For Elevated Installation >15' To 20', Add	13.20	
For Elevated Installation >20' To 25', Add	16.50	
For Elevated Installation >25' To 30', Add	23.09	
For Elevated Installation >30' To 35', Add	26.39	
For Elevated Installation >35' To 40', Add	32.99	
For Elevated Installation >40', Add	36.29	
For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add	19.79	
26 05 33 13-0346 EA 3/4" Type LB, Threaded, Two Hub Malleable Iron Conduit Body With Cover .....91.85		30.23
For Work In Restricted Working Space, Add	22.67	
For Elevated Installation >10' To 15', Add	7.56	
For Elevated Installation >15' To 20', Add	15.12	
For Elevated Installation >20' To 25', Add	18.90	
For Elevated Installation >25' To 30', Add	26.45	
For Elevated Installation >30' To 35', Add	30.23	
For Elevated Installation >35' To 40', Add	37.79	
For Elevated Installation >40', Add	41.57	
For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add	22.67	
26 05 33 13-0347 EA 1" Type LB, Threaded, Two Hub Malleable Iron Conduit Body With Cover .....112.21		35.18
For Work In Restricted Working Space, Add	26.39	
For Elevated Installation >10' To 15', Add	8.80	
For Elevated Installation >15' To 20', Add	17.59	
For Elevated Installation >20' To 25', Add	21.99	
For Elevated Installation >25' To 30', Add	30.79	
For Elevated Installation >30' To 35', Add	35.18	
For Elevated Installation >35' To 40', Add	43.98	
For Elevated Installation >40', Add	48.38	
For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add	26.39	
26 05 33 13-0348 EA 1-1/4" Type LB, Threaded, Two Hub Malleable Iron Conduit Body With Cover .....143.83		40.13
For Work In Restricted Working Space, Add	30.10	
For Elevated Installation >10' To 15', Add	10.03	
For Elevated Installation >15' To 20', Add	20.07	
For Elevated Installation >20' To 25', Add	25.08	
For Elevated Installation >25' To 30', Add	35.12	
For Elevated Installation >30' To 35', Add	40.13	
For Elevated Installation >35' To 40', Add	50.17	
For Elevated Installation >40', Add	55.18	
For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add	30.10	



Electrical		26
Common Work Results for Electrical		26 05
Raceway and Boxes for Electrical Systems		26 05 33

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MINOR CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
26 05 33 13-0349	EA	1-1/2" Type LB, Threaded, Two Hub Malleable Iron Conduit Body With Cover.....	163.30	43.98
		For Work In Restricted Working Space, Add	32.98	
		For Elevated Installation >10' To 15', Add	10.99	
		For Elevated Installation >15' To 20', Add	21.99	
		For Elevated Installation >20' To 25', Add	27.49	
		For Elevated Installation >25' To 30', Add	38.48	
		For Elevated Installation >30' To 35', Add	43.98	
		For Elevated Installation >35' To 40', Add	54.97	
		For Elevated Installation >40', Add	60.47	
		For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add	32.98	
26 05 33 13-0350	EA	2" Type LB, Threaded, Two Hub Malleable Iron Conduit Body With Cover.....	221.24	52.78
		For Work In Restricted Working Space, Add	39.58	
		For Elevated Installation >10' To 15', Add	13.19	
		For Elevated Installation >15' To 20', Add	26.39	
		For Elevated Installation >20' To 25', Add	32.99	
		For Elevated Installation >25' To 30', Add	46.18	
		For Elevated Installation >30' To 35', Add	52.78	
		For Elevated Installation >35' To 40', Add	65.97	
		For Elevated Installation >40', Add	72.57	
		For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add	39.58	
26 05 33 13-0351	EA	2-1/2" Type LB, Threaded, Two Hub Malleable Iron Conduit Body With Cover.....	368.34	74.21
		For Work In Restricted Working Space, Add	55.67	
		For Elevated Installation >10' To 15', Add	18.56	
		For Elevated Installation >15' To 20', Add	37.11	
		For Elevated Installation >20' To 25', Add	46.39	
		For Elevated Installation >25' To 30', Add	64.94	
		For Elevated Installation >30' To 35', Add	74.22	
		For Elevated Installation >35' To 40', Add	92.78	
		For Elevated Installation >40', Add	102.05	
		For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add	55.67	
26 05 33 13-0352	EA	3" Type LB, Threaded, Two Hub Malleable Iron Conduit Body With Cover.....	520.08	98.95
		For Work In Restricted Working Space, Add	74.22	
		For Elevated Installation >10' To 15', Add	24.74	
		For Elevated Installation >15' To 20', Add	49.48	
		For Elevated Installation >20' To 25', Add	61.85	
		For Elevated Installation >25' To 30', Add	86.59	
		For Elevated Installation >30' To 35', Add	98.96	
		For Elevated Installation >35' To 40', Add	123.70	
		For Elevated Installation >40', Add	136.07	
		For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add	74.22	
26 05 33 13-0353	EA	3-1/2" Type LB, Threaded, Two Hub Malleable Iron Conduit Body With Cover.....	712.93	123.69
		For Work In Restricted Working Space, Add	92.77	
		For Elevated Installation >10' To 15', Add	30.92	
		For Elevated Installation >15' To 20', Add	61.85	
		For Elevated Installation >20' To 25', Add	77.31	
		For Elevated Installation >25' To 30', Add	108.23	
		For Elevated Installation >30' To 35', Add	123.69	
		For Elevated Installation >35' To 40', Add	154.62	
		For Elevated Installation >40', Add	170.08	
		For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add	92.77	
26 05 33 13-0354	EA	4" Type LB, Threaded, Two Hub Malleable Iron Conduit Body With Cover.....	853.95	150.63
		For Work In Restricted Working Space, Add	112.97	
		For Elevated Installation >10' To 15', Add	37.66	
		For Elevated Installation >15' To 20', Add	75.32	
		For Elevated Installation >20' To 25', Add	94.15	
		For Elevated Installation >25' To 30', Add	131.80	
		For Elevated Installation >30' To 35', Add	150.63	
		For Elevated Installation >35' To 40', Add	188.29	
		For Elevated Installation >40', Add	207.12	
		For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add	112.97	
26 05 33 13-0355 Type LL Or LR, Threaded, Two Hub Malleable Iron Conduit Body With Cover (26 05 33 13-0343)				
26 05 33 13-0356	EA	1/2" Type LL Or LR, Threaded, Two Hub Malleable Iron Conduit Body With Cover.....	82.32	26.38
		For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add	19.79	
26 05 33 13-0357	EA	3/4" Type LL Or LR, Threaded, Two Hub Malleable Iron Conduit Body With Cover.....	92.75	30.23
		For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add	22.67	
26 05 33 13-0358	EA	1" Type LL Or LR, Threaded, Two Hub Malleable Iron Conduit Body With Cover.....	116.90	35.18
		For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add	26.39	
26 05 33 13-0359	EA	1-1/4" Type LL Or LR, Threaded, Two Hub Malleable Iron Conduit Body With Cover.....	146.98	40.13
		For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add	30.10	
26 05 33 13-0360	EA	1-1/2" Type LL Or LR, Threaded, Two Hub Malleable Iron Conduit Body With Cover.....	167.15	43.98
		For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add	32.98	
26 05 33 13-0361	EA	2" Type LL Or LR, Threaded, Two Hub Malleable Iron Conduit Body With Cover.....	213.35	52.78
		For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add	39.58	
26 05 33 13-0362	EA	2-1/2" Type LL Or LR, Threaded, Two Hub Malleable Iron Conduit Body With Cover.....	324.51	74.21
		For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add	55.67	
26 05 33 13-0363	EA	3" Type LL Or LR, Threaded, Two Hub Malleable Iron Conduit Body With Cover.....	441.27	98.95
		For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add	74.22	
26 05 33 13-0364	EA	3-1/2" Type LL Or LR, Threaded, Two Hub Malleable Iron Conduit Body With Cover.....	759.34	123.69
		For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add	92.77	
26 05 33 13-0365	EA	4" Type LL Or LR, Threaded, Two Hub Malleable Iron Conduit Body With Cover.....	888.19	150.63
		For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add	112.97	

**26 Electrical****26 05 Common Work Results for Electrical****26 05 33 Raceway and Boxes for Electrical Systems**

MINOR			TOTAL DIRECT		DEMOLITION
CSI	UOM	DESCRIPTION	UNIT COST	UNIT COST	UNIT COST
26 05 33 13-0366		Type T, Threaded, Three Hub Malleable Iron Conduit Body With Cover <sup>(26 05 33)</sup>			
26 05 33 13-0367	EA	1/2" Type T, Threaded, Three Hub Malleable Iron Conduit Body With Cover.....	97.50		30.23
		For Work In Restricted Working Space, Add	22.68		
		For Elevated Installation >10' To 15', Add	7.56		
		For Elevated Installation >15' To 20', Add	15.12		
		For Elevated Installation >20' To 25', Add	18.90		
		For Elevated Installation >25' To 30', Add	26.46		
		For Elevated Installation >30' To 35', Add	30.24		
		For Elevated Installation >35' To 40', Add	37.80		
		For Elevated Installation >40', Add	41.57		
		For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add	22.68		
26 05 33 13-0368	EA	3/4" Type T, Threaded, Three Hub Malleable Iron Conduit Body With Cover.....	114.96		35.18
		For Work In Restricted Working Space, Add	26.80		
		For Elevated Installation >10' To 15', Add	8.93		
		For Elevated Installation >15' To 20', Add	17.87		
		For Elevated Installation >20' To 25', Add	22.33		
		For Elevated Installation >25' To 30', Add	31.27		
		For Elevated Installation >30' To 35', Add	35.73		
		For Elevated Installation >35' To 40', Add	44.67		
		For Elevated Installation >40', Add	49.13		
		For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add	26.80		
26 05 33 13-0369	EA	1" Type T, Threaded, Three Hub Malleable Iron Conduit Body With Cover.....	134.96		38.48
		For Work In Restricted Working Space, Add	28.86		
		For Elevated Installation >10' To 15', Add	9.62		
		For Elevated Installation >15' To 20', Add	19.24		
		For Elevated Installation >20' To 25', Add	24.05		
		For Elevated Installation >25' To 30', Add	33.67		
		For Elevated Installation >30' To 35', Add	38.48		
		For Elevated Installation >35' To 40', Add	48.11		
		For Elevated Installation >40', Add	52.92		
		For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add	28.86		
26 05 33 13-0370	EA	1-1/4" Type T, Threaded, Three Hub Malleable Iron Conduit Body With Cover.....	168.62		43.98
		For Work In Restricted Working Space, Add	32.57		
		For Elevated Installation >10' To 15', Add	10.86		
		For Elevated Installation >15' To 20', Add	21.71		
		For Elevated Installation >20' To 25', Add	27.14		
		For Elevated Installation >25' To 30', Add	38.00		
		For Elevated Installation >30' To 35', Add	43.43		
		For Elevated Installation >35' To 40', Add	54.29		
		For Elevated Installation >40', Add	59.71		
		For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add	32.57		
26 05 33 13-0371	EA	1-1/2" Type T, Threaded, Three Hub Malleable Iron Conduit Body With Cover.....	193.11		48.38
		For Work In Restricted Working Space, Add	36.29		
		For Elevated Installation >10' To 15', Add	12.10		
		For Elevated Installation >15' To 20', Add	24.19		
		For Elevated Installation >20' To 25', Add	30.24		
		For Elevated Installation >25' To 30', Add	42.33		
		For Elevated Installation >30' To 35', Add	48.38		
		For Elevated Installation >35' To 40', Add	60.48		
		For Elevated Installation >40', Add	66.52		
		For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add	36.29		
26 05 33 13-0372	EA	2" Type T, Threaded, Three Hub Malleable Iron Conduit Body With Cover.....	254.61		56.63
		For Work In Restricted Working Space, Add	42.47		
		For Elevated Installation >10' To 15', Add	14.16		
		For Elevated Installation >15' To 20', Add	28.31		
		For Elevated Installation >20' To 25', Add	35.39		
		For Elevated Installation >25' To 30', Add	49.55		
		For Elevated Installation >30' To 35', Add	56.62		
		For Elevated Installation >35' To 40', Add	70.78		
		For Elevated Installation >40', Add	77.86		
		For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add	42.47		
26 05 33 13-0373	EA	2-1/2" Type T, Threaded, Three Hub Malleable Iron Conduit Body With Cover.....	324.75		82.46
		For Work In Restricted Working Space, Add	61.85		
		For Elevated Installation >10' To 15', Add	20.62		
		For Elevated Installation >15' To 20', Add	41.23		
		For Elevated Installation >20' To 25', Add	51.54		
		For Elevated Installation >25' To 30', Add	72.15		
		For Elevated Installation >30' To 35', Add	82.46		
		For Elevated Installation >35' To 40', Add	103.08		
		For Elevated Installation >40', Add	113.38		
		For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add	61.85		
26 05 33 13-0374	EA	3" Type T, Threaded, Three Hub Malleable Iron Conduit Body With Cover.....	465.08		107.20
		For Work In Restricted Working Space, Add	80.40		
		For Elevated Installation >10' To 15', Add	26.80		
		For Elevated Installation >15' To 20', Add	53.60		
		For Elevated Installation >20' To 25', Add	67.00		
		For Elevated Installation >25' To 30', Add	93.80		
		For Elevated Installation >30' To 35', Add	107.20		
		For Elevated Installation >35' To 40', Add	134.00		
		For Elevated Installation >40', Add	147.40		
		For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add	80.40		



		Electrical	26
		Common Work Results for Electrical	26 05
		Raceway and Boxes for Electrical Systems	26 05 33

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MINOR CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
26 05 33 13-0375	EA	3-1/2" Type T, Threaded, Three Hub Malleable Iron Conduit Body With Cover ..... For Work In Restricted Working Space, Add For Elevated Installation >10' To 15', Add For Elevated Installation >15' To 20', Add For Elevated Installation >20' To 25', Add For Elevated Installation >25' To 30', Add For Elevated Installation >30' To 35', Add For Elevated Installation >35' To 40', Add For Elevated Installation >40', Add For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add	801.39 98.95 32.98 65.97 82.46 115.44 131.94 164.92 181.41 98.95	131.94
26 05 33 13-0376	EA	4" Type T, Threaded, Three Hub Malleable Iron Conduit Body With Cover..... For Work In Restricted Working Space, Add For Elevated Installation >10' To 15', Add For Elevated Installation >15' To 20', Add For Elevated Installation >20' To 25', Add For Elevated Installation >25' To 30', Add For Elevated Installation >30' To 35', Add For Elevated Installation >35' To 40', Add For Elevated Installation >40', Add For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add	928.70 119.57 39.86 79.71 99.64 139.50 159.43 199.29 219.21 119.57	158.88
26 05 33 13-0377		Type C, Threaded, Two Hub Malleable Iron Conduit Body With Cover (26 05 33 13-0343)		
26 05 33 13-0378	EA	1/2" Type C, Threaded, Two Hub Malleable Iron Conduit Body With Cover..... For Work In Restricted Working Space, Add For Elevated Installation >10' To 15', Add For Elevated Installation >15' To 20', Add For Elevated Installation >20' To 25', Add For Elevated Installation >25' To 30', Add For Elevated Installation >30' To 35', Add For Elevated Installation >35' To 40', Add For Elevated Installation >40', Add For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add	79.47 19.79 6.60 13.19 16.49 23.09 26.39 32.99 36.28 19.79	26.38
26 05 33 13-0379	EA	3/4" Type C, Threaded, Two Hub Malleable Iron Conduit Body With Cover..... For Work In Restricted Working Space, Add For Elevated Installation >10' To 15', Add For Elevated Installation >15' To 20', Add For Elevated Installation >20' To 25', Add For Elevated Installation >25' To 30', Add For Elevated Installation >30' To 35', Add For Elevated Installation >35' To 40', Add For Elevated Installation >40', Add For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add	95.83 22.68 7.56 15.12 18.90 26.46 30.24 37.80 41.57 22.68	30.23
26 05 33 13-0380	EA	1" Type C, Threaded, Two Hub Malleable Iron Conduit Body With Cover..... For Work In Restricted Working Space, Add For Elevated Installation >10' To 15', Add For Elevated Installation >15' To 20', Add For Elevated Installation >20' To 25', Add For Elevated Installation >25' To 30', Add For Elevated Installation >30' To 35', Add For Elevated Installation >35' To 40', Add For Elevated Installation >40', Add For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add	111.94 25.98 8.66 17.32 21.65 30.31 34.64 43.30 47.62 25.98	34.63
26 05 33 13-0381	EA	1-1/4" Type C, Threaded, Two Hub Malleable Iron Conduit Body With Cover..... For Work In Restricted Working Space, Add For Elevated Installation >10' To 15', Add For Elevated Installation >15' To 20', Add For Elevated Installation >20' To 25', Add For Elevated Installation >25' To 30', Add For Elevated Installation >30' To 35', Add For Elevated Installation >35' To 40', Add For Elevated Installation >40', Add For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add	149.63 30.10 10.03 20.07 25.09 35.12 40.14 50.17 55.19 30.10	40.13
26 05 33 13-0382	EA	1-1/2" Type C, Threaded, Two Hub Malleable Iron Conduit Body With Cover..... For Work In Restricted Working Space, Add For Elevated Installation >10' To 15', Add For Elevated Installation >15' To 20', Add For Elevated Installation >20' To 25', Add For Elevated Installation >25' To 30', Add For Elevated Installation >30' To 35', Add For Elevated Installation >35' To 40', Add For Elevated Installation >40', Add For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add	174.15 32.98 10.99 21.99 27.49 38.48 43.98 54.97 60.47 32.98	43.98
26 05 33 13-0383	EA	2" Type C, Threaded, Two Hub Malleable Iron Conduit Body With Cover..... For Work In Restricted Working Space, Add For Elevated Installation >10' To 15', Add For Elevated Installation >15' To 20', Add For Elevated Installation >20' To 25', Add For Elevated Installation >25' To 30', Add For Elevated Installation >30' To 35', Add For Elevated Installation >35' To 40', Add For Elevated Installation >40', Add For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add	224.34 39.58 13.19 26.39 32.99 46.18 52.78 65.97 72.57 39.58	52.78

**26 Electrical****26 05 Common Work Results for Electrical****26 05 33 Raceway and Boxes for Electrical Systems**

MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
26 05 33 13-0384 EA 2-1/2" Type C, Threaded, Two Hub Malleable Iron Conduit Body With Cover.....	506.72	139.22
For Work In Restricted Working Space, Add	104.37	
For Elevated Installation >10' To 15', Add	34.79	
For Elevated Installation >15' To 20', Add	69.58	
For Elevated Installation >20' To 25', Add	86.98	
For Elevated Installation >25' To 30', Add	121.77	
For Elevated Installation >30' To 35', Add	139.16	
For Elevated Installation >35' To 40', Add	173.95	
For Elevated Installation >40', Add	191.35	
For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add	104.37	
26 05 33 13-0385 EA 3" Type C, Threaded, Two Hub Malleable Iron Conduit Body With Cover.....	474.37	98.95
For Work In Restricted Working Space, Add	74.22	
For Elevated Installation >10' To 15', Add	24.74	
For Elevated Installation >15' To 20', Add	49.48	
For Elevated Installation >20' To 25', Add	61.85	
For Elevated Installation >25' To 30', Add	86.59	
For Elevated Installation >30' To 35', Add	98.96	
For Elevated Installation >35' To 40', Add	123.70	
For Elevated Installation >40', Add	136.07	
For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add	74.22	
26 05 33 13-0386 EA 3-1/2" Type C, Threaded, Two Hub Malleable Iron Conduit Body With Cover.....	759.34	123.69
For Work In Restricted Working Space, Add	92.77	
For Elevated Installation >10' To 15', Add	30.92	
For Elevated Installation >15' To 20', Add	61.85	
For Elevated Installation >20' To 25', Add	77.31	
For Elevated Installation >25' To 30', Add	108.23	
For Elevated Installation >30' To 35', Add	123.69	
For Elevated Installation >35' To 40', Add	154.62	
For Elevated Installation >40', Add	170.08	
For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add	92.77	
26 05 33 13-0387 EA 4" Type C, Threaded, Two Hub Malleable Iron Conduit Body With Cover.....	888.17	150.63
For Work In Restricted Working Space, Add	112.97	
For Elevated Installation >10' To 15', Add	37.66	
For Elevated Installation >15' To 20', Add	75.31	
For Elevated Installation >20' To 25', Add	94.14	
For Elevated Installation >25' To 30', Add	131.80	
For Elevated Installation >30' To 35', Add	150.62	
For Elevated Installation >35' To 40', Add	188.28	
For Elevated Installation >40', Add	207.11	
For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add	112.97	
<b>26 05 33 13-0388 Type X, Threaded, Four Hub Malleable Iron Conduit Body With Cover</b> (26 05 33 13-0343)		
26 05 33 13-0389 EA 1/2" Type X, Threaded, Four Hub Malleable Iron Conduit Body With Cover.....	110.88	34.63
For Work In Restricted Working Space, Add	25.98	
For Elevated Installation >10' To 15', Add	8.66	
For Elevated Installation >15' To 20', Add	17.32	
For Elevated Installation >20' To 25', Add	21.65	
For Elevated Installation >25' To 30', Add	30.31	
For Elevated Installation >30' To 35', Add	34.64	
For Elevated Installation >35' To 40', Add	43.30	
For Elevated Installation >40', Add	47.62	
For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add	25.98	
26 05 33 13-0390 EA 3/4" Type X, Threaded, Four Hub Malleable Iron Conduit Body With Cover.....	121.41	38.48
For Work In Restricted Working Space, Add	28.86	
For Elevated Installation >10' To 15', Add	9.62	
For Elevated Installation >15' To 20', Add	19.24	
For Elevated Installation >20' To 25', Add	24.05	
For Elevated Installation >25' To 30', Add	33.67	
For Elevated Installation >30' To 35', Add	38.48	
For Elevated Installation >35' To 40', Add	48.11	
For Elevated Installation >40', Add	52.92	
For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add	28.86	
26 05 33 13-0391 EA 1" Type X, Threaded, Four Hub Malleable Iron Conduit Body With Cover.....	140.41	42.33
For Work In Restricted Working Space, Add	31.75	
For Elevated Installation >10' To 15', Add	10.58	
For Elevated Installation >15' To 20', Add	21.17	
For Elevated Installation >20' To 25', Add	26.46	
For Elevated Installation >25' To 30', Add	37.04	
For Elevated Installation >30' To 35', Add	42.33	
For Elevated Installation >35' To 40', Add	52.92	
For Elevated Installation >40', Add	58.21	
For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add	31.75	
26 05 33 13-0392 EA 1-1/4" Type X, Threaded, Four Hub Malleable Iron Conduit Body With Cover .....	166.61	48.38
For Work In Restricted Working Space, Add	36.29	
For Elevated Installation >10' To 15', Add	12.10	
For Elevated Installation >15' To 20', Add	24.19	
For Elevated Installation >20' To 25', Add	30.24	
For Elevated Installation >25' To 30', Add	42.33	
For Elevated Installation >30' To 35', Add	48.38	
For Elevated Installation >35' To 40', Add	60.48	
For Elevated Installation >40', Add	66.52	
For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add	36.29	





<b>Electrical</b>		<b>26</b>
<b>Common Work Results for Electrical</b>		<b>26 05</b>
<b>Raceway and Boxes for Electrical Systems</b>		<b>26 05 33</b>

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MINOR CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
26 05 33 13-0393	EA	1-1/2" Type X, Threaded, Four Hub Malleable Iron Conduit Body With Cover ..... For Work In Restricted Working Space, Add ..... For Elevated Installation >10' To 15', Add ..... For Elevated Installation >15' To 20', Add ..... For Elevated Installation >20' To 25', Add ..... For Elevated Installation >25' To 30', Add ..... For Elevated Installation >30' To 35', Add ..... For Elevated Installation >35' To 40', Add ..... For Elevated Installation >40', Add ..... For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add .....	191.51 39.58 13.19 26.39 32.99 46.18 52.78 65.97 72.57 39.58	52.78
26 05 33 13-0394	EA	2" Type X, Threaded, Four Hub Malleable Iron Conduit Body With Cover ..... For Work In Restricted Working Space, Add ..... For Elevated Installation >10' To 15', Add ..... For Elevated Installation >15' To 20', Add ..... For Elevated Installation >20' To 25', Add ..... For Elevated Installation >25' To 30', Add ..... For Elevated Installation >30' To 35', Add ..... For Elevated Installation >35' To 40', Add ..... For Elevated Installation >40', Add ..... For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add .....	265.88 48.65 16.22 32.43 40.54 56.76 64.87 81.09 89.19 48.65	64.87
26 05 33 13-0395	EA	2-1/2" Type X, Threaded, Four Hub Malleable Iron Conduit Body With Cover ..... For Work In Restricted Working Space, Add ..... For Elevated Installation >10' To 15', Add ..... For Elevated Installation >15' To 20', Add ..... For Elevated Installation >20' To 25', Add ..... For Elevated Installation >25' To 30', Add ..... For Elevated Installation >30' To 35', Add ..... For Elevated Installation >35' To 40', Add ..... For Elevated Installation >40', Add ..... For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add .....	422.93 71.33 23.78 47.55 59.44 83.22 95.11 118.89 130.77 71.33	95.10
26 05 33 13-0396	EA	3" Type X, Threaded, Four Hub Malleable Iron Conduit Body With Cover ..... For Work In Restricted Working Space, Add ..... For Elevated Installation >10' To 15', Add ..... For Elevated Installation >15' To 20', Add ..... For Elevated Installation >20' To 25', Add ..... For Elevated Installation >25' To 30', Add ..... For Elevated Installation >30' To 35', Add ..... For Elevated Installation >35' To 40', Add ..... For Elevated Installation >40', Add ..... For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add .....	616.92 92.77 30.92 61.85 77.31 108.23 123.69 154.62 170.08 92.77	123.69
26 05 33 13-0397	EA	3-1/2" Type X, Threaded, Four Hub Malleable Iron Conduit Body With Cover ..... For Work In Restricted Working Space, Add ..... For Elevated Installation >10' To 15', Add ..... For Elevated Installation >15' To 20', Add ..... For Elevated Installation >20' To 25', Add ..... For Elevated Installation >25' To 30', Add ..... For Elevated Installation >30' To 35', Add ..... For Elevated Installation >35' To 40', Add ..... For Elevated Installation >40', Add ..... For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add .....	914.15 114.62 38.21 76.41 95.52 133.72 152.83 191.04 210.14 114.62	152.83
26 05 33 13-0398	EA	4" Type X, Threaded, Four Hub Malleable Iron Conduit Body With Cover ..... For Work In Restricted Working Space, Add ..... For Elevated Installation >10' To 15', Add ..... For Elevated Installation >15' To 20', Add ..... For Elevated Installation >20' To 25', Add ..... For Elevated Installation >25' To 30', Add ..... For Elevated Installation >30' To 35', Add ..... For Elevated Installation >35' To 40', Add ..... For Elevated Installation >40', Add ..... For Personal Protective Equipment (Arc Flash) When Working On Energized Equipment, Add .....	1,023.98 137.71 45.90 91.81 114.76 160.66 183.62 229.52 252.47 137.71	183.62
26 05 33 13-0399		Replacement Covers And Gaskets For Conduit Body (26 05 33 13-0330)		
26 05 33 13-0400		Replacement Stamped Aluminum Conduit Body Cover (26 05 33 13-0399)		
26 05 33 13-0401	EA	1/2" Replacement Stamped Aluminum Conduit Body Cover .....	13.96	5.36
26 05 33 13-0402	EA	3/4" Replacement Stamped Aluminum Conduit Body Cover .....	17.04	6.25
26 05 33 13-0403	EA	1" Replacement Stamped Aluminum Conduit Body Cover .....	21.83	8.04
26 05 33 13-0404	EA	1-1/4" Replacement Stamped Aluminum Conduit Body Cover .....	26.58	9.83
26 05 33 13-0405	EA	1-1/2" Replacement Stamped Aluminum Conduit Body Cover .....	32.61	11.61
26 05 33 13-0406	EA	2" Replacement Stamped Aluminum Conduit Body Cover .....	38.62	13.40
26 05 33 13-0407	EA	2-1/2" Replacement Stamped Aluminum Conduit Body Cover .....	50.82	15.19
26 05 33 13-0408	EA	3" Replacement Stamped Aluminum Conduit Body Cover .....	65.98	21.44
26 05 33 13-0409	EA	3-1/2" Replacement Stamped Aluminum Conduit Body Cover .....	71.65	24.12
26 05 33 13-0410	EA	4" Replacement Stamped Aluminum Conduit Body Cover .....	90.26	30.37
26 05 33 13-0411		Replacement Cast Steel Conduit Body Cover (26 05 33 13-0399)		
26 05 33 13-0412	EA	1/2" Replacement Cast Steel Conduit Body Cover .....	16.17	5.36
26 05 33 13-0413	EA	3/4" Replacement Cast Steel Conduit Body Cover .....	18.97	6.25
26 05 33 13-0414	EA	1" Replacement Cast Steel Conduit Body Cover .....	26.58	8.04
26 05 33 13-0415	EA	1-1/4" Replacement Cast Steel Conduit Body Cover .....	33.01	9.83
26 05 33 13-0416	EA	1-1/2" Replacement Cast Steel Conduit Body Cover .....	40.10	11.61
26 05 33 13-0417	EA	2" Replacement Cast Steel Conduit Body Cover .....	47.19	13.40
26 05 33 13-0418	EA	2-1/2" Replacement Cast Steel Conduit Body Cover .....	54.22	15.19

**26 Electrical****26 05 Common Work Results for Electrical****26 05 33 Raceway and Boxes for Electrical Systems**

MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
26 05 33 13-0419 EA 3" Replacement Cast Steel Conduit Body Cover.....	74.01	21.44
26 05 33 13-0420 EA 3-1/2" Replacement Cast Steel Conduit Body Cover.....	84.30	24.12
26 05 33 13-0421 EA 4" Replacement Cast Steel Conduit Body Cover.....	106.27	30.37
<b>26 05 33 13-0422 Replacement Velbuna Composition Conduit Body Gasket (26 05 33 13-0399)</b>		
26 05 33 13-0423 EA 1/2" Replacement Velbuna Composition Conduit Body Gasket.....	12.97	5.36
26 05 33 13-0424 EA 3/4" Replacement Velbuna Composition Conduit Body Gasket.....	14.83	6.25
26 05 33 13-0425 EA 1" Replacement Velbuna Composition Conduit Body Gasket.....	19.37	8.04
26 05 33 13-0426 EA 1-1/4" Replacement Velbuna Composition Conduit Body Gasket.....	25.09	9.83
26 05 33 13-0427 EA 1-1/2" Replacement Velbuna Composition Conduit Body Gasket.....	28.67	11.61
26 05 33 13-0428 EA 2" Replacement Velbuna Composition Conduit Body Gasket.....	34.06	13.40
26 05 33 13-0429 EA 2-1/2" Replacement Velbuna Composition Conduit Body Gasket.....	44.57	15.19
26 05 33 13-0430 EA 3" Replacement Velbuna Composition Conduit Body Gasket.....	58.18	21.44
26 05 33 13-0431 EA 3-1/2" Replacement Velbuna Composition Conduit Body Gasket.....	64.27	24.12
26 05 33 13-0432 EA 4" Replacement Velbuna Composition Conduit Body Gasket.....	76.64	30.37
<b>26 05 33 13-0433 Replacement Neoprene Conduit Body Gasket (26 05 33 13-0399)</b>		
26 05 33 13-0434 EA 1/2" Replacement Neoprene Conduit Body Gasket.....	14.51	5.36
26 05 33 13-0435 EA 3/4" Replacement Neoprene Conduit Body Gasket.....	16.30	6.25
26 05 33 13-0436 EA 1" Replacement Neoprene Conduit Body Gasket.....	21.29	8.04
26 05 33 13-0437 EA 1-1/4" Replacement Neoprene Conduit Body Gasket.....	26.06	9.83
26 05 33 13-0438 EA 1-1/2" Replacement Neoprene Conduit Body Gasket.....	29.64	11.61
26 05 33 13-0439 EA 2" Replacement Neoprene Conduit Body Gasket.....	34.16	13.40
26 05 33 13-0440 EA 2-1/2" Replacement Neoprene Conduit Body Gasket.....	44.82	15.19
26 05 33 13-0441 EA 3" Replacement Neoprene Conduit Body Gasket.....	58.43	21.44
26 05 33 13-0442 EA 3-1/2" Replacement Neoprene Conduit Body Gasket.....	65.91	24.12
26 05 33 13-0443 EA 4" Replacement Neoprene Conduit Body Gasket.....	78.28	30.37
<b>26 05 46 Utility Poles for Electrical Systems (26 05)</b>		
<b>26 05 46 00-0001 Wood Poles (26 05 46)</b>		
<b>26 05 46 00-0002 Wood Pole, Class 3, Penta-Treated To 8 LB Retention (26 05 46 00-0001)</b>		
Note: Machine dig and set.		
26 05 46 00-0003 EA 25' Treated Wood Pole, Class 3, Machine Dig And Set.....	1,096.96	387.43
For Class 1 Pole, Add	112.69	
For Class 2 Pole, Add	64.39	
For Class 4 Pole, Deduct	-32.20	
For Class 5 Pole, Deduct	-96.59	
For Class 6 Pole, Deduct	-128.79	
26 05 46 00-0004 EA 30' Treated Wood Pole, Class 3, Machine Dig And Set.....	1,296.89	429.85
For Class 1 Pole, Add	153.00	
For Class 2 Pole, Add	87.43	
For Class 4 Pole, Deduct	-43.71	
For Class 5 Pole, Deduct	-131.14	
For Class 6 Pole, Deduct	-174.86	
26 05 46 00-0005 EA 35' Treated Wood Pole, Class 3, Machine Dig And Set.....	1,686.56	568.50
For Class 1 Pole, Add	192.40	
For Class 2 Pole, Add	109.94	
For Class 4 Pole, Deduct	-54.97	
For Class 5 Pole, Deduct	-164.91	
For Class 6 Pole, Deduct	-219.88	
26 05 46 00-0006 EA 40' Treated Wood Pole, Class 3, Machine Dig And Set.....	1,918.05	625.30
For Class 1 Pole, Add	233.63	
For Class 2 Pole, Add	133.50	
For Class 4 Pole, Deduct	-66.75	
For Class 5 Pole, Deduct	-200.25	
For Class 6 Pole, Deduct	-267.00	
26 05 46 00-0007 EA 45' Treated Wood Pole, Class 3, Machine Dig And Set.....	2,183.53	696.44
For Class 1 Pole, Add	276.68	
For Class 2 Pole, Add	158.10	
For Class 4 Pole, Deduct	-79.05	
For Class 5 Pole, Deduct	-237.16	
For Class 6 Pole, Deduct	-316.21	
26 05 46 00-0008 EA 50' Treated Wood Pole, Class 3, Machine Dig And Set.....	2,479.35	781.62
For Class 1 Pole, Add	320.66	
For Class 2 Pole, Add	183.23	
For Class 4 Pole, Deduct	-91.62	
For Class 5 Pole, Deduct	-274.85	
For Class 6 Pole, Deduct	-366.47	
26 05 46 00-0009 EA 55' Treated Wood Pole, Class 3, Machine Dig And Set.....	2,766.55	859.69
For Class 1 Pole, Add	366.47	
For Class 2 Pole, Add	209.41	
For Class 4 Pole, Deduct	-104.71	
For Class 5 Pole, Deduct	-314.12	
For Class 6 Pole, Deduct	-418.82	



<b>Electrical</b>		<b>26</b>
<b>Common Work Results for Electrical</b>		<b>26 05</b>
<b>Utility Poles for Electrical Systems</b>		<b>26 05 46</b>

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MINOR CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
26 05 46 00-0010	EA	60' Treated Wood Pole, Class 3, Machine Dig And Set.....	3,084.50	945.37
		For Class 1 Pole, Add	417.77	
		For Class 2 Pole, Add	238.73	
		For Class 4 Pole, Deduct	-119.36	
		For Class 5 Pole, Deduct	-358.09	
		For Class 6 Pole, Deduct	-477.46	
26 05 46 00-0011	EA	65' Treated Wood Pole, Class 3, Machine Dig And Set.....	4,811.18	1,030.38
		For Class 1 Pole, Add	962.62	
		For Class 2 Pole, Add	550.07	
		For Class 4 Pole, Deduct	-275.04	
		For Class 5 Pole, Deduct	-825.11	
		For Class 6 Pole, Deduct	-1,100.14	
26 05 46 00-0012	EA	70' Treated Wood Pole, Class 3, Machine Dig And Set.....	5,266.98	1,096.08
		For Class 1 Pole, Add	1,076.18	
		For Class 2 Pole, Add	614.96	
		For Class 4 Pole, Deduct	-307.48	
		For Class 5 Pole, Deduct	-922.44	
		For Class 6 Pole, Deduct	-1,229.92	
26 05 46 00-0013	EA	75' Treated Wood Pole, Class 3, Machine Dig And Set.....	5,773.85	1,170.69
		For Class 1 Pole, Add	1,201.34	
		For Class 2 Pole, Add	686.48	
		For Class 4 Pole, Deduct	-343.24	
		For Class 5 Pole, Deduct	-1,029.72	
		For Class 6 Pole, Deduct	-1,372.96	
26 05 46 00-0014		<b>Steel Service Poles Distribution</b> (26 05 46)		
		Note: Direct embedded, bearing plate on base end, pole cap on top end, grounding nut, galvanized finish.		
26 05 46 00-0015		<b>Removal And Relocation Of Steel Service Poles</b> (26 05 46 00-0014)		
26 05 46 00-0016	LF	Removal And Relocation Of Steel Service Poles With Arms Up To 60'.....	57.76	
26 05 46 00-0017		<b>Special Steel Bases For Poles</b> (26 05 46 00-0014)		
26 05 46 00-0018	EA	Spin-In Steel Base For Poles.....	305.21	
26 05 46 00-0019	EA	Series 3, 25' Pole And less.....	334.77	82.54
26 05 46 00-0020	EA	Series 4, 40' Pole And less.....	397.24	94.92
26 05 46 00-0021	EA	Series 5, 50' Pole And less.....	451.46	103.17
26 05 53		<b>Identification for Electrical Systems</b> (26 05)		
26 05 53 00-0001		<b>Labeling Electrical Wires</b> (26 05 53)		
		Note: Self-adhesive vinly coated white cloth		
26 05 53 00-0002	EA	Labeling Wire.....	4.65	
26 09		<b>Instrumentation and Control for Electrical Systems</b> (26)		
26 09 23		<b>Lighting Control Devices</b> (26 09)		
26 09 23 00-0001		<b>Street Light Controls</b> (26 09 23)		
26 09 23 00-0002		<b>Photo Controls</b> (26 09 23 00-0001)		
26 09 23 00-0003	EA	Photo Control, 120 Volt As Manufactured By Cooper Lighting #RA1014 .....	114.24	
26 09 23 00-0004	EA	Photo Control, Multi-Tap As Manufactured By Cooper Lighting #RA1016.....	128.64	
26 09 23 00-0005		<b>Connector Node</b> (26 09 23 00-0001)		
26 09 23 00-0006	EA	Outdoor Lighting Connector Node (Philips City Touch LLC7260).....	522.33	2.98
26 20		<b>Low-Voltage Electrical Distribution</b> (26)		
26 27		<b>Low-Voltage Distribution Equipment</b> (26 20)		
26 27 13		<b>Electricity Metering</b> (26 27)		
26 27 13 00-0001		<b>Revenue Metering</b> (26 27 13)		
26 27 13 00-0002		<b>Meter Socket Base</b> (26 27 13 00-0001)		
		Note: NEMA 3R.		
26 27 13 00-0003	EA	100 Amperes, 1 Phase, 3 Wire, 4 Terminal Meter Socket With Bypass .....	288.70	97.77
26 27 13 00-0004	EA	200 Amperes, 1 Phase, 3 Wire, 4 Terminal Meter Socket With Bypass .....	398.47	120.33
26 27 13 00-0005	EA	320 Amperes, 3 Phase, 4 Wire, 7 Terminal Meter Socket With Bypass And Jaw Release .....	937.77	150.42
26 27 16		<b>Electrical Cabinets and Enclosures</b> (26 27)		
		Note: Can be used as enclosure or pull/junction boxes.		
26 27 16 00-0001		<b>NEMA 3R Enclosures, Lockable</b> (26 27 16)		
		Note: Rain-tight enclosures.		
26 27 16 00-0002		<b>Hinged Cover, Galvanized Steel NEMA 3R Enclosures</b> (26 27 16 00-0001)		

**26 Electrical****26 20 Low-Voltage Electrical Distribution****26 27 Low-Voltage Distribution Equipment**

MINOR CSI UOM DESCRIPTION			TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
26 27 16 00-0003	<b>4" Depth, Hinged Cover, Galvanized Steel NEMA 3R Enclosures</b> (26 27 16 00-0002)			
26 27 16 00-0004	EA	6" x 4" x 4" Hinged Cover, Galvanized Steel NEMA 3R Enclosure.....	111.65	30.08
26 27 16 00-0005	EA	6" x 6" x 4" Hinged Cover, Galvanized Steel NEMA 3R Enclosure.....	123.19	33.09
26 27 16 00-0006	EA	8" x 6" x 4" Hinged Cover, Galvanized Steel NEMA 3R Enclosure.....	173.49	36.10
26 27 16 00-0007	<b>6" Depth, Hinged Cover, Galvanized Steel NEMA 3R Enclosures</b> (26 27 16 00-0002)			
26 27 16 00-0008	EA	8" x 8" x 6" Hinged Cover, Galvanized Steel NEMA 3R Enclosure.....	218.16	45.12
26 27 16 00-0009	EA	10" x 8" x 6" Hinged Cover, Galvanized Steel NEMA 3R Enclosure.....	244.27	51.14
26 27 16 00-0010	EA	12" x 10" x 6" Hinged Cover, Galvanized Steel NEMA 3R Enclosure.....	284.66	57.16
26 27 16 00-0011	EA	12" x 12" x 6" Hinged Cover, Galvanized Steel NEMA 3R Enclosure.....	306.63	60.17
26 27 16 00-0012	EA	16" x 12" x 6" Hinged Cover, Galvanized Steel NEMA 3R Enclosure.....	399.13	78.22
26 27 16 00-0013	EA	16" x 16" x 6" Hinged Cover, Galvanized Steel NEMA 3R Enclosure.....	479.16	96.26
26 27 16 00-0014	EA	18" x 18" x 6" Hinged Cover, Galvanized Steel NEMA 3R Enclosure.....	554.44	120.33
26 27 16 00-0015	<b>8" Depth, Hinged Cover, Galvanized Steel NEMA 3R Enclosures</b> (26 27 16 00-0002)			
26 27 16 00-0016	EA	24" x 20" x 8" Hinged Cover, Galvanized Steel NEMA 3R Enclosure.....	821.92	153.42
26 27 16 00-0017	EA	24" x 24" x 8" Hinged Cover, Galvanized Steel NEMA 3R Enclosure.....	908.34	165.45
26 27 16 00-0018	EA	30" x 24" x 8" Hinged Cover, Galvanized Steel NEMA 3R Enclosure.....	1,014.43	174.48
26 27 16 00-0019	EA	30" x 30" x 8" Hinged Cover, Galvanized Steel NEMA 3R Enclosure.....	1,064.89	180.50
26 27 16 00-0020	<b>10" Depth, Hinged Cover, Galvanized Steel NEMA 3R Enclosures</b> (26 27 16 00-0002)			
26 27 16 00-0021	EA	12" x 48" x 10" Hinged Cover, Galvanized Steel NEMA 3R Enclosure.....	1,016.60	186.51
26 27 16 00-0022	EA	12" x 54" x 10" Hinged Cover, Galvanized Steel NEMA 3R Enclosure.....	1,148.31	210.58
26 27 16 00-0023	EA	12" x 60" x 10" Hinged Cover, Galvanized Steel NEMA 3R Enclosure.....	1,271.51	233.15
26 27 16 00-0024	EA	12" x 66" x 10" Hinged Cover, Galvanized Steel NEMA 3R Enclosure.....	1,400.21	257.21
26 27 16 00-0025	EA	12" x 72" x 10" Hinged Cover, Galvanized Steel NEMA 3R Enclosure.....	1,524.91	279.77
26 27 16 00-0026	EA	18" x 18" x 10" Hinged Cover, Galvanized Steel NEMA 3R Enclosure.....	679.67	147.40
26 27 16 00-0027	EA	24" x 24" x 10" Hinged Cover, Galvanized Steel NEMA 3R Enclosure.....	1,016.60	186.51
26 27 16 00-0028	EA	30" x 24" x 10" Hinged Cover, Galvanized Steel NEMA 3R Enclosure.....	1,184.28	192.53
26 27 16 00-0029	EA	36" x 36" x 10" Hinged Cover, Galvanized Steel NEMA 3R Enclosure.....	1,476.41	210.58
26 27 16 00-0030	<b>12" Depth, Hinged Cover, Galvanized Steel NEMA 3R Enclosures</b> (26 27 16 00-0002)			
26 27 16 00-0031	EA	12" x 48" x 12" Hinged Cover, Galvanized Steel NEMA 3R Enclosure.....	963.90	148.91
26 27 16 00-0032	EA	12" x 54" x 12" Hinged Cover, Galvanized Steel NEMA 3R Enclosure.....	1,081.26	166.96
26 27 16 00-0033	EA	12" x 60" x 12" Hinged Cover, Galvanized Steel NEMA 3R Enclosure.....	1,197.13	185.01
26 27 16 00-0034	EA	12" x 66" x 12" Hinged Cover, Galvanized Steel NEMA 3R Enclosure.....	1,323.33	204.56
26 27 16 00-0035	EA	12" x 72" x 12" Hinged Cover, Galvanized Steel NEMA 3R Enclosure.....	1,440.68	222.62
26 27 16 00-0036	EA	18" x 24" x 12" Hinged Cover, Galvanized Steel NEMA 3R Enclosure.....	720.35	111.31
26 27 16 00-0037	EA	18" x 32" x 12" Hinged Cover, Galvanized Steel NEMA 3R Enclosure.....	963.90	148.91
26 27 16 00-0038	EA	18" x 36" x 12" Hinged Cover, Galvanized Steel NEMA 3R Enclosure.....	1,081.26	166.96
26 27 16 00-0039	EA	18" x 42" x 12" Hinged Cover, Galvanized Steel NEMA 3R Enclosure.....	1,271.51	195.54
26 27 16 00-0040	EA	18" x 48" x 12" Hinged Cover, Galvanized Steel NEMA 3R Enclosure.....	1,440.68	222.62
26 27 16 00-0041	EA	30" x 30" x 12" Hinged Cover, Galvanized Steel NEMA 3R Enclosure.....	1,374.79	219.60
26 27 16 00-0042	EA	36" x 24" x 12" Hinged Cover, Galvanized Steel NEMA 3R Enclosure.....	1,440.68	222.62
26 27 16 00-0043	EA	36" x 30" x 12" Hinged Cover, Galvanized Steel NEMA 3R Enclosure.....	1,513.57	228.63
26 27 16 00-0044	EA	36" x 36" x 12" Hinged Cover, Galvanized Steel NEMA 3R Enclosure.....	1,676.36	240.66
26 27 16 00-0045	EA	42" x 30" x 12" Hinged Cover, Galvanized Steel NEMA 3R Enclosure.....	1,812.44	252.70
26 27 16 00-0046	<b>Screw Cover, Galvanized Steel NEMA 3R Enclosures</b> (26 27 16 00-0001)			
26 27 16 00-0047	<b>4" Depth, Screw Cover, Galvanized Steel NEMA 3R Enclosures</b> (26 27 16 00-0046)			
26 27 16 00-0048	EA	4" x 4" x 4", Screw Cover, Galvanized Steel NEMA 3R Enclosure.....	80.85	24.06
26 27 16 00-0049	EA	6" x 4" x 4", Screw Cover, Galvanized Steel NEMA 3R Enclosure.....	98.47	30.08
26 27 16 00-0050	EA	6" x 6" x 4", Screw Cover, Galvanized Steel NEMA 3R Enclosure.....	108.64	33.09
26 27 16 00-0051	EA	8" x 6" x 4", Screw Cover, Galvanized Steel NEMA 3R Enclosure.....	120.01	36.10
26 27 16 00-0052	EA	8" x 8" x 4", Screw Cover, Galvanized Steel NEMA 3R Enclosure.....	139.51	42.12
26 27 16 00-0053	EA	10" x 8" x 4", Screw Cover, Galvanized Steel NEMA 3R Enclosure.....	151.46	45.12
26 27 16 00-0054	EA	10" x 10" x 4", Screw Cover, Galvanized Steel NEMA 3R Enclosure.....	164.26	48.14
26 27 16 00-0055	EA	12" x 8" x 4", Screw Cover, Galvanized Steel NEMA 3R Enclosure.....	163.69	48.14
26 27 16 00-0056	EA	12" x 10" x 4", Screw Cover, Galvanized Steel NEMA 3R Enclosure.....	177.80	51.14
26 27 16 00-0057	EA	12" x 12" x 4", Screw Cover, Galvanized Steel NEMA 3R Enclosure.....	190.60	54.15
26 27 16 00-0058	EA	18" x 12" x 4", Screw Cover, Galvanized Steel NEMA 3R Enclosure.....	289.80	84.23
26 27 16 00-0059	EA	18" x 18" x 4", Screw Cover, Galvanized Steel NEMA 3R Enclosure.....	383.48	108.30
26 27 16 00-0060	<b>6" Depth, Screw Cover, Galvanized Steel NEMA 3R Enclosures</b> (26 27 16 00-0046)			
26 27 16 00-0061	EA	6" x 6" x 6" Screw Cover, Galvanized Steel NEMA 3R Enclosure.....	114.36	36.10
26 27 16 00-0062	EA	8" x 8" x 6" Screw Cover, Galvanized Steel NEMA 3R Enclosure.....	152.99	45.12
26 27 16 00-0063	EA	10" x 8" x 6" Screw Cover, Galvanized Steel NEMA 3R Enclosure.....	173.32	51.14
26 27 16 00-0064	EA	10" x 10" x 6" Screw Cover, Galvanized Steel NEMA 3R Enclosure.....	186.90	54.15
26 27 16 00-0065	EA	12" x 8" x 6" Screw Cover, Galvanized Steel NEMA 3R Enclosure.....	186.06	54.15
26 27 16 00-0066	EA	12" x 10" x 6" Screw Cover, Galvanized Steel NEMA 3R Enclosure.....	200.32	57.16
26 27 16 00-0067	EA	12" x 12" x 6" Screw Cover, Galvanized Steel NEMA 3R Enclosure.....	214.69	60.17
26 27 16 00-0068	EA	16" x 12" x 6" Screw Cover, Galvanized Steel NEMA 3R Enclosure.....	279.96	78.22



<b>Electrical</b>		<b>26</b>	<b>26</b>
<b>Low-Voltage Electrical Distribution</b>		<b>26 20</b>	
<b>Low-Voltage Distribution Equipment</b>		<b>26 27</b>	

MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
26 27 16 00-0069 EA 18" x 12" x 6" Screw Cover, Galvanized Steel NEMA 3R Enclosure .....	324.70	93.26
26 27 16 00-0070 EA 18" x 18" x 6" Screw Cover, Galvanized Steel NEMA 3R Enclosure .....	430.20	120.33
26 27 16 00-0071 EA 24" x 12" x 6" Screw Cover, Galvanized Steel NEMA 3R Enclosure .....	451.88	129.36
26 27 16 00-0072 EA 24" x 18" x 6" Screw Cover, Galvanized Steel NEMA 3R Enclosure .....	509.45	138.38
26 27 16 00-0073 EA 24" x 24" x 6" Screw Cover, Galvanized Steel NEMA 3R Enclosure .....	569.78	150.42
<b>26 27 16 00-0074 8" Depth, Screw Cover, Galvanized Steel NEMA 3R Enclosures (26 27 16 00-0046)</b>		
26 27 16 00-0075 EA 12" x 12" x 8", Screw Cover, Galvanized Steel NEMA 3R Enclosure .....	239.44	66.18
26 27 16 00-0076 EA 18" x 12" x 8", Screw Cover, Galvanized Steel NEMA 3R Enclosure .....	351.56	102.28
26 27 16 00-0077 EA 18" x 18" x 8", Screw Cover, Galvanized Steel NEMA 3R Enclosure .....	475.40	132.37
26 27 16 00-0078 EA 24" x 18" x 8", Screw Cover, Galvanized Steel NEMA 3R Enclosure .....	563.92	153.42
26 27 16 00-0079 EA 24" x 24" x 8", Screw Cover, Galvanized Steel NEMA 3R Enclosure .....	632.00	165.45
26 27 16 00-0080 EA 30" x 24" x 8", Screw Cover, Galvanized Steel NEMA 3R Enclosure .....	695.19	174.48
<b>26 27 16 00-0081 10" Depth, Screw Cover, Galvanized Steel NEMA 3R Enclosures (26 27 16 00-0046)</b>		
26 27 16 00-0082 EA 18" x 18" x 10" Screw Cover, Galvanized Steel NEMA 3R Enclosure .....	525.50	147.40
26 27 16 00-0083 EA 24" x 24" x 10" Screw Cover, Galvanized Steel NEMA 3R Enclosure .....	698.36	186.51
26 27 16 00-0084 EA 30" x 24" x 10" Screw Cover, Galvanized Steel NEMA 3R Enclosure .....	757.20	192.53
<b>26 27 16 00-0085 12" Depth, Screw Cover, Galvanized Steel NEMA 3R Enclosures (26 27 16 00-0046)</b>		
26 27 16 00-0086 EA 24" x 24" x 12" Screw Cover, Galvanized Steel NEMA 3R Enclosure .....	770.40	204.56
26 27 16 00-0087 EA 30" x 30" x 12" Screw Cover, Galvanized Steel NEMA 3R Enclosure .....	1,026.75	222.62
26 27 16 00-0088 EA 36" x 30" x 12" Screw Cover, Galvanized Steel NEMA 3R Enclosure .....	1,060.09	228.63
26 27 16 00-0089 EA 36" x 36" x 12" Screw Cover, Galvanized Steel NEMA 3R Enclosure .....	1,219.96	240.66
<b>26 27 16 00-0090 NEMA 4 Enclosures, Lockable (26 27 16)</b>		
Note: Water-tight enclosures.		
<b>26 27 16 00-0091 Hinge Cover, Painted Steel NEMA 4 Enclosures (26 27 16 00-0090)</b>		
26 27 16 00-0092 EA 4" x 4" x 3" Hinge Cover, Painted Steel NEMA 4 Enclosure .....	125.10	21.06
26 27 16 00-0093 EA 6" x 4" x 3" Hinge Cover, Painted Steel NEMA 4 Enclosure .....	146.62	25.57
26 27 16 00-0094 EA 8" x 6" x 3.5" Hinge Cover, Painted Steel NEMA 4 Enclosure .....	183.68	33.09
26 27 16 00-0095 EA 6" x 6" x 4" Hinge Cover, Painted Steel NEMA 4 Enclosure .....	175.45	33.09
26 27 16 00-0096 EA 10" x 8" x 4" Hinge Cover, Painted Steel NEMA 4 Enclosure .....	234.87	45.12
26 27 16 00-0097 EA 12" x 10" x 5" Hinge Cover, Painted Steel NEMA 4 Enclosure .....	291.73	54.15
26 27 16 00-0098 EA 10" x 8" x 6" Hinge Cover, Painted Steel NEMA 4 Enclosure .....	269.96	51.14
26 27 16 00-0099 EA 12" x 12" x 6" Hinge Cover, Painted Steel NEMA 4 Enclosure .....	314.97	60.17
26 27 16 00-0100 EA 14" x 12" x 6" Hinge Cover, Painted Steel NEMA 4 Enclosure .....	369.94	69.19
26 27 16 00-0101 EA 16" x 14" x 6" Hinge Cover, Painted Steel NEMA 4 Enclosure .....	449.84	87.24
<b>26 27 16 00-0102 Clamp Cover, Painted Steel NEMA 4 Enclosures (26 27 16 00-0090)</b>		
26 27 16 00-0103 EA 4" x 4" x 3" Clamp Cover, Painted Steel NEMA 4 Enclosure .....	115.53	21.06
26 27 16 00-0104 EA 6" x 6" x 4" Clamp Cover, Painted Steel NEMA 4 Enclosure .....	165.90	33.09
<b>26 27 16 00-0105 NEMA 4X Enclosures, Lockable (26 27 16)</b>		
Note: Water-tight enclosures.		
<b>26 27 16 00-0106 Clamp Cover, Aluminum NEMA 4X Enclosures (26 27 16 00-0105)</b>		
26 27 16 00-0107 EA 6" x 4" x 3" Clamp Cover, Aluminum NEMA 4X Enclosure .....	241.60	24.06
26 27 16 00-0108 EA 6" x 6" x 4" Clamp Cover, Aluminum NEMA 4X Enclosure .....	286.79	33.09
26 27 16 00-0109 EA 10" x 8" x 4" Clamp Cover, Aluminum NEMA 4X Enclosure .....	364.83	45.12
26 27 16 00-0110 EA 12" x 10" x 5" Clamp Cover, Aluminum NEMA 4X Enclosure .....	442.64	54.15
26 27 16 00-0111 EA 14" x 12" x 6" Clamp Cover, Aluminum NEMA 4X Enclosure .....	546.74	69.19
26 27 16 00-0112 EA 16" x 14" x 6" Clamp Cover, Aluminum NEMA 4X Enclosure .....	647.93	87.24
<b>26 27 16 00-0113 Clamp Cover, 304 Stainless Steel NEMA 4X Enclosures (26 27 16 00-0105)</b>		
26 27 16 00-0114 EA 4" x 4" x 3", Clamp Cover, 304 Stainless Steel NEMA 4X Enclosure .....	290.45	21.06
For 316 Stainless Steel, Add		38.05
26 27 16 00-0115 EA 6" x 4" x 4", Clamp Cover, 304 Stainless Steel NEMA 4X Enclosure .....	379.50	30.08
For 316 Stainless Steel, Add		48.69
26 27 16 00-0116 EA 6" x 6" x 4", Clamp Cover, 304 Stainless Steel NEMA 4X Enclosure .....	429.40	33.09
For 316 Stainless Steel, Add		55.47
26 27 16 00-0117 EA 8" x 6" x 4", Clamp Cover, 304 Stainless Steel NEMA 4X Enclosure .....	490.31	36.10
For 316 Stainless Steel, Add		64.01
26 27 16 00-0118 EA 10" x 8" x 4", Clamp Cover, 304 Stainless Steel NEMA 4X Enclosure .....	602.69	45.12
For 316 Stainless Steel, Add		78.38
26 27 16 00-0119 EA 12" x 10" x 6", Clamp Cover, 304 Stainless Steel NEMA 4X Enclosure .....	843.66	57.16
For 316 Stainless Steel, Add		112.12
26 27 16 00-0120 EA 14" x 12" x 6", Clamp Cover, 304 Stainless Steel NEMA 4X Enclosure .....	1,050.43	69.19
For 316 Stainless Steel, Add		140.39
26 27 16 00-0121 EA 16" x 14" x 6", Clamp Cover, 304 Stainless Steel NEMA 4X Enclosure .....	1,268.80	87.24
For 316 Stainless Steel, Add		168.11

**26 Electrical****26 20 Low-Voltage Electrical Distribution****26 27 Low-Voltage Distribution Equipment**

MINOR  
CSI UOM DESCRIPTION

TOTAL DIRECT DEMOLITION  
UNIT COST UNIT COST

<b>26 27 16 00-0122</b>		<b>Screw Cover, Polycarbonate NEMA 4X Enclosures</b> <small>(26 27 16 00-0105)</small>	
		Note: NEMA 3R, 4, 4X and 12 rated.	
26 27 16 00-0123	EA	6" x 6" x 4" Screw Cover, Polycarbonate NEMA 4X Enclosure With Opaque Cover .....	161.17 33.09
26 27 16 00-0124	EA	8" x 6" x 4" Screw Cover, Polycarbonate NEMA 4X Enclosure With Opaque Cover .....	181.07 36.10
26 27 16 00-0125	EA	8" x 8" x 4" Screw Cover, Polycarbonate NEMA 4X Enclosure With Opaque Cover .....	207.48 42.12
26 27 16 00-0126	EA	10" x 8" x 4" Screw Cover, Polycarbonate NEMA 4X Enclosure With Opaque Cover .....	225.32 45.12
26 27 16 00-0127	EA	12" x 10" x 4" Screw Cover, Polycarbonate NEMA 4X Enclosure With Opaque Cover .....	259.96 51.14
26 27 16 00-0128	EA	10" x 8" x 6" Screw Cover, Polycarbonate NEMA 4X Enclosure With Opaque Cover .....	245.51 51.14
26 27 16 00-0129	EA	12" x 10" x 6" Screw Cover, Polycarbonate NEMA 4X Enclosure With Opaque Cover .....	285.26 57.16
26 27 16 00-0130	EA	14" x 12" x 6" Screw Cover, Polycarbonate NEMA 4X Enclosure With Opaque Cover .....	356.69 69.19
26 27 16 00-0131	EA	16" x 14" x 8" Screw Cover, Polycarbonate NEMA 4X Enclosure With Opaque Cover .....	457.77 94.76
26 27 16 00-0132	EA	18" x 16" x 10" Screw Cover, Polycarbonate NEMA 4X Enclosure With Opaque Cover .....	594.31 136.42
26 27 16 00-0133	EA	6" x 6" x 4" Screw Cover, Polycarbonate NEMA 4X Enclosure With Clear Cover .....	172.53 33.09
26 27 16 00-0134	EA	8" x 6" x 4" Screw Cover, Polycarbonate NEMA 4X Enclosure With Clear Cover .....	194.50 36.10
26 27 16 00-0135	EA	8" x 8" x 4" Screw Cover, Polycarbonate NEMA 4X Enclosure With Clear Cover .....	221.93 42.12
26 27 16 00-0136	EA	10" x 8" x 4" Screw Cover, Polycarbonate NEMA 4X Enclosure With Clear Cover .....	242.85 45.12
26 27 16 00-0137	EA	12" x 10" x 4" Screw Cover, Polycarbonate NEMA 4X Enclosure With Clear Cover .....	278.54 51.14
26 27 16 00-0138	EA	10" x 8" x 6" Screw Cover, Polycarbonate NEMA 4X Enclosure With Clear Cover .....	263.06 51.14
26 27 16 00-0139	EA	12" x 10" x 6" Screw Cover, Polycarbonate NEMA 4X Enclosure With Clear Cover .....	309.07 57.16
26 27 16 00-0140	EA	14" x 12" x 6" Screw Cover, Polycarbonate NEMA 4X Enclosure With Clear Cover .....	369.08 69.19
26 27 16 00-0141	EA	16" x 14" x 8" Screw Cover, Polycarbonate NEMA 4X Enclosure With Clear Cover .....	483.58 94.76
26 27 16 00-0142	EA	18" x 16" x 10" Screw Cover, Polycarbonate NEMA 4X Enclosure With Clear Cover .....	622.17 136.42

<b>26 27 16 00-0143</b>		<b>Hinged Cover, Polycarbonate NEMA 4X Enclosures</b> <small>(26 27 16 00-0105)</small>	
		Note: NEMA 3R, 4, 4X and 12 rated.	
26 27 16 00-0144	EA	6" x 6" x 4" Hinged Cover, Polycarbonate NEMA 4X Enclosure With Opaque Cover .....	193.17 33.09
26 27 16 00-0145	EA	8" x 6" x 4" Hinged Cover, Polycarbonate NEMA 4X Enclosure With Opaque Cover .....	206.89 36.10
26 27 16 00-0146	EA	8" x 8" x 4" Hinged Cover, Polycarbonate NEMA 4X Enclosure With Opaque Cover .....	235.33 42.12
26 27 16 00-0147	EA	10" x 8" x 4" Hinged Cover, Polycarbonate NEMA 4X Enclosure With Opaque Cover .....	254.22 45.12
26 27 16 00-0148	EA	12" x 10" x 4" Hinged Cover, Polycarbonate NEMA 4X Enclosure With Opaque Cover .....	300.22 51.14
26 27 16 00-0149	EA	10" x 8" x 6" Hinged Cover, Polycarbonate NEMA 4X Enclosure With Opaque Cover .....	277.51 51.14
26 27 16 00-0150	EA	12" x 10" x 6" Hinged Cover, Polycarbonate NEMA 4X Enclosure With Opaque Cover .....	338.99 57.16
26 27 16 00-0151	EA	14" x 12" x 6" Hinged Cover, Polycarbonate NEMA 4X Enclosure With Opaque Cover .....	403.15 69.19
26 27 16 00-0152	EA	16" x 14" x 8" Hinged Cover, Polycarbonate NEMA 4X Enclosure With Opaque Cover .....	498.03 94.76
26 27 16 00-0153	EA	18" x 16" x 10" Hinged Cover, Polycarbonate NEMA 4X Enclosure With Opaque Cover .....	646.94 136.42
26 27 16 00-0154	EA	6" x 6" x 4" Hinged Cover, Polycarbonate NEMA 4X Enclosure With Clear Cover .....	201.43 33.09
26 27 16 00-0155	EA	8" x 6" x 4" Hinged Cover, Polycarbonate NEMA 4X Enclosure With Clear Cover .....	222.36 36.10
26 27 16 00-0156	EA	8" x 8" x 4" Hinged Cover, Polycarbonate NEMA 4X Enclosure With Clear Cover .....	249.78 42.12
26 27 16 00-0157	EA	10" x 8" x 4" Hinged Cover, Polycarbonate NEMA 4X Enclosure With Clear Cover .....	269.69 45.12
26 27 16 00-0158	EA	12" x 10" x 4" Hinged Cover, Polycarbonate NEMA 4X Enclosure With Clear Cover .....	320.86 51.14
26 27 16 00-0159	EA	10" x 8" x 6" Hinged Cover, Polycarbonate NEMA 4X Enclosure With Clear Cover .....	295.05 51.14
26 27 16 00-0160	EA	12" x 10" x 6" Hinged Cover, Polycarbonate NEMA 4X Enclosure With Clear Cover .....	360.67 57.16
26 27 16 00-0161	EA	14" x 12" x 6" Hinged Cover, Polycarbonate NEMA 4X Enclosure With Clear Cover .....	413.47 69.19
26 27 16 00-0162	EA	16" x 14" x 8" Hinged Cover, Polycarbonate NEMA 4X Enclosure With Clear Cover .....	532.08 94.76
26 27 16 00-0163	EA	18" x 16" x 10" Hinged Cover, Polycarbonate NEMA 4X Enclosure With Clear Cover .....	683.07 136.42

**26 50 Lighting** (26)

Note: Includes testing of fixture, a set of lamps (light bulbs), wire nuts, ground wire connector, fixture whip, ballast(s), mounting brackets where necessary and cable connectors. Lay-in fixtures include support wire, clips and seismic supports.

**26 56 Exterior Lighting** (26 50)**26 56 13 Lighting Poles and Standards** (26 56)

<b>26 56 13 00-0001</b>		<b>Poles And Standards</b> <small>(26 56 13)</small>	
		See CSI section 26 05 46 00-0000 for additional poles, 26 05 46 00-0001 for additional pole.	
<b>26 56 13 00-0002</b>		<b>Roadway Light Poles</b> <small>(26 56 13 00-0001)</small>	
		Note: Excludes lighting fixtures.	
<b>26 56 13 00-0003</b>		<b>Steel Roadway Light Poles</b> <small>(26 56 13 00-0002)</small>	
		Note: Includes prime painted finish, anchor bolts, steel base with nut covers, reinforced handhole with cover and grounding provisions, and fixture arm(s).	
<b>26 56 13 00-0004</b>		<b>Round Tapered, Steel Roadway Light Poles</b> <small>(26 56 13 00-0003)</small>	
<b>26 56 13 00-0005</b>		<b>Round Tapered, Steel Roadway Light Poles With Upsweep Style Arms</b> <small>(26 56 13 00-0004)</small>	
<b>26 56 13 00-0006</b>		<b>Round Tapered, Steel Roadway Light Poles With Single Upsweep Style Arm</b> <small>(26 56 13 00-0005)</small>	
26 56 13 00-0007	EA	20' High, 5.9" Base OD, 7 Gauge, Round Tapered, Steel Roadway Light Pole With Single 4' Upsweep Style Arm, Anchor Base .....	3,133.48 495.21
		For Galvanized Finish, Add .....	64.29
		For >10 To 20, Deduct .....	-78.34
		For >20 To 40, Deduct .....	-156.67
		For >40, Deduct .....	-259.77



Electrical		26
Lighting		26 50
Exterior Lighting		26 56

26

MINOR	CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
26 56 13 00-0008	EA		20' High, 5.9" Base OD, 7 Gauge, Round Tapered, Steel Roadway Light Pole With Single 6' Upsweep Style Arm, Anchor Base.....	3,138.77	495.21
			For Galvanized Finish, Add	64.45	
			For >10 To 20, Deduct	-78.47	
			For >20 To 40, Deduct	-156.94	
			For >40, Deduct	-260.17	
26 56 13 00-0009	EA		25' High, 5.9" Base OD, 7 Gauge, Round Tapered, Steel Roadway Light Pole With Single 4' Upsweep Style Arm, Anchor Base.....	3,500.31	660.29
			For Galvanized Finish, Add	65.39	
			For >10 To 20, Deduct	-87.51	
			For >20 To 40, Deduct	-175.02	
			For >40, Deduct	-295.54	
26 56 13 00-0010	EA		25' High, 5.9" Base OD, 7 Gauge, Round Tapered, Steel Roadway Light Pole With Single 6' Upsweep Style Arm, Anchor Base.....	3,564.00	660.29
			For Galvanized Finish, Add	67.30	
			For >10 To 20, Deduct	-89.10	
			For >20 To 40, Deduct	-178.20	
			For >40, Deduct	-300.31	
26 56 13 00-0011	EA		25' High, 5.9" Base OD, 7 Gauge, Round Tapered, Steel Roadway Light Pole With Single 8' Upsweep Style Arm, Anchor Base.....	3,627.69	660.29
			For Galvanized Finish, Add	69.21	
			For >10 To 20, Deduct	-90.69	
			For >20 To 40, Deduct	-181.38	
			For >40, Deduct	-305.09	
26 56 13 00-0012	EA		30' High, 6.6" Base OD, 7 Gauge, Round Tapered, Steel Roadway Light Pole With Single 4' Upsweep Style Arm, Anchor Base.....	3,806.18	742.83
			For Galvanized Finish, Add	69.62	
			For >10 To 20, Deduct	-95.15	
			For >20 To 40, Deduct	-190.31	
			For >40, Deduct	-322.60	
26 56 13 00-0013	EA		30' High, 6.6" Base OD, 7 Gauge, Round Tapered, Steel Roadway Light Pole With Single 6' Upsweep Style Arm, Anchor Base.....	3,836.38	742.83
			For Galvanized Finish, Add	70.52	
			For >10 To 20, Deduct	-95.91	
			For >20 To 40, Deduct	-191.82	
			For >40, Deduct	-324.87	
26 56 13 00-0014	EA		30' High, 6.6" Base OD, 7 Gauge, Round Tapered, Steel Roadway Light Pole With Single 8' Upsweep Style Arm, Anchor Base.....	3,842.13	742.83
			For Galvanized Finish, Add	70.69	
			For >10 To 20, Deduct	-96.05	
			For >20 To 40, Deduct	-192.11	
			For >40, Deduct	-325.30	
26 56 13 00-0015	EA		35' High, 7.3" Base OD, 7 Gauge, Round Tapered, Steel Roadway Light Pole With Single 4' Upsweep Style Arm, Anchor Base.....	4,031.89	784.09
			For Galvanized Finish, Add	73.91	
			For >10 To 20, Deduct	-100.80	
			For >20 To 40, Deduct	-201.59	
			For >40, Deduct	-341.60	
26 56 13 00-0016	EA		35' High, 7.3" Base OD, 7 Gauge, Round Tapered, Steel Roadway Light Pole With Single 6' Upsweep Style Arm, Anchor Base.....	4,054.70	784.09
			For Galvanized Finish, Add	74.60	
			For >10 To 20, Deduct	-101.37	
			For >20 To 40, Deduct	-202.74	
			For >40, Deduct	-343.31	
26 56 13 00-0017	EA		35' High, 7.3" Base OD, 7 Gauge, Round Tapered, Steel Roadway Light Pole With Single 8' Upsweep Style Arm, Anchor Base.....	4,079.61	784.09
			For Galvanized Finish, Add	75.34	
			For >10 To 20, Deduct	-101.99	
			For >20 To 40, Deduct	-203.98	
			For >40, Deduct	-345.18	
26 56 13 00-0018	EA		40' High, 9.0" Base OD, 7 Gauge, Round Tapered, Steel Roadway Light Pole With Single 4' Upsweep Style Arm, Anchor Base.....	4,608.34	825.36
			For Galvanized Finish, Add	88.73	
			For >10 To 20, Deduct	-115.21	
			For >20 To 40, Deduct	-230.42	
			For >40, Deduct	-386.89	
26 56 13 00-0019	EA		40' High, 9.0" Base OD, 7 Gauge, Round Tapered, Steel Roadway Light Pole With Single 6' Upsweep Style Arm, Anchor Base.....	4,616.46	825.36
			For Galvanized Finish, Add	88.97	
			For >10 To 20, Deduct	-115.41	
			For >20 To 40, Deduct	-230.82	
			For >40, Deduct	-387.50	
26 56 13 00-0020	EA		40' High, 9.0" Base OD, 7 Gauge, Round Tapered, Steel Roadway Light Pole With Single 8' Upsweep Style Arm, Anchor Base.....	4,624.49	825.36
			For Galvanized Finish, Add	89.21	
			For >10 To 20, Deduct	-115.61	
			For >20 To 40, Deduct	-231.22	
			For >40, Deduct	-388.10	

26 56 13 00-0021 Round Tapered, Steel Roadway Light Poles With Two Upsweep Style  
Arms (26 56 13 00-0005)

**26 Electrical**  
**26 50 Lighting**  
**26 56 Exterior Lighting**



MINOR	CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
26 56 13 00-0022	EA	20' High, 5.9" Base OD, 7 Gauge, Round Tapered, Steel Roadway Light Pole With Two 4' Upsweep Style Arms,			
		Anchor Base .....	3,876.61	577.75	
		For Galvanized Finish, Add .....	81.63		
		For >10 To 20, Deduct .....	-96.92		
		For >20 To 40, Deduct .....	-193.83		
		For >40, Deduct .....	-319.63		
26 56 13 00-0023	EA	20' High, 5.9" Base OD, 7 Gauge, Round Tapered, Steel Roadway Light Pole With Two 6' Upsweep Style Arms,			
		Anchor Base .....	3,951.92	598.38	
		For Galvanized Finish, Add .....	82.65		
		For >10 To 20, Deduct .....	-98.80		
		For >20 To 40, Deduct .....	-197.60		
		For >40, Deduct .....	-326.31		
26 56 13 00-0024	EA	20' High, 5.9" Base OD, 7 Gauge, Round Tapered, Steel Roadway Light Pole With Two 8' Upsweep Style Arms,			
		Anchor Base .....	4,018.82	619.02	
		For Galvanized Finish, Add .....	83.42		
		For >10 To 20, Deduct .....	-100.47		
		For >20 To 40, Deduct .....	-200.94		
		For >40, Deduct .....	-332.36		
26 56 13 00-0025	EA	25' High, 5.9" Base OD, 7 Gauge, Round Tapered, Steel Roadway Light Pole With Two 4' Upsweep Style Arms,			
		Anchor Base .....	3,986.12	742.83	
		For Galvanized Finish, Add .....	75.01		
		For >10 To 20, Deduct .....	-99.65		
		For >20 To 40, Deduct .....	-199.31		
		For >40, Deduct .....	-336.10		
26 56 13 00-0026	EA	25' High, 5.9" Base OD, 7 Gauge, Round Tapered, Steel Roadway Light Pole With Two 6' Upsweep Style Arms,			
		Anchor Base .....	4,040.88	763.46	
		For Galvanized Finish, Add .....	75.42		
		For >10 To 20, Deduct .....	-101.02		
		For >20 To 40, Deduct .....	-202.04		
		For >40, Deduct .....	-341.24		
26 56 13 00-0027	EA	25' High, 5.9" Base OD, 7 Gauge, Round Tapered, Steel Roadway Light Pole With Two 8' Upsweep Style Arms,			
		Anchor Base .....	4,087.64	784.09	
		For Galvanized Finish, Add .....	75.58		
		For >10 To 20, Deduct .....	-102.19		
		For >20 To 40, Deduct .....	-204.38		
		For >40, Deduct .....	-345.78		
26 56 13 00-0028	EA	30' High, 6.6" Base OD, 7 Gauge, Round Tapered, Steel Roadway Light Pole With Two 4' Upsweep Style Arms,			
		Anchor Base .....	4,317.99	825.36	
		For Galvanized Finish, Add .....	80.02		
		For >10 To 20, Deduct .....	-107.95		
		For >20 To 40, Deduct .....	-215.90		
		For >40, Deduct .....	-365.12		
26 56 13 00-0029	EA	30' High, 6.6" Base OD, 7 Gauge, Round Tapered, Steel Roadway Light Pole With Two 6' Upsweep Style Arms,			
		Anchor Base .....	4,367.47	845.99	
		For Galvanized Finish, Add .....	80.26		
		For >10 To 20, Deduct .....	-109.19		
		For >20 To 40, Deduct .....	-218.37		
		For >40, Deduct .....	-369.86		
26 56 13 00-0030	EA	30' High, 6.6" Base OD, 7 Gauge, Round Tapered, Steel Roadway Light Pole With Two 8' Upsweep Style Arms,			
		Anchor Base .....	4,413.93	866.63	
		For Galvanized Finish, Add .....	80.42		
		For >10 To 20, Deduct .....	-110.35		
		For >20 To 40, Deduct .....	-220.70		
		For >40, Deduct .....	-374.38		
26 56 13 00-0031	EA	35' High, 7.3" Base OD, 7 Gauge, Round Tapered, Steel Roadway Light Pole With Two 4' Upsweep Style Arms,			
		Anchor Base .....	4,575.26	866.63	
		For Galvanized Finish, Add .....	85.26		
		For >10 To 20, Deduct .....	-114.38		
		For >20 To 40, Deduct .....	-228.76		
		For >40, Deduct .....	-386.48		
26 56 13 00-0032	EA	35' High, 7.3" Base OD, 7 Gauge, Round Tapered, Steel Roadway Light Pole With Two 6' Upsweep Style Arms,			
		Anchor Base .....	4,651.85	887.26	
		For Galvanized Finish, Add .....	86.32		
		For >10 To 20, Deduct .....	-116.30		
		For >20 To 40, Deduct .....	-232.59		
		For >40, Deduct .....	-393.25		
26 56 13 00-0033	EA	35' High, 7.3" Base OD, 7 Gauge, Round Tapered, Steel Roadway Light Pole With Two 8' Upsweep Style Arms,			
		Anchor Base .....	4,726.60	907.90	
		For Galvanized Finish, Add .....	87.32		
		For >10 To 20, Deduct .....	-118.17		
		For >20 To 40, Deduct .....	-236.33		
		For >40, Deduct .....	-399.89		
26 56 13 00-0034	EA	40' High, 9.0" Base OD, 7 Gauge, Round Tapered, Steel Roadway Light Pole With Two 4' Upsweep Style Arms,			
		Anchor Base .....	5,120.34	907.90	
		For Galvanized Finish, Add .....	99.14		
		For >10 To 20, Deduct .....	-128.01		
		For >20 To 40, Deduct .....	-256.02		
		For >40, Deduct .....	-429.42		
26 56 13 00-0035	EA	40' High, 9.0" Base OD, 7 Gauge, Round Tapered, Steel Roadway Light Pole With Two 6' Upsweep Style Arms,			
		Anchor Base .....	5,166.90	928.53	
		For Galvanized Finish, Add .....	99.30		
		For >10 To 20, Deduct .....	-129.17		
		For >20 To 40, Deduct .....	-258.35		
		For >40, Deduct .....	-433.94		





Electrical		26	26
Lighting		26 50	
Exterior Lighting		26 56	

MINOR	CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
26 56 13 00-0036	EA		40' High, 9.0" Base OD, 7 Gauge, Round Tapered, Steel Roadway Light Pole With Two 8' Upsweep Style Arms, Anchor Base.....	5,213.64	949.16
			For Galvanized Finish, Add	99.46	
			For >10 To 20, Deduct	-130.34	
			For >20 To 40, Deduct	-260.68	
			For >40, Deduct	-438.48	
26 56 13 00-0037 Round Tapered, Steel Roadway Light Poles With Three Upsweep Style Arms (26 56 13 00-0005)					
26 56 13 00-0038	EA		25' High, 7.0" Base OD, 7 Gauge, Round Tapered, Steel Roadway Light Pole With Three 4' Upsweep Style Arms, Anchor Base.....	4,651.41	825.36
			For Galvanized Finish, Add	90.02	
			For >10 To 20, Deduct	-116.29	
			For >20 To 40, Deduct	-232.57	
			For >40, Deduct	-390.12	
26 56 13 00-0039	EA		25' High, 7.0" Base OD, 7 Gauge, Round Tapered, Steel Roadway Light Pole With Three 6' Upsweep Style Arms, Anchor Base.....	4,739.32	866.63
			For Galvanized Finish, Add	90.18	
			For >10 To 20, Deduct	-118.48	
			For >20 To 40, Deduct	-236.97	
			For >40, Deduct	-398.78	
26 56 13 00-0040	EA		25' High, 7.0" Base OD, 7 Gauge, Round Tapered, Steel Roadway Light Pole With Three 8' Upsweep Style Arms, Anchor Base.....	4,835.28	907.90
			For Galvanized Finish, Add	90.58	
			For >10 To 20, Deduct	-120.88	
			For >20 To 40, Deduct	-241.76	
			For >40, Deduct	-408.04	
26 56 13 00-0041	EA		30' High, 7.5" Base OD, 7 Gauge, Round Tapered, Steel Roadway Light Pole With Three 4' Upsweep Style Arms, Anchor Base.....	4,950.98	907.90
			For Galvanized Finish, Add	94.06	
			For >10 To 20, Deduct	-123.77	
			For >20 To 40, Deduct	-247.55	
			For >40, Deduct	-416.72	
26 56 13 00-0042	EA		30' High, 7.5" Base OD, 7 Gauge, Round Tapered, Steel Roadway Light Pole With Three 6' Upsweep Style Arms, Anchor Base.....	5,041.46	949.16
			For Galvanized Finish, Add	94.29	
			For >10 To 20, Deduct	-126.04	
			For >20 To 40, Deduct	-252.07	
			For >40, Deduct	-425.57	
26 56 13 00-0043	EA		30' High, 7.5" Base OD, 7 Gauge, Round Tapered, Steel Roadway Light Pole With Three 8' Upsweep Style Arms, Anchor Base.....	5,129.37	990.43
			For Galvanized Finish, Add	94.46	
			For >10 To 20, Deduct	-128.23	
			For >20 To 40, Deduct	-256.47	
			For >40, Deduct	-434.22	
26 56 13 00-0044	EA		35' High, 8.0" Base OD, 7 Gauge, Round Tapered, Steel Roadway Light Pole With Three 4' Upsweep Style Arms, Anchor Base.....	5,253.79	949.16
			For Galvanized Finish, Add	100.66	
			For >10 To 20, Deduct	-131.34	
			For >20 To 40, Deduct	-262.69	
			For >40, Deduct	-441.49	
26 56 13 00-0045	EA		35' High, 8.0" Base OD, 7 Gauge, Round Tapered, Steel Roadway Light Pole With Three 6' Upsweep Style Arms, Anchor Base.....	5,341.71	990.43
			For Galvanized Finish, Add	100.83	
			For >10 To 20, Deduct	-133.54	
			For >20 To 40, Deduct	-267.09	
			For >40, Deduct	-450.15	
26 56 13 00-0046	EA		35' High, 8.5" Base OD, 7 Gauge, Round Tapered, Steel Roadway Light Pole With Three 8' Upsweep Style Arms, Anchor Base.....	5,429.63	1,031.70
			For Galvanized Finish, Add	100.99	
			For >10 To 20, Deduct	-135.74	
			For >20 To 40, Deduct	-271.48	
			For >40, Deduct	-458.81	
26 56 13 00-0047	EA		40' High, 9.0" Base OD, 7 Gauge, Round Tapered, Steel Roadway Light Pole With Three 4' Upsweep Style Arms, Anchor Base.....	5,632.33	990.43
			For Galvanized Finish, Add	109.54	
			For >10 To 20, Deduct	-140.81	
			For >20 To 40, Deduct	-281.62	
			For >40, Deduct	-471.95	
26 56 13 00-0048	EA		40' High, 9.0" Base OD, 7 Gauge, Round Tapered, Steel Roadway Light Pole With Three 6' Upsweep Style Arms, Anchor Base.....	5,719.98	1,031.70
			For Galvanized Finish, Add	109.70	
			For >10 To 20, Deduct	-143.00	
			For >20 To 40, Deduct	-286.00	
			For >40, Deduct	-480.58	
26 56 13 00-0049	EA		40' High, 9.5" Base OD, 7 Gauge, Round Tapered, Steel Roadway Light Pole With Three 8' Upsweep Style Arms, Anchor Base.....	5,813.29	1,072.96
			For Galvanized Finish, Add	110.02	
			For >10 To 20, Deduct	-145.33	
			For >20 To 40, Deduct	-290.66	
			For >40, Deduct	-489.65	



MINOR	CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
26 56 13 00-0050			<b>Round Tapered, Steel Roadway Light Poles With Four Upsweep Style Arms</b> <small>(26 56 13 00-0005)</small>		
26 56 13 00-0051	EA		25' High, 7.0" Base OD, 7 Gauge, Round Tapered, Steel Roadway Light Pole With Four 4' Upsweep Style Arms, Anchor Base .....	5,166.05	907.90
			For Galvanized Finish, Add .....	100.51	
			For >10 To 20, Deduct .....	-129.15	
			For >20 To 40, Deduct .....	-258.30	
			For >40, Deduct .....	-432.85	
26 56 13 00-0052	EA		25' High, 7.0" Base OD, 7 Gauge, Round Tapered, Steel Roadway Light Pole With Four 6' Upsweep Style Arms, Anchor Base .....	5,297.88	969.80
			For Galvanized Finish, Add .....	100.75	
			For >10 To 20, Deduct .....	-132.45	
			For >20 To 40, Deduct .....	-264.89	
			For >40, Deduct .....	-445.83	
26 56 13 00-0053	EA		25' High, 7.0" Base OD, 7 Gauge, Round Tapered, Steel Roadway Light Pole With Four 8' Upsweep Style Arms, Anchor Base .....	5,426.98	1,031.70
			For Galvanized Finish, Add .....	100.91	
			For >10 To 20, Deduct .....	-135.67	
			For >20 To 40, Deduct .....	-271.35	
			For >40, Deduct .....	-458.61	
26 56 13 00-0054	EA		30' High, 8.0" Base OD, 7 Gauge, Round Tapered, Steel Roadway Light Pole With Four 4' Upsweep Style Arms, Anchor Base .....	5,498.56	990.43
			For Galvanized Finish, Add .....	105.53	
			For >10 To 20, Deduct .....	-137.46	
			For >20 To 40, Deduct .....	-274.93	
			For >40, Deduct .....	-461.91	
26 56 13 00-0055	EA		30' High, 8.0" Base OD, 7 Gauge, Round Tapered, Steel Roadway Light Pole With Four 6' Upsweep Style Arms, Anchor Base .....	5,628.03	1,052.33
			For Galvanized Finish, Add .....	105.70	
			For >10 To 20, Deduct .....	-140.70	
			For >20 To 40, Deduct .....	-281.40	
			For >40, Deduct .....	-474.72	
26 56 13 00-0056	EA		30' High, 8.0" Base OD, 7 Gauge, Round Tapered, Steel Roadway Light Pole With Four 8' Upsweep Style Arms, Anchor Base .....	5,726.46	1,114.24
			For Galvanized Finish, Add .....	104.94	
			For >10 To 20, Deduct .....	-143.16	
			For >20 To 40, Deduct .....	-286.32	
			For >40, Deduct .....	-485.20	
26 56 13 00-0057	EA		35' High, 9.0" Base OD, 7 Gauge, Round Tapered, Steel Roadway Light Pole With Four 4' Upsweep Style Arms, Anchor Base .....	5,886.69	1,031.70
			For Galvanized Finish, Add .....	114.70	
			For >10 To 20, Deduct .....	-147.17	
			For >20 To 40, Deduct .....	-294.33	
			For >40, Deduct .....	-493.09	
26 56 13 00-0058	EA		35' High, 9.0" Base OD, 7 Gauge, Round Tapered, Steel Roadway Light Pole With Four 6' Upsweep Style Arms, Anchor Base .....	6,052.47	1,093.61
			For Galvanized Finish, Add .....	115.96	
			For >10 To 20, Deduct .....	-151.31	
			For >20 To 40, Deduct .....	-302.62	
			For >40, Deduct .....	-508.62	
26 56 13 00-0059	EA		35' High, 9.5" Base OD, 7 Gauge, Round Tapered, Steel Roadway Light Pole With Four 8' Upsweep Style Arms, Anchor Base .....	6,147.89	1,155.50
			For Galvanized Finish, Add .....	115.11	
			For >10 To 20, Deduct .....	-153.70	
			For >20 To 40, Deduct .....	-307.39	
			For >40, Deduct .....	-518.87	
26 56 13 00-0060	EA		40' High, 10.0" Base OD, 7 Gauge, Round Tapered, Steel Roadway Light Pole With Four 4' Upsweep Style Arms, Anchor Base .....	6,144.06	1,072.96
			For Galvanized Finish, Add .....	119.94	
			For >10 To 20, Deduct .....	-153.60	
			For >20 To 40, Deduct .....	-307.20	
			For >40, Deduct .....	-514.45	
26 56 13 00-0061	EA		40' High, 10.0" Base OD, 7 Gauge, Round Tapered, Steel Roadway Light Pole With Four 6' Upsweep Style Arms, Anchor Base .....	6,273.15	1,134.87
			For Galvanized Finish, Add .....	120.10	
			For >10 To 20, Deduct .....	-156.83	
			For >20 To 40, Deduct .....	-313.66	
			For >40, Deduct .....	-527.23	
26 56 13 00-0062	EA		40' High, 10.5" Base OD, 7 Gauge, Round Tapered, Steel Roadway Light Pole With Four 8' Upsweep Style Arms, Anchor Base .....	6,404.98	1,196.78
			For Galvanized Finish, Add .....	120.34	
			For >10 To 20, Deduct .....	-160.12	
			For >20 To 40, Deduct .....	-320.25	
			For >40, Deduct .....	-540.21	
26 56 13 00-0063			<b>Round Tapered, Steel Roadway Light Poles With Davit Style Arm</b> <small>(26 56 13 00-0004)</small>		
26 56 13 00-0064			<b>Round Tapered, Steel Roadway Light Poles With Single Davit Style Arm</b> <small>(26 56 13 00-0063)</small>		
26 56 13 00-0065	EA		25' High, 6.4" Base OD, 7 Gauge, Round Tapered, Steel Roadway Light Pole With Single 6.5' Davit Style Arm, Anchor Base .....	3,697.41	660.29
			For Galvanized Finish, Add .....	71.30	
			For >10 To 20, Deduct .....	-92.44	
			For >20 To 40, Deduct .....	-184.87	
			For >40, Deduct .....	-310.32	



Electrical		26
Lighting		26 50
Exterior Lighting		26 56

MINOR	CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
26 56 13 00-0066	EA		30' High, 7.1" Base OD, 7 Gauge, Round Tapered, Steel Roadway Light Pole With Single 6.5' Davit Style Arm, Anchor Base.....	4,181.02	742.83
			For Galvanized Finish, Add	80.86	
			For >10 To 20, Deduct	-104.53	
			For >20 To 40, Deduct	-209.05	
			For >40, Deduct	-350.72	
26 56 13 00-0067	EA		35' High, 7.8" Base OD, 7 Gauge, Round Tapered, Steel Roadway Light Pole With Single 6.5' Davit Style Arm, Anchor Base.....	4,307.91	784.09
			For Galvanized Finish, Add	82.19	
			For >10 To 20, Deduct	-107.70	
			For >20 To 40, Deduct	-215.40	
			For >40, Deduct	-362.30	
26 56 13 00-0068	EA		40' High, 9.5" Base OD, 7 Gauge, Round Tapered, Steel Roadway Light Pole With Single 6.5' Davit Style Arm, Anchor Base.....	5,070.79	825.36
			For Galvanized Finish, Add	102.60	
			For >10 To 20, Deduct	-126.77	
			For >20 To 40, Deduct	-253.54	
			For >40, Deduct	-421.58	
26 56 13 00-0069			Round Tapered, Steel Roadway Light Poles With Truss Style Arms (26 56 13 00-0004)		
26 56 13 00-0070			Round Tapered, Steel Roadway Light Poles With Single Truss Style Arm (26 56 13 00-0069)		
26 56 13 00-0071	EA		25' High, 6.5" Base OD, 7 Gauge, Round Tapered, Steel Roadway Light Pole With Single 10' Truss Style Arm, Anchor Base.....	4,648.85	660.29
			For Galvanized Finish, Add	99.85	
			For >10 To 20, Deduct	-116.22	
			For >20 To 40, Deduct	-232.44	
			For >40, Deduct	-381.68	
26 56 13 00-0072	EA		25' High, 6.5" Base OD, 7 Gauge, Round Tapered, Steel Roadway Light Pole With Single 12' Truss Style Arm, Anchor Base.....	4,689.64	660.29
			For Galvanized Finish, Add	101.07	
			For >10 To 20, Deduct	-117.24	
			For >20 To 40, Deduct	-234.48	
			For >40, Deduct	-384.74	
26 56 13 00-0073	EA		25' High, 7.0" Base OD, 7 Gauge, Round Tapered, Steel Roadway Light Pole With Single 15' Truss Style Arm, Anchor Base.....	4,708.25	660.29
			For Galvanized Finish, Add	101.63	
			For >10 To 20, Deduct	-117.71	
			For >20 To 40, Deduct	-235.41	
			For >40, Deduct	-386.13	
26 56 13 00-0074	EA		30' High, 7.0" Base OD, 7 Gauge, Round Tapered, Steel Roadway Light Pole With Single 10' Truss Style Arm, Anchor Base.....	4,854.71	742.83
			For Galvanized Finish, Add	101.07	
			For >10 To 20, Deduct	-121.37	
			For >20 To 40, Deduct	-242.74	
			For >40, Deduct	-401.24	
26 56 13 00-0075	EA		30' High, 7.0" Base OD, 7 Gauge, Round Tapered, Steel Roadway Light Pole With Single 12' Truss Style Arm, Anchor Base.....	4,861.83	742.83
			For Galvanized Finish, Add	101.29	
			For >10 To 20, Deduct	-121.55	
			For >20 To 40, Deduct	-243.09	
			For >40, Deduct	-401.78	
26 56 13 00-0076	EA		30' High, 7.5" Base OD, 7 Gauge, Round Tapered, Steel Roadway Light Pole With Single 15' Truss Style Arm, Anchor Base.....	4,935.37	742.83
			For Galvanized Finish, Add	103.49	
			For >10 To 20, Deduct	-123.38	
			For >20 To 40, Deduct	-246.77	
			For >40, Deduct	-407.29	
26 56 13 00-0077	EA		35' High, 8.0" Base OD, 7 Gauge, Round Tapered, Steel Roadway Light Pole With Single 10' Truss Style Arm, Anchor Base.....	4,961.43	784.09
			For Galvanized Finish, Add	101.80	
			For >10 To 20, Deduct	-124.04	
			For >20 To 40, Deduct	-248.07	
			For >40, Deduct	-411.31	
26 56 13 00-0078	EA		35' High, 8.0" Base OD, 7 Gauge, Round Tapered, Steel Roadway Light Pole With Single 12' Truss Style Arm, Anchor Base.....	5,004.50	784.09
			For Galvanized Finish, Add	103.09	
			For >10 To 20, Deduct	-125.11	
			For >20 To 40, Deduct	-250.23	
			For >40, Deduct	-414.54	
26 56 13 00-0079	EA		35' High, 8.5" Base OD, 7 Gauge, Round Tapered, Steel Roadway Light Pole With Single 15' Truss Style Arm, Anchor Base.....	5,230.34	784.09
			For Galvanized Finish, Add	109.86	
			For >10 To 20, Deduct	-130.76	
			For >20 To 40, Deduct	-261.52	
			For >40, Deduct	-431.48	
26 56 13 00-0080			Round Tapered, Steel Roadway Light Poles With Two Truss Style Arms (26 56 13 00-0069)		

**26 Electrical**  
**26 50 Lighting**  
**26 56 Exterior Lighting**



MINOR	CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
26 56 13 00-0081	EA		25' High, 6.5" Base OD, 7 Gauge, Round Tapered, Steel Roadway Light Pole With Two 10' Truss Style Arms, Anchor Base.....	6,064.11	825.36
			For Galvanized Finish, Add.....	132.40	
			For >10 To 20, Deduct.....	-151.60	
			For >20 To 40, Deduct.....	-303.21	
			For >40, Deduct.....	-496.08	
26 56 13 00-0082	EA		25' High, 6.5" Base OD, 7 Gauge, Round Tapered, Steel Roadway Light Pole With Two 12' Truss Style Arms, Anchor Base.....	6,185.70	866.63
			For Galvanized Finish, Add.....	133.57	
			For >10 To 20, Deduct.....	-154.64	
			For >20 To 40, Deduct.....	-309.29	
			For >40, Deduct.....	-507.26	
26 56 13 00-0083	EA		25' High, 7.0" Base OD, 7 Gauge, Round Tapered, Steel Roadway Light Pole With Two 15' Truss Style Arms, Anchor Base.....	6,421.53	907.90
			For Galvanized Finish, Add.....	138.17	
			For >10 To 20, Deduct.....	-160.54	
			For >20 To 40, Deduct.....	-321.08	
			For >40, Deduct.....	-527.01	
26 56 13 00-0084	EA		30' High, 7.0" Base OD, 7 Gauge, Round Tapered, Steel Roadway Light Pole With Two 10' Truss Style Arms, Anchor Base.....	6,206.55	907.90
			For Galvanized Finish, Add.....	131.72	
			For >10 To 20, Deduct.....	-155.16	
			For >20 To 40, Deduct.....	-310.33	
			For >40, Deduct.....	-510.89	
26 56 13 00-0085	EA		30' High, 7.5" Base OD, 7 Gauge, Round Tapered, Steel Roadway Light Pole With Two 12' Truss Style Arms, Anchor Base.....	6,490.84	949.16
			For Galvanized Finish, Add.....	137.78	
			For >10 To 20, Deduct.....	-162.27	
			For >20 To 40, Deduct.....	-324.54	
			For >40, Deduct.....	-534.27	
26 56 13 00-0086	EA		30' High, 8.0" Base OD, 7 Gauge, Round Tapered, Steel Roadway Light Pole With Two 15' Truss Style Arms, Anchor Base.....	6,672.65	990.43
			For Galvanized Finish, Add.....	140.75	
			For >10 To 20, Deduct.....	-166.82	
			For >20 To 40, Deduct.....	-333.63	
			For >40, Deduct.....	-549.97	
26 56 13 00-0087	EA		35' High, 8.0" Base OD, 7 Gauge, Round Tapered, Steel Roadway Light Pole With Two 10' Truss Style Arms, Anchor Base.....	6,401.78	949.16
			For Galvanized Finish, Add.....	135.10	
			For >10 To 20, Deduct.....	-160.04	
			For >20 To 40, Deduct.....	-320.09	
			For >40, Deduct.....	-527.59	
26 56 13 00-0088	EA		35' High, 8.5" Base OD, 7 Gauge, Round Tapered, Steel Roadway Light Pole With Two 12' Truss Style Arms, Anchor Base.....	6,772.11	990.43
			For Galvanized Finish, Add.....	143.74	
			For >10 To 20, Deduct.....	-169.30	
			For >20 To 40, Deduct.....	-338.61	
			For >40, Deduct.....	-557.43	
26 56 13 00-0089	EA		35' High, 8.5" Base OD, 7 Gauge, Round Tapered, Steel Roadway Light Pole With Two 15' Truss Style Arms, Anchor Base.....	7,002.47	1,031.70
			For Galvanized Finish, Add.....	148.17	
			For >10 To 20, Deduct.....	-175.06	
			For >20 To 40, Deduct.....	-350.12	
			For >40, Deduct.....	-576.77	
26 56 13 00-0090			Aluminum Roadway Light Poles (26 56 13 00-0002) Note: Includes satin finish, anchor bolts, cast aluminum base with nut covers, reinforced handhole with cover and grounding provisions, and fixture arm(s).		
26 56 13 00-0091			Round Tapered, Aluminum Roadway Light Poles (26 56 13 00-0090)		
26 56 13 00-0092			Round Tapered, Aluminum Roadway Light Poles With Upsweep Style Arms (26 56 13 00-0091)		
26 56 13 00-0093			Round Tapered, Aluminum Roadway Light Poles With Single Upsweep Style Arm (26 56 13 00-0092)		
26 56 13 00-0094	EA		20' High, 6" Base OD, 0.188" Wall Thickness, Round Tapered, Aluminum Roadway Light Pole With Single 4' Upsweep Style Arm, Anchor Base.....	2,512.48	495.21
			For >10 To 20, Deduct.....	-62.81	
			For >20 To 40, Deduct.....	-125.62	
			For >40, Deduct.....	-213.20	
26 56 13 00-0095	EA		20' High, 6" Base OD, 0.188" Wall Thickness, Round Tapered, Aluminum Roadway Light Pole With Single 6' Upsweep Style Arm, Anchor Base.....	2,530.91	495.21
			For >10 To 20, Deduct.....	-63.27	
			For >20 To 40, Deduct.....	-126.55	
			For >40, Deduct.....	-214.58	
26 56 13 00-0096	EA		25' High, 7" Base OD, 0.188" Wall Thickness, Round Tapered, Aluminum Roadway Light Pole With Single 4' Upsweep Style Arm, Anchor Base.....	3,120.75	660.29
			For >10 To 20, Deduct.....	-78.02	
			For >20 To 40, Deduct.....	-156.04	
			For >40, Deduct.....	-267.07	



Electrical		26
Lighting		26 50
Exterior Lighting		26 56

MINOR	CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
26 56 13 00-0097	EA		25' High, 7" Base OD, 0.188" Wall Thickness, Round Tapered, Aluminum Roadway Light Pole With Single 6' Upsweep Style Arm, Anchor Base.....	3,155.56	660.29
			For >10 To 20, Deduct	-78.89	
			For >20 To 40, Deduct	-157.78	
			For >40, Deduct	-269.68	
26 56 13 00-0098	EA		25' High, 7" Base OD, 0.188" Wall Thickness, Round Tapered, Aluminum Roadway Light Pole With Single 8' Upsweep Style Arm, Anchor Base.....	3,187.58	660.29
			For >10 To 20, Deduct	-79.69	
			For >20 To 40, Deduct	-159.38	
			For >40, Deduct	-272.08	
26 56 13 00-0099	EA		30' High, 8" Base OD, 0.188" Wall Thickness, Round Tapered, Aluminum Roadway Light Pole With Single 4' Upsweep Style Arm, Anchor Base.....	3,570.66	742.83
			For >10 To 20, Deduct	-89.27	
			For >20 To 40, Deduct	-178.53	
			For >40, Deduct	-304.94	
26 56 13 00-0100	EA		30' High, 8" Base OD, 0.188" Wall Thickness, Round Tapered, Aluminum Roadway Light Pole With Single 6' Upsweep Style Arm, Anchor Base.....	3,600.03	742.83
			For >10 To 20, Deduct	-90.00	
			For >20 To 40, Deduct	-180.00	
			For >40, Deduct	-307.14	
26 56 13 00-0101	EA		30' High, 8" Base OD, 0.188" Wall Thickness, Round Tapered, Aluminum Roadway Light Pole With Single 8' Upsweep Style Arm, Anchor Base.....	3,632.88	742.83
			For >10 To 20, Deduct	-90.82	
			For >20 To 40, Deduct	-181.64	
			For >40, Deduct	-309.61	
26 56 13 00-0102	EA		35' High, 8" Base OD, 0.188" Wall Thickness, Round Tapered, Aluminum Roadway Light Pole With Single 4' Upsweep Style Arm, Anchor Base.....	4,117.91	784.09
			For >10 To 20, Deduct	-102.95	
			For >20 To 40, Deduct	-205.90	
			For >40, Deduct	-348.05	
26 56 13 00-0103	EA		35' High, 8" Base OD, 0.188" Wall Thickness, Round Tapered, Aluminum Roadway Light Pole With Single 6' Upsweep Style Arm, Anchor Base.....	4,147.21	784.09
			For >10 To 20, Deduct	-103.68	
			For >20 To 40, Deduct	-207.36	
			For >40, Deduct	-350.25	
26 56 13 00-0104	EA		35' High, 8" Base OD, 0.188" Wall Thickness, Round Tapered, Aluminum Roadway Light Pole With Single 8' Upsweep Style Arm, Anchor Base.....	4,171.75	784.09
			For >10 To 20, Deduct	-104.29	
			For >20 To 40, Deduct	-208.59	
			For >40, Deduct	-352.09	
26 56 13 00-0105 Round Tapered, Aluminum Roadway Light Poles With Two Upsweep Style Arms					
			(26 56 13 00-0092)		
26 56 13 00-0106	EA		20' High, 6" Base OD, 0.188" Wall Thickness, Round Tapered, Aluminum Roadway Light Pole With Two 4' Upsweep Style Arms, Anchor Base.....	2,886.72	577.75
			For >10 To 20, Deduct	-72.17	
			For >20 To 40, Deduct	-144.34	
			For >40, Deduct	-245.39	
26 56 13 00-0107	EA		20' High, 6" Base OD, 0.188" Wall Thickness, Round Tapered, Aluminum Roadway Light Pole With Two 6' Upsweep Style Arms, Anchor Base.....	3,067.28	577.75
			For >10 To 20, Deduct	-76.68	
			For >20 To 40, Deduct	-153.36	
			For >40, Deduct	-258.93	
26 56 13 00-0108	EA		20' High, 6" Base OD, 0.188" Wall Thickness, Round Tapered, Aluminum Roadway Light Pole With Two 8' Upsweep Style Arms, Anchor Base.....	3,185.01	619.02
			For >10 To 20, Deduct	-79.63	
			For >20 To 40, Deduct	-159.25	
			For >40, Deduct	-269.83	
26 56 13 00-0109	EA		25' High, 7" Base OD, 0.188" Wall Thickness, Round Tapered, Aluminum Roadway Light Pole With Two 4' Upsweep Style Arms, Anchor Base.....	3,485.10	742.83
			For >10 To 20, Deduct	-87.13	
			For >20 To 40, Deduct	-174.26	
			For >40, Deduct	-298.52	
26 56 13 00-0110	EA		25' High, 7" Base OD, 0.188" Wall Thickness, Round Tapered, Aluminum Roadway Light Pole With Two 6' Upsweep Style Arms, Anchor Base.....	3,641.29	763.46
			For >10 To 20, Deduct	-91.03	
			For >20 To 40, Deduct	-182.06	
			For >40, Deduct	-311.27	
26 56 13 00-0111	EA		25' High, 7" Base OD, 0.188" Wall Thickness, Round Tapered, Aluminum Roadway Light Pole With Two 8' Upsweep Style Arms, Anchor Base.....	3,859.65	784.09
			For >10 To 20, Deduct	-96.49	
			For >20 To 40, Deduct	-192.98	
			For >40, Deduct	-328.68	
26 56 13 00-0112	EA		30' High, 8" Base OD, 0.188" Wall Thickness, Round Tapered, Aluminum Roadway Light Pole With Two 4' Upsweep Style Arms, Anchor Base.....	3,998.29	825.36
			For >10 To 20, Deduct	-99.96	
			For >20 To 40, Deduct	-199.91	
			For >40, Deduct	-341.14	
26 56 13 00-0113	EA		30' High, 8" Base OD, 0.188" Wall Thickness, Round Tapered, Aluminum Roadway Light Pole With Two 6' Upsweep Style Arms, Anchor Base.....	4,146.18	845.99
			For >10 To 20, Deduct	-103.65	
			For >20 To 40, Deduct	-207.31	
			For >40, Deduct	-353.26	

**26 Electrical**  
**26 50 Lighting**  
**26 56 Exterior Lighting**



MINOR	CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
26 56 13 00-0114	EA		30' High, 8" Base OD, 0.188" Wall Thickness, Round Tapered, Aluminum Roadway Light Pole With Two 8' Upsweep Style Arms, Anchor Base.....	4,323.22	866.63
			For >10 To 20, Deduct	-108.08	
			For >20 To 40, Deduct	-216.16	
			For >40, Deduct	-367.57	
26 56 13 00-0115	EA		35' High, 8" Base OD, 0.188" Wall Thickness, Round Tapered, Aluminum Roadway Light Pole With Two 4' Upsweep Style Arms, Anchor Base.....	4,482.93	866.63
			For >10 To 20, Deduct	-112.07	
			For >20 To 40, Deduct	-224.15	
			For >40, Deduct	-379.55	
26 56 13 00-0116	EA		35' High, 8" Base OD, 0.188" Wall Thickness, Round Tapered, Aluminum Roadway Light Pole With Two 6' Upsweep Style Arms, Anchor Base.....	4,856.62	887.26
			For >10 To 20, Deduct	-121.42	
			For >20 To 40, Deduct	-242.83	
			For >40, Deduct	-408.61	
26 56 13 00-0117	EA		35' High, 8" Base OD, 0.250" Wall Thickness, Round Tapered, Aluminum Roadway Light Pole With Two 8' Upsweep Style Arms, Anchor Base.....	5,288.66	907.90
			For >10 To 20, Deduct	-132.22	
			For >20 To 40, Deduct	-264.43	
			For >40, Deduct	-442.04	
<b>26 56 13 00-0118 Round Tapered, Aluminum Roadway Light Poles With Three Upsweep Style Arms</b> <small>(26 56 13 00-0092)</small>					
26 56 13 00-0119	EA		20' High, 6" Base OD, 0.188" Wall Thickness, Round Tapered, Aluminum Roadway Light Pole With Three 4' Upsweep Style Arms, Anchor Base.....	3,342.46	660.29
			For >10 To 20, Deduct	-83.56	
			For >20 To 40, Deduct	-167.12	
			For >40, Deduct	-283.70	
26 56 13 00-0120	EA		20' High, 6" Base OD, 0.188" Wall Thickness, Round Tapered, Aluminum Roadway Light Pole With Three 6' Upsweep Style Arms, Anchor Base.....	3,571.03	701.55
			For >10 To 20, Deduct	-89.28	
			For >20 To 40, Deduct	-178.55	
			For >40, Deduct	-302.91	
26 56 13 00-0121	EA		25' High, 7" Base OD, 0.188" Wall Thickness, Round Tapered, Aluminum Roadway Light Pole With Three 4' Upsweep Style Arms, Anchor Base.....	4,081.43	825.36
			For >10 To 20, Deduct	-102.04	
			For >20 To 40, Deduct	-204.07	
			For >40, Deduct	-347.38	
26 56 13 00-0122	EA		25' High, 7" Base OD, 0.188" Wall Thickness, Round Tapered, Aluminum Roadway Light Pole With Three 6' Upsweep Style Arms, Anchor Base.....	4,260.54	866.63
			For >10 To 20, Deduct	-106.51	
			For >20 To 40, Deduct	-213.03	
			For >40, Deduct	-362.87	
26 56 13 00-0123	EA		30' High, 8" Base OD, 0.188" Wall Thickness, Round Tapered, Aluminum Roadway Light Pole With Three 4' Upsweep Style Arms, Anchor Base.....	4,462.16	907.90
			For >10 To 20, Deduct	-111.55	
			For >20 To 40, Deduct	-223.11	
			For >40, Deduct	-380.06	
26 56 13 00-0124	EA		30' High, 8" Base OD, 0.188" Wall Thickness, Round Tapered, Aluminum Roadway Light Pole With Three 6' Upsweep Style Arms, Anchor Base.....	4,627.84	949.16
			For >10 To 20, Deduct	-115.70	
			For >20 To 40, Deduct	-231.39	
			For >40, Deduct	-394.55	
26 56 13 00-0125	EA		35' High, 8" Base OD, 0.188" Wall Thickness, Round Tapered, Aluminum Roadway Light Pole With Three 4' Upsweep Style Arms, Anchor Base.....	4,800.77	949.16
			For >10 To 20, Deduct	-120.02	
			For >20 To 40, Deduct	-240.04	
			For >40, Deduct	-407.52	
26 56 13 00-0126	EA		35' High, 8" Base OD, 0.219" Wall Thickness, Round Tapered, Aluminum Roadway Light Pole With Three 6' Upsweep Style Arms, Anchor Base.....	5,190.19	990.43
			For >10 To 20, Deduct	-129.75	
			For >20 To 40, Deduct	-259.51	
			For >40, Deduct	-438.79	
26 56 13 00-0127	EA		35' High, 8" Base OD, 0.250" Wall Thickness, Round Tapered, Aluminum Roadway Light Pole With Three 8' Upsweep Style Arms, Anchor Base.....	11,270.98	1,031.70
			For >10 To 20, Deduct	-281.77	
			For >20 To 40, Deduct	-563.55	
			For >40, Deduct	-896.91	
<b>26 56 13 00-0128 Round Tapered, Aluminum Roadway Light Poles With Four Upsweep Style Arms</b> <small>(26 56 13 00-0092)</small>					
26 56 13 00-0129	EA		20' High, 6" Base OD, 0.188" Wall Thickness, Round Tapered, Aluminum Roadway Light Pole With Four 4' Upsweep Style Arms, Anchor Base.....	3,507.07	742.83
			For >10 To 20, Deduct	-87.68	
			For >20 To 40, Deduct	-175.35	
			For >40, Deduct	-300.17	
26 56 13 00-0130	EA		20' High, 6" Base OD, 0.188" Wall Thickness, Round Tapered, Aluminum Roadway Light Pole With Four 6' Upsweep Style Arms, Anchor Base.....	3,617.63	742.83
			For >10 To 20, Deduct	-90.44	
			For >20 To 40, Deduct	-180.88	
			For >40, Deduct	-308.46	



Electrical		26
Lighting		26 50
Exterior Lighting		26 56

MINOR	CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
26 56 13 00-0131	EA	25' High, 7" Base OD, 0.188" Wall Thickness, Round Tapered, Aluminum Roadway Light Pole With Four 4'			
		Upsweep Style Arms, Anchor Base.....	4,469.04		907.90
		For >10 To 20, Deduct	-111.73		
		For >20 To 40, Deduct	-223.45		
		For >40, Deduct	-380.57		
26 56 13 00-0132	EA	25' High, 7" Base OD, 0.188" Wall Thickness, Round Tapered, Aluminum Roadway Light Pole With Four 6'			
		Upsweep Style Arms, Anchor Base.....	4,828.51		969.80
		For >10 To 20, Deduct	-120.71		
		For >20 To 40, Deduct	-241.43		
		For >40, Deduct	-410.63		
26 56 13 00-0133	EA	30' High, 8" Base OD, 0.188" Wall Thickness, Round Tapered, Aluminum Roadway Light Pole With Four 4'			
		Upsweep Style Arms, Anchor Base.....	5,020.36		990.43
		For >10 To 20, Deduct	-125.51		
		For >20 To 40, Deduct	-251.02		
		For >40, Deduct	-426.05		
26 56 13 00-0134	EA	30' High, 8" Base OD, 0.188" Wall Thickness, Round Tapered, Aluminum Roadway Light Pole With Four 6'			
		Upsweep Style Arms, Anchor Base.....	5,355.38		1,052.33
		For >10 To 20, Deduct	-133.88		
		For >20 To 40, Deduct	-267.77		
		For >40, Deduct	-454.27		
26 56 13 00-0135	EA	35' High, 8" Base OD, 0.188" Wall Thickness, Round Tapered, Aluminum Roadway Light Pole With Four 4'			
		Upsweep Style Arms, Anchor Base.....	5,278.16		1,031.70
		For >10 To 20, Deduct	-131.95		
		For >20 To 40, Deduct	-263.91		
		For >40, Deduct	-447.45		
26 56 13 00-0136	EA	35' High, 8" Base OD, 0.219" Wall Thickness, Round Tapered, Aluminum Roadway Light Pole With Four 6'			
		Upsweep Style Arms, Anchor Base.....	5,943.17		1,093.61
		For >10 To 20, Deduct	-148.58		
		For >20 To 40, Deduct	-297.16		
		For >40, Deduct	-500.42		
26 56 13 00-0137	EA	35' High, 8" Base OD, 0.250" Wall Thickness, Round Tapered, Aluminum Roadway Light Pole With Four 8'			
		Upsweep Style Arms, Anchor Base.....	6,536.51		1,155.50
		For >10 To 20, Deduct	-163.41		
		For >20 To 40, Deduct	-326.83		
		For >40, Deduct	-548.01		
26 56 13 00-0138		Round Tapered, Aluminum Roadway Light Poles With Truss Style Arms			
		13 00-0091)			
26 56 13 00-0139		Round Tapered, Aluminum Roadway Light Poles With Single Truss Style			
		Arm			
26 56 13 00-0140	EA	25' High, 7" Base OD, 0.188" Wall Thickness, Round Tapered, Aluminum Roadway Light Pole With Single 8'			
		Truss Style Arm, Anchor Base.....	3,632.28		660.29
		For >10 To 20, Deduct	-90.81		
		For >20 To 40, Deduct	-181.61		
		For >40, Deduct	-305.44		
26 56 13 00-0141	EA	25' High, 7" Base OD, 0.188" Wall Thickness, Round Tapered, Aluminum Roadway Light Pole With Single 10'			
		Truss Style Arm, Anchor Base.....	3,656.90		660.29
		For >10 To 20, Deduct	-91.42		
		For >20 To 40, Deduct	-182.85		
		For >40, Deduct	-307.28		
26 56 13 00-0142	EA	25' High, 7" Base OD, 0.188" Wall Thickness, Round Tapered, Aluminum Roadway Light Pole With Single 12'			
		Truss Style Arm, Anchor Base.....	3,719.80		660.29
		For >10 To 20, Deduct	-93.00		
		For >20 To 40, Deduct	-185.99		
		For >40, Deduct	-312.00		
26 56 13 00-0143	EA	25' High, 7" Base OD, 0.188" Wall Thickness, Round Tapered, Aluminum Roadway Light Pole With Single 15'			
		Truss Style Arm, Anchor Base.....	3,814.19		660.29
		For >10 To 20, Deduct	-95.35		
		For >20 To 40, Deduct	-190.71		
		For >40, Deduct	-319.08		
26 56 13 00-0144	EA	30' High, 8" Base OD, 0.188" Wall Thickness, Round Tapered, Aluminum Roadway Light Pole With Single 8'			
		Truss Style Arm, Anchor Base.....	4,089.21		742.83
		For >10 To 20, Deduct	-102.23		
		For >20 To 40, Deduct	-204.46		
		For >40, Deduct	-343.83		
26 56 13 00-0145	EA	30' High, 8" Base OD, 0.188" Wall Thickness, Round Tapered, Aluminum Roadway Light Pole With Single 10'			
		Truss Style Arm, Anchor Base.....	4,144.71		742.83
		For >10 To 20, Deduct	-103.62		
		For >20 To 40, Deduct	-207.24		
		For >40, Deduct	-347.99		
26 56 13 00-0146	EA	30' High, 8" Base OD, 0.188" Wall Thickness, Round Tapered, Aluminum Roadway Light Pole With Single 12'			
		Truss Style Arm, Anchor Base.....	4,203.91		742.83
		For >10 To 20, Deduct	-105.10		
		For >20 To 40, Deduct	-210.20		
		For >40, Deduct	-352.43		
26 56 13 00-0147	EA	30' High, 8" Base OD, 0.188" Wall Thickness, Round Tapered, Aluminum Roadway Light Pole With Single 15'			
		Truss Style Arm, Anchor Base.....	4,561.02		742.83
		For >10 To 20, Deduct	-114.03		
		For >20 To 40, Deduct	-228.05		
		For >40, Deduct	-379.22		
26 56 13 00-0148	EA	35' High, 8" Base OD, 0.188" Wall Thickness, Round Tapered, Aluminum Roadway Light Pole With Single 8'			
		Truss Style Arm, Anchor Base.....	4,425.70		784.09
		For >10 To 20, Deduct	-110.64		
		For >20 To 40, Deduct	-221.29		
		For >40, Deduct	-371.13		

**26 Electrical**  
**26 50 Lighting**  
**26 56 Exterior Lighting**



MINOR CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
26 56 13 00-0149	EA	35' High, 8" Base OD, 0.219" Wall Thickness, Round Tapered, Aluminum Roadway Light Pole With Single 10' Truss Style Arm, Anchor Base.....	4,883.92	784.09
		For >10 To 20, Deduct	-122.10	
		For >20 To 40, Deduct	-244.20	
		For >40, Deduct	-405.50	
26 56 13 00-0150	EA	35' High, 8" Base OD, 0.219" Wall Thickness, Round Tapered, Aluminum Roadway Light Pole With Single 12' Truss Style Arm, Anchor Base.....	4,928.55	784.09
		For >10 To 20, Deduct	-123.21	
		For >20 To 40, Deduct	-246.43	
		For >40, Deduct	-408.85	
26 56 13 00-0151	EA	35' High, 8" Base OD, 0.219" Wall Thickness, Round Tapered, Aluminum Roadway Light Pole With Single 15' Truss Style Arm, Anchor Base.....	5,211.87	784.09
		For >10 To 20, Deduct	-130.30	
		For >20 To 40, Deduct	-260.59	
		For >40, Deduct	-430.10	
26 56 13 00-0152	EA	35' High, 8" Base OD, 0.250" Wall Thickness, Round Tapered, Aluminum Roadway Light Pole With Single 15' Truss Style Arm, Anchor Base.....	5,470.28	784.09
		For >10 To 20, Deduct	-136.76	
		For >20 To 40, Deduct	-273.51	
		For >40, Deduct	-449.48	
<b>26 56 13 00-0153 Round Tapered, Aluminum Roadway Light Poles With Two Truss Style Arms</b> <small>(26 56 13 00-0138)</small>				
26 56 13 00-0154	EA	25' High, 8" Base OD, 0.188" Wall Thickness, Round Tapered, Aluminum Roadway Light Pole With Two 10' Truss Style Arms, Anchor Base.....	4,690.22	825.36
		For >10 To 20, Deduct	-117.26	
		For >20 To 40, Deduct	-234.51	
		For >40, Deduct	-393.03	
26 56 13 00-0155	EA	25' High, 8" Base OD, 0.188" Wall Thickness, Round Tapered, Aluminum Roadway Light Pole With Two 12' Truss Style Arms, Anchor Base.....	4,835.65	866.63
		For >10 To 20, Deduct	-120.89	
		For >20 To 40, Deduct	-241.78	
		For >40, Deduct	-406.01	
26 56 13 00-0156	EA	25' High, 8" Base OD, 0.219" Wall Thickness, Round Tapered, Aluminum Roadway Light Pole With Two 15' Truss Style Arms, Anchor Base.....	4,958.67	907.90
		For >10 To 20, Deduct	-123.97	
		For >20 To 40, Deduct	-247.93	
		For >40, Deduct	-417.30	
26 56 13 00-0157	EA	30' High, 8" Base OD, 0.188" Wall Thickness, Round Tapered, Aluminum Roadway Light Pole With Two 10' Truss Style Arms, Anchor Base.....	5,066.50	907.90
		For >10 To 20, Deduct	-126.66	
		For >20 To 40, Deduct	-253.33	
		For >40, Deduct	-425.38	
26 56 13 00-0158	EA	30' High, 8" Base OD, 0.219" Wall Thickness, Round Tapered, Aluminum Roadway Light Pole With Two 12' Truss Style Arms, Anchor Base.....	5,476.92	949.16
		For >10 To 20, Deduct	-136.92	
		For >20 To 40, Deduct	-273.85	
		For >40, Deduct	-458.23	
26 56 13 00-0159	EA	30' High, 8" Base OD, 0.250" Wall Thickness, Round Tapered, Aluminum Roadway Light Pole With Two 15' Truss Style Arms, Anchor Base.....	6,206.37	990.43
		For >10 To 20, Deduct	-155.16	
		For >20 To 40, Deduct	-310.32	
		For >40, Deduct	-515.00	
26 56 13 00-0160	EA	35' High, 8" Base OD, 0.250" Wall Thickness, Round Tapered, Aluminum Roadway Light Pole With Two 10' Truss Style Arms, Anchor Base.....	5,995.77	949.16
		For >10 To 20, Deduct	-149.89	
		For >20 To 40, Deduct	-299.79	
		For >40, Deduct	-497.14	
26 56 13 00-0161	EA	35' High, 10" Base OD, 0.188" Wall Thickness, Round Tapered, Aluminum Roadway Light Pole With Two 12' Truss Style Arms, Anchor Base.....	6,131.01	990.43
		For >10 To 20, Deduct	-153.28	
		For >20 To 40, Deduct	-306.55	
		For >40, Deduct	-509.35	
26 56 13 00-0162	EA	35' High, 10" Base OD, 0.250" Wall Thickness, Round Tapered, Aluminum Roadway Light Pole With Two 15' Truss Style Arms, Anchor Base.....	7,319.83	1,031.70
		For >10 To 20, Deduct	-183.00	
		For >20 To 40, Deduct	-365.99	
		For >40, Deduct	-600.57	
<b>26 56 13 00-0163 Round Tapered, Aluminum Roadway Light Poles With Davit Style Arm</b> <small>(26 56 13 00-0091)</small>				
<b>26 56 13 00-0164 Round Tapered, Aluminum Roadway Light Poles With Single Davit Style Arm</b> <small>(26 56 13 00-0163)</small>				
26 56 13 00-0165	EA	20' High, 6" Base OD, 0.188" Wall Thickness, Round Tapered, Aluminum Roadway Light Pole With Single 4' Davit Style Arm, Anchor Base.....	2,942.76	495.21
		For >10 To 20, Deduct	-73.57	
		For >20 To 40, Deduct	-147.14	
		For >40, Deduct	-245.47	
26 56 13 00-0166	EA	20' High, 6" Base OD, 0.188" Wall Thickness, Round Tapered, Aluminum Roadway Light Pole With Single 6' Davit Style Arm, Anchor Base.....	3,012.31	495.21
		For >10 To 20, Deduct	-75.31	
		For >20 To 40, Deduct	-150.62	
		For >40, Deduct	-250.68	





<b>Electrical</b>		<b>26</b>
<b>Lighting</b>		<b>26 50</b>
<b>Exterior Lighting</b>		<b>26 56</b>

MINOR	CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
26 56 13 00-0167	EA	20'	High, 6" Base OD, 0.188" Wall Thickness, Round Tapered, Aluminum Roadway Light Pole With Single 8' Davit Style Arm, Anchor Base .....	3,082.01	495.21
			For >10 To 20, Deduct .....	-77.05	
			For >20 To 40, Deduct .....	-154.10	
			For >40, Deduct .....	-255.91	
26 56 13 00-0168	EA	25'	High, 7" Base OD, 0.188" Wall Thickness, Round Tapered, Aluminum Roadway Light Pole With Single 4' Davit Style Arm, Anchor Base .....	3,557.29	660.29
			For >10 To 20, Deduct .....	-88.93	
			For >20 To 40, Deduct .....	-177.86	
			For >40, Deduct .....	-299.81	
26 56 13 00-0169	EA	25'	High, 7" Base OD, 0.188" Wall Thickness, Round Tapered, Aluminum Roadway Light Pole With Single 6' Davit Style Arm, Anchor Base .....	3,610.30	660.29
			For >10 To 20, Deduct .....	-90.26	
			For >20 To 40, Deduct .....	-180.52	
			For >40, Deduct .....	-303.79	
26 56 13 00-0170	EA	25'	High, 7" Base OD, 0.188" Wall Thickness, Round Tapered, Aluminum Roadway Light Pole With Single 8' Davit Style Arm, Anchor Base .....	3,668.22	660.29
			For >10 To 20, Deduct .....	-91.71	
			For >20 To 40, Deduct .....	-183.41	
			For >40, Deduct .....	-308.13	
26 56 13 00-0171	EA	30'	High, 8" Base OD, 0.188" Wall Thickness, Round Tapered, Aluminum Roadway Light Pole With Single 4' Davit Style Arm, Anchor Base .....	4,012.94	742.83
			For >10 To 20, Deduct .....	-100.32	
			For >20 To 40, Deduct .....	-200.65	
			For >40, Deduct .....	-338.11	
26 56 13 00-0172	EA	30'	High, 8" Base OD, 0.188" Wall Thickness, Round Tapered, Aluminum Roadway Light Pole With Single 6' Davit Style Arm, Anchor Base .....	4,084.90	742.83
			For >10 To 20, Deduct .....	-102.12	
			For >20 To 40, Deduct .....	-204.25	
			For >40, Deduct .....	-343.51	
26 56 13 00-0173	EA	30'	High, 8" Base OD, 0.188" Wall Thickness, Round Tapered, Aluminum Roadway Light Pole With Single 8' Davit Style Arm, Anchor Base .....	4,095.70	742.83
			For >10 To 20, Deduct .....	-102.39	
			For >20 To 40, Deduct .....	-204.79	
			For >40, Deduct .....	-344.32	
26 56 13 00-0174	EA	35'	High, 8" Base OD, 0.188" Wall Thickness, Round Tapered, Aluminum Roadway Light Pole With Single 4' Davit Style Arm, Anchor Base .....	4,351.55	784.09
			For >10 To 20, Deduct .....	-108.79	
			For >20 To 40, Deduct .....	-217.58	
			For >40, Deduct .....	-365.57	
26 56 13 00-0175	EA	35'	High, 8" Base OD, 0.188" Wall Thickness, Round Tapered, Aluminum Roadway Light Pole With Single 6' Davit Style Arm, Anchor Base .....	4,383.11	784.09
			For >10 To 20, Deduct .....	-109.58	
			For >20 To 40, Deduct .....	-219.16	
			For >40, Deduct .....	-367.94	
26 56 13 00-0176	EA	35'	High, 8" Base OD, 0.188" Wall Thickness, Round Tapered, Aluminum Roadway Light Pole With Single 8' Davit Style Arm, Anchor Base .....	4,457.11	784.09
			For >10 To 20, Deduct .....	-111.43	
			For >20 To 40, Deduct .....	-222.86	
			For >40, Deduct .....	-373.49	
26 56 13 00-0177			<b>Area Light Poles</b> (26 56 13 00-0001) Note: Excludes lighting fixtures.		
26 56 13 00-0178			<b>Steel Area Light Poles</b> (26 56 13 00-0177) Note: Includes powdercoat finish, anchor bolts, base cover, reinforced handhole with cover and grounding provisions, factory drilled fixture mounting holes and tenon, open or capped top.		
26 56 13 00-0179			<b>Round Straight, Steel Area Light Poles</b> (26 56 13 00-0178)		
26 56 13 00-0180			<b>Round Straight, Steel Area Light Poles, Anchor Base</b> (26 56 13 00-0179)		
26 56 13 00-0181	EA	10'	High, 3" OD, 11 Gauge, Round Straight, Steel Area Light Pole, Anchor Base.....	1,569.23	288.88
			For Galvanized Finish, Add .....	29.74	
			For >10 To 20, Deduct .....	-54.10	
			For >20 To 40, Deduct .....	-98.29	
			For >40, Deduct .....	-206.50	
26 56 13 00-0182	EA	12'	High, 3" OD, 11 Gauge, Round Straight, Steel Area Light Pole, Anchor Base.....	1,706.70	330.14
			For Galvanized Finish, Add .....	31.39	
			For >10 To 20, Deduct .....	-58.36	
			For >20 To 40, Deduct .....	-106.26	
			For >40, Deduct .....	-222.99	
26 56 13 00-0183	EA	14'	High, 3" OD, 11 Gauge, Round Straight, Steel Area Light Pole, Anchor Base.....	1,907.34	371.41
			For Galvanized Finish, Add .....	34.94	
			For >10 To 20, Deduct .....	-65.15	
			For >20 To 40, Deduct .....	-118.66	
			For >40, Deduct .....	-248.96	
26 56 13 00-0184	EA	16'	High, 3" OD, 11 Gauge, Round Straight, Steel Area Light Pole, Anchor Base.....	2,113.46	412.68
			For Galvanized Finish, Add .....	38.64	
			For >10 To 20, Deduct .....	-72.16	
			For >20 To 40, Deduct .....	-131.44	
			For >40, Deduct .....	-275.75	
26 56 13 00-0185	EA	18'	High, 3" OD, 11 Gauge, Round Straight, Steel Area Light Pole, Anchor Base.....	2,250.93	453.95
			For Galvanized Finish, Add .....	40.29	
			For >10 To 20, Deduct .....	-76.42	
			For >20 To 40, Deduct .....	-139.41	
			For >40, Deduct .....	-292.24	

**26 Electrical**  
**26 50 Lighting**  
**26 56 Exterior Lighting**



MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
26 56 13 00-0186 EA 20' High, 3" OD, 11 Gauge, Round Straight, Steel Area Light Pole, Anchor Base.....	2,374.66	495.21
For Galvanized Finish, Add	41.53	
For >10 To 20, Deduct	-80.13	
For >20 To 40, Deduct	-146.42	
For >40, Deduct	-306.68	
26 56 13 00-0187 EA 10' High, 4" OD, 11 Gauge, Round Straight, Steel Area Light Pole, Anchor Base.....	1,640.64	288.88
For Galvanized Finish, Add	31.89	
For >10 To 20, Deduct	-56.96	
For >20 To 40, Deduct	-103.29	
For >40, Deduct	-217.21	
26 56 13 00-0188 EA 12' High, 4" OD, 11 Gauge, Round Straight, Steel Area Light Pole, Anchor Base.....	1,780.85	330.14
For Galvanized Finish, Add	33.62	
For >10 To 20, Deduct	-61.33	
For >20 To 40, Deduct	-111.45	
For >40, Deduct	-234.11	
26 56 13 00-0189 EA 14' High, 4" OD, 11 Gauge, Round Straight, Steel Area Light Pole, Anchor Base.....	2,055.65	371.41
For Galvanized Finish, Add	39.38	
For >10 To 20, Deduct	-71.08	
For >20 To 40, Deduct	-129.04	
For >40, Deduct	-271.21	
26 56 13 00-0190 EA 16' High, 4" OD, 11 Gauge, Round Straight, Steel Area Light Pole, Anchor Base.....	2,209.59	412.68
For Galvanized Finish, Add	41.53	
For >10 To 20, Deduct	-76.00	
For >20 To 40, Deduct	-138.16	
For >40, Deduct	-290.17	
26 56 13 00-0191 EA 18' High, 4" OD, 11 Gauge, Round Straight, Steel Area Light Pole, Anchor Base.....	2,355.30	453.95
For Galvanized Finish, Add	43.42	
For >10 To 20, Deduct	-80.59	
For >20 To 40, Deduct	-146.71	
For >40, Deduct	-307.90	
26 56 13 00-0192 EA 20' High, 4" OD, 11 Gauge, Round Straight, Steel Area Light Pole, Anchor Base.....	2,473.53	495.21
For Galvanized Finish, Add	44.49	
For >10 To 20, Deduct	-84.08	
For >20 To 40, Deduct	-153.34	
For >40, Deduct	-321.51	
26 56 13 00-0193 EA 25' High, 4" OD, 11 Gauge, Round Straight, Steel Area Light Pole, Anchor Base.....	2,905.30	660.29
For Galvanized Finish, Add	47.54	
For >10 To 20, Deduct	-96.40	
For >20 To 40, Deduct	-176.96	
For >40, Deduct	-369.77	
26 56 13 00-0194 EA 10' High, 4-1/2" OD, 11 Gauge, Round Straight, Steel Area Light Pole, Anchor Base.....	1,640.64	288.88
For Galvanized Finish, Add	31.89	
For >10 To 20, Deduct	-56.96	
For >20 To 40, Deduct	-103.29	
For >40, Deduct	-217.21	
26 56 13 00-0195 EA 12' High, 4-1/2" OD, 11 Gauge, Round Straight, Steel Area Light Pole, Anchor Base.....	1,789.09	330.14
For Galvanized Finish, Add	33.86	
For >10 To 20, Deduct	-61.66	
For >20 To 40, Deduct	-112.03	
For >40, Deduct	-235.35	
26 56 13 00-0196 EA 14' High, 4-1/2" OD, 11 Gauge, Round Straight, Steel Area Light Pole, Anchor Base.....	2,099.59	371.41
For Galvanized Finish, Add	40.70	
For >10 To 20, Deduct	-72.84	
For >20 To 40, Deduct	-132.11	
For >40, Deduct	-277.80	
26 56 13 00-0197 EA 16' High, 4-1/2" OD, 11 Gauge, Round Straight, Steel Area Light Pole, Anchor Base.....	2,217.83	412.68
For Galvanized Finish, Add	41.77	
For >10 To 20, Deduct	-76.33	
For >20 To 40, Deduct	-138.74	
For >40, Deduct	-291.41	
26 56 13 00-0198 EA 18' High, 4-1/2" OD, 11 Gauge, Round Straight, Steel Area Light Pole, Anchor Base.....	2,355.30	453.95
For Galvanized Finish, Add	43.42	
For >10 To 20, Deduct	-80.59	
For >20 To 40, Deduct	-146.71	
For >40, Deduct	-307.90	
26 56 13 00-0199 EA 20' High, 4-1/2" OD, 11 Gauge, Round Straight, Steel Area Light Pole, Anchor Base.....	2,473.53	495.21
For Galvanized Finish, Add	44.49	
For >10 To 20, Deduct	-84.08	
For >20 To 40, Deduct	-153.34	
For >40, Deduct	-321.51	
26 56 13 00-0200 EA 25' High, 4-1/2" OD, 11 Gauge, Round Straight, Steel Area Light Pole, Anchor Base.....	2,982.20	660.29
For Galvanized Finish, Add	49.85	
For >10 To 20, Deduct	-99.48	
For >20 To 40, Deduct	-182.34	
For >40, Deduct	-381.30	
26 56 13 00-0201 EA 30' High, 4-1/2" OD, 11 Gauge, Round Straight, Steel Area Light Pole, Anchor Base.....	3,290.09	742.83
For Galvanized Finish, Add	54.13	
For >10 To 20, Deduct	-109.32	
For >20 To 40, Deduct	-200.59	
For >40, Deduct	-419.23	
26 56 13 00-0202 EA 20' High, 5" OD, 11 Gauge, Round Straight, Steel Area Light Pole, Anchor Base.....	2,649.30	495.21
For Galvanized Finish, Add	49.77	
For >10 To 20, Deduct	-91.12	
For >20 To 40, Deduct	-165.64	
For >40, Deduct	-347.87	



Electrical		26	26
Lighting		26 50	
Exterior Lighting		26 56	

MINOR	CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
26 56 13 00-0203	EA		25' High, 5" OD, 11 Gauge, Round Straight, Steel Area Light Pole, Anchor Base.....	3,017.90	660.29
			For Galvanized Finish, Add	50.92	
			For >10 To 20, Deduct	-100.91	
			For >20 To 40, Deduct	-184.84	
			For >40, Deduct	-386.66	
26 56 13 00-0204	EA		30' High, 5" OD, 11 Gauge, Round Straight, Steel Area Light Pole, Anchor Base.....	3,358.75	742.83
			For Galvanized Finish, Add	56.19	
			For >10 To 20, Deduct	-112.07	
			For >20 To 40, Deduct	-205.40	
			For >40, Deduct	-429.53	
26 56 13 00-0205 Round Tapered, Steel Area Light Poles (26 56 13 00-0178)					
26 56 13 00-0206 Round Tapered, Steel Area Light Poles, Anchor Base (26 56 13 00-0205)					
26 56 13 00-0207	EA		20' High, 5.90" Base OD, 11 Gauge, Round Tapered, Steel Area Light Pole, Anchor Base .....	3,270.01	495.21
			For Galvanized Finish, Add	68.39	
			For >10 To 20, Deduct	-115.94	
			For >20 To 40, Deduct	-209.09	
			For >40, Deduct	-440.98	
26 56 13 00-0208	EA		20' High, 6.50" Base OD, 11 Gauge, Round Tapered, Steel Area Light Pole, Anchor Base .....	3,355.15	495.21
			For Galvanized Finish, Add	70.94	
			For >10 To 20, Deduct	-119.35	
			For >20 To 40, Deduct	-215.05	
			For >40, Deduct	-453.75	
26 56 13 00-0209	EA		25' High, 5.90" Base OD, 11 Gauge, Round Tapered, Steel Area Light Pole, Anchor Base .....	3,872.06	660.29
			For Galvanized Finish, Add	76.54	
			For >10 To 20, Deduct	-135.07	
			For >20 To 40, Deduct	-244.63	
			For >40, Deduct	-514.78	
26 56 13 00-0210	EA		25' High, 7.00" Base OD, 11 Gauge, Round Tapered, Steel Area Light Pole, Anchor Base .....	4,047.83	660.29
			For Galvanized Finish, Add	81.82	
			For >10 To 20, Deduct	-142.10	
			For >20 To 40, Deduct	-256.94	
			For >40, Deduct	-541.15	
26 56 13 00-0211	EA		30' High, 6.60" Base OD, 11 Gauge, Round Tapered, Steel Area Light Pole, Anchor Base .....	4,311.78	742.83
			For Galvanized Finish, Add	84.78	
			For >10 To 20, Deduct	-150.19	
			For >20 To 40, Deduct	-272.11	
			For >40, Deduct	-572.48	
26 56 13 00-0212	EA		30' High, 8.00" Base OD, 11 Gauge, Round Tapered, Steel Area Light Pole, Anchor Base .....	4,605.65	742.83
			For Galvanized Finish, Add	93.60	
			For >10 To 20, Deduct	-161.94	
			For >20 To 40, Deduct	-292.68	
			For >40, Deduct	-616.57	
26 56 13 00-0213	EA		35' High, 7.30" Base OD, 11 Gauge, Round Tapered, Steel Area Light Pole, Anchor Base .....	4,748.61	784.09
			For Galvanized Finish, Add	95.41	
			For >10 To 20, Deduct	-166.42	
			For >20 To 40, Deduct	-301.04	
			For >40, Deduct	-633.88	
26 56 13 00-0214	EA		35' High, 8.50" Base OD, 11 Gauge, Round Tapered, Steel Area Light Pole, Anchor Base .....	4,929.88	784.09
			For Galvanized Finish, Add	100.85	
			For >10 To 20, Deduct	-173.67	
			For >20 To 40, Deduct	-313.73	
			For >40, Deduct	-661.07	
26 56 13 00-0215	EA		35' High, 9.50" Base OD, 11 Gauge, Round Tapered, Steel Area Light Pole, Anchor Base .....	5,363.83	784.09
			For Galvanized Finish, Add	113.87	
			For >10 To 20, Deduct	-191.03	
			For >20 To 40, Deduct	-344.10	
			For >40, Deduct	-726.17	
26 56 13 00-0216	EA		39' High, 7.82" Base OD, 11 Gauge, Round Tapered, Steel Area Light Pole, Anchor Base .....	5,413.40	825.36
			For Galvanized Finish, Add	112.88	
			For >10 To 20, Deduct	-191.78	
			For >20 To 40, Deduct	-345.92	
			For >40, Deduct	-729.47	
26 56 13 00-0217	EA		39' High, 9.00" Base OD, 11 Gauge, Round Tapered, Steel Area Light Pole, Anchor Base .....	5,490.30	825.36
			For Galvanized Finish, Add	115.19	
			For >10 To 20, Deduct	-194.85	
			For >20 To 40, Deduct	-351.31	
			For >40, Deduct	-741.01	
26 56 13 00-0218	EA		45' High, 10.00" Base OD, 11 Gauge, Round Tapered, Steel Area Light Pole, Anchor Base .....	7,465.87	1,072.96
			For Galvanized Finish, Add	159.60	
			For >10 To 20, Deduct	-266.45	
			For >20 To 40, Deduct	-479.69	
			For >40, Deduct	-1,012.58	
26 56 13 00-0219	EA		50' High, 10.00" Base OD, 11 Gauge, Round Tapered, Steel Area Light Pole, Anchor Base .....	7,779.53	1,238.04
			For Galvanized Finish, Add	159.10	
			For >10 To 20, Deduct	-274.04	
			For >20 To 40, Deduct	-495.05	
			For >40, Deduct	-1,043.13	
26 56 13 00-0220	EA		25' High, 7.00" Base OD, 7 Gauge, Round Tapered, Steel Area Light Pole, Anchor Base .....	5,239.81	660.29
			For Galvanized Finish, Add	117.58	
			For >10 To 20, Deduct	-189.78	
			For >20 To 40, Deduct	-340.38	
			For >40, Deduct	-719.94	

**26 Electrical**  
**26 50 Lighting**  
**26 56 Exterior Lighting**



MINOR	CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
26 56 13 00-0221	EA		30' High, 8.00" Base OD, 7 Gauge, Round Tapered, Steel Area Light Pole, Anchor Base.....	5,948.68	742.83
			For Galvanized Finish, Add	133.89	
			For >10 To 20, Deduct	-215.66	
			For >20 To 40, Deduct	-386.69	
			For >40, Deduct	-818.02	
26 56 13 00-0222	EA		39' High, 9.00" Base OD, 7 Gauge, Round Tapered, Steel Area Light Pole, Anchor Base.....	6,893.75	825.36
			For Galvanized Finish, Add	157.29	
			For >10 To 20, Deduct	-250.99	
			For >20 To 40, Deduct	-449.55	
			For >40, Deduct	-951.53	
26 56 13 00-0223	EA		45' High, 10.00" Base OD, 7 Gauge, Round Tapered, Steel Area Light Pole, Anchor Base.....	8,322.77	1,072.96
			For Galvanized Finish, Add	185.30	
			For >10 To 20, Deduct	-300.72	
			For >20 To 40, Deduct	-539.68	
			For >40, Deduct	-1,141.12	
26 56 13 00-0224	EA		50' High, 10.00" Base OD, 7 Gauge, Round Tapered, Steel Area Light Pole, Anchor Base.....	9,713.05	1,238.04
			For Galvanized Finish, Add	217.11	
			For >10 To 20, Deduct	-351.38	
			For >20 To 40, Deduct	-630.39	
			For >40, Deduct	-1,333.15	
26 56 13 00-0225	EA		50' High, 11.00" Base OD, 7 Gauge, Round Tapered, Steel Area Light Pole, Anchor Base.....	10,830.87	1,238.04
			For Galvanized Finish, Add	250.64	
			For >10 To 20, Deduct	-396.09	
			For >20 To 40, Deduct	-708.64	
			For >40, Deduct	-1,500.83	
26 56 13 00-0226	EA		50' High, 13.00" Base OD, 7 Gauge, Round Tapered, Steel Area Light Pole, Anchor Base.....	14,566.08	1,238.04
			For Galvanized Finish, Add	362.70	
			For >10 To 20, Deduct	-545.50	
			For >20 To 40, Deduct	-970.10	
			For >40, Deduct	-2,061.11	
26 56 13 00-0227	EA		50' High, 13.00" Base OD, 3 Gauge, Round Tapered, Steel Area Light Pole, Anchor Base.....	16,378.76	1,238.04
			For Galvanized Finish, Add	417.08	
			For >10 To 20, Deduct	-618.01	
			For >20 To 40, Deduct	-1,096.99	
			For >40, Deduct	-2,333.01	
26 56 13 00-0228			Square Straight, Steel Area Light Poles (26 56 13 00-0178)		
26 56 13 00-0229			Square Straight, Steel Area Light Poles, Anchor Base (26 56 13 00-0228)		
26 56 13 00-0230	EA		10' High, 4" OD, 11 Gauge, Square Straight, Steel Area Light Pole, Anchor Base.....	1,547.26	288.88
			For Galvanized Finish, Add	29.09	
			For >10 To 20, Deduct	-53.22	
			For >20 To 40, Deduct	-96.75	
			For >40, Deduct	-203.20	
26 56 13 00-0231	EA		12' High, 4" OD, 11 Gauge, Square Straight, Steel Area Light Pole, Anchor Base.....	1,629.80	330.14
			For Galvanized Finish, Add	29.09	
			For >10 To 20, Deduct	-55.29	
			For >20 To 40, Deduct	-100.88	
			For >40, Deduct	-211.46	
26 56 13 00-0232	EA		14' High, 4" OD, 11 Gauge, Square Straight, Steel Area Light Pole, Anchor Base.....	1,759.03	371.41
			For Galvanized Finish, Add	30.49	
			For >10 To 20, Deduct	-59.22	
			For >20 To 40, Deduct	-108.28	
			For >40, Deduct	-226.71	
26 56 13 00-0233	EA		15' High, 4" OD, 11 Gauge, Square Straight, Steel Area Light Pole, Anchor Base.....	1,866.20	392.04
			For Galvanized Finish, Add	32.46	
			For >10 To 20, Deduct	-62.89	
			For >20 To 40, Deduct	-114.95	
			For >40, Deduct	-240.73	
26 56 13 00-0234	EA		16' High, 4" OD, 11 Gauge, Square Straight, Steel Area Light Pole, Anchor Base.....	1,907.47	412.68
			For Galvanized Finish, Add	32.46	
			For >10 To 20, Deduct	-63.92	
			For >20 To 40, Deduct	-117.02	
			For >40, Deduct	-244.85	
26 56 13 00-0235	EA		18' High, 4" OD, 11 Gauge, Square Straight, Steel Area Light Pole, Anchor Base.....	2,020.22	453.95
			For Galvanized Finish, Add	33.37	
			For >10 To 20, Deduct	-67.19	
			For >20 To 40, Deduct	-123.26	
			For >40, Deduct	-257.64	
26 56 13 00-0236	EA		20' High, 4" OD, 11 Gauge, Square Straight, Steel Area Light Pole, Anchor Base.....	2,127.47	495.21
			For Galvanized Finish, Add	34.11	
			For >10 To 20, Deduct	-70.24	
			For >20 To 40, Deduct	-129.11	
			For >40, Deduct	-269.60	
26 56 13 00-0237	EA		25' High, 4" OD, 11 Gauge, Square Straight, Steel Area Light Pole, Anchor Base.....	2,622.41	660.29
			For Galvanized Finish, Add	39.05	
			For >10 To 20, Deduct	-85.09	
			For >20 To 40, Deduct	-157.16	
			For >40, Deduct	-327.33	
26 56 13 00-0238	EA		20' High, 5" OD, 11 Gauge, Square Straight, Steel Area Light Pole, Anchor Base.....	2,498.25	495.21
			For Galvanized Finish, Add	45.23	
			For >10 To 20, Deduct	-85.07	
			For >20 To 40, Deduct	-155.07	
			For >40, Deduct	-325.22	



Electrical		26
Lighting		26 50
Exterior Lighting		26 56

MINOR	CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
26 56 13 00-0239	EA	25' High, 5" OD, 11 Gauge, Square Straight, Steel Area Light Pole, Anchor Base.....	3,133.26	660.29	
		For Galvanized Finish, Add	54.38		
		For >10 To 20, Deduct	-105.52		
		For >20 To 40, Deduct	-192.92		
		For >40, Deduct	-403.96		
26 56 13 00-0240	EA	30' High, 5" OD, 11 Gauge, Square Straight, Steel Area Light Pole, Anchor Base.....	3,597.69	742.83	
		For Galvanized Finish, Add	63.36		
		For >10 To 20, Deduct	-121.62		
		For >20 To 40, Deduct	-222.13		
		For >40, Deduct	-465.37		
26 56 13 00-0241	EA	20' High, 4" OD, 7 Gauge, Square Straight, Steel Area Light Pole, Anchor Base.....	2,396.63	495.21	
		For Galvanized Finish, Add	42.19		
		For >10 To 20, Deduct	-81.01		
		For >20 To 40, Deduct	-147.96		
		For >40, Deduct	-309.97		
26 56 13 00-0242	EA	25' High, 4" OD, 7 Gauge, Square Straight, Steel Area Light Pole, Anchor Base.....	2,935.51	660.29	
		For Galvanized Finish, Add	48.45		
		For >10 To 20, Deduct	-97.61		
		For >20 To 40, Deduct	-179.07		
		For >40, Deduct	-374.30		
26 56 13 00-0243	EA	30' High, 4" OD, 7 Gauge, Square Straight, Steel Area Light Pole, Anchor Base.....	3,427.41	742.83	
		For Galvanized Finish, Add	58.25		
		For >10 To 20, Deduct	-114.81		
		For >20 To 40, Deduct	-210.21		
		For >40, Deduct	-439.83		
26 56 13 00-0244	EA	20' High, 5" OD, 7 Gauge, Square Straight, Steel Area Light Pole, Anchor Base.....	2,745.43	495.21	
		For Galvanized Finish, Add	52.65		
		For >10 To 20, Deduct	-94.96		
		For >20 To 40, Deduct	-172.37		
		For >40, Deduct	-362.29		
26 56 13 00-0245	EA	25' High, 5" OD, 7 Gauge, Square Straight, Steel Area Light Pole, Anchor Base.....	3,380.44	660.29	
		For Galvanized Finish, Add	61.80		
		For >10 To 20, Deduct	-115.41		
		For >20 To 40, Deduct	-210.22		
		For >40, Deduct	-441.04		
26 56 13 00-0246	EA	30' High, 5" OD, 7 Gauge, Square Straight, Steel Area Light Pole, Anchor Base.....	3,831.14	742.83	
		For Galvanized Finish, Add	70.36		
		For >10 To 20, Deduct	-130.96		
		For >20 To 40, Deduct	-238.47		
		For >40, Deduct	-500.39		
26 56 13 00-0247	EA	35' High, 5" OD, 7 Gauge, Square Straight, Steel Area Light Pole, Anchor Base.....	4,254.25	784.09	
		For Galvanized Finish, Add	80.58		
		For >10 To 20, Deduct	-146.65		
		For >20 To 40, Deduct	-266.43		
		For >40, Deduct	-559.73		
26 56 13 00-0248	EA	30' High, 6" OD, 7 Gauge, Square Straight, Steel Area Light Pole, Anchor Base.....	4,372.20	742.83	
		For Galvanized Finish, Add	86.60		
		For >10 To 20, Deduct	-152.60		
		For >20 To 40, Deduct	-276.34		
		For >40, Deduct	-581.55		
26 56 13 00-0249	EA	35' High, 6" OD, 7 Gauge, Square Straight, Steel Area Light Pole, Anchor Base.....	4,798.05	784.09	
		For Galvanized Finish, Add	96.90		
		For >10 To 20, Deduct	-168.40		
		For >20 To 40, Deduct	-304.50		
		For >40, Deduct	-641.30		
26 56 13 00-0250	EA	40' High, 6" OD, 7 Gauge, Square Straight, Steel Area Light Pole, Anchor Base.....	5,075.58	825.36	
		For Galvanized Finish, Add	102.75		
		For >10 To 20, Deduct	-178.26		
		For >20 To 40, Deduct	-322.28		
		For >40, Deduct	-678.80		
26 56 13 00-0251		Hinged, Square Straight, Steel Area Light Poles (26 56 13 00-0178)			
26 56 13 00-0252		Hinged, Square Straight, Steel Area Light Poles, Anchor Base (26 56 13 00-0251)			
26 56 13 00-0253	EA	20' High, 6.44" OD, 11 Gauge, Hinged, Square Straight, Steel Area Light Pole, Anchor Base .....	5,544.67	495.21	
		For Galvanized Finish, Add	136.63		
		For >10 To 20, Deduct	-206.93		
		For >20 To 40, Deduct	-368.32		
		For >40, Deduct	-782.18		
26 56 13 00-0254	EA	25' High, 6.44" OD, 11 Gauge, Hinged, Square Straight, Steel Area Light Pole, Anchor Base .....	6,184.47	660.29	
		For Galvanized Finish, Add	145.92		
		For >10 To 20, Deduct	-227.57		
		For >20 To 40, Deduct	-406.50		
		For >40, Deduct	-861.64		
26 56 13 00-0255	EA	30' High, 6.44" OD, 11 Gauge, Hinged, Square Straight, Steel Area Light Pole, Anchor Base .....	8,663.18	742.83	
		For Galvanized Finish, Add	215.33		
		For >10 To 20, Deduct	-324.24		
		For >20 To 40, Deduct	-576.71		
		For >40, Deduct	-1,225.19		
26 56 13 00-0256	EA	20' High, 7.32" OD, 11 Gauge, Hinged, Square Straight, Steel Area Light Pole, Anchor Base .....	5,655.68	495.21	
		For Galvanized Finish, Add	139.96		
		For >10 To 20, Deduct	-211.37		
		For >20 To 40, Deduct	-376.09		
		For >40, Deduct	-798.83		

**26 Electrical**  
**26 50 Lighting**  
**26 56 Exterior Lighting**



MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
26 56 13 00-0257 EA 25' High, 7.32" OD, 11 Gauge, Hinged, Square Straight, Steel Area Light Pole, Anchor Base ..... For Galvanized Finish, Add ..... For >10 To 20, Deduct ..... For >20 To 40, Deduct ..... For >40, Deduct .....	6,830.07 165.28 -253.39 -451.69 -958.48	660.29
26 56 13 00-0258 EA 30' High, 7.32" OD, 11 Gauge, Hinged, Square Straight, Steel Area Light Pole, Anchor Base ..... For Galvanized Finish, Add ..... For >10 To 20, Deduct ..... For >20 To 40, Deduct ..... For >40, Deduct .....	9,624.27 244.16 -362.69 -643.99 -1,369.36	742.83
26 56 13 00-0259 EA 35' High, 7.32" OD, 11 Gauge, Hinged, Square Straight, Steel Area Light Pole, Anchor Base ..... For Galvanized Finish, Add ..... For >10 To 20, Deduct ..... For >20 To 40, Deduct ..... For >40, Deduct .....	11,047.67 284.38 -418.38 -741.97 -1,578.74	784.09
26 56 13 00-0260 EA 39' High, 7.32" OD, 11 Gauge, Hinged, Square Straight, Steel Area Light Pole, Anchor Base ..... For Galvanized Finish, Add ..... For >10 To 20, Deduct ..... For >20 To 40, Deduct ..... For >40, Deduct .....	12,991.04 340.21 -494.88 -876.36 -1,866.12	825.36
26 56 13 00-0261 EA 20' High, 4" OD, 7 Gauge, Hinged, Square Straight, Steel Area Light Pole, Anchor Base ..... For Galvanized Finish, Add ..... For >10 To 20, Deduct ..... For >20 To 40, Deduct ..... For >40, Deduct .....	5,369.39 131.37 -199.92 -356.05 -755.89	495.21
26 56 13 00-0262 EA 25' High, 4" OD, 7 Gauge, Hinged, Square Straight, Steel Area Light Pole, Anchor Base ..... For Galvanized Finish, Add ..... For >10 To 20, Deduct ..... For >20 To 40, Deduct ..... For >40, Deduct .....	5,904.03 137.50 -216.35 -386.87 -819.58	660.29
26 56 13 00-0263 EA 30' High, 4" OD, 7 Gauge, Hinged, Square Straight, Steel Area Light Pole, Anchor Base ..... For Galvanized Finish, Add ..... For >10 To 20, Deduct ..... For >20 To 40, Deduct ..... For >40, Deduct .....	8,169.48 200.51 -304.49 -542.15 -1,151.14	742.83
26 56 13 00-0264 EA 20' High, 6.44" OD, 7 Gauge, Hinged, Square Straight, Steel Area Light Pole, Anchor Base ..... For Galvanized Finish, Add ..... For >10 To 20, Deduct ..... For >20 To 40, Deduct ..... For >40, Deduct .....	5,570.96 137.42 -207.98 -370.16 -786.12	495.21
26 56 13 00-0265 EA 25' High, 6.44" OD, 7 Gauge, Hinged, Square Straight, Steel Area Light Pole, Anchor Base ..... For Galvanized Finish, Add ..... For >10 To 20, Deduct ..... For >20 To 40, Deduct ..... For >40, Deduct .....	5,567.16 157.40 -242.88 -433.29 -919.05	660.29
26 56 13 00-0266 EA 30' High, 6.44" OD, 7 Gauge, Hinged Square Straight, Steel Area Light Pole, Anchor Base ..... For Galvanized Finish, Add ..... For >10 To 20, Deduct ..... For >20 To 40, Deduct ..... For >40, Deduct .....	9,259.11 233.20 -348.08 -618.42 -1,314.58	742.83
26 56 13 00-0267 EA 20' High, 7.32" OD, 7 Gauge, Hinged, Square Straight, Steel Area Light Pole, Anchor Base ..... For Galvanized Finish, Add ..... For >10 To 20, Deduct ..... For >20 To 40, Deduct ..... For >40, Deduct .....	5,880.61 146.71 -220.37 -391.83 -832.57	495.21
26 56 13 00-0268 EA 25' High, 7.32" OD, 7 Gauge, Hinged, Square Straight, Steel Area Light Pole, Anchor Base ..... For Galvanized Finish, Add ..... For >10 To 20, Deduct ..... For >20 To 40, Deduct ..... For >40, Deduct .....	7,125.12 174.14 -265.20 -472.35 -1,002.74	660.29
26 56 13 00-0269 EA 30' High, 7.32" OD, 7 Gauge, Hinged, Square Straight, Steel Area Light Pole, Anchor Base ..... For Galvanized Finish, Add ..... For >10 To 20, Deduct ..... For >20 To 40, Deduct ..... For >40, Deduct .....	9,916.39 252.92 -374.37 -664.43 -1,413.18	742.83
26 56 13 00-0270 EA 35' High, 7.32" OD, 7 Gauge, Hinged, Square Straight, Steel Area Light Pole, Anchor Base ..... For Galvanized Finish, Add ..... For >10 To 20, Deduct ..... For >20 To 40, Deduct ..... For >40, Deduct .....	11,404.06 295.08 -432.64 -766.92 -1,632.20	784.09
26 56 13 00-0271 EA 39' High, 7.32" OD, 7 Gauge, Hinged, Square Straight, Steel Area Light Pole, Anchor Base ..... For Galvanized Finish, Add ..... For >10 To 20, Deduct ..... For >20 To 40, Deduct ..... For >40, Deduct .....	13,180.92 345.91 -502.48 -889.65 -1,894.60	825.36
26 56 13 00-0272 Square Tapered, Steel Area Light Poles (26 56 13 00-0178)		
26 56 13 00-0273 Square Tapered, Steel Area Light Poles, Anchor Base (26 56 13 00-0272)		
26 56 13 00-0274 EA 20' High, 5.25" Base OD, 11 Gauge, Square Tapered, Steel Area Light Pole, Anchor Base ..... For Galvanized Finish, Add ..... For >10 To 20, Deduct ..... For >20 To 40, Deduct ..... For >40, Deduct .....	4,195.57 96.15 -152.97 -273.88 -579.81	495.21



Electrical			26
Lighting			26 50
Exterior Lighting			26 56

MINOR				TOTAL DIRECT	DEMOLITION
CSI	UOM	DESCRIPTION	UNIT COST	UNIT COST	
26 56 13 00-0275	EA	25' High, 6.00" Base OD, 11 Gauge, Square Tapered, Steel Area Light Pole, Anchor Base.....	5,091.50		660.29
		For Galvanized Finish, Add	113.13		
		For >10 To 20, Deduct	-183.85		
		For >20 To 40, Deduct	-329.99		
		For >40, Deduct	-697.70		
26 56 13 00-0276	EA	30' High, 6.41" Base OD, 11 Gauge, Square Tapered, Steel Area Light Pole, Anchor Base.....	5,665.79		742.83
		For Galvanized Finish, Add	125.40		
		For >10 To 20, Deduct	-204.35		
		For >20 To 40, Deduct	-366.89		
		For >40, Deduct	-775.59		
26 56 13 00-0277	EA	35' High, 6.81" Base OD, 11 Gauge, Square Tapered, Steel Area Light Pole, Anchor Base.....	6,289.39		784.09
		For Galvanized Finish, Add	141.64		
		For >10 To 20, Deduct	-228.05		
		For >20 To 40, Deduct	-408.89		
		For >40, Deduct	-865.00		
26 56 13 00-0278	EA	39' High, 7.18" Base OD, 11 Gauge, Square Tapered, Steel Area Light Pole, Anchor Base.....	6,630.09		825.36
		For Galvanized Finish, Add	149.38		
		For >10 To 20, Deduct	-240.44		
		For >20 To 40, Deduct	-431.09		
		For >40, Deduct	-911.98		
26 56 13 00-0279	EA	20' High, 5.50" Base OD, 7 Gauge, Square Tapered, Steel Area Light Pole, Anchor Base .....	5,428.74		495.21
		For Galvanized Finish, Add	133.15		
		For >10 To 20, Deduct	-202.29		
		For >20 To 40, Deduct	-360.20		
		For >40, Deduct	-764.79		
26 56 13 00-0280	EA	25' High, 6.41" Base OD, 7 Gauge, Square Tapered, Steel Area Light Pole, Anchor Base .....	6,058.26		660.29
		For Galvanized Finish, Add	142.13		
		For >10 To 20, Deduct	-222.52		
		For >20 To 40, Deduct	-397.67		
		For >40, Deduct	-842.71		
26 56 13 00-0281	EA	30' High, 6.41" Base OD, 7 Gauge, Square Tapered, Steel Area Light Pole, Anchor Base .....	6,456.78		742.83
		For Galvanized Finish, Add	149.13		
		For >10 To 20, Deduct	-235.99		
		For >20 To 40, Deduct	-422.26		
		For >40, Deduct	-894.23		
26 56 13 00-0282	EA	30' High, 7.13" Base OD, 7 Gauge, Square Tapered, Steel Area Light Pole, Anchor Base .....	7,181.85		742.83
		For Galvanized Finish, Add	170.89		
		For >10 To 20, Deduct	-264.99		
		For >20 To 40, Deduct	-473.02		
		For >40, Deduct	-1,003.00		
26 56 13 00-0283	EA	35' High, 7.13" Base OD, 7 Gauge, Square Tapered, Steel Area Light Pole, Anchor Base .....	7,786.22		784.09
		For Galvanized Finish, Add	186.54		
		For >10 To 20, Deduct	-287.93		
		For >20 To 40, Deduct	-513.67		
		For >40, Deduct	-1,089.52		
26 56 13 00-0284	EA	35' High, 7.88" Base OD, 7 Gauge, Square Tapered, Steel Area Light Pole, Anchor Base .....	8,684.32		784.09
		For Galvanized Finish, Add	213.48		
		For >10 To 20, Deduct	-323.85		
		For >20 To 40, Deduct	-576.54		
		For >40, Deduct	-1,224.24		
26 56 13 00-0285	EA	39' High, 7.13" Base OD, 7 Gauge, Square Tapered, Steel Area Light Pole, Anchor Base .....	7,909.95		825.36
		For Galvanized Finish, Add	187.78		
		For >10 To 20, Deduct	-291.64		
		For >20 To 40, Deduct	-520.68		
		For >40, Deduct	-1,103.96		
26 56 13 00-0286	EA	39' High, 8.75" Base OD, 7 Gauge, Square Tapered, Steel Area Light Pole, Anchor Base .....	10,120.86		825.36
		For Galvanized Finish, Add	254.10		
		For >10 To 20, Deduct	-380.07		
		For >20 To 40, Deduct	-675.45		
		For >40, Deduct	-1,435.59		
26 56 13 00-0287	EA	45' High, 7.88" Base OD, 7 Gauge, Square Tapered, Steel Area Light Pole, Anchor Base .....	9,336.22		1,072.96
		For Galvanized Finish, Add	215.71		
		For >10 To 20, Deduct	-341.26		
		For >20 To 40, Deduct	-610.62		
		For >40, Deduct	-1,293.14		
26 56 13 00-0288	EA	45' High, 8.75" Base OD, 7 Gauge, Square Tapered, Steel Area Light Pole, Anchor Base .....	10,844.04		1,072.96
		For Galvanized Finish, Add	260.94		
		For >10 To 20, Deduct	-401.57		
		For >20 To 40, Deduct	-716.16		
		For >40, Deduct	-1,519.31		
26 56 13 00-0289	EA	50' High, 8.81" Base OD, 7 Gauge, Square Tapered, Steel Area Light Pole, Anchor Base .....	11,251.08		1,238.04
		For Galvanized Finish, Add	263.25		
		For >10 To 20, Deduct	-412.90		
		For >20 To 40, Deduct	-738.05		
		For >40, Deduct	-1,563.86		
26 56 13 00-0290	Factory Accessories For Steel Area Light Poles (26 56 13 00-0178)				
26 56 13 00-0291	EA	1/2", 3/4" Or 1" Factory Threaded Pipe Coupling Or Nipple For Steel Area Light Poles.....	97.38		
26 56 13 00-0292	EA	Extra Handhole For Steel Area Light Poles .....	144.81		
26 56 13 00-0293	EA	Vibration Dampener For Steel Area Light Poles .....	147.31		
Aluminum Area Light Poles (26 56 13 00-0177)					
Note: Includes satin brushed or painted finish, anchor bolts, base cover, reinforced handhole with cover and grounding provisions, factory drilled fixture mounting holes and tenon, open or capped top.					

**26 Electrical**  
**26 50 Lighting**  
**26 56 Exterior Lighting**



MINOR CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
26 56 13 00-0295		Round Straight, Aluminum Area Light Poles <small>(26 56 13 00-0294)</small>		
26 56 13 00-0296		Round Straight, Aluminum Area Light Poles, Anchor Base <small>(26 56 13 00-0295)</small>		
26 56 13 00-0297	EA	8' High, 4" OD, 0.125", Round Straight, Aluminum Area Light Pole, Anchor Base ..... For Bronze Or Satin Anodized Finish, Add ..... For Black Anodized Finish, Add ..... For >10 To 20, Deduct ..... For >20 To 40, Deduct ..... For >40, Deduct .....	832.66 33.75 67.49 -25.88 -48.38 -100.14	247.61
26 56 13 00-0298	EA	10' High, 4" OD, 0.125", Round Straight, Aluminum Area Light Pole, Anchor Base ..... For Bronze Or Satin Anodized Finish, Add ..... For Black Anodized Finish, Add ..... For >10 To 20, Deduct ..... For >20 To 40, Deduct ..... For >40, Deduct .....	932.51 35.48 70.95 -28.63 -53.72 -110.99	288.88
26 56 13 00-0299	EA	12' High, 4" OD, 0.125", Round Straight, Aluminum Area Light Pole, Anchor Base ..... For Bronze Or Satin Anodized Finish, Add ..... For Black Anodized Finish, Add ..... For >10 To 20, Deduct ..... For >20 To 40, Deduct ..... For >40, Deduct .....	1,036.68 37.64 75.28 -31.56 -59.36 -122.49	330.14
26 56 13 00-0300	EA	14' High, 4" OD, 0.125", Round Straight, Aluminum Area Light Pole, Anchor Base ..... For Bronze Or Satin Anodized Finish, Add ..... For Black Anodized Finish, Add ..... For >10 To 20, Deduct ..... For >20 To 40, Deduct ..... For >40, Deduct .....	1,141.71 39.89 79.78 -34.53 -65.06 -134.12	371.41
26 56 13 00-0301	EA	15' High, 4" OD, 0.125", Round Straight, Aluminum Area Light Pole, Anchor Base ..... For Bronze Or Satin Anodized Finish, Add ..... For Black Anodized Finish, Add ..... For >10 To 20, Deduct ..... For >20 To 40, Deduct ..... For >40, Deduct .....	1,197.68 41.36 82.72 -36.15 -68.16 -140.45	392.04
26 56 13 00-0302	EA	16' High, 4" OD, 0.125", Round Straight, Aluminum Area Light Pole, Anchor Base ..... For Bronze Or Satin Anodized Finish, Add ..... For Black Anodized Finish, Add ..... For >10 To 20, Deduct ..... For >20 To 40, Deduct ..... For >40, Deduct .....	1,252.80 42.74 85.49 -37.73 -71.19 -146.65	412.68
26 56 13 00-0303	EA	16' High, 4" OD, 0.188", Round Straight, Aluminum Area Light Pole, Anchor Base ..... For Bronze Or Satin Anodized Finish, Add ..... For Black Anodized Finish, Add ..... For >10 To 20, Deduct ..... For >20 To 40, Deduct ..... For >40, Deduct .....	1,304.71 47.94 95.87 -39.81 -74.82 -154.44	412.68
26 56 13 00-0304	EA	18' High, 4" OD, 0.188", Round Straight, Aluminum Area Light Pole, Anchor Base ..... For Bronze Or Satin Anodized Finish, Add ..... For Black Anodized Finish, Add ..... For >10 To 20, Deduct ..... For >20 To 40, Deduct ..... For >40, Deduct .....	1,420.13 51.22 102.45 -43.19 -81.25 -167.62	453.95
26 56 13 00-0305	EA	20' High, 4" OD, 0.188", Round Straight, Aluminum Area Light Pole, Anchor Base ..... For Bronze Or Satin Anodized Finish, Add ..... For Black Anodized Finish, Add ..... For >10 To 20, Deduct ..... For >20 To 40, Deduct ..... For >40, Deduct .....	1,530.35 53.99 107.98 -46.36 -87.32 -180.03	495.21
26 56 13 00-0306	EA	15' High, 5" OD, 0.188", Round Straight, Aluminum Area Light Pole, Anchor Base ..... For Bronze Or Satin Anodized Finish, Add ..... For Black Anodized Finish, Add ..... For >10 To 20, Deduct ..... For >20 To 40, Deduct ..... For >40, Deduct .....	1,388.91 60.48 120.96 -43.80 -81.54 -169.13	392.04
26 56 13 00-0307	EA	20' High, 5" OD, 0.188", Round Straight, Aluminum Area Light Pole, Anchor Base ..... For Bronze Or Satin Anodized Finish, Add ..... For Black Anodized Finish, Add ..... For >10 To 20, Deduct ..... For >20 To 40, Deduct ..... For >40, Deduct .....	1,721.57 73.11 146.23 -54.01 -100.70 -208.71	495.21
26 56 13 00-0308	EA	20' High, 6" OD, 0.188", Round Straight, Aluminum Area Light Pole, Anchor Base ..... For Bronze Or Satin Anodized Finish, Add ..... For Black Anodized Finish, Add ..... For >10 To 20, Deduct ..... For >20 To 40, Deduct ..... For >40, Deduct .....	1,818.48 82.81 165.61 -57.88 -107.49 -223.25	495.21
26 56 13 00-0309	EA	25' High, 6" OD, 0.188", Round Straight, Aluminum Area Light Pole, Anchor Base ..... For Bronze Or Satin Anodized Finish, Add ..... For Black Anodized Finish, Add ..... For >10 To 20, Deduct ..... For >20 To 40, Deduct ..... For >40, Deduct .....	2,239.49 91.89 183.78 -69.77 -130.35 -269.89	660.29





Electrical		26
Lighting		26 50
Exterior Lighting		26 56

MINOR	CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
26 56 13 00-0310	EA	30'	High, 6" OD, 0.188", Round Straight, Aluminum Area Light Pole, Anchor Base ..... <i>For Bronze Or Satin Anodized Finish, Add</i> <i>For Black Anodized Finish, Add</i> <i>For &gt;10 To 20, Deduct</i> <i>For &gt;20 To 40, Deduct</i> <i>For &gt;40, Deduct</i>	2,576.74 109.11 218.22 -80.78 -150.66 -312.23	742.83
26 56 13 00-0311	EA	20'	High, 4" OD, 0.250", Round Straight, Aluminum Area Light Pole, Anchor Base ..... <i>For Bronze Or Satin Anodized Finish, Add</i> <i>For Black Anodized Finish, Add</i> <i>For &gt;10 To 20, Deduct</i> <i>For &gt;20 To 40, Deduct</i> <i>For &gt;40, Deduct</i>	1,590.06 59.96 119.93 -48.75 -91.50 -188.99	495.21
26 56 13 00-0312	EA	20'	High, 5" OD, 0.250", Round Straight, Aluminum Area Light Pole, Anchor Base ..... <i>For Bronze Or Satin Anodized Finish, Add</i> <i>For Black Anodized Finish, Add</i> <i>For &gt;10 To 20, Deduct</i> <i>For &gt;20 To 40, Deduct</i> <i>For &gt;40, Deduct</i>	1,810.70 82.03 164.05 -57.57 -106.94 -222.08	495.21
26 56 13 00-0313	EA	25'	High, 5" OD, 0.250", Round Straight, Aluminum Area Light Pole, Anchor Base ..... <i>For Bronze Or Satin Anodized Finish, Add</i> <i>For Black Anodized Finish, Add</i> <i>For &gt;10 To 20, Deduct</i> <i>For &gt;20 To 40, Deduct</i> <i>For &gt;40, Deduct</i>	2,225.64 90.51 181.01 -69.22 -129.38 -267.82	660.29
26 56 13 00-0314	EA	25'	High, 6" OD, 0.250", Round Straight, Aluminum Area Light Pole, Anchor Base ..... <i>For Bronze Or Satin Anodized Finish, Add</i> <i>For Black Anodized Finish, Add</i> <i>For &gt;10 To 20, Deduct</i> <i>For &gt;20 To 40, Deduct</i> <i>For &gt;40, Deduct</i>	2,351.10 103.05 206.10 -74.24 -138.17 -286.64	660.29
26 56 13 00-0315	EA	30'	High, 6" OD, 0.250", Round Straight, Aluminum Area Light Pole, Anchor Base ..... <i>For Bronze Or Satin Anodized Finish, Add</i> <i>For Black Anodized Finish, Add</i> <i>For &gt;10 To 20, Deduct</i> <i>For &gt;20 To 40, Deduct</i> <i>For &gt;40, Deduct</i>	2,718.65 123.30 246.60 -86.46 -160.59 -333.52	742.83
26 56 13 00-0316 Round Straight, Aluminum Area Light Poles, Hinged Anchor Base (26 56 13 00-0295)					
26 56 13 00-0317	EA	8'	High, 4" OD, 0.125", Round Straight, Aluminum Area Light Pole, Hinged Anchor Base ..... <i>For Bronze, Satin Or Black Anodized Finish, Add</i> <i>For &gt;10 To 20, Deduct</i> <i>For &gt;20 To 40, Deduct</i> <i>For &gt;40, Deduct</i>	920.92 63.86 -29.41 -54.56 -113.38	247.61
26 56 13 00-0318	EA	10'	High, 4" OD, 0.125", Round Straight, Aluminum Area Light Pole, Hinged Anchor Base ..... <i>For Bronze, Satin Or Black Anodized Finish, Add</i> <i>For &gt;10 To 20, Deduct</i> <i>For &gt;20 To 40, Deduct</i> <i>For &gt;40, Deduct</i>	1,038.07 69.05 -32.86 -61.11 -126.82	288.88
26 56 13 00-0319	EA	12'	High, 4" OD, 0.125", Round Straight, Aluminum Area Light Pole, Hinged Anchor Base ..... <i>For Bronze, Satin Or Black Anodized Finish, Add</i> <i>For &gt;10 To 20, Deduct</i> <i>For &gt;20 To 40, Deduct</i> <i>For &gt;40, Deduct</i>	1,151.76 73.72 -36.17 -67.42 -139.75	330.14
26 56 13 00-0320	EA	14'	High, 4" OD, 0.125", Round Straight, Aluminum Area Light Pole, Hinged Anchor Base ..... <i>For Bronze, Satin Or Black Anodized Finish, Add</i> <i>For &gt;10 To 20, Deduct</i> <i>For &gt;20 To 40, Deduct</i> <i>For &gt;40, Deduct</i>	1,249.01 75.93 -38.82 -72.57 -150.21	371.41
26 56 13 00-0321	EA	16'	High, 4" OD, 0.125", Round Straight, Aluminum Area Light Pole, Hinged Anchor Base ..... <i>For Bronze, Satin Or Black Anodized Finish, Add</i> <i>For &gt;10 To 20, Deduct</i> <i>For &gt;20 To 40, Deduct</i> <i>For &gt;40, Deduct</i>	1,356.63 79.69 -41.88 -78.46 -162.23	412.68
26 56 13 00-0322	EA	10'	High, 5" OD, 0.125", Round Straight, Aluminum Area Light Pole, Hinged Anchor Base ..... <i>For Bronze, Satin Or Black Anodized Finish, Add</i> <i>For &gt;10 To 20, Deduct</i> <i>For &gt;20 To 40, Deduct</i> <i>For &gt;40, Deduct</i>	1,056.24 71.77 -33.58 -62.38 -129.55	288.88
26 56 13 00-0323	EA	12'	High, 5" OD, 0.125", Round Straight, Aluminum Area Light Pole, Hinged Anchor Base ..... <i>For Bronze, Satin Or Black Anodized Finish, Add</i> <i>For &gt;10 To 20, Deduct</i> <i>For &gt;20 To 40, Deduct</i> <i>For &gt;40, Deduct</i>	1,168.20 76.19 -36.82 -68.57 -142.22	330.14
26 56 13 00-0324	EA	14'	High, 5" OD, 0.125", Round Straight, Aluminum Area Light Pole, Hinged Anchor Base ..... <i>For Bronze, Satin Or Black Anodized Finish, Add</i> <i>For &gt;10 To 20, Deduct</i> <i>For &gt;20 To 40, Deduct</i> <i>For &gt;40, Deduct</i>	1,282.75 80.99 -40.17 -74.94 -155.27	371.41
26 56 13 00-0325	EA	16'	High, 5" OD, 0.125", Round Straight, Aluminum Area Light Pole, Hinged Anchor Base ..... <i>For Bronze, Satin Or Black Anodized Finish, Add</i> <i>For &gt;10 To 20, Deduct</i> <i>For &gt;20 To 40, Deduct</i> <i>For &gt;40, Deduct</i>	1,396.43 85.66 -43.48 -81.24 -168.20	412.68

**26 Electrical**  
**26 50 Lighting**  
**26 56 Exterior Lighting**



MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
26 56 13 00-0326 EA 18' High, 5" OD, 0.125", Round Straight, Aluminum Area Light Pole, Hinged Anchor Base .....	1,514.45	453.95
For Bronze, Satin Or Black Anodized Finish, Add	90.98	
For >10 To 20, Deduct	-46.96	
For >20 To 40, Deduct	-87.85	
For >40, Deduct	-181.77	
26 56 13 00-0327 EA 20' High, 5" OD, 0.125", Round Straight, Aluminum Area Light Pole, Hinged Anchor Base .....	1,627.26	495.21
For Bronze, Satin Or Black Anodized Finish, Add	95.52	
For >10 To 20, Deduct	-50.23	
For >20 To 40, Deduct	-94.10	
For >40, Deduct	-194.57	
26 56 13 00-0328 EA 12' High, 5" OD, 0.156", Round Straight, Aluminum Area Light Pole, Hinged Anchor Base .....	1,201.94	330.14
For Bronze, Satin Or Black Anodized Finish, Add	81.25	
For >10 To 20, Deduct	-38.17	
For >20 To 40, Deduct	-70.93	
For >40, Deduct	-147.28	
26 56 13 00-0329 EA 14' High, 5" OD, 0.156", Round Straight, Aluminum Area Light Pole, Hinged Anchor Base .....	1,322.55	371.41
For Bronze, Satin Or Black Anodized Finish, Add	86.96	
For >10 To 20, Deduct	-41.76	
For >20 To 40, Deduct	-77.72	
For >40, Deduct	-161.24	
26 56 13 00-0330 EA 16' High, 5" OD, 0.156", Round Straight, Aluminum Area Light Pole, Hinged Anchor Base .....	1,442.29	412.68
For Bronze, Satin Or Black Anodized Finish, Add	92.54	
For >10 To 20, Deduct	-45.31	
For >20 To 40, Deduct	-84.45	
For >40, Deduct	-175.08	
26 56 13 00-0331 EA 18' High, 5" OD, 0.156", Round Straight, Aluminum Area Light Pole, Hinged Anchor Base .....	1,563.77	453.95
For Bronze, Satin Or Black Anodized Finish, Add	98.38	
For >10 To 20, Deduct	-48.93	
For >20 To 40, Deduct	-91.31	
For >40, Deduct	-189.17	
26 56 13 00-0332 EA 16' High, 6" OD, 0.156", Round Straight, Aluminum Area Light Pole, Hinged Anchor Base .....	1,490.74	412.68
For Bronze, Satin Or Black Anodized Finish, Add	99.81	
For >10 To 20, Deduct	-47.25	
For >20 To 40, Deduct	-87.84	
For >40, Deduct	-182.34	
26 56 13 00-0333 EA 20' High, 6" OD, 0.156", Round Straight, Aluminum Area Light Pole, Hinged Anchor Base .....	1,740.61	495.21
For Bronze, Satin Or Black Anodized Finish, Add	112.53	
For >10 To 20, Deduct	-54.77	
For >20 To 40, Deduct	-102.03	
For >40, Deduct	-211.57	
26 56 13 00-0334 EA 12' High, 5" OD, 0.188", Round Straight, Aluminum Area Light Pole, Hinged Anchor Base .....	1,233.96	330.14
For Bronze, Satin Or Black Anodized Finish, Add	86.05	
For >10 To 20, Deduct	-39.45	
For >20 To 40, Deduct	-73.17	
For >40, Deduct	-152.08	
26 56 13 00-0335 EA 14' High, 5" OD, 0.188", Round Straight, Aluminum Area Light Pole, Hinged Anchor Base .....	1,364.09	371.41
For Bronze, Satin Or Black Anodized Finish, Add	93.19	
For >10 To 20, Deduct	-43.42	
For >20 To 40, Deduct	-80.63	
For >40, Deduct	-167.47	
26 56 13 00-0336 EA 16' High, 5" OD, 0.188", Round Straight, Aluminum Area Light Pole, Hinged Anchor Base .....	1,485.55	412.68
For Bronze, Satin Or Black Anodized Finish, Add	99.03	
For >10 To 20, Deduct	-47.04	
For >20 To 40, Deduct	-87.48	
For >40, Deduct	-181.56	
26 56 13 00-0337 EA 18' High, 5" OD, 0.188", Round Straight, Aluminum Area Light Pole, Hinged Anchor Base .....	1,612.22	453.95
For Bronze, Satin Or Black Anodized Finish, Add	105.65	
For >10 To 20, Deduct	-50.87	
For >20 To 40, Deduct	-94.70	
For >40, Deduct	-196.44	
26 56 13 00-0338 EA 20' High, 5" OD, 0.188", Round Straight, Aluminum Area Light Pole, Hinged Anchor Base .....	1,736.28	495.21
For Bronze, Satin Or Black Anodized Finish, Add	111.88	
For >10 To 20, Deduct	-54.59	
For >20 To 40, Deduct	-101.73	
For >40, Deduct	-210.92	
26 56 13 00-0339 EA 16' High, 6" OD, 0.188", Round Straight, Aluminum Area Light Pole, Hinged Anchor Base .....	1,548.72	412.68
For Bronze, Satin Or Black Anodized Finish, Add	108.50	
For >10 To 20, Deduct	-49.57	
For >20 To 40, Deduct	-91.90	
For >40, Deduct	-191.04	
26 56 13 00-0340 EA 18' High, 6" OD, 0.188", Round Straight, Aluminum Area Light Pole, Hinged Anchor Base .....	1,683.17	453.95
For Bronze, Satin Or Black Anodized Finish, Add	116.29	
For >10 To 20, Deduct	-53.71	
For >20 To 40, Deduct	-99.66	
For >40, Deduct	-207.08	
26 56 13 00-0341 EA 20' High, 6" OD, 0.188", Round Straight, Aluminum Area Light Pole, Hinged Anchor Base .....	1,763.11	495.21
For Bronze, Satin Or Black Anodized Finish, Add	115.90	
For >10 To 20, Deduct	-55.67	
For >20 To 40, Deduct	-103.61	
For >40, Deduct	-214.95	

26 56 13 00-0342 Round Straight, Aluminum Area Light Poles, Direct Burial (26 56 13 00-0295)  
Note: Includes rubberized undercoating on embedded portion.



Electrical			26
Lighting			26 50
Exterior Lighting			26 56

MINOR			TOTAL DIRECT	DEMOLITION
CSI	UOM	DESCRIPTION	UNIT COST	UNIT COST
26 56 13 00-0343	EA	10' High, 4" OD, 0.125", Round Straight, Aluminum Area Light Pole, Direct Burial	731.10	206.34
		For Bronze Or Satin Anodized Finish, Add	31.84	
		For Black Anodized Finish, Add	63.68	
		For >10 To 20, Deduct	-23.05	
		For >20 To 40, Deduct	-42.92	
		For >40, Deduct	-89.03	
26 56 13 00-0344	EA	12' High, 4" OD, 0.125", Round Straight, Aluminum Area Light Pole, Direct Burial	788.81	226.97
		For Bronze Or Satin Anodized Finish, Add	33.49	
		For Black Anodized Finish, Add	66.97	
		For >10 To 20, Deduct	-24.74	
		For >20 To 40, Deduct	-46.14	
		For >40, Deduct	-95.62	
26 56 13 00-0345	EA	14' High, 4" OD, 0.125", Round Straight, Aluminum Area Light Pole, Direct Burial	869.00	247.61
		For Bronze Or Satin Anodized Finish, Add	37.38	
		For Black Anodized Finish, Add	74.76	
		For >10 To 20, Deduct	-27.33	
		For >20 To 40, Deduct	-50.93	
		For >40, Deduct	-105.59	
26 56 13 00-0346	EA	15' High, 4" OD, 0.125", Round Straight, Aluminum Area Light Pole, Direct Burial	888.90	247.61
		For Bronze Or Satin Anodized Finish, Add	39.37	
		For Black Anodized Finish, Add	78.74	
		For >10 To 20, Deduct	-28.13	
		For >20 To 40, Deduct	-52.32	
		For >40, Deduct	-108.57	
26 56 13 00-0347	EA	16' High, 4" OD, 0.125", Round Straight, Aluminum Area Light Pole, Direct Burial	914.00	247.61
		For Bronze Or Satin Anodized Finish, Add	41.88	
		For Black Anodized Finish, Add	83.76	
		For >10 To 20, Deduct	-29.13	
		For >20 To 40, Deduct	-54.08	
		For >40, Deduct	-112.34	
26 56 13 00-0348	EA	18' High, 4" OD, 0.188", Round Straight, Aluminum Area Light Pole, Direct Burial	1,031.42	268.24
		For Bronze Or Satin Anodized Finish, Add	49.49	
		For Black Anodized Finish, Add	98.99	
		For >10 To 20, Deduct	-33.21	
		For >20 To 40, Deduct	-61.47	
		For >40, Deduct	-127.89	
26 56 13 00-0349	EA	20' High, 4" OD, 0.188", Round Straight, Aluminum Area Light Pole, Direct Burial	1,104.69	288.88
		For Bronze Or Satin Anodized Finish, Add	52.69	
		For Black Anodized Finish, Add	105.39	
		For >10 To 20, Deduct	-35.52	
		For >20 To 40, Deduct	-65.77	
		For >40, Deduct	-136.82	
26 56 13 00-0350	EA	20' High, 5" OD, 0.188", Round Straight, Aluminum Area Light Pole, Direct Burial	1,238.81	288.88
		For Bronze Or Satin Anodized Finish, Add	66.11	
		For Black Anodized Finish, Add	132.21	
		For >10 To 20, Deduct	-40.89	
		For >20 To 40, Deduct	-75.16	
		For >40, Deduct	-156.93	
26 56 13 00-0351	EA	25' High, 6" OD, 0.188", Round Straight, Aluminum Area Light Pole, Direct Burial	1,493.54	330.14
		For Bronze Or Satin Anodized Finish, Add	83.33	
		For Black Anodized Finish, Add	166.65	
		For >10 To 20, Deduct	-49.84	
		For >20 To 40, Deduct	-91.34	
		For >40, Deduct	-191.02	
26 56 13 00-0352	EA	30' High, 6" OD, 0.188", Round Straight, Aluminum Area Light Pole, Direct Burial	1,692.02	371.41
		For Bronze Or Satin Anodized Finish, Add	94.92	
		For Black Anodized Finish, Add	189.84	
		For >10 To 20, Deduct	-56.54	
		For >20 To 40, Deduct	-103.58	
		For >40, Deduct	-216.66	
26 56 13 00-0353	EA	30' High, 6" OD, 0.250", Round Straight, Aluminum Area Light Pole, Direct Burial	1,850.36	371.41
		For Bronze Or Satin Anodized Finish, Add	110.75	
		For Black Anodized Finish, Add	221.51	
		For >10 To 20, Deduct	-62.87	
		For >20 To 40, Deduct	-114.67	
		For >40, Deduct	-240.41	
26 56 13 00-0354		Round Tapered, Aluminum Area Light Poles (26 56 13 00-0294)		
26 56 13 00-0355		Round Tapered, Aluminum Area Light Poles, Anchor Base (26 56 13 00-0354)		
26 56 13 00-0356	EA	8' High, 4" OD, 0.125", Round Tapered, Aluminum Area Light Pole, Anchor Base	740.08	247.61
		For Bronze Or Satin Anodized Finish, Add	24.49	
		For Black Anodized Finish, Add	48.97	
		For >10 To 20, Deduct	-22.18	
		For >20 To 40, Deduct	-41.90	
		For >40, Deduct	-86.25	
26 56 13 00-0357	EA	10' High, 4" OD, 0.125", Round Tapered, Aluminum Area Light Pole, Anchor Base	842.52	288.88
		For Bronze Or Satin Anodized Finish, Add	26.48	
		For Black Anodized Finish, Add	52.95	
		For >10 To 20, Deduct	-25.03	
		For >20 To 40, Deduct	-47.42	
		For >40, Deduct	-97.49	

**26 Electrical**  
**26 50 Lighting**  
**26 56 Exterior Lighting**



MINOR CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
26 56 13 00-0358	EA	12' High, 4" OD, 0.125", Round Tapered, Aluminum Area Light Pole, Anchor Base .....	944.96	330.14
		For Bronze Or Satin Anodized Finish, Add	28.47	
		For Black Anodized Finish, Add	56.93	
		For >10 To 20, Deduct	-27.89	
		For >20 To 40, Deduct	-52.94	
		For >40, Deduct	-108.73	
26 56 13 00-0359	EA	14' High, 4" OD, 0.125", Round Tapered, Aluminum Area Light Pole, Anchor Base .....	1,055.19	371.41
		For Bronze Or Satin Anodized Finish, Add	31.24	
		For Black Anodized Finish, Add	62.47	
		For >10 To 20, Deduct	-31.07	
		For >20 To 40, Deduct	-59.01	
		For >40, Deduct	-121.14	
26 56 13 00-0360	EA	16' High, 4" OD, 0.125", Round Tapered, Aluminum Area Light Pole, Anchor Base .....	1,164.54	412.68
		For Bronze Or Satin Anodized Finish, Add	33.92	
		For Black Anodized Finish, Add	67.84	
		For >10 To 20, Deduct	-34.20	
		For >20 To 40, Deduct	-65.01	
		For >40, Deduct	-133.41	
26 56 13 00-0361	EA	10' High, 5" OD, 0.125", Round Tapered, Aluminum Area Light Pole, Anchor Base .....	865.02	288.88
		For Bronze Or Satin Anodized Finish, Add	28.73	
		For Black Anodized Finish, Add	57.45	
		For >10 To 20, Deduct	-25.93	
		For >20 To 40, Deduct	-49.00	
		For >40, Deduct	-100.87	
26 56 13 00-0362	EA	12' High, 5" OD, 0.125", Round Tapered, Aluminum Area Light Pole, Anchor Base .....	980.44	330.14
		For Bronze Or Satin Anodized Finish, Add	32.02	
		For Black Anodized Finish, Add	64.03	
		For >10 To 20, Deduct	-29.31	
		For >20 To 40, Deduct	-55.43	
		For >40, Deduct	-114.05	
26 56 13 00-0363	EA	14' High, 5" OD, 0.125", Round Tapered, Aluminum Area Light Pole, Anchor Base .....	1,093.26	371.41
		For Bronze Or Satin Anodized Finish, Add	35.04	
		For Black Anodized Finish, Add	70.09	
		For >10 To 20, Deduct	-32.59	
		For >20 To 40, Deduct	-61.67	
		For >40, Deduct	-126.85	
26 56 13 00-0364	EA	18' High, 5" OD, 0.125", Round Tapered, Aluminum Area Light Pole, Anchor Base .....	1,312.84	453.95
		For Bronze Or Satin Anodized Finish, Add	40.49	
		For Black Anodized Finish, Add	80.99	
		For >10 To 20, Deduct	-38.90	
		For >20 To 40, Deduct	-73.74	
		For >40, Deduct	-151.53	
26 56 13 00-0365	EA	20' High, 5" OD, 0.125", Round Tapered, Aluminum Area Light Pole, Anchor Base .....	1,417.00	495.21
		For Bronze Or Satin Anodized Finish, Add	42.66	
		For Black Anodized Finish, Add	85.31	
		For >10 To 20, Deduct	-41.82	
		For >20 To 40, Deduct	-79.38	
		For >40, Deduct	-163.03	
26 56 13 00-0366	EA	12' High, 5" OD, 0.156", Round Tapered, Aluminum Area Light Pole, Anchor Base .....	1,012.45	330.14
		For Bronze Or Satin Anodized Finish, Add	35.22	
		For Black Anodized Finish, Add	70.43	
		For >10 To 20, Deduct	-30.59	
		For >20 To 40, Deduct	-57.67	
		For >40, Deduct	-118.85	
26 56 13 00-0367	EA	14' High, 5" OD, 0.156", Round Tapered, Aluminum Area Light Pole, Anchor Base .....	1,130.47	371.41
		For Bronze Or Satin Anodized Finish, Add	38.76	
		For Black Anodized Finish, Add	77.53	
		For >10 To 20, Deduct	-34.08	
		For >20 To 40, Deduct	-64.28	
		For >40, Deduct	-132.43	
26 56 13 00-0368	EA	16' High, 5" OD, 0.156", Round Tapered, Aluminum Area Light Pole, Anchor Base .....	1,254.53	412.68
		For Bronze Or Satin Anodized Finish, Add	42.92	
		For Black Anodized Finish, Add	85.83	
		For >10 To 20, Deduct	-37.80	
		For >20 To 40, Deduct	-71.31	
		For >40, Deduct	-146.91	
26 56 13 00-0369	EA	18' High, 5" OD, 0.156", Round Tapered, Aluminum Area Light Pole, Anchor Base .....	1,363.03	453.95
		For Bronze Or Satin Anodized Finish, Add	45.51	
		For Black Anodized Finish, Add	91.03	
		For >10 To 20, Deduct	-40.90	
		For >20 To 40, Deduct	-77.25	
		For >40, Deduct	-159.06	
26 56 13 00-0370	EA	20' High, 5" OD, 0.156", Round Tapered, Aluminum Area Light Pole, Anchor Base .....	1,483.63	495.21
		For Bronze Or Satin Anodized Finish, Add	49.32	
		For Black Anodized Finish, Add	98.64	
		For >10 To 20, Deduct	-44.49	
		For >20 To 40, Deduct	-84.05	
		For >40, Deduct	-173.02	
26 56 13 00-0371	EA	16' High, 6" OD, 0.156", Round Tapered, Aluminum Area Light Pole, Anchor Base .....	1,339.32	412.68
		For Bronze Or Satin Anodized Finish, Add	51.40	
		For Black Anodized Finish, Add	102.79	
		For >10 To 20, Deduct	-41.19	
		For >20 To 40, Deduct	-77.25	
		For >40, Deduct	-159.63	



Electrical		26
Lighting		26 50
Exterior Lighting		26 56

MINOR	CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
26 56 13 00-0372	EA	18'	High, 6" OD, 0.156", Round Tapered, Aluminum Area Light Pole, Anchor Base ..... For Bronze Or Satin Anodized Finish, Add For Black Anodized Finish, Add For >10 To 20, Deduct For >20 To 40, Deduct For >40, Deduct	1,471.18 56.33 112.66 -45.23 -84.82 -175.28	453.95
26 56 13 00-0373	EA	20'	High, 6" OD, 0.156", Round Tapered, Aluminum Area Light Pole, Anchor Base ..... For Bronze Or Satin Anodized Finish, Add For Black Anodized Finish, Add For >10 To 20, Deduct For >20 To 40, Deduct For >40, Deduct	1,567.56 57.71 115.43 -47.85 -89.92 -185.61	495.21
26 56 13 00-0374	EA	23'	High, 6" OD, 0.156", Round Tapered, Aluminum Area Light Pole, Anchor Base ..... For Bronze Or Satin Anodized Finish, Add For Black Anodized Finish, Add For >10 To 20, Deduct For >20 To 40, Deduct For >40, Deduct	1,809.64 65.41 130.83 -55.05 -103.56 -213.67	577.75
26 56 13 00-0375	EA	25'	High, 6" OD, 0.156", Round Tapered, Aluminum Area Light Pole, Anchor Base ..... For Bronze Or Satin Anodized Finish, Add For Black Anodized Finish, Add For >10 To 20, Deduct For >20 To 40, Deduct For >40, Deduct	2,056.92 73.63 147.27 -62.47 -117.57 -242.51	660.29
26 56 13 00-0376	EA	18'	High, 7" OD, 0.156", Round Tapered, Aluminum Area Light Pole, Anchor Base ..... For Bronze Or Satin Anodized Finish, Add For Black Anodized Finish, Add For >10 To 20, Deduct For >20 To 40, Deduct For >40, Deduct	1,555.98 64.81 129.62 -48.62 -90.76 -188.00	453.95
26 56 13 00-0377	EA	20'	High, 7" OD, 0.156", Round Tapered, Aluminum Area Light Pole, Anchor Base ..... For Bronze Or Satin Anodized Finish, Add For Black Anodized Finish, Add For >10 To 20, Deduct For >20 To 40, Deduct For >40, Deduct	1,670.52 68.01 136.02 -51.96 -97.13 -201.06	495.21
26 56 13 00-0378	EA	23'	High, 7" OD, 0.156", Round Tapered, Aluminum Area Light Pole, Anchor Base ..... For Bronze Or Satin Anodized Finish, Add For Black Anodized Finish, Add For >10 To 20, Deduct For >20 To 40, Deduct For >40, Deduct	1,890.97 73.55 147.09 -58.31 -109.26 -225.87	577.75
26 56 13 00-0379	EA	25'	High, 7" OD, 0.156", Round Tapered, Aluminum Area Light Pole, Anchor Base ..... For Bronze Or Satin Anodized Finish, Add For Black Anodized Finish, Add For >10 To 20, Deduct For >20 To 40, Deduct For >40, Deduct	2,119.22 79.86 159.73 -64.96 -121.93 -251.85	660.29
26 56 13 00-0380	EA	28'	High, 7" OD, 0.156", Round Tapered, Aluminum Area Light Pole, Anchor Base ..... For Bronze Or Satin Anodized Finish, Add For Black Anodized Finish, Add For >10 To 20, Deduct For >20 To 40, Deduct For >40, Deduct	2,271.83 86.87 173.74 -69.83 -130.97 -270.62	701.55
26 56 13 00-0381	EA	30'	High, 7" OD, 0.156", Round Tapered, Aluminum Area Light Pole, Anchor Base ..... For Bronze Or Satin Anodized Finish, Add For Black Anodized Finish, Add For >10 To 20, Deduct For >20 To 40, Deduct For >40, Deduct	2,426.19 94.05 188.11 -74.76 -140.12 -289.65	742.83
26 56 13 00-0382	EA	23'	High, 8" OD, 0.156", Round Tapered, Aluminum Area Light Pole, Anchor Base ..... For Bronze Or Satin Anodized Finish, Add For Black Anodized Finish, Add For >10 To 20, Deduct For >20 To 40, Deduct For >40, Deduct	1,971.44 81.59 163.19 -61.53 -114.89 -237.94	577.75
26 56 13 00-0383	EA	25'	High, 8" OD, 0.156", Round Tapered, Aluminum Area Light Pole, Anchor Base ..... For Bronze Or Satin Anodized Finish, Add For Black Anodized Finish, Add For >10 To 20, Deduct For >20 To 40, Deduct For >40, Deduct	2,172.86 85.23 170.46 -67.11 -125.69 -259.90	660.29
26 56 13 00-0384	EA	28'	High, 8" OD, 0.156", Round Tapered, Aluminum Area Light Pole, Anchor Base ..... For Bronze Or Satin Anodized Finish, Add For Black Anodized Finish, Add For >10 To 20, Deduct For >20 To 40, Deduct For >40, Deduct	2,329.80 92.67 185.34 -72.15 -135.02 -279.31	701.55
26 56 13 00-0385	EA	30'	High, 8" OD, 0.156", Round Tapered, Aluminum Area Light Pole, Anchor Base ..... For Bronze Or Satin Anodized Finish, Add For Black Anodized Finish, Add For >10 To 20, Deduct For >20 To 40, Deduct For >40, Deduct	2,516.17 103.05 206.10 -78.36 -146.42 -303.14	742.83

**26 Electrical**  
**26 50 Lighting**  
**26 56 Exterior Lighting**



MINOR CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
26 56 13 00-0386	EA	33' High, 8" OD, 0.156", Round Tapered, Aluminum Area Light Pole, Anchor Base .....	2,596.37	763.46
		For Bronze Or Satin Anodized Finish, Add	106.95	
		For Black Anodized Finish, Add	213.89	
		For >10 To 20, Deduct	-80.95	
		For >20 To 40, Deduct	-151.21	
		For >40, Deduct	-313.11	
26 56 13 00-0387	EA	35' High, 8" OD, 0.156", Round Tapered, Aluminum Area Light Pole, Anchor Base .....	2,742.35	784.09
		For Bronze Or Satin Anodized Finish, Add	117.42	
		For Black Anodized Finish, Add	234.83	
		For >10 To 20, Deduct	-86.17	
		For >20 To 40, Deduct	-160.60	
		For >40, Deduct	-332.94	
26 56 13 00-0388	EA	12' High, 5" OD, 0.188", Round Tapered, Aluminum Area Light Pole, Anchor Base .....	1,047.93	330.14
		For Bronze Or Satin Anodized Finish, Add	38.76	
		For Black Anodized Finish, Add	77.53	
		For >10 To 20, Deduct	-32.01	
		For >20 To 40, Deduct	-60.15	
		For >40, Deduct	-124.18	
26 56 13 00-0389	EA	14' High, 5" OD, 0.188", Round Tapered, Aluminum Area Light Pole, Anchor Base .....	1,172.00	371.41
		For Bronze Or Satin Anodized Finish, Add	42.92	
		For Black Anodized Finish, Add	85.83	
		For >10 To 20, Deduct	-35.74	
		For >20 To 40, Deduct	-67.18	
		For >40, Deduct	-138.66	
26 56 13 00-0390	EA	16' High, 5" OD, 0.188", Round Tapered, Aluminum Area Light Pole, Anchor Base .....	1,299.52	412.68
		For Bronze Or Satin Anodized Finish, Add	47.42	
		For Black Anodized Finish, Add	94.83	
		For >10 To 20, Deduct	-39.60	
		For >20 To 40, Deduct	-74.46	
		For >40, Deduct	-153.66	
26 56 13 00-0391	EA	18' High, 5" OD, 0.188", Round Tapered, Aluminum Area Light Pole, Anchor Base .....	1,417.54	453.95
		For Bronze Or Satin Anodized Finish, Add	50.96	
		For Black Anodized Finish, Add	101.93	
		For >10 To 20, Deduct	-43.08	
		For >20 To 40, Deduct	-81.07	
		For >40, Deduct	-167.24	
26 56 13 00-0392	EA	20' High, 5" OD, 0.188", Round Tapered, Aluminum Area Light Pole, Anchor Base .....	1,534.68	495.21
		For Bronze Or Satin Anodized Finish, Add	54.43	
		For Black Anodized Finish, Add	108.85	
		For >10 To 20, Deduct	-46.53	
		For >20 To 40, Deduct	-87.62	
		For >40, Deduct	-180.68	
26 56 13 00-0393	EA	16' High, 6" OD, 0.188", Round Tapered, Aluminum Area Light Pole, Anchor Base .....	1,393.84	412.68
		For Bronze Or Satin Anodized Finish, Add	56.85	
		For Black Anodized Finish, Add	113.70	
		For >10 To 20, Deduct	-43.37	
		For >20 To 40, Deduct	-81.06	
		For >40, Deduct	-167.81	
26 56 13 00-0394	EA	18' High, 6" OD, 0.188", Round Tapered, Aluminum Area Light Pole, Anchor Base .....	1,528.29	453.95
		For Bronze Or Satin Anodized Finish, Add	62.04	
		For Black Anodized Finish, Add	124.08	
		For >10 To 20, Deduct	-47.51	
		For >20 To 40, Deduct	-88.82	
		For >40, Deduct	-183.85	
26 56 13 00-0395	EA	20' High, 6" OD, 0.188", Round Tapered, Aluminum Area Light Pole, Anchor Base .....	1,635.91	495.21
		For Bronze Or Satin Anodized Finish, Add	64.55	
		For Black Anodized Finish, Add	129.10	
		For >10 To 20, Deduct	-50.58	
		For >20 To 40, Deduct	-94.71	
		For >40, Deduct	-195.87	
26 56 13 00-0396	EA	23' High, 6" OD, 0.188", Round Tapered, Aluminum Area Light Pole, Anchor Base .....	1,873.67	577.75
		For Bronze Or Satin Anodized Finish, Add	71.82	
		For Black Anodized Finish, Add	143.63	
		For >10 To 20, Deduct	-57.61	
		For >20 To 40, Deduct	-108.05	
		For >40, Deduct	-223.28	
26 56 13 00-0397	EA	25' High, 6" OD, 0.188", Round Tapered, Aluminum Area Light Pole, Anchor Base .....	2,116.62	660.29
		For Bronze Or Satin Anodized Finish, Add	79.60	
		For Black Anodized Finish, Add	159.21	
		For >10 To 20, Deduct	-64.86	
		For >20 To 40, Deduct	-121.75	
		For >40, Deduct	-251.46	
26 56 13 00-0398	EA	23' High, 8" OD, 0.188", Round Tapered, Aluminum Area Light Pole, Anchor Base .....	2,069.21	577.75
		For Bronze Or Satin Anodized Finish, Add	91.37	
		For Black Anodized Finish, Add	182.74	
		For >10 To 20, Deduct	-65.44	
		For >20 To 40, Deduct	-121.73	
		For >40, Deduct	-252.61	
26 56 13 00-0399	EA	25' High, 8" OD, 0.188", Round Tapered, Aluminum Area Light Pole, Anchor Base .....	2,302.65	660.29
		For Bronze Or Satin Anodized Finish, Add	98.21	
		For Black Anodized Finish, Add	196.41	
		For >10 To 20, Deduct	-72.30	
		For >20 To 40, Deduct	-134.77	
		For >40, Deduct	-279.37	



Electrical		26
Lighting		26 50
Exterior Lighting		26 56

MINOR	CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
26 56 13 00-0400	EA	28' High, 8" OD, 0.188", Round Tapered, Aluminum Area Light Pole, Anchor Base	2,469.98	701.55	
		For Bronze Or Satin Anodized Finish, Add	106.69		
		For Black Anodized Finish, Add	213.37		
		For >10 To 20, Deduct	-77.75		
		For >20 To 40, Deduct	-144.84		
		For >40, Deduct	-300.34		
26 56 13 00-0401	EA	30' High, 8" OD, 0.188", Round Tapered, Aluminum Area Light Pole, Anchor Base	2,622.60	742.83	
		For Bronze Or Satin Anodized Finish, Add	113.70		
		For Black Anodized Finish, Add	227.39		
		For >10 To 20, Deduct	-82.62		
		For >20 To 40, Deduct	-153.87		
		For >40, Deduct	-319.11		
26 56 13 00-0402	EA	33' High, 8" OD, 0.188", Round Tapered, Aluminum Area Light Pole, Anchor Base	2,747.79	763.46	
		For Bronze Or Satin Anodized Finish, Add	122.09		
		For Black Anodized Finish, Add	244.18		
		For >10 To 20, Deduct	-87.01		
		For >20 To 40, Deduct	-161.81		
		For >40, Deduct	-335.82		
26 56 13 00-0403	EA	35' High, 8" OD, 0.188", Round Tapered, Aluminum Area Light Pole, Anchor Base	2,859.16	784.09	
		For Bronze Or Satin Anodized Finish, Add	129.10		
		For Black Anodized Finish, Add	258.19		
		For >10 To 20, Deduct	-90.84		
		For >20 To 40, Deduct	-168.78		
		For >40, Deduct	-350.46		
26 56 13 00-0404	EA	37' High, 8" OD, 0.188", Round Tapered, Aluminum Area Light Pole, Anchor Base	2,956.66	804.72	
		For Bronze Or Satin Anodized Finish, Add	134.72		
		For Black Anodized Finish, Add	269.44		
		For >10 To 20, Deduct	-94.12		
		For >20 To 40, Deduct	-174.78		
		For >40, Deduct	-363.03		
26 56 13 00-0405	EA	39' High, 8" OD, 0.188", Round Tapered, Aluminum Area Light Pole, Anchor Base	3,119.07	825.36	
		For Bronze Or Satin Anodized Finish, Add	146.84		
		For Black Anodized Finish, Add	293.67		
		For >10 To 20, Deduct	-100.00		
		For >20 To 40, Deduct	-185.32		
		For >40, Deduct	-385.32		
26 56 13 00-0406	EA	28' High, 10" OD, 0.188", Round Tapered, Aluminum Area Light Pole, Anchor Base	2,843.77	701.55	
		For Bronze Or Satin Anodized Finish, Add	144.07		
		For Black Anodized Finish, Add	288.13		
		For >10 To 20, Deduct	-92.70		
		For >20 To 40, Deduct	-171.00		
		For >40, Deduct	-356.41		
26 56 13 00-0407	EA	30' High, 10" OD, 0.188", Round Tapered, Aluminum Area Light Pole, Anchor Base	3,055.23	742.83	
		For Bronze Or Satin Anodized Finish, Add	156.96		
		For Black Anodized Finish, Add	313.92		
		For >10 To 20, Deduct	-99.92		
		For >20 To 40, Deduct	-184.15		
		For >40, Deduct	-384.00		
26 56 13 00-0408	EA	33' High, 10" OD, 0.188", Round Tapered, Aluminum Area Light Pole, Anchor Base	3,197.73	763.46	
		For Bronze Or Satin Anodized Finish, Add	167.08		
		For Black Anodized Finish, Add	334.16		
		For >10 To 20, Deduct	-105.01		
		For >20 To 40, Deduct	-193.30		
		For >40, Deduct	-403.31		
26 56 13 00-0409	EA	35' High, 10" OD, 0.188", Round Tapered, Aluminum Area Light Pole, Anchor Base	3,309.96	784.09	
		For Bronze Or Satin Anodized Finish, Add	174.18		
		For Black Anodized Finish, Add	348.35		
		For >10 To 20, Deduct	-108.88		
		For >20 To 40, Deduct	-200.33		
		For >40, Deduct	-418.08		
26 56 13 00-0410	EA	37' High, 10" OD, 0.188", Round Tapered, Aluminum Area Light Pole, Anchor Base	3,379.77	804.72	
		For Bronze Or Satin Anodized Finish, Add	177.03		
		For Black Anodized Finish, Add	354.06		
		For >10 To 20, Deduct	-111.05		
		For >20 To 40, Deduct	-204.39		
		For >40, Deduct	-426.49		
26 56 13 00-0411	EA	39' High, 10" OD, 0.188", Round Tapered, Aluminum Area Light Pole, Anchor Base	3,556.89	825.36	
		For Bronze Or Satin Anodized Finish, Add	190.62		
		For Black Anodized Finish, Add	381.23		
		For >10 To 20, Deduct	-117.51		
		For >20 To 40, Deduct	-215.97		
		For >40, Deduct	-451.00		
26 56 13 00-0412	EA	28' High, 8" OD, 0.250", Round Tapered, Aluminum Area Light Pole, Anchor Base	2,725.23	701.55	
		For Bronze Or Satin Anodized Finish, Add	132.21		
		For Black Anodized Finish, Add	264.42		
		For >10 To 20, Deduct	-87.96		
		For >20 To 40, Deduct	-162.70		
		For >40, Deduct	-338.63		
26 56 13 00-0413	EA	30' High, 8" OD, 0.250", Round Tapered, Aluminum Area Light Pole, Anchor Base	2,921.12	742.83	
		For Bronze Or Satin Anodized Finish, Add	143.55		
		For Black Anodized Finish, Add	287.09		
		For >10 To 20, Deduct	-94.56		
		For >20 To 40, Deduct	-174.77		
		For >40, Deduct	-363.89		

**26 Electrical**  
**26 50 Lighting**  
**26 56 Exterior Lighting**



MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
26 56 13 00-0414 EA 33' High, 8" OD, 0.250", Round Tapered, Aluminum Area Light Pole, Anchor Base .....3,001.31 763.46 For Bronze Or Satin Anodized Finish, Add 147.44 For Black Anodized Finish, Add 294.88 For >10 To 20, Deduct -97.15 For >20 To 40, Deduct -179.55 For >40, Deduct -373.85		
26 56 13 00-0415 EA 35' High, 8" OD, 0.250", Round Tapered, Aluminum Area Light Pole, Anchor Base .....3,181.03 784.09 For Bronze Or Satin Anodized Finish, Add 161.28 For Black Anodized Finish, Add 322.57 For >10 To 20, Deduct -103.72 For >20 To 40, Deduct -191.31 For >40, Deduct -398.75		
26 56 13 00-0416 EA 37' High, 8" OD, 0.250", Round Tapered, Aluminum Area Light Pole, Anchor Base .....3,277.67 804.72 For Bronze Or Satin Anodized Finish, Add 166.82 For Black Anodized Finish, Add 333.64 For >10 To 20, Deduct -106.97 For >20 To 40, Deduct -197.25 For >40, Deduct -411.18		
26 56 13 00-0417 EA 39' High, 8" OD, 0.250", Round Tapered, Aluminum Area Light Pole, Anchor Base .....3,455.65 825.36 For Bronze Or Satin Anodized Finish, Add 180.49 For Black Anodized Finish, Add 360.99 For >10 To 20, Deduct -113.47 For >20 To 40, Deduct -208.88 For >40, Deduct -435.81		
26 56 13 00-0418 EA 28' High, 10" OD, 0.250", Round Tapered, Aluminum Area Light Pole, Anchor Base .....3,266.88 701.55 For Bronze Or Satin Anodized Finish, Add 186.38 For Black Anodized Finish, Add 372.75 For >10 To 20, Deduct -109.63 For >20 To 40, Deduct -200.62 For >40, Deduct -419.88		
26 56 13 00-0419 EA 30' High, 10" OD, 0.250", Round Tapered, Aluminum Area Light Pole, Anchor Base .....3,454.98 742.83 For Bronze Or Satin Anodized Finish, Add 196.93 For Black Anodized Finish, Add 393.87 For >10 To 20, Deduct -115.91 For >20 To 40, Deduct -212.14 For >40, Deduct -443.96		
26 56 13 00-0420 EA 33' High, 10" OD, 0.250", Round Tapered, Aluminum Area Light Pole, Anchor Base .....3,599.21 763.46 For Bronze Or Satin Anodized Finish, Add 207.23 For Black Anodized Finish, Add 414.46 For >10 To 20, Deduct -121.06 For >20 To 40, Deduct -221.41 For >40, Deduct -463.54		
26 56 13 00-0421 EA 35' High, 10" OD, 0.250", Round Tapered, Aluminum Area Light Pole, Anchor Base .....3,813.54 784.09 For Bronze Or Satin Anodized Finish, Add 224.54 For Black Anodized Finish, Add 449.07 For >10 To 20, Deduct -129.02 For >20 To 40, Deduct -235.58 For >40, Deduct -493.62		
26 56 13 00-0422 EA 37' High, 10" OD, 0.250", Round Tapered, Aluminum Area Light Pole, Anchor Base .....3,873.84 804.72 For Bronze Or Satin Anodized Finish, Add 226.44 For Black Anodized Finish, Add 452.88 For >10 To 20, Deduct -130.81 For >20 To 40, Deduct -238.98 For >40, Deduct -500.60		
26 56 13 00-0423 EA 39' High, 10" OD, 0.250", Round Tapered, Aluminum Area Light Pole, Anchor Base .....4,087.29 825.36 For Bronze Or Satin Anodized Finish, Add 243.66 For Black Anodized Finish, Add 487.31 For >10 To 20, Deduct -138.73 For >20 To 40, Deduct -253.10 For >40, Deduct -530.56		
26 56 13 00-0424 EA 48' High, 10" OD, 0.250", Round Tapered, Aluminum Area Light Pole, Anchor Base .....5,313.27 1,238.04 For Bronze Or Satin Anodized Finish, Add 283.72 For Black Anodized Finish, Add 567.44 For >10 To 20, Deduct -175.39 For >20 To 40, Deduct -322.41 For >40, Deduct -673.19		
26 56 13 00-0425 EA 50' High, 10" OD, 0.250", Round Tapered, Aluminum Area Light Pole, Anchor Base .....5,420.56 1,238.04 For Bronze Or Satin Anodized Finish, Add 294.45 For Black Anodized Finish, Add 588.90 For >10 To 20, Deduct -179.68 For >20 To 40, Deduct -329.92 For >40, Deduct -689.28		
<b>26 56 13 00-0426 Round Tapered, Aluminum Area Light Poles, Hinged Anchor Base (26 56 13 00-0354)</b>		
26 56 13 00-0427 EA 8' High, 4" OD, 0.125", Round Tapered, Aluminum Area Light Pole, Hinged Anchor Base .....926.11 247.61 For Bronze, Satin Or Black Anodized Finish, Add 64.64 For >10 To 20, Deduct -29.62 For >20 To 40, Deduct -54.92 For >40, Deduct -114.16		
26 56 13 00-0428 EA 10' High, 4" OD, 0.125", Round Tapered, Aluminum Area Light Pole, Hinged Anchor Base .....1,026.82 288.88 For Bronze, Satin Or Black Anodized Finish, Add 67.36 For >10 To 20, Deduct -32.41 For >20 To 40, Deduct -60.32 For >40, Deduct -125.14		





Electrical			26
Lighting			26 50
Exterior Lighting			26 56

MINOR	CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
26 56 13 00-0429	EA	12'	High, 4" OD, 0.125", Round Tapered, Aluminum Area Light Pole, Hinged Anchor Base ..... <i>For Bronze, Satin Or Black Anodized Finish, Add</i> <i>For &gt;10 To 20, Deduct</i> <i>For &gt;20 To 40, Deduct</i> <i>For &gt;40, Deduct</i>	1,128.40 70.22 -35.23 -65.78 -136.25	330.14
26 56 13 00-0430	EA	14'	High, 4" OD, 0.125", Round Tapered, Aluminum Area Light Pole, Hinged Anchor Base ..... <i>For Bronze, Satin Or Black Anodized Finish, Add</i> <i>For &gt;10 To 20, Deduct</i> <i>For &gt;20 To 40, Deduct</i> <i>For &gt;40, Deduct</i>	1,231.70 73.33 -38.13 -71.36 -147.61	371.41
26 56 13 00-0431	EA	16'	High, 4" OD, 0.125", Round Tapered, Aluminum Area Light Pole, Hinged Anchor Base ..... <i>For Bronze, Satin Or Black Anodized Finish, Add</i> <i>For &gt;10 To 20, Deduct</i> <i>For &gt;20 To 40, Deduct</i> <i>For &gt;40, Deduct</i>	1,334.13 76.32 -40.98 -76.88 -158.85	412.68
26 56 13 00-0432	EA	10'	High, 5" OD, 0.125", Round Tapered, Aluminum Area Light Pole, Hinged Anchor Base ..... <i>For Bronze, Satin Or Black Anodized Finish, Add</i> <i>For &gt;10 To 20, Deduct</i> <i>For &gt;20 To 40, Deduct</i> <i>For &gt;40, Deduct</i>	1,037.20 68.92 -32.82 -61.05 -126.69	288.88
26 56 13 00-0433	EA	12'	High, 5" OD, 0.125", Round Tapered, Aluminum Area Light Pole, Hinged Anchor Base ..... <i>For Bronze, Satin Or Black Anodized Finish, Add</i> <i>For &gt;10 To 20, Deduct</i> <i>For &gt;20 To 40, Deduct</i> <i>For &gt;40, Deduct</i>	1,140.51 72.03 -35.72 -66.63 -138.06	330.14
26 56 13 00-0434	EA	14'	High, 5" OD, 0.125", Round Tapered, Aluminum Area Light Pole, Hinged Anchor Base ..... <i>For Bronze, Satin Or Black Anodized Finish, Add</i> <i>For &gt;10 To 20, Deduct</i> <i>For &gt;20 To 40, Deduct</i> <i>For &gt;40, Deduct</i>	1,245.55 75.41 -38.68 -72.33 -149.69	371.41
26 56 13 00-0435	EA	16'	High, 5" OD, 0.125", Round Tapered, Aluminum Area Light Pole, Hinged Anchor Base ..... <i>For Bronze, Satin Or Black Anodized Finish, Add</i> <i>For &gt;10 To 20, Deduct</i> <i>For &gt;20 To 40, Deduct</i> <i>For &gt;40, Deduct</i>	1,349.71 78.65 -41.61 -77.97 -161.19	412.68
26 56 13 00-0436	EA	18'	High, 5" OD, 0.125", Round Tapered, Aluminum Area Light Pole, Hinged Anchor Base ..... <i>For Bronze, Satin Or Black Anodized Finish, Add</i> <i>For &gt;10 To 20, Deduct</i> <i>For &gt;20 To 40, Deduct</i> <i>For &gt;40, Deduct</i>	1,465.13 83.58 -44.99 -84.40 -174.37	453.95
26 56 13 00-0437	EA	20'	High, 5" OD, 0.125", Round Tapered, Aluminum Area Light Pole, Hinged Anchor Base ..... <i>For Bronze, Satin Or Black Anodized Finish, Add</i> <i>For &gt;10 To 20, Deduct</i> <i>For &gt;20 To 40, Deduct</i> <i>For &gt;40, Deduct</i>	1,572.75 87.35 -48.05 -90.28 -186.39	495.21
26 56 13 00-0438	EA	12'	High, 5" OD, 0.156", Round Tapered, Aluminum Area Light Pole, Hinged Anchor Base ..... <i>For Bronze, Satin Or Black Anodized Finish, Add</i> <i>For &gt;10 To 20, Deduct</i> <i>For &gt;20 To 40, Deduct</i> <i>For &gt;40, Deduct</i>	1,174.25 77.09 -37.07 -68.99 -143.12	330.14
26 56 13 00-0439	EA	14'	High, 5" OD, 0.156", Round Tapered, Aluminum Area Light Pole, Hinged Anchor Base ..... <i>For Bronze, Satin Or Black Anodized Finish, Add</i> <i>For &gt;10 To 20, Deduct</i> <i>For &gt;20 To 40, Deduct</i> <i>For &gt;40, Deduct</i>	1,283.62 81.12 -40.20 -75.00 -155.40	371.41
26 56 13 00-0440	EA	16'	High, 5" OD, 0.156", Round Tapered, Aluminum Area Light Pole, Hinged Anchor Base ..... <i>For Bronze, Satin Or Black Anodized Finish, Add</i> <i>For &gt;10 To 20, Deduct</i> <i>For &gt;20 To 40, Deduct</i> <i>For &gt;40, Deduct</i>	1,403.35 86.70 -43.75 -81.73 -169.23	412.68
26 56 13 00-0441	EA	18'	High, 5" OD, 0.156", Round Tapered, Aluminum Area Light Pole, Hinged Anchor Base ..... <i>For Bronze, Satin Or Black Anodized Finish, Add</i> <i>For &gt;10 To 20, Deduct</i> <i>For &gt;20 To 40, Deduct</i> <i>For &gt;40, Deduct</i>	1,514.45 90.98 -46.96 -87.85 -181.77	453.95
26 56 13 00-0442	EA	20'	High, 5" OD, 0.156", Round Tapered, Aluminum Area Light Pole, Hinged Anchor Base ..... <i>For Bronze, Satin Or Black Anodized Finish, Add</i> <i>For &gt;10 To 20, Deduct</i> <i>For &gt;20 To 40, Deduct</i> <i>For &gt;40, Deduct</i>	1,636.78 96.95 -50.61 -94.77 -196.00	495.21
26 56 13 00-0443	EA	16'	High, 6" OD, 0.156", Round Tapered, Aluminum Area Light Pole, Hinged Anchor Base ..... <i>For Bronze, Satin Or Black Anodized Finish, Add</i> <i>For &gt;10 To 20, Deduct</i> <i>For &gt;20 To 40, Deduct</i> <i>For &gt;40, Deduct</i>	1,452.67 94.10 -45.73 -85.18 -176.63	412.68
26 56 13 00-0444	EA	18'	High, 6" OD, 0.156", Round Tapered, Aluminum Area Light Pole, Hinged Anchor Base ..... <i>For Bronze, Satin Or Black Anodized Finish, Add</i> <i>For &gt;10 To 20, Deduct</i> <i>For &gt;20 To 40, Deduct</i> <i>For &gt;40, Deduct</i>	1,581.07 100.98 -49.62 -92.52 -191.77	453.95
26 56 13 00-0445	EA	20'	High, 6" OD, 0.156", Round Tapered, Aluminum Area Light Pole, Hinged Anchor Base ..... <i>For Bronze, Satin Or Black Anodized Finish, Add</i> <i>For &gt;10 To 20, Deduct</i> <i>For &gt;20 To 40, Deduct</i> <i>For &gt;40, Deduct</i>	1,690.43 105.00 -52.76 -98.52 -204.04	495.21

**26 Electrical**  
**26 50 Lighting**  
**26 56 Exterior Lighting**



MINOR	CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
26 56 13 00-0446	EA	12'	High, 5" OD, 0.188", Round Tapered, Aluminum Area Light Pole, Hinged Anchor Base .....	1,201.08	330.14
			For Bronze, Satin Or Black Anodized Finish, Add	81.12	
			For >10 To 20, Deduct	-38.14	
			For >20 To 40, Deduct	-70.87	
			For >40, Deduct	-147.15	
26 56 13 00-0447	EA	14'	High, 5" OD, 0.188", Round Tapered, Aluminum Area Light Pole, Hinged Anchor Base .....	1,324.28	371.41
			For Bronze, Satin Or Black Anodized Finish, Add	87.22	
			For >10 To 20, Deduct	-41.83	
			For >20 To 40, Deduct	-77.84	
			For >40, Deduct	-161.50	
26 56 13 00-0448	EA	16'	High, 5" OD, 0.188", Round Tapered, Aluminum Area Light Pole, Hinged Anchor Base .....	1,452.67	412.68
			For Bronze, Satin Or Black Anodized Finish, Add	94.10	
			For >10 To 20, Deduct	-45.73	
			For >20 To 40, Deduct	-85.18	
			For >40, Deduct	-176.63	
26 56 13 00-0449	EA	18'	High, 5" OD, 0.188", Round Tapered, Aluminum Area Light Pole, Hinged Anchor Base .....	1,570.69	453.95
			For Bronze, Satin Or Black Anodized Finish, Add	99.42	
			For >10 To 20, Deduct	-49.21	
			For >20 To 40, Deduct	-91.79	
			For >40, Deduct	-190.21	
26 56 13 00-0450	EA	20'	High, 5" OD, 0.188", Round Tapered, Aluminum Area Light Pole, Hinged Anchor Base .....	1,694.75	495.21
			For Bronze, Satin Or Black Anodized Finish, Add	105.65	
			For >10 To 20, Deduct	-52.93	
			For >20 To 40, Deduct	-98.82	
			For >40, Deduct	-204.69	
26 56 13 00-0451	EA	16'	High, 6" OD, 0.188", Round Tapered, Aluminum Area Light Pole, Hinged Anchor Base .....	1,508.92	412.68
			For Bronze, Satin Or Black Anodized Finish, Add	102.53	
			For >10 To 20, Deduct	-47.98	
			For >20 To 40, Deduct	-89.12	
			For >40, Deduct	-185.07	
26 56 13 00-0452	EA	18'	High, 6" OD, 0.188", Round Tapered, Aluminum Area Light Pole, Hinged Anchor Base .....	1,644.24	453.95
			For Bronze, Satin Or Black Anodized Finish, Add	110.45	
			For >10 To 20, Deduct	-52.15	
			For >20 To 40, Deduct	-96.94	
			For >40, Deduct	-201.24	
26 56 13 00-0453	EA	20'	High, 6" OD, 0.188", Round Tapered, Aluminum Area Light Pole, Hinged Anchor Base .....	1,757.92	495.21
			For Bronze, Satin Or Black Anodized Finish, Add	115.12	
			For >10 To 20, Deduct	-55.46	
			For >20 To 40, Deduct	-103.25	
			For >40, Deduct	-214.17	
<b>26 56 13 00-0454 Round Tapered, Aluminum Area Light Poles, Direct Burial</b> (26 56 13 00-0354)					
Note: Includes rubberized undercoating on embedded portion.					
26 56 13 00-0455	EA	8'	High, 4" OD, 0.125", Round Tapered, Aluminum Area Light Pole, Direct Burial .....	668.80	206.34
			For Bronze Or Satin Anodized Finish, Add	25.61	
			For Black Anodized Finish, Add	51.22	
			For >10 To 20, Deduct	-20.56	
			For >20 To 40, Deduct	-38.56	
			For >40, Deduct	-79.69	
26 56 13 00-0456	EA	10'	High, 4" OD, 0.125", Round Tapered, Aluminum Area Light Pole, Direct Burial .....	693.02	206.34
			For Bronze Or Satin Anodized Finish, Add	28.03	
			For Black Anodized Finish, Add	56.07	
			For >10 To 20, Deduct	-21.53	
			For >20 To 40, Deduct	-40.26	
			For >40, Deduct	-83.32	
26 56 13 00-0457	EA	12'	High, 4" OD, 0.125", Round Tapered, Aluminum Area Light Pole, Direct Burial .....	754.20	226.97
			For Bronze Or Satin Anodized Finish, Add	30.03	
			For Black Anodized Finish, Add	60.05	
			For >10 To 20, Deduct	-23.36	
			For >20 To 40, Deduct	-43.72	
			For >40, Deduct	-90.43	
26 56 13 00-0458	EA	14'	High, 4" OD, 0.125", Round Tapered, Aluminum Area Light Pole, Direct Burial .....	809.30	247.61
			For Bronze Or Satin Anodized Finish, Add	31.41	
			For Black Anodized Finish, Add	62.82	
			For >10 To 20, Deduct	-24.94	
			For >20 To 40, Deduct	-46.75	
			For >40, Deduct	-96.63	
26 56 13 00-0459	EA	16'	High, 4" OD, 0.125", Round Tapered, Aluminum Area Light Pole, Direct Burial .....	840.45	247.61
			For Bronze Or Satin Anodized Finish, Add	34.52	
			For Black Anodized Finish, Add	69.05	
			For >10 To 20, Deduct	-26.19	
			For >20 To 40, Deduct	-48.93	
			For >40, Deduct	-101.31	
26 56 13 00-0460	EA	12'	High, 5" OD, 0.125", Round Tapered, Aluminum Area Light Pole, Direct Burial .....	777.56	226.97
			For Bronze Or Satin Anodized Finish, Add	32.36	
			For Black Anodized Finish, Add	64.72	
			For >10 To 20, Deduct	-24.29	
			For >20 To 40, Deduct	-45.35	
			For >40, Deduct	-93.94	
26 56 13 00-0461	EA	14'	High, 5" OD, 0.125", Round Tapered, Aluminum Area Light Pole, Direct Burial .....	843.04	247.61
			For Bronze Or Satin Anodized Finish, Add	34.78	
			For Black Anodized Finish, Add	69.57	
			For >10 To 20, Deduct	-26.29	
			For >20 To 40, Deduct	-49.11	
			For >40, Deduct	-101.70	



Electrical		26
Lighting		26 50
Exterior Lighting		26 56

MINOR	CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
26 56 13 00-0462	EA	16'	High, 5" OD, 0.125", Round Tapered, Aluminum Area Light Pole, Direct Burial .....	860.35	247.61
			For Bronze Or Satin Anodized Finish, Add	36.51	
			For Black Anodized Finish, Add	73.03	
			For >10 To 20, Deduct	-26.99	
			For >20 To 40, Deduct	-50.32	
			For >40, Deduct	-104.29	
26 56 13 00-0463	EA	18'	High, 5" OD, 0.125", Round Tapered, Aluminum Area Light Pole, Direct Burial .....	929.32	268.24
			For Bronze Or Satin Anodized Finish, Add	39.28	
			For Black Anodized Finish, Add	78.57	
			For >10 To 20, Deduct	-29.13	
			For >20 To 40, Deduct	-54.32	
			For >40, Deduct	-112.57	
26 56 13 00-0464	EA	20'	High, 5" OD, 0.125", Round Tapered, Aluminum Area Light Pole, Direct Burial .....	994.81	288.88
			For Bronze Or Satin Anodized Finish, Add	41.71	
			For Black Anodized Finish, Add	83.41	
			For >10 To 20, Deduct	-31.13	
			For >20 To 40, Deduct	-58.08	
			For >40, Deduct	-120.33	
26 56 13 00-0465	EA	16'	High, 5" OD, 0.156", Round Tapered, Aluminum Area Light Pole, Direct Burial .....	910.53	247.61
			For Bronze Or Satin Anodized Finish, Add	41.53	
			For Black Anodized Finish, Add	83.06	
			For >10 To 20, Deduct	-28.99	
			For >20 To 40, Deduct	-53.83	
			For >40, Deduct	-111.82	
26 56 13 00-0466	EA	18'	High, 5" OD, 0.156", Round Tapered, Aluminum Area Light Pole, Direct Burial .....	984.69	268.24
			For Bronze Or Satin Anodized Finish, Add	44.82	
			For Black Anodized Finish, Add	89.64	
			For >10 To 20, Deduct	-31.34	
			For >20 To 40, Deduct	-58.20	
			For >40, Deduct	-120.88	
26 56 13 00-0467	EA	20'	High, 5" OD, 0.156", Round Tapered, Aluminum Area Light Pole, Direct Burial .....	1,054.51	288.88
			For Bronze Or Satin Anodized Finish, Add	47.68	
			For Black Anodized Finish, Add	95.35	
			For >10 To 20, Deduct	-33.51	
			For >20 To 40, Deduct	-62.26	
			For >40, Deduct	-129.29	
26 56 13 00-0468	EA	18'	High, 6" OD, 0.156", Round Tapered, Aluminum Area Light Pole, Direct Burial .....	1,055.65	268.24
			For Bronze Or Satin Anodized Finish, Add	51.92	
			For Black Anodized Finish, Add	103.83	
			For >10 To 20, Deduct	-34.18	
			For >20 To 40, Deduct	-63.17	
			For >40, Deduct	-131.52	
26 56 13 00-0469	EA	25'	High, 6" OD, 0.156", Round Tapered, Aluminum Area Light Pole, Direct Burial .....	1,341.25	330.14
			For Bronze Or Satin Anodized Finish, Add	68.10	
			For Black Anodized Finish, Add	136.19	
			For >10 To 20, Deduct	-43.75	
			For >20 To 40, Deduct	-80.68	
			For >40, Deduct	-168.17	
26 56 13 00-0470	EA	25'	High, 6" OD, 0.188", Round Tapered, Aluminum Area Light Pole, Direct Burial .....	1,439.02	330.14
			For Bronze Or Satin Anodized Finish, Add	77.87	
			For Black Anodized Finish, Add	155.75	
			For >10 To 20, Deduct	-47.66	
			For >20 To 40, Deduct	-87.53	
			For >40, Deduct	-182.84	
26 56 13 00-0471	EA	30'	High, 7" OD, 0.156", Round Tapered, Aluminum Area Light Pole, Direct Burial .....	1,605.49	371.41
			For Bronze Or Satin Anodized Finish, Add	86.27	
			For Black Anodized Finish, Add	172.53	
			For >10 To 20, Deduct	-53.08	
			For >20 To 40, Deduct	-97.53	
			For >40, Deduct	-203.68	
26 56 13 00-0472	EA	30'	High, 8" OD, 0.156", Round Tapered, Aluminum Area Light Pole, Direct Burial .....	1,711.92	371.41
			For Bronze Or Satin Anodized Finish, Add	96.91	
			For Black Anodized Finish, Add	193.82	
			For >10 To 20, Deduct	-57.33	
			For >20 To 40, Deduct	-104.98	
			For >40, Deduct	-219.65	
26 56 13 00-0473	Square Straight, Aluminum Area Light Poles (26 56 13 00-0294)				
26 56 13 00-0474	Square Straight, Aluminum Area Light Poles, Anchor Base (26 56 13 00-0473)				
26 56 13 00-0475	EA	8'	High, 4" OD, 0.125", Square Straight, Aluminum Area Light Pole, Anchor Base .....	852.56	247.61
			For Bronze Or Satin Anodized Finish, Add	35.74	
			For Black Anodized Finish, Add	71.47	
			For >10 To 20, Deduct	-26.67	
			For >20 To 40, Deduct	-49.78	
			For >40, Deduct	-103.12	
26 56 13 00-0476	EA	10'	High, 4" OD, 0.125", Square Straight, Aluminum Area Light Pole, Anchor Base .....	953.27	288.88
			For Bronze Or Satin Anodized Finish, Add	37.55	
			For Black Anodized Finish, Add	75.10	
			For >10 To 20, Deduct	-29.46	
			For >20 To 40, Deduct	-55.17	
			For >40, Deduct	-114.10	

**26 Electrical**  
**26 50 Lighting**  
**26 56 Exterior Lighting**



MINOR	CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
26 56 13 00-0477	EA	12' High, 4" OD, 0.125", Square Straight, Aluminum Area Light Pole, Anchor Base	.....	1,060.91	330.14
		For Bronze Or Satin Anodized Finish, Add		40.06	
		For Black Anodized Finish, Add		80.12	
		For >10 To 20, Deduct		-32.53	
		For >20 To 40, Deduct		-61.06	
		For >40, Deduct		-126.12	
26 56 13 00-0478	EA	14' High, 4" OD, 0.125", Square Straight, Aluminum Area Light Pole, Anchor Base	.....	1,167.67	371.41
		For Bronze Or Satin Anodized Finish, Add		42.48	
		For Black Anodized Finish, Add		84.97	
		For >10 To 20, Deduct		-35.56	
		For >20 To 40, Deduct		-66.88	
		For >40, Deduct		-138.01	
26 56 13 00-0479	EA	15' High, 4" OD, 0.125", Square Straight, Aluminum Area Light Pole, Anchor Base	.....	1,224.51	392.04
		For Bronze Or Satin Anodized Finish, Add		44.04	
		For Black Anodized Finish, Add		88.08	
		For >10 To 20, Deduct		-37.22	
		For >20 To 40, Deduct		-70.03	
		For >40, Deduct		-144.47	
26 56 13 00-0480	EA	16' High, 4" OD, 0.125", Square Straight, Aluminum Area Light Pole, Anchor Base	.....	1,281.35	412.68
		For Bronze Or Satin Anodized Finish, Add		45.60	
		For Black Anodized Finish, Add		91.20	
		For >10 To 20, Deduct		-38.87	
		For >20 To 40, Deduct		-73.19	
		For >40, Deduct		-150.93	
26 56 13 00-0481	EA	18' High, 4" OD, 0.125", Square Straight, Aluminum Area Light Pole, Anchor Base	.....	1,393.31	453.95
		For Bronze Or Satin Anodized Finish, Add		48.54	
		For Black Anodized Finish, Add		97.08	
		For >10 To 20, Deduct		-42.11	
		For >20 To 40, Deduct		-79.37	
		For >40, Deduct		-163.60	
26 56 13 00-0482	EA	20' High, 4" OD, 0.125", Square Straight, Aluminum Area Light Pole, Anchor Base	.....	1,513.05	495.21
		For Bronze Or Satin Anodized Finish, Add		52.26	
		For Black Anodized Finish, Add		104.52	
		For >10 To 20, Deduct		-45.67	
		For >20 To 40, Deduct		-86.10	
		For >40, Deduct		-177.44	
26 56 13 00-0483	EA	16' High, 4" OD, 0.188", Square Straight, Aluminum Area Light Pole, Anchor Base	.....	1,341.06	412.68
		For Bronze Or Satin Anodized Finish, Add		51.57	
		For Black Anodized Finish, Add		103.14	
		For >10 To 20, Deduct		-41.26	
		For >20 To 40, Deduct		-77.37	
		For >40, Deduct		-159.89	
26 56 13 00-0484	EA	18' High, 4" OD, 0.188", Square Straight, Aluminum Area Light Pole, Anchor Base	.....	1,454.74	453.95
		For Bronze Or Satin Anodized Finish, Add		54.68	
		For Black Anodized Finish, Add		109.37	
		For >10 To 20, Deduct		-44.57	
		For >20 To 40, Deduct		-83.67	
		For >40, Deduct		-172.82	
26 56 13 00-0485	EA	20' High, 4" OD, 0.188", Square Straight, Aluminum Area Light Pole, Anchor Base	.....	1,579.67	495.21
		For Bronze Or Satin Anodized Finish, Add		58.92	
		For Black Anodized Finish, Add		117.85	
		For >10 To 20, Deduct		-48.33	
		For >20 To 40, Deduct		-90.77	
		For >40, Deduct		-187.43	
26 56 13 00-0486	EA	15' High, 5" OD, 0.188", Square Straight, Aluminum Area Light Pole, Anchor Base	.....	1,484.09	392.04
		For Bronze Or Satin Anodized Finish, Add		70.00	
		For Black Anodized Finish, Add		140.00	
		For >10 To 20, Deduct		-47.60	
		For >20 To 40, Deduct		-88.20	
		For >40, Deduct		-183.41	
26 56 13 00-0487	EA	20' High, 5" OD, 0.188", Square Straight, Aluminum Area Light Pole, Anchor Base	.....	1,828.00	495.21
		For Bronze Or Satin Anodized Finish, Add		83.76	
		For Black Anodized Finish, Add		167.51	
		For >10 To 20, Deduct		-58.26	
		For >20 To 40, Deduct		-108.15	
		For >40, Deduct		-224.68	
26 56 13 00-0488	EA	25' High, 5" OD, 0.188", Square Straight, Aluminum Area Light Pole, Anchor Base	.....	2,266.31	660.29
		For Bronze Or Satin Anodized Finish, Add		94.57	
		For Black Anodized Finish, Add		189.15	
		For >10 To 20, Deduct		-70.84	
		For >20 To 40, Deduct		-132.23	
		For >40, Deduct		-273.92	
26 56 13 00-0489	EA	20' High, 4" OD, 0.250", Square Straight, Aluminum Area Light Pole, Anchor Base	.....	1,633.32	495.21
		For Bronze Or Satin Anodized Finish, Add		64.29	
		For Black Anodized Finish, Add		128.58	
		For >10 To 20, Deduct		-50.48	
		For >20 To 40, Deduct		-94.52	
		For >40, Deduct		-195.48	
26 56 13 00-0490	EA	20' High, 5" OD, 0.250", Square Straight, Aluminum Area Light Pole, Anchor Base	.....	1,932.70	495.21
		For Bronze Or Satin Anodized Finish, Add		94.23	
		For Black Anodized Finish, Add		188.45	
		For >10 To 20, Deduct		-62.45	
		For >20 To 40, Deduct		-115.48	
		For >40, Deduct		-240.38	



Electrical		26
Lighting		26 50
Exterior Lighting		26 56

26

MINOR	CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
26 56 13 00-0491	EA	25'	High, 5" OD, 0.250", Square Straight, Aluminum Area Light Pole, Anchor Base ..... For Bronze Or Satin Anodized Finish, Add For Black Anodized Finish, Add For >10 To 20, Deduct For >20 To 40, Deduct For >40, Deduct	2,361.49 104.09 208.18 -74.65 -138.89 -288.19	660.29
26 56 13 00-0492	EA	20'	High, 6" OD, 0.250", Square Straight, Aluminum Area Light Pole, Anchor Base ..... For Bronze Or Satin Anodized Finish, Add For Black Anodized Finish, Add For >10 To 20, Deduct For >20 To 40, Deduct For >40, Deduct	2,097.10 110.67 221.33 -69.03 -126.99 -265.04	495.21
26 56 13 00-0493	EA	25'	High, 6" OD, 0.250", Square Straight, Aluminum Area Light Pole, Anchor Base ..... For Bronze Or Satin Anodized Finish, Add For Black Anodized Finish, Add For >10 To 20, Deduct For >20 To 40, Deduct For >40, Deduct	2,576.07 125.55 251.10 -83.23 -153.91 -320.38	660.29
26 56 13 00-0494	EA	30'	High, 6" OD, 0.250", Square Straight, Aluminum Area Light Pole, Anchor Base ..... For Bronze Or Satin Anodized Finish, Add For Black Anodized Finish, Add For >10 To 20, Deduct For >20 To 40, Deduct For >40, Deduct	2,964.38 147.87 295.75 -96.29 -177.79 -370.37	742.83
26 56 13 00-0495	Square Straight, Aluminum Area Light Poles, Direct Burial (26 56 13 00-0473) Note: Includes rubberized undercoating on embedded portion.				
26 56 13 00-0496	EA	10'	High, 4" OD, 0.125", Square Straight, Aluminum Area Light Pole, Direct Burial ..... For Bronze Or Satin Anodized Finish, Add For Black Anodized Finish, Add For >10 To 20, Deduct For >20 To 40, Deduct For >40, Deduct	753.59 34.09 68.18 -23.95 -44.50 -92.40	206.34
26 56 13 00-0497	EA	12'	High, 4" OD, 0.125", Square Straight, Aluminum Area Light Pole, Direct Burial ..... For Bronze Or Satin Anodized Finish, Add For Black Anodized Finish, Add For >10 To 20, Deduct For >20 To 40, Deduct For >40, Deduct	838.99 38.50 77.01 -26.75 -49.65 -103.15	226.97
26 56 13 00-0498	EA	14'	High, 4" OD, 0.125", Square Straight, Aluminum Area Light Pole, Direct Burial ..... For Bronze Or Satin Anodized Finish, Add For Black Anodized Finish, Add For >10 To 20, Deduct For >20 To 40, Deduct For >40, Deduct	898.42 40.32 80.64 -28.51 -52.99 -110.00	247.61
26 56 13 00-0499	EA	15'	High, 4" OD, 0.125", Square Straight, Aluminum Area Light Pole, Direct Burial ..... For Bronze Or Satin Anodized Finish, Add For Black Anodized Finish, Add For >10 To 20, Deduct For >20 To 40, Deduct For >40, Deduct	920.05 42.48 84.97 -29.37 -54.50 -113.25	247.61
26 56 13 00-0500	EA	16'	High, 4" OD, 0.125", Square Straight, Aluminum Area Light Pole, Direct Burial ..... For Bronze Or Satin Anodized Finish, Add For Black Anodized Finish, Add For >10 To 20, Deduct For >20 To 40, Deduct For >40, Deduct	946.88 45.17 90.33 -30.45 -56.38 -117.27	247.61
26 56 13 00-0501	EA	18'	High, 4" OD, 0.188", Square Straight, Aluminum Area Light Pole, Direct Burial ..... For Bronze Or Satin Anodized Finish, Add For Black Anodized Finish, Add For >10 To 20, Deduct For >20 To 40, Deduct For >40, Deduct	1,079.87 54.34 108.68 -35.15 -64.86 -135.16	268.24
26 56 13 00-0502	EA	20'	High, 4" OD, 0.188", Square Straight, Aluminum Area Light Pole, Direct Burial ..... For Bronze Or Satin Anodized Finish, Add For Black Anodized Finish, Add For >10 To 20, Deduct For >20 To 40, Deduct For >40, Deduct	1,158.34 58.06 116.12 -37.67 -69.53 -144.86	288.88
26 56 13 00-0503	EA	20'	High, 5" OD, 0.188", Square Straight, Aluminum Area Light Pole, Direct Burial ..... For Bronze Or Satin Anodized Finish, Add For Black Anodized Finish, Add For >10 To 20, Deduct For >20 To 40, Deduct For >40, Deduct	1,294.19 71.64 143.29 -43.10 -79.04 -165.24	288.88
26 56 13 00-0504	EA	25'	High, 5" OD, 0.188", Square Straight, Aluminum Area Light Pole, Direct Burial ..... For Bronze Or Satin Anodized Finish, Add For Black Anodized Finish, Add For >10 To 20, Deduct For >20 To 40, Deduct For >40, Deduct	1,485.75 82.55 165.09 -49.53 -90.80 -189.85	330.14

**26 Electrical**  
**26 50 Lighting**  
**26 56 Exterior Lighting**



MINOR	CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
26 56 13 00-0505	EA		25' High, 6" OD, 0.250", Square Straight, Aluminum Area Light Pole, Direct Burial .....	1,789.45	330.14
			For Bronze Or Satin Anodized Finish, Add .....	112.92	
			For Black Anodized Finish, Add .....	225.83	
			For >10 To 20, Deduct .....	-61.67	
			For >20 To 40, Deduct .....	-112.06	
			For >40, Deduct .....	-235.40	
26 56 13 00-0506			<b>Factory Accessories For Aluminum Area Light Poles</b> (26 56 13 00-0294)		
26 56 13 00-0507	EA		1/2", 3/4" Or 1" Factory Threaded Pipe Coupling Or Nipple For Aluminum Area Light Poles .....	97.38	
26 56 13 00-0508	EA		Extra Handhole For Aluminum Area Light Poles.....	32.25	
26 56 13 00-0509	EA		Vibration Dampener For Aluminum Area Light Poles.....	147.31	
26 56 13 00-0510			<b>Fiberglass Area Light Poles</b> (26 56 13 00-0177)		
			Note: Includes UV resistant textured weave finish, anchor bolts, base cover, reinforced handhole with cover and grounding provisions and tenon top.		
26 56 13 00-0511			<b>Round Tapered, Fiberglass Area Light Poles</b> (26 56 13 00-0510)		
26 56 13 00-0512			<b>Round Tapered, Fiberglass Area Light Poles, Anchor Base</b> (26 56 13 00-0511)		
26 56 13 00-0513	EA		10' High, 3.5" Top OD, Round Tapered, Fiberglass Area Light Pole, Anchor Base.....	1,488.57	288.88
			For >10 To 20, Deduct .....	-50.88	
			For >20 To 40, Deduct .....	-92.64	
			For >40, Deduct .....	-194.40	
26 56 13 00-0514	EA		12' High, 3.5" Top OD, Round Tapered, Fiberglass Area Light Pole, Anchor Base.....	1,625.33	330.14
			For >10 To 20, Deduct .....	-55.11	
			For >20 To 40, Deduct .....	-100.57	
			For >40, Deduct .....	-210.79	
26 56 13 00-0515	EA		14' High, 3.5" Top OD, Round Tapered, Fiberglass Area Light Pole, Anchor Base.....	1,763.63	371.41
			For >10 To 20, Deduct .....	-59.40	
			For >20 To 40, Deduct .....	-108.60	
			For >40, Deduct .....	-227.40	
26 56 13 00-0516	EA		16' High, 3.5" Top OD, Round Tapered, Fiberglass Area Light Pole, Anchor Base.....	1,900.38	412.68
			For >10 To 20, Deduct .....	-63.63	
			For >20 To 40, Deduct .....	-116.52	
			For >40, Deduct .....	-243.79	
26 56 13 00-0517	EA		18' High, 3.5" Top OD, Round Tapered, Fiberglass Area Light Pole, Anchor Base.....	2,065.02	453.95
			For >10 To 20, Deduct .....	-68.98	
			For >20 To 40, Deduct .....	-126.39	
			For >40, Deduct .....	-264.36	
26 56 13 00-0518	EA		20' High, 3.5" Top OD, Round Tapered, Fiberglass Area Light Pole, Anchor Base.....	2,204.86	495.21
			For >10 To 20, Deduct .....	-73.34	
			For >20 To 40, Deduct .....	-134.53	
			For >40, Deduct .....	-281.21	
26 56 13 00-0519	EA		22' High, 3.5" Top OD, Round Tapered, Fiberglass Area Light Pole, Anchor Base.....	2,425.70	577.75
			For >10 To 20, Deduct .....	-79.70	
			For >20 To 40, Deduct .....	-146.69	
			For >40, Deduct .....	-306.08	
26 56 13 00-0520	EA		24' High, 3.5" Top OD, Round Tapered, Fiberglass Area Light Pole, Anchor Base.....	2,644.99	660.29
			For >10 To 20, Deduct .....	-85.99	
			For >20 To 40, Deduct .....	-158.74	
			For >40, Deduct .....	-330.72	
26 56 13 00-0521	EA		26' High, 3.5" Top OD, Round Tapered, Fiberglass Area Light Pole, Anchor Base.....	2,770.46	660.29
			For >10 To 20, Deduct .....	-91.01	
			For >20 To 40, Deduct .....	-167.52	
			For >40, Deduct .....	-349.54	
26 56 13 00-0522	EA		28' High, 3.5" Top OD, Round Tapered, Fiberglass Area Light Pole, Anchor Base.....	2,962.97	701.55
			For >10 To 20, Deduct .....	-97.47	
			For >20 To 40, Deduct .....	-179.35	
			For >40, Deduct .....	-374.29	
26 56 13 00-0523	EA		30' High, 3.5" Top OD, Round Tapered, Fiberglass Area Light Pole, Anchor Base.....	3,155.49	742.83
			For >10 To 20, Deduct .....	-103.93	
			For >20 To 40, Deduct .....	-191.17	
			For >40, Deduct .....	-399.04	
26 56 13 00-0524	EA		10' High, 4.5" Top OD, Round Tapered, Fiberglass Area Light Pole, Anchor Base.....	1,631.08	288.88
			For >10 To 20, Deduct .....	-56.58	
			For >20 To 40, Deduct .....	-102.62	
			For >40, Deduct .....	-215.77	
26 56 13 00-0525	EA		12' High, 4.5" Top OD, Round Tapered, Fiberglass Area Light Pole, Anchor Base.....	1,739.96	330.14
			For >10 To 20, Deduct .....	-59.69	
			For >20 To 40, Deduct .....	-108.59	
			For >40, Deduct .....	-227.98	
26 56 13 00-0526	EA		14' High, 4.5" Top OD, Round Tapered, Fiberglass Area Light Pole, Anchor Base.....	1,850.38	371.41
			For >10 To 20, Deduct .....	-62.87	
			For >20 To 40, Deduct .....	-114.67	
			For >40, Deduct .....	-240.42	
26 56 13 00-0527	EA		16' High, 4.5" Top OD, Round Tapered, Fiberglass Area Light Pole, Anchor Base.....	1,963.89	412.68
			For >10 To 20, Deduct .....	-66.18	
			For >20 To 40, Deduct .....	-120.97	
			For >40, Deduct .....	-253.32	
26 56 13 00-0528	EA		18' High, 4.5" Top OD, Round Tapered, Fiberglass Area Light Pole, Anchor Base.....	2,085.16	453.95
			For >10 To 20, Deduct .....	-69.79	
			For >20 To 40, Deduct .....	-127.80	
			For >40, Deduct .....	-267.38	



Electrical		26
Lighting		26 50
Exterior Lighting		26 56

MINOR CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
26 56 13 00-0529	EA	20' High, 4.5" Top OD, Round Tapered, Fiberglass Area Light Pole, Anchor Base.....	2,204.86	495.21
		For >10 To 20, Deduct	-73.34	
		For >20 To 40, Deduct	-134.53	
		For >40, Deduct	-281.21	
26 56 13 00-0530	EA	22' High, 4.5" Top OD, Round Tapered, Fiberglass Area Light Pole, Anchor Base.....	2,407.11	577.75
		For >10 To 20, Deduct	-78.95	
		For >20 To 40, Deduct	-145.39	
		For >40, Deduct	-303.29	
26 56 13 00-0531	EA	24' High, 4.5" Top OD, Round Tapered, Fiberglass Area Light Pole, Anchor Base.....	2,644.99	660.29
		For >10 To 20, Deduct	-85.99	
		For >20 To 40, Deduct	-158.74	
		For >40, Deduct	-330.72	
26 56 13 00-0532	EA	26' High, 4.5" Top OD, Round Tapered, Fiberglass Area Light Pole, Anchor Base.....	2,697.66	660.29
		For >10 To 20, Deduct	-88.10	
		For >20 To 40, Deduct	-162.42	
		For >40, Deduct	-338.62	
26 56 13 00-0533	EA	28' High, 4.5" Top OD, Round Tapered, Fiberglass Area Light Pole, Anchor Base.....	2,834.40	701.55
		For >10 To 20, Deduct	-92.33	
		For >20 To 40, Deduct	-170.35	
		For >40, Deduct	-355.00	
26 56 13 00-0534	EA	30' High, 4.5" Top OD, Round Tapered, Fiberglass Area Light Pole, Anchor Base.....	2,971.16	742.83
		For >10 To 20, Deduct	-96.56	
		For >20 To 40, Deduct	-178.27	
		For >40, Deduct	-371.39	
26 56 13 00-0535	EA	10' High, 5" Top OD, Round Tapered, Fiberglass Area Light Pole, Anchor Base.....	1,840.20	288.88
		For >10 To 20, Deduct	-64.94	
		For >20 To 40, Deduct	-117.26	
		For >40, Deduct	-247.14	
26 56 13 00-0536	EA	12' High, 5" Top OD, Round Tapered, Fiberglass Area Light Pole, Anchor Base.....	1,970.76	330.14
		For >10 To 20, Deduct	-68.93	
		For >20 To 40, Deduct	-124.75	
		For >40, Deduct	-262.60	
26 56 13 00-0537	EA	14' High, 5" Top OD, Round Tapered, Fiberglass Area Light Pole, Anchor Base.....	2,101.32	371.41
		For >10 To 20, Deduct	-72.91	
		For >20 To 40, Deduct	-132.24	
		For >40, Deduct	-278.06	
26 56 13 00-0538	EA	16' High, 5" Top OD, Round Tapered, Fiberglass Area Light Pole, Anchor Base.....	2,233.42	412.68
		For >10 To 20, Deduct	-76.96	
		For >20 To 40, Deduct	-139.83	
		For >40, Deduct	-293.75	
26 56 13 00-0539	EA	18' High, 5" Top OD, Round Tapered, Fiberglass Area Light Pole, Anchor Base.....	2,371.72	453.95
		For >10 To 20, Deduct	-81.25	
		For >20 To 40, Deduct	-147.86	
		For >40, Deduct	-310.36	
26 56 13 00-0540	EA	20' High, 5" Top OD, Round Tapered, Fiberglass Area Light Pole, Anchor Base.....	2,519.31	495.21
		For >10 To 20, Deduct	-85.92	
		For >20 To 40, Deduct	-156.54	
		For >40, Deduct	-328.38	
26 56 13 00-0541	EA	22' High, 5" Top OD, Round Tapered, Fiberglass Area Light Pole, Anchor Base.....	2,763.38	577.75
		For >10 To 20, Deduct	-93.20	
		For >20 To 40, Deduct	-170.33	
		For >40, Deduct	-356.73	
26 56 13 00-0542	EA	24' High, 5" Top OD, Round Tapered, Fiberglass Area Light Pole, Anchor Base.....	3,009.01	660.29
		For >10 To 20, Deduct	-100.55	
		For >20 To 40, Deduct	-184.22	
		For >40, Deduct	-385.32	
26 56 13 00-0543	EA	26' High, 5" Top OD, Round Tapered, Fiberglass Area Light Pole, Anchor Base.....	3,089.56	660.29
		For >10 To 20, Deduct	-103.77	
		For >20 To 40, Deduct	-189.86	
		For >40, Deduct	-397.41	
26 56 13 00-0544	EA	28' High, 5" Top OD, Round Tapered, Fiberglass Area Light Pole, Anchor Base.....	3,299.11	701.55
		For >10 To 20, Deduct	-110.92	
		For >20 To 40, Deduct	-202.88	
		For >40, Deduct	-424.71	
26 56 13 00-0545	EA	30' High, 5" Top OD, Round Tapered, Fiberglass Area Light Pole, Anchor Base.....	3,473.04	742.83
		For >10 To 20, Deduct	-116.64	
		For >20 To 40, Deduct	-213.40	
		For >40, Deduct	-446.67	
26 56 13 00-0546	EA	32' High, 5" Top OD, Round Tapered, Fiberglass Area Light Pole, Anchor Base.....	3,605.69	763.46
		For >10 To 20, Deduct	-121.32	
		For >20 To 40, Deduct	-221.86	
		For >40, Deduct	-464.51	
26 56 13 00-0547	EA	34' High, 5" Top OD, Round Tapered, Fiberglass Area Light Pole, Anchor Base.....	3,738.37	784.09
		For >10 To 20, Deduct	-126.01	
		For >20 To 40, Deduct	-230.32	
		For >40, Deduct	-482.35	
26 56 13 00-0548		Round Tapered, Fiberglass Area Light Poles, Direct Burial (26 56 13 00-0511)		
26 56 13 00-0549	EA	10' High, 3.5" Top OD, Round Tapered, Fiberglass Area Light Pole, Direct Burial.....	933.15	206.34
		For >10 To 20, Deduct	-31.14	
		For >20 To 40, Deduct	-57.07	
		For >40, Deduct	-119.34	

**26 Electrical**  
**26 50 Lighting**  
**26 56 Exterior Lighting**



MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
26 56 13 00-0550 EA 12' High, 3.5" Top OD, Round Tapered, Fiberglass Area Light Pole, Direct Burial.....	1,003.85	226.97
For >10 To 20, Deduct	-33.34	
For >20 To 40, Deduct	-61.19	
For >40, Deduct	-127.88	
26 56 13 00-0551 EA 14' High, 3.5" Top OD, Round Tapered, Fiberglass Area Light Pole, Direct Burial.....	1,072.99	247.61
For >10 To 20, Deduct	-35.49	
For >20 To 40, Deduct	-65.21	
For >40, Deduct	-136.19	
26 56 13 00-0552 EA 16' High, 3.5" Top OD, Round Tapered, Fiberglass Area Light Pole, Direct Burial.....	1,099.33	247.61
For >10 To 20, Deduct	-36.55	
For >20 To 40, Deduct	-67.05	
For >40, Deduct	-140.14	
26 56 13 00-0553 EA 18' High, 3.5" Top OD, Round Tapered, Fiberglass Area Light Pole, Direct Burial.....	1,183.98	268.24
For >10 To 20, Deduct	-39.31	
For >20 To 40, Deduct	-72.15	
For >40, Deduct	-150.77	
26 56 13 00-0554 EA 20' High, 3.5" Top OD, Round Tapered, Fiberglass Area Light Pole, Direct Burial.....	1,256.22	288.88
For >10 To 20, Deduct	-41.58	
For >20 To 40, Deduct	-76.38	
For >40, Deduct	-159.55	
26 56 13 00-0555 EA 22' High, 3.5" Top OD, Round Tapered, Fiberglass Area Light Pole, Direct Burial.....	1,333.12	309.51
For >10 To 20, Deduct	-44.04	
For >20 To 40, Deduct	-80.94	
For >40, Deduct	-169.02	
26 56 13 00-0556 EA 24' High, 3.5" Top OD, Round Tapered, Fiberglass Area Light Pole, Direct Burial.....	1,417.76	330.14
For >10 To 20, Deduct	-46.81	
For >20 To 40, Deduct	-86.04	
For >40, Deduct	-179.65	
26 56 13 00-0557 EA 26' High, 3.5" Top OD, Round Tapered, Fiberglass Area Light Pole, Direct Burial.....	1,566.47	330.14
For >10 To 20, Deduct	-52.75	
For >20 To 40, Deduct	-96.45	
For >40, Deduct	-201.96	
26 56 13 00-0558 EA 28' High, 3.5" Top OD, Round Tapered, Fiberglass Area Light Pole, Direct Burial.....	1,756.43	350.78
For >10 To 20, Deduct	-59.73	
For >20 To 40, Deduct	-108.92	
For >40, Deduct	-228.39	
26 56 13 00-0559 EA 30' High, 3.5" Top OD, Round Tapered, Fiberglass Area Light Pole, Direct Burial.....	1,946.42	371.41
For >10 To 20, Deduct	-66.71	
For >20 To 40, Deduct	-121.39	
For >40, Deduct	-254.82	
26 56 13 00-0560 EA 10' High, 4.5" Top OD, Round Tapered, Fiberglass Area Light Pole, Direct Burial.....	1,075.66	206.34
For >10 To 20, Deduct	-36.84	
For >20 To 40, Deduct	-67.04	
For >40, Deduct	-140.72	
26 56 13 00-0561 EA 12' High, 4.5" Top OD, Round Tapered, Fiberglass Area Light Pole, Direct Burial.....	1,154.11	226.97
For >10 To 20, Deduct	-39.36	
For >20 To 40, Deduct	-71.71	
For >40, Deduct	-150.42	
26 56 13 00-0562 EA 14' High, 4.5" Top OD, Round Tapered, Fiberglass Area Light Pole, Direct Burial.....	1,232.54	247.61
For >10 To 20, Deduct	-41.87	
For >20 To 40, Deduct	-76.37	
For >40, Deduct	-160.12	
26 56 13 00-0563 EA 16' High, 4.5" Top OD, Round Tapered, Fiberglass Area Light Pole, Direct Burial.....	1,271.27	247.61
For >10 To 20, Deduct	-43.42	
For >20 To 40, Deduct	-79.08	
For >40, Deduct	-165.93	
26 56 13 00-0564 EA 18' High, 4.5" Top OD, Round Tapered, Fiberglass Area Light Pole, Direct Burial.....	1,349.73	268.24
For >10 To 20, Deduct	-45.94	
For >20 To 40, Deduct	-83.75	
For >40, Deduct	-175.64	
26 56 13 00-0565 EA 20' High, 4.5" Top OD, Round Tapered, Fiberglass Area Light Pole, Direct Burial.....	1,428.16	288.88
For >10 To 20, Deduct	-48.46	
For >20 To 40, Deduct	-88.42	
For >40, Deduct	-185.34	
26 56 13 00-0566 EA 22' High, 4.5" Top OD, Round Tapered, Fiberglass Area Light Pole, Direct Burial.....	1,506.61	309.51
For >10 To 20, Deduct	-50.98	
For >20 To 40, Deduct	-93.08	
For >40, Deduct	-195.04	
26 56 13 00-0567 EA 24' High, 4.5" Top OD, Round Tapered, Fiberglass Area Light Pole, Direct Burial.....	1,620.68	330.14
For >10 To 20, Deduct	-54.92	
For >20 To 40, Deduct	-100.24	
For >40, Deduct	-210.09	
26 56 13 00-0568 EA 26' High, 4.5" Top OD, Round Tapered, Fiberglass Area Light Pole, Direct Burial.....	1,764.74	330.14
For >10 To 20, Deduct	-60.69	
For >20 To 40, Deduct	-110.33	
For >40, Deduct	-231.70	
26 56 13 00-0569 EA 28' High, 4.5" Top OD, Round Tapered, Fiberglass Area Light Pole, Direct Burial.....	1,951.61	350.78
For >10 To 20, Deduct	-67.54	
For >20 To 40, Deduct	-122.58	
For >40, Deduct	-257.66	
26 56 13 00-0570 EA 30' High, 4.5" Top OD, Round Tapered, Fiberglass Area Light Pole, Direct Burial.....	2,136.95	371.41
For >10 To 20, Deduct	-74.34	
For >20 To 40, Deduct	-134.73	
For >40, Deduct	-283.40	





<b>Electrical</b>		<b>26</b>	<b>26</b>
<b>Lighting</b>		<b>26 50</b>	
<b>Exterior Lighting</b>		<b>26 56</b>	

MINOR CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
26 56 13 00-0571	EA	10' High, 5" Top OD, Round Tapered, Fiberglass Area Light Pole, Direct Burial..... For >10 To 20, Deduct For >20 To 40, Deduct For >40, Deduct	1,201.13 -41.86 -75.83 -159.54	206.34
26 56 13 00-0572	EA	12' High, 5" Top OD, Round Tapered, Fiberglass Area Light Pole, Direct Burial..... For >10 To 20, Deduct For >20 To 40, Deduct For >40, Deduct	1,270.28 -44.00 -79.84 -167.84	226.97
26 56 13 00-0573	EA	14' High, 5" Top OD, Round Tapered, Fiberglass Area Light Pole, Direct Burial..... For >10 To 20, Deduct For >20 To 40, Deduct For >40, Deduct	1,337.88 -46.09 -83.75 -175.92	247.61
26 56 13 00-0574	EA	16' High, 5" Top OD, Round Tapered, Fiberglass Area Light Pole, Direct Burial..... For >10 To 20, Deduct For >20 To 40, Deduct For >40, Deduct	1,364.21 -47.14 -85.59 -179.87	247.61
26 56 13 00-0575	EA	18' High, 5" Top OD, Round Tapered, Fiberglass Area Light Pole, Direct Burial..... For >10 To 20, Deduct For >20 To 40, Deduct For >40, Deduct	1,431.82 -49.23 -89.50 -187.95	268.24
26 56 13 00-0576	EA	20' High, 5" Top OD, Round Tapered, Fiberglass Area Light Pole, Direct Burial..... For >10 To 20, Deduct For >20 To 40, Deduct For >40, Deduct	1,500.97 -51.37 -93.51 -196.26	288.88
26 56 13 00-0577	EA	22' High, 5" Top OD, Round Tapered, Fiberglass Area Light Pole, Direct Burial..... For >10 To 20, Deduct For >20 To 40, Deduct For >40, Deduct	1,622.78 -55.63 -101.21 -212.47	309.51
26 56 13 00-0578	EA	24' High, 5" Top OD, Round Tapered, Fiberglass Area Light Pole, Direct Burial..... For >10 To 20, Deduct For >20 To 40, Deduct For >40, Deduct	1,763.19 -60.62 -110.22 -231.46	330.14
26 56 13 00-0579	EA	26' High, 5" Top OD, Round Tapered, Fiberglass Area Light Pole, Direct Burial..... For >10 To 20, Deduct For >20 To 40, Deduct For >40, Deduct	1,853.04 -64.22 -116.51 -244.94	330.14
26 56 13 00-0580	EA	28' High, 5" Top OD, Round Tapered, Fiberglass Area Light Pole, Direct Burial..... For >10 To 20, Deduct For >20 To 40, Deduct For >40, Deduct	1,985.69 -68.90 -124.97 -262.78	350.78
26 56 13 00-0581	EA	30' High, 5" Top OD, Round Tapered, Fiberglass Area Light Pole, Direct Burial..... For >10 To 20, Deduct For >20 To 40, Deduct For >40, Deduct	2,118.36 -73.59 -133.43 -280.61	371.41
26 56 13 00-0582		<b>Factory Accessories For Fiberglass Area Light Poles (26 56 13 00-0510)</b>		
26 56 13 00-0583	EA	Open Or Capped Top For Fiberglass Area Light Poles.....	54.92	
26 56 13 00-0584	EA	Factory Side Drilling Up To Four Fixtures On Fiberglass Area Light Poles.....	54.92	
26 56 13 00-0585	EA	Smooth Shaft Finish For Fiberglass Area Light Poles.....	104.21	
26 56 13 00-0586	EA	Vibration Dampener For Fiberglass Area Light Poles.....	138.00	
26 56 13 00-0587		<b>Concrete Area Light Poles (26 56 13 00-0177)</b>		
26 56 13 00-0588		<b>Octagonal Tapered, Spun Concrete Area Light Poles, Anchor Base (26 56 13 00-0587)</b>		
26 56 13 00-0589	EA	28' High, Octagonal Tapered, Spun Concrete Area Light Pole, Anchor Base.....	3,207.28	701.55
26 56 13 00-0590	EA	30' High, Octagonal Tapered, Spun Concrete Area Light Pole, Anchor Base.....	3,380.03	742.83
26 56 13 00-0591	EA	33' High, Octagonal Tapered, Spun Concrete Area Light Pole, Anchor Base.....	3,509.41	763.46
26 56 13 00-0592	EA	36' High, Octagonal Tapered, Spun Concrete Area Light Pole, Anchor Base.....	4,439.76	784.09
26 56 13 00-0593	EA	38' High, Octagonal Tapered, Spun Concrete Area Light Pole, Anchor Base.....	4,953.01	825.36
26 56 13 00-0594	EA	43' High, Octagonal Tapered, Spun Concrete Area Light Pole, Anchor Base.....	6,106.77	1,072.96
26 56 13 00-0595	EA	47' High, Octagonal Tapered, Spun Concrete Area Light Pole, Anchor Base.....	7,299.67	1,320.58
26 56 13 00-0596	EA	27' High, Octagonal Tapered, Spun Concrete Area Light Pole, Anchor Base..... Note: Polished brown with acrylic coating finish.	7,343.08	701.55
26 56 13 00-0597	EA	30' High, Octagonal Tapered, Spun Concrete Area Light Pole, Anchor Base..... Note: Polished brown with acrylic coating finish.	8,505.63	742.83
26 56 13 00-0598	EA	Pole Adapter Base Plate, Galvanized Steel, 1" Thick For Adapting Up To 40'.....	749.14	247.61
26 56 13 00-0599	EA	13' High Concrete Octagonal Area Light Pole, Pink With Acrylic Coating, Finish Design.....	4,408.68	495.06
26 56 13 00-0600	EA	Pole Base Cover For All Octagon Poles.....	291.22	101.02
26 56 13 00-0601	EA	Pole Arms 24" Long, Square, 250 Watt Fixture, Dark, Architectural Bronze.....	595.89	202.05
26 56 13 00-0602		<b>Tapered, Spun Concrete Area Light Poles, Direct Burial (26 56 13 00-0587)</b> Note: Round or square.		
26 56 13 00-0603	EA	13' High, Tapered, Spun Concrete Area Light Pole, Direct Burial.....	3,640.57	330.14
26 56 13 00-0604	EA	16' High, Tapered, Spun Concrete Area Light Pole, Direct Burial.....	4,095.49	412.68
26 56 13 00-0605	EA	18' High, Tapered, Spun Concrete Area Light Pole, Direct Burial.....	4,504.13	495.21
26 56 13 00-0606	EA	30' High, Tapered, Spun Concrete Area Light Pole, Direct Burial.....	6,251.57	742.83
26 56 13 00-0607	EA	35' High, Tapered, Spun Concrete Area Light Pole, Direct Burial.....	7,242.44	784.09
26 56 13 00-0608	EA	40' High, Tapered, Spun Concrete Area Light Pole, Direct Burial.....	8,315.38	825.36
26 56 13 00-0609	EA	45' High, Tapered, Spun Concrete Area Light Pole, Direct Burial.....	9,585.94	1,072.96



MINOR CSI UOM DESCRIPTION			TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
26 56 13 00-0610	Round Tapered, Spun Concrete Area Light Poles, Direct Burial (26 56 13 00-0587)			
26 56 13 00-0611	EA	60' High, Round Tapered, Spun Concrete Area Light Pole, Direct Burial (Lithonia SPRTC C2 60 9-22).....	18,368.00	1,857.06
26 56 13 00-0612	EA	70' High, Round Tapered, Spun Concrete Area Light Pole, Direct Burial (Lithonia SPRTC C2 70 9-24).....	21,813.01	2,245.74
26 56 13 00-0613	EA	80' High, Round Tapered, Spun Concrete Area Light Pole, Direct Burial (Lithonia SPRTC C1 80 9-26).....	25,925.77	3,033.73
26 56 13 00-0614	Treated Wood Area Light Poles (26 56 13 00-0177) See CSI section 26 05 46 00-0001 for wood poles.			
26 56 13 00-0615	Cast Iron Decorative Light Posts (26 56 13 00-0177)			
26 56 13 00-0616	Round Tapered, Cast Iron Decorative Light Post, Anchor Base (26 56 13 00-0615) Note: As manufactured by Hadco and King Luminaries or an approved equal.			
26 56 13 00-0617	EA	10' High, Round Tapered, Cast Iron Decorative Light Post, Anchor Base .....	1,737.99	206.34
26 56 13 00-0618	EA	12' High, Round Tapered, Cast Iron Decorative Light Post, Anchor Base .....	1,835.90	237.70
26 56 13 00-0619	EA	14' High, Round Tapered, Cast Iron Decorative Light Post, Anchor Base .....	1,989.31	247.61
26 56 13 00-0620	EA	16' High, Round Tapered, Cast Iron Decorative Light Post, Anchor Base .....	2,441.85	288.88
26 56 13 00-0621	EA	18' High, Round Tapered, Cast Iron Decorative Light Post, Anchor Base .....	2,848.38	313.64
26 56 13 00-0622	EA	20' High, Round Tapered, Cast Iron Decorative Light Post, Anchor Base .....	3,274.39	338.40
26 56 13 00-0623	Landscape Light Poles (26 56 13 00-0001) Note: Excludes lighting fixtures.			
26 56 13 00-0624	Aluminum Landscape Light Poles (26 56 13 00-0623) Note: Includes painted finish.			
26 56 13 00-0625	Round Straight, Aluminum Landscape Light Poles (26 56 13 00-0624)			
26 56 13 00-0626	Round Straight, Aluminum Landscape Light Poles, Anchor Base (26 56 13 00-0625)			
26 56 13 00-0627	EA	7' High, 3" OD, Round Straight, Aluminum Landscape Light Pole, Anchor Base .....	572.21	247.61
26 56 13 00-0628	EA	12' High, 3" OD, Round Straight, Aluminum Landscape Light Pole, Anchor Base .....	903.98	330.14
26 56 13 00-0629	Round Straight, Aluminum Landscape Light Poles, Direct Burial (26 56 13 00-0625)			
26 56 13 00-0630	EA	7' High, 3" OD, Round Straight, Aluminum Landscape Light Pole, Direct Burial .....	535.97	247.61
26 56 13 00-0631	EA	12' High, 3" OD, Round Straight, Aluminum Landscape Light Pole, Direct Burial .....	867.74	330.14
26 56 13 00-0632	Steel Landscape Light Poles (26 56 13 00-0623) Note: Includes painted finish.			
26 56 13 00-0633	Round Straight, Steel Landscape Light Poles (26 56 13 00-0632)			
26 56 13 00-0634	Round Straight, Steel Landscape Light Poles, Anchor Base (26 56 13 00-0633)			
26 56 13 00-0635	EA	6'-8" High, 3" OD, Round Straight, Steel Landscape Light Pole, Anchor Base .....	661.45	247.61
26 56 13 00-0636	Round Straight, Steel Landscape Light Poles, Direct Burial (26 56 13 00-0633)			
26 56 13 00-0637	EA	6'-8" High, 3" OD, Round Straight, Steel Landscape Light Pole, Direct Burial .....	624.21	247.61
26 56 13 00-0638	Light Pole Brackets And Arms (26 56 13 00-0001)			
26 56 13 00-0639	Light Pole Brackets (26 56 13 00-0638)			
26 56 13 00-0640	Bullhorn Style, Pole Top Area Light Brackets (26 56 13 00-0639)			
26 56 13 00-0641	Round Bullhorn Style, Pole Top Area Light Brackets (26 56 13 00-0640)			
26 56 13 00-0642	Steel, Round Bullhorn Style, Pole Top Area Light Brackets (26 56 13 00-0641) Note: Includes powdercoat finish.			
26 56 13 00-0643	EA	Two Tenons At 180 Degrees, Steel, Round Bullhorn Style, Pole Top Area Light Bracket .....	765.72	49.52
		For Galvanized Finish, Add .....	66.67	
26 56 13 00-0644	EA	Three Tenons At 180 Degrees, Steel, Round Bullhorn Style, Pole Top Area Light Bracket .....	966.86	49.52
		For Galvanized Finish, Add .....	86.78	
26 56 13 00-0645	EA	Three Tenons At 120 Degrees, Steel, Round Bullhorn Style, Pole Top Area Light Bracket .....	1,028.26	49.52
		For Galvanized Finish, Add .....	92.92	
26 56 13 00-0646	EA	Four Tenons At 90 Degrees, Steel, Round Bullhorn Style, Pole Top Area Light Bracket .....	1,407.26	49.52
		For Galvanized Finish, Add .....	130.82	
26 56 13 00-0647	EA	Four Tenons At 180 Degrees, Steel, Round Bullhorn Style, Pole Top Area Light Bracket .....	1,466.28	49.52
		For Galvanized Finish, Add .....	136.72	
26 56 13 00-0648	Aluminum, Round Bullhorn Style, Pole Top Area Light Brackets (26 56 13 00-0641) Note: Includes satin brushed or painted finish.			
26 56 13 00-0649	EA	Two Tenons At 180 Degrees, Aluminum, Round Bullhorn Style, Pole Top Area Light Bracket .....	240.08	49.52
		For Bronze Or Satin Anodized Finish, Add .....	14.10	
		For Black Anodized Finish, Add .....	28.21	
26 56 13 00-0650	EA	Three Tenons At 120 Degrees, Aluminum, Round Bullhorn Style, Pole Top Area Light Bracket .....	285.07	49.52
		For Bronze Or Satin Anodized Finish, Add .....	18.60	
		For Black Anodized Finish, Add .....	37.21	
26 56 13 00-0651	EA	Three Tenons At 180 Degrees, Aluminum, Round Bullhorn Style, Pole Top Area Light Bracket .....	297.18	49.52
		For Bronze Or Satin Anodized Finish, Add .....	19.81	
		For Black Anodized Finish, Add .....	39.63	



<b>Electrical</b>		<b>26</b>
<b>Lighting</b>		<b>26 50</b>
<b>Exterior Lighting</b>		<b>26 56</b>

MINOR	CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
26 56 13 00-0652	EA		Four Tenons At 90 Degrees, Aluminum, Round Bullhorn Style, Pole Top Area Light Bracket..... <i>For Bronze Or Satin Anodized Finish, Add</i> <i>For Black Anodized Finish, Add</i>	339.58 24.05 48.11	49.52
26 56 13 00-0653	EA		Four Tenons At 180 Degrees, Aluminum, Round Bullhorn Style, Pole Top Area Light Bracket..... <i>For Bronze Or Satin Anodized Finish, Add</i> <i>For Black Anodized Finish, Add</i>	348.23 24.92 49.84	49.52
26 56 13 00-0654			<b>Square Bullhorn Style, Pole Top Area Light Brackets</b> (26 56 13 00-0640)		
26 56 13 00-0655			<b>Steel, Square Bullhorn Style, Pole Top Area Light Brackets</b> (26 56 13 00-0654) Note: Includes powdercoat finish.		
26 56 13 00-0656	EA		Two Tenons At 180 Degrees, Steel, Square Bullhorn Style, Pole Top Area Light Bracket..... <i>For Galvanized Finish, Add</i>	823.15 72.41	49.52
26 56 13 00-0657	EA		Three Tenons At 180 Degrees, Steel, Square Bullhorn Style, Pole Top Area Light Bracket ..... <i>For Galvanized Finish, Add</i>	1,015.82 91.68	49.52
26 56 13 00-0658	EA		Four Tenons At 180 Degrees, Steel, Square Bullhorn Style, Pole Top Area Light Bracket ..... <i>For Galvanized Finish, Add</i>	1,242.11 114.31	49.52
26 56 13 00-0659	EA		Four Tenons At 90 Degrees, Steel, Square Bullhorn Style, Pole Top Area Light Bracket ..... <i>For Galvanized Finish, Add</i>	1,469.45 137.04	49.52
26 56 13 00-0660			<b>Wood Pole Clamp On Style, Pole Top Area Light Brackets</b> (26 56 13 00-0639)		
26 56 13 00-0661			<b>Steel, Wood Pole Clamp On Style, Pole Top Area Light Brackets</b> (26 56 13 00-0660) Note: Includes powdercoat finish.		
26 56 13 00-0662	EA		One Tenon, Steel, Wood Pole Clamp On Style, Pole Top Area Light Bracket .....	781.73	82.54
26 56 13 00-0663	EA		Two Tenons At 90, 120 Or 180 Degrees, Steel, Wood Pole Clamp On Style, Pole Top Area Light Bracket .....	1,176.07	82.54
26 56 13 00-0664	EA		Three Tenons At 120 Degrees, Steel, Wood Pole Clamp On Style, Pole Top Area Light Bracket .....	1,642.67	82.54
26 56 13 00-0665	EA		Four Tenons At 90 Degrees, Steel, Wood Pole Clamp On Style, Pole Top Area Light Bracket .....	1,796.17	82.54
26 56 13 00-0666			<b>Light Pole Arms</b> (26 56 13 00-0638)		
26 56 13 00-0667			<b>Wood Pole Streetlight Arms</b> (26 56 13 00-0666)		
26 56 13 00-0668			<b>Steel, Wood Pole Streetlight Arms</b> (26 56 13 00-0667)		
26 56 13 00-0669	EA		1-1/4" Arm Diameter, 2-1/2' Arm Length, Galvanized Steel, Wood Pole Streetlight Arm, Bolt Mount .....	456.11	74.28
26 56 13 00-0670	EA		1-1/4" Arm Diameter, 3-1/2' Arm Length, Galvanized Steel, Wood Pole Streetlight Arm, Bolt Mount .....	482.93	82.54
26 56 13 00-0671	EA		1-1/4" Arm Diameter, 5-1/2' Arm Length, Galvanized Steel, Wood Pole Streetlight Arm, Bolt Mount .....	560.46	103.17
26 56 13 00-0672	EA		2" Arm Diameter, 3-1/2' Arm Length, Galvanized Steel, Wood Pole Streetlight Arm, Bolt Mount .....	671.90	82.54
26 56 13 00-0673	EA		2" Arm Diameter, 5-1/2' Arm Length, Galvanized Steel, Wood Pole Streetlight Arm, Bolt Mount .....	748.89	103.17
26 56 13 00-0674	EA		2" Arm Diameter, 7-1/2' Arm Length, Galvanized Steel, Wood Pole Streetlight Arm, Bolt Mount .....	909.00	123.80
26 56 13 00-0675			<b>Aluminum, Wood Pole Streetlight Arms</b> (26 56 13 00-0667)		
26 56 13 00-0676	EA		1-1/4" Arm Diameter, 42" Arm Length, Aluminum Arm, Wood Pole Streetlight Arm, Bolt Mount .....	261.96	82.54
26 56 13 00-0677	EA		2" Arm Diameter, 42" Arm Length, Aluminum Arm, Wood Pole Streetlight Arm, Bolt Mount .....	311.65	82.54
26 56 13 00-0678	EA		2" Arm Diameter, 66" Arm Length, Aluminum Arm, Wood Pole Streetlight Arm, Bolt Mount .....	411.95	103.17
26 56 13 00-0679	EA		2" Arm Diameter, 90" Arm Length, Aluminum Arm, Wood Pole Streetlight Arm, Bolt Mount .....	532.85	123.80
26 56 13 00-0680			<b>Area Light Arms</b> (26 56 13 00-0666)		
26 56 13 00-0681			<b>Steel Area Light Arms</b> (26 56 13 00-0680)		
26 56 13 00-0682	EA		Single, 2.38" Arm Diameter, 4' Arm Length, Upsweep Style, Steel Area Light Arm, Hub Mount .....	868.17	82.54
26 56 13 00-0683	EA		Two, 2.38" Arm Diameter, 4' Arm Length, Upsweep Style, Steel Area Light Arms, Hub Mount .....	1,359.82	90.79
26 56 13 00-0684	EA		Three, 2.38" Arm Diameter, 4' Arm Length, Upsweep Style, Steel Area Light Arms, Hub Mount .....	1,510.91	99.04
26 56 13 00-0685	EA		Four, 2.38" Arm Diameter, 4' Arm Length, Upsweep Style, Steel Area Light Arms, Hub Mount .....	1,793.83	107.29
26 56 13 00-0686	EA		Single, 2.38" Arm Diameter, 6' Arm Length, Upsweep Style, Steel Area Light Arm, Hub Mount .....	1,035.78	103.17
26 56 13 00-0687	EA		Two, 2.38" Arm Diameter, 6' Arm Length, Upsweep Style, Steel Area Light Arms, Hub Mount .....	1,477.99	111.43
26 56 13 00-0688			<b>Aluminum Area Light Arms</b> (26 56 13 00-0680)		
26 56 13 00-0689	EA		Single, 4' Arm Length, Mast Style, Aluminum Area Light Arm, Bolt Mount .....	306.11	82.54
26 56 13 00-0690	EA		Single, 6' Arm Length, Mast Style, Aluminum Area Light Arm, Bolt Mount .....	378.53	103.17
26 56 13 00-0691	EA		Single, 8' Arm Length, Mast Style, Aluminum Area Light Arm, Bolt Mount .....	452.68	123.80
26 56 13 00-0692	EA		Single, 4' Arm Length, Mast Style, Aluminum Area Light Arm, Hub Mount .....	304.38	82.54
26 56 13 00-0693	EA		Two, 4' Arm Length, Mast Style, Aluminum Area Light Arms, Hub Mount .....	414.33	90.79
26 56 13 00-0694	EA		Single, 6' Arm Length, Mast Style, Aluminum Area Light Arm, Hub Mount .....	375.07	103.17
26 56 13 00-0695	EA		Two, 6' Arm Length, Mast Style, Aluminum Area Light Arms, Hub Mount .....	505.79	111.43
26 56 13 00-0696	EA		Single, 8' Arm Length, Mast Style, Aluminum Area Light Arm, Hub Mount .....	454.41	123.80
26 56 13 00-0697	EA		Two, 8' Arm Length, Mast Style, Aluminum Area Light Arms, Hub Mount .....	611.95	132.06
26 56 13 00-0698			<b>Removal And Reinstallation Of Lighting Pole</b> (26 56 13 00-0001)		
26 56 13 00-0699	EA		Removal And Relocation Of Up To 45' Lighting Pole And Standards With One Or Two Arms .....	2,723.69	
26 56 13 00-0700			<b>Concrete Bases</b> (26 56 13 00-0001)		

<b>26</b>	<b>Electrical</b>
<b>26 50</b>	<b>Lighting</b>
<b>26 56</b>	<b>Exterior Lighting</b>



MINOR CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
26 56 13 00-0701		<b>Concrete Bases, Cast In Place</b> (26 56 13 00-0700) Note: Includes excavation/drilling, concrete, reinforcement, forms for exposed base, anchors/supports and backfill. Excludes conduit.		
26 56 13 00-0702	EA	Cast In Place Concrete Base For Poles Minimum Charge ..... Note: For projects where the cast in place concrete base for poles charge is less than the minimum charge, use this task exclusively. This task should not be used in conjunction with any other tasks in this section.	335.18	
26 56 13 00-0703	VLF	1-1/2' Diameter Concrete Base For Poles.....	56.38	
26 56 13 00-0704	VLF	2' Diameter Concrete Base For Poles.....	86.68	
26 56 13 00-0705	VLF	2-1/2' Diameter Concrete Base For Poles.....	124.48	
26 56 13 00-0706	VLF	3' Diameter Concrete Base For Poles.....	170.42	
26 56 13 00-0707	VLF	3-1/2' Diameter Concrete Base For Poles.....	227.78	
26 56 13 00-0708	VLF	4' Diameter Concrete Base For Poles.....	290.39	
26 56 13 00-0709	VLF	5' Diameter Concrete Base For Poles.....	432.86	
26 56 13 00-0710	VLF	6' Diameter Concrete Base For Poles.....	605.35	
<b>26 56 19</b>		<b>LED Exterior Lighting</b> (26 56)		
26 56 19 00-0001		<b>LED, Roadway Lighting</b> (26 56 19)		
26 56 19 00-0002		<b>LED Roadway Lighting (Philips Lumec)</b> (26 56 19 00-0001)		
26 56 19 00-0003		<b>Horizontal Tenon Mount, LED Cobra Head Street Lights (Philips Lumec GPL Series)</b> (26 56 19 00-0002) Note: UL wet listed. Includes 4,000K color temperature, 120-480 voltage, 570mA driver, die-cast extruded aluminum housing assembly and powder coat finish. Excludes sensors.		
26 56 19 00-0004	EA	49 LEDs, 102 Watt, Horizontal Tenon Mount, LED Cobra Head Street Light (Philips Lumec GPLS Series)..... For >50 To 100, Deduct For >100 To 250, Deduct For >250 To 500, Deduct For >500 To 1000, Deduct For >1000, Deduct	1,617.04 -80.85 -121.28 -192.15 -263.03 -333.91	199.53
26 56 19 00-0005	EA	98 LEDs, 204 Watt, Horizontal Tenon Mount, LED Cobra Head Street Light (Philips Lumec GPLM Series)..... For >50 To 100, Deduct For >100 To 250, Deduct For >250 To 500, Deduct For >500 To 1000, Deduct For >1000, Deduct	2,488.03 -124.40 -186.60 -300.76 -414.91 -529.07	204.91
26 56 19 00-0006		<b>Horizontal Tenon Mount, LED Cobra Head Street Lights (Philips Lumec RFM Series)</b> (26 56 19 00-0002) Note: UL wet listed. Includes 3,000 to 4,000K color temperature, 120-277 voltage, up to 1050mA driver, die-cast extruded aluminum housing assembly and powder coat finish. Excludes sensors.		
26 56 19 00-0007	EA	48 LEDs, 55 Watt, Type III Medium, 120-277 Volt, Horizontal Tenon Mount, LED Cobra Head Street Light (Philips Lumec RFM Series)..... For >50 To 100, Deduct For >100 To 250, Deduct For >250 To 500, Deduct For >500 To 1000, Deduct For >1000, Deduct	1,194.24 -59.71 -89.57 -139.30 -189.04 -238.78	199.53
26 56 19 00-0008	EA	48 LEDs, 80 Watt, Type III Medium, 120-277 Volt, RoadFocus Roadway, LED Cobra Head Luminaire (Philips Lumec RFM Series)..... For >50 To 100, Deduct For >100 To 250, Deduct For >250 To 500, Deduct For >500 To 1000, Deduct For >1000, Deduct	1,194.24 -59.71 -89.57 -139.30 -189.04 -238.78	199.53
26 56 19 00-0009	EA	48 LEDs, 108 Watt, Type III Medium, 120-277 Volt, RoadFocus Roadway, LED Cobra Head Luminaire (Philips Lumec RFM Series)..... For >50 To 100, Deduct For >100 To 250, Deduct For >250 To 500, Deduct For >500 To 1000, Deduct For >1000, Deduct	1,194.24 -59.71 -89.57 -139.30 -189.04 -238.78	199.53
26 56 19 00-0010		<b>LED Roadway Lighting (Lithonia)</b> (26 56 19 00-0001)		
26 56 19 00-0011		<b>Horizontal Tenon Mount, LED Cobra Head Street Lights (Lithonia CSX1 Series)</b> (26 56 19 00-0010) Note: UL wet listed. Includes 4,000K color temperature, 120-480 voltage, 700mA driver, die-cast extruded aluminum housing assembly and bronze powder coat finish. Excludes sensors.		
26 56 19 00-0012	EA	30 LEDs, 74 Watt, Horizontal Tenon Mount, LED Cobra Head Street Light (Lithonia CSX1 Series)..... For >50 To 100, Deduct For >100 To 250, Deduct For >250 To 500, Deduct For >500 To 1000, Deduct For >1000, Deduct	2,314.39 -115.72 -173.58 -279.86 -386.14 -492.43	188.74



Electrical		26
Lighting		26 50
Exterior Lighting		26 56

MINOR	CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
26 56 19 00-0013	EA		60 LEDs, 146 Watt, Horizontal Tenon Mount, LED Cobra Head Street Light (Lithonia CSX1 Series).....	3,786.34	194.13
			For >50 To 100, Deduct	-189.32	
			For >100 To 250, Deduct	-283.98	
			For >250 To 500, Deduct	-463.59	
			For >500 To 1000, Deduct	-643.20	
			For >1000, Deduct	-822.81	
26 56 19 00-0014			LED Roadway Lighting (CREE® BetaLED®) (26 56 19 00-0011)		
26 56 19 00-0015			Horizontal Tenon Mount, LED Cobra Head Street Lights (CREE® BetaLED® LEDway® STR-LWY) (26 56 19 00-0014)		
			Note: UL wet listed. Includes 6,000K color temperature, 120-480 voltage, 350mA driver, die-cast extruded aluminum housing assembly and white, black, silver or bronze powder coat finish. Includes Type II Medium, Type II Short or Type III Medium optic. Excludes sensors.		
26 56 19 00-0016	EA		20 LEDs, 25 Watt, Horizontal Tenon Mount, LED Cobra Head Street Light (CREE® BetaLED® LEDway® STR-LWY) .....	853.57	183.34
			For >50 To 100, Deduct	-42.68	
			For >100 To 250, Deduct	-64.02	
			For >250 To 500, Deduct	-97.53	
			For >500 To 1000, Deduct	-131.04	
			For >1000, Deduct	-164.55	
26 56 19 00-0017	EA		30 LEDs, 35 Watt, Horizontal Tenon Mount, LED Cobra Head Street Light (CREE® BetaLED® LEDway® STR-LWY) .....	946.92	188.74
			For >50 To 100, Deduct	-47.35	
			For >100 To 250, Deduct	-71.02	
			For >250 To 500, Deduct	-108.93	
			For >500 To 1000, Deduct	-146.84	
			For >1000, Deduct	-184.75	
26 56 19 00-0018	EA		40 LEDs, 45 Watt, Horizontal Tenon Mount, LED Cobra Head Street Light (CREE® BetaLED® LEDway® STR-LWY) .....	1,058.78	194.13
			For >50 To 100, Deduct	-52.94	
			For >100 To 250, Deduct	-79.41	
			For >250 To 500, Deduct	-122.64	
			For >500 To 1000, Deduct	-165.87	
			For >1000, Deduct	-209.11	
26 56 19 00-0019	EA		50 LEDs, 55 Watt, Horizontal Tenon Mount, LED Cobra Head Street Light (CREE® BetaLED® LEDway® STR-LWY) .....	1,153.55	199.53
			For >50 To 100, Deduct	-57.68	
			For >100 To 250, Deduct	-86.52	
			For >250 To 500, Deduct	-134.22	
			For >500 To 1000, Deduct	-181.92	
			For >1000, Deduct	-229.62	
26 56 19 00-0020	EA		60 LEDs, 65 Watt, Horizontal Tenon Mount, LED Cobra Head Street Light (CREE® BetaLED® LEDway® STR-LWY) .....	1,248.33	204.91
			For >50 To 100, Deduct	-62.42	
			For >100 To 250, Deduct	-93.62	
			For >250 To 500, Deduct	-145.80	
			For >500 To 1000, Deduct	-197.97	
			For >1000, Deduct	-250.14	
26 56 19 00-0021	EA		70 LEDs, 75 Watt, Horizontal Tenon Mount, LED Cobra Head Street Light (CREE® BetaLED® LEDway® STR-LWY) .....	1,468.39	210.31
			For >50 To 100, Deduct	-73.42	
			For >100 To 250, Deduct	-110.13	
			For >250 To 500, Deduct	-173.03	
			For >500 To 1000, Deduct	-235.94	
			For >1000, Deduct	-298.84	
26 56 19 00-0022	EA		80 LEDs, 86 Watt, Horizontal Tenon Mount, LED Cobra Head Street Light (CREE® BetaLED® LEDway® STR-LWY) .....	1,563.16	215.70
			For >50 To 100, Deduct	-78.16	
			For >100 To 250, Deduct	-117.24	
			For >250 To 500, Deduct	-184.61	
			For >500 To 1000, Deduct	-251.98	
			For >1000, Deduct	-319.36	
26 56 19 00-0023	EA		90 LEDs, 96 Watt, Horizontal Tenon Mount, LED Cobra Head Street Light (CREE® BetaLED® LEDway® STR-LWY) .....	1,656.52	221.10
			For >50 To 100, Deduct	-82.83	
			For >100 To 250, Deduct	-124.24	
			For >250 To 500, Deduct	-196.01	
			For >500 To 1000, Deduct	-267.78	
			For >1000, Deduct	-339.55	
26 56 19 00-0024	EA		100 LEDs, 111 Watt, Horizontal Tenon Mount, LED Cobra Head Street Light (CREE® BetaLED® LEDway® STR-LWY) .....	1,835.28	226.49
			For >50 To 100, Deduct	-91.76	
			For >100 To 250, Deduct	-137.65	
			For >250 To 500, Deduct	-218.09	
			For >500 To 1000, Deduct	-298.53	
			For >1000, Deduct	-378.97	
26 56 19 00-0025	EA		110 LEDs, 122 Watt, Horizontal Tenon Mount, LED Cobra Head Street Light (CREE® BetaLED® LEDway® STR-LWY) .....	1,930.06	231.88
			For >50 To 100, Deduct	-96.50	
			For >100 To 250, Deduct	-144.75	
			For >250 To 500, Deduct	-229.66	
			For >500 To 1000, Deduct	-314.57	
			For >1000, Deduct	-399.48	

**26 Electrical**  
**26 50 Lighting**  
**26 56 Exterior Lighting**



MINOR	CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
26 56 19 00-0026	EA		120 LEDs, 133 Watt, Horizontal Tenon Mount, LED Cobra Head Street Light (CREE® BetaLED® LEDway® STR-LWY).....	2,024.83	237.27
			For >50 To 100, Deduct	-101.24	
			For >100 To 250, Deduct	-151.86	
			For >250 To 500, Deduct	-241.24	
			For >500 To 1000, Deduct	-330.62	
			For >1000, Deduct	-420.00	
26 56 19 00-0027			<b>Surface Mount, LED Transportation Fixtures (CREE® BetaLED® Edge® TSP-EDG)</b> (26 56 19 00-0014)		
			Note: Direct, cantenary or pendant mount. UL wet listed. Includes 5,700K color temperature, 120-480 voltage, 350mA driver, die-cast extruded aluminum housing assembly and white, black, silver or bronze powder coat finish. Excludes sensors.		
26 56 19 00-0028	EA		40 LEDs, 47 Watt, Surface Mount, LED Transportation Fixture (CREE® BetaLED® Edge® TSP-EDG).....	1,578.39	194.13
			For Multi-Level Drive Currents, Add	199.30	
			For >50 To 100, Deduct	-78.92	
			For >100 To 250, Deduct	-118.38	
			For >250 To 500, Deduct	-187.59	
			For >500 To 1000, Deduct	-256.80	
			For >1000, Deduct	-326.02	
26 56 19 00-0029	EA		60 LEDs, 68 Watt, Surface Mount, LED Transportation Fixture (CREE® BetaLED® Edge® TSP-EDG).....	1,809.23	204.91
			For Multi-Level Drive Currents, Add	199.30	
			For >50 To 100, Deduct	-90.46	
			For >100 To 250, Deduct	-135.69	
			For >250 To 500, Deduct	-215.91	
			For >500 To 1000, Deduct	-296.12	
			For >1000, Deduct	-376.34	
26 56 19 00-0030	EA		80 LEDs, 90 Watt, Surface Mount, LED Transportation Fixture (CREE® BetaLED® Edge® TSP-EDG).....	2,040.07	215.70
			For Multi-Level Drive Currents, Add	199.30	
			For >50 To 100, Deduct	-102.00	
			For >100 To 250, Deduct	-153.01	
			For >250 To 500, Deduct	-244.22	
			For >500 To 1000, Deduct	-335.44	
			For >1000, Deduct	-426.66	
26 56 19 00-0031	EA		100 LEDs, 111 Watt, Surface Mount, LED Transportation Fixture (CREE® BetaLED® Edge® TSP-EDG).....	2,270.89	226.49
			For Multi-Level Drive Currents, Add	199.30	
			For >50 To 100, Deduct	-113.54	
			For >100 To 250, Deduct	-170.32	
			For >250 To 500, Deduct	-272.54	
			For >500 To 1000, Deduct	-374.76	
			For >1000, Deduct	-476.98	
26 56 19 00-0032	EA		120 LEDs, 132 Watt, Surface Mount, LED Transportation Fixture (CREE® BetaLED® Edge® TSP-EDG).....	2,945.89	237.27
			For Multi-Level Drive Currents, Add	199.30	
			For >50 To 100, Deduct	-147.29	
			For >100 To 250, Deduct	-220.94	
			For >250 To 500, Deduct	-356.37	
			For >500 To 1000, Deduct	-491.80	
			For >1000, Deduct	-627.23	
26 56 19 00-0033	EA		140 LEDs, 157 Watt, Surface Mount, LED Transportation Fixture (CREE® BetaLED® Edge® TSP-EDG).....	3,176.73	248.06
			For Multi-Level Drive Currents, Add	199.30	
			For >50 To 100, Deduct	-158.84	
			For >100 To 250, Deduct	-238.25	
			For >250 To 500, Deduct	-384.69	
			For >500 To 1000, Deduct	-531.12	
			For >1000, Deduct	-677.56	
26 56 19 00-0034	EA		160 LEDs, 179 Watt, Surface Mount, LED Transportation Fixture (CREE® BetaLED® Edge® TSP-EDG).....	3,407.57	258.84
			For Multi-Level Drive Currents, Add	199.30	
			For >50 To 100, Deduct	-170.38	
			For >100 To 250, Deduct	-255.57	
			For >250 To 500, Deduct	-413.00	
			For >500 To 1000, Deduct	-570.44	
			For >1000, Deduct	-727.88	
26 56 19 00-0035			<b>Horizontal Tenon Mount, LED Cobra Head Street Lights (CREE® BetaLED® XSP)</b> (26 56 19 00-0014)		
			Note: UL wet listed. Includes 120-277 voltage, die-cast extruded aluminum housing assembly and white, black, silver or bronze powder coat finish. Excludes sensors.		
26 56 19 00-0036	EA		4,806 Lumens, 4000K CCT, Horizontal Tenon Mount, LED Cobra Head Street Light (CREE® XSP1™ BXSP-B-HT-XXX-A).....	739.10	194.13
			For 3 Or 7-Pin NEMA Photocell Receptacle, Add	16.78	
			For Backlight Control Shield, Add	35.28	
			For Field Adjustable Output, Add	25.19	
			For Bird Spikes, Add	51.14	
			For Field Adjustable Output And Utility Label, Add	33.58	
			For Fuse, Add	50.37	
			For Field Adjustable Output, Utility Label And 3 Or 7-Pin NEMA Photocell Receptacle, Add	50.37	
			For 480 Volt, Add	75.56	
			For Multi-Level, Add	109.13	
			For >50 To 100, Deduct	-36.96	
			For >100 To 250, Deduct	-55.43	
			For >250 To 500, Deduct	-82.68	
			For >500 To 1000, Deduct	-109.93	
			For >1000, Deduct	-137.18	



Electrical		26
Lighting		26 50
Exterior Lighting		26 56

26

MINOR	CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
26 56 19 00-0037	EA		5,340 Lumens, 5700K, Horizontal Tenon Mount, LED Cobra Head Street Light (CREE® XSP1™ BXSP-B-HT-XXX-A) .....	739.10	194.13
			For 3 Or 7-Pin NEMA Photocell Receptacle, Add	16.78	
			For Backlight Control Shield, Add	35.28	
			For Field Adjustable Output, Add	25.19	
			For Bird Spikes, Add	51.14	
			For Field Adjustable Output And Utility Label, Add	33.58	
			For Fuse, Add	50.37	
			For Field Adjustable Output, Utility Label And 3 Or 7-Pin NEMA Photocell Receptacle, Add	50.37	
			For 480 Volt, Add	75.56	
			For Multi-Level, Add	109.13	
			For >50 To 100, Deduct	-36.96	
			For >100 To 250, Deduct	-55.43	
			For >250 To 500, Deduct	-82.68	
			For >500 To 1000, Deduct	-109.93	
			For >1000, Deduct	-137.18	
26 56 19 00-0038	EA		8,407 Lumens, 4000K CCT, Horizontal Tenon Mount, LED Cobra Head Street Light (CREE® XSP1™ BXSP-C-HT-XXX-E) .....	802.56	194.13
			For 3 Or 7-Pin NEMA Photocell Receptacle, Add	16.78	
			For Backlight Control Shield, Add	35.28	
			For Field Adjustable Output, Add	25.19	
			For Bird Spikes, Add	51.14	
			For Field Adjustable Output And Utility Label, Add	33.58	
			For Field Adjustable Output, Utility Label And 3 Or 7-Pin NEMA Photocell Receptacle, Add	50.37	
			For 480 Volt, Add	75.56	
			For >50 To 100, Deduct	-40.13	
			For >100 To 250, Deduct	-60.19	
			For >250 To 500, Deduct	-90.61	
			For >500 To 1000, Deduct	-121.03	
			For >1000, Deduct	-151.46	
26 56 19 00-0039	EA		8,820 Lumens, 5700K, Horizontal Tenon Mount, LED Cobra Head Street Light (CREE® XSP1™ BXSP-C-HT-XXX-E) .....	802.56	194.13
			For 3 Or 7-Pin NEMA Photocell Receptacle, Add	16.78	
			For Backlight Control Shield, Add	35.28	
			For Field Adjustable Output, Add	25.19	
			For Bird Spikes, Add	51.14	
			For Field Adjustable Output And Utility Label, Add	33.58	
			For Field Adjustable Output, Utility Label And 3 Or 7-Pin NEMA Photocell Receptacle, Add	50.37	
			For 480 Volt, Add	75.56	
			For >50 To 100, Deduct	-40.13	
			For >100 To 250, Deduct	-60.19	
			For >250 To 500, Deduct	-90.61	
			For >500 To 1000, Deduct	-121.03	
			For >1000, Deduct	-151.46	
26 56 19 00-0040	EA		9,612 Lumens, 4000K CCT, Horizontal Tenon Mount, LED Cobra Head Street Light (CREE® XSP2™ BXSP-B-HT-XXX-B) .....	915.38	194.13
			For 3 Or 7-Pin NEMA Photocell Receptacle, Add	16.78	
			For Field Adjustable Output, Add	25.19	
			For Backlight Control Shield, Add	47.61	
			For Field Adjustable Output And Utility Label, Add	33.58	
			For Fuse, Add	50.37	
			For Field Adjustable Output, Utility Label And 3 Or 7-Pin NEMA Photocell Receptacle, Add	50.37	
			For Bird Spikes, Add	79.36	
			For 480 Volt, Add	75.56	
			For Multi-Level, Add	109.13	
			For >50 To 100, Deduct	-45.77	
			For >100 To 250, Deduct	-68.65	
			For >250 To 500, Deduct	-104.72	
			For >500 To 1000, Deduct	-140.78	
			For >1000, Deduct	-176.84	
26 56 19 00-0041	EA		10,680 Lumens, 5700K, Horizontal Tenon Mount, LED Cobra Head Street Light (CREE® XSP2™ BXSP-B-HT-XXX-B) .....	915.38	194.13
			For 3 Or 7-Pin NEMA Photocell Receptacle, Add	16.78	
			For Field Adjustable Output, Add	25.19	
			For Backlight Control Shield, Add	47.61	
			For Field Adjustable Output And Utility Label, Add	33.58	
			For Fuse, Add	50.37	
			For Field Adjustable Output, Utility Label And 3 Or 7-Pin NEMA Photocell Receptacle, Add	50.37	
			For Bird Spikes, Add	79.36	
			For 480 Volt, Add	75.56	
			For Multi-Level, Add	109.13	
			For >50 To 100, Deduct	-45.77	
			For >100 To 250, Deduct	-68.65	
			For >250 To 500, Deduct	-104.72	
			For >500 To 1000, Deduct	-140.78	
			For >1000, Deduct	-176.84	

<b>26</b>	<b>Electrical</b>
<b>26 50</b>	<b>Lighting</b>
<b>26 56</b>	<b>Exterior Lighting</b>



MINOR	CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
26 56 19 00-0042	EA		13,732 Lumens, 4000K CCT, Horizontal Tenon Mount, LED Cobra Head Street Light (CREE® XSP2™ BXSP-C-HT-XXX-F).....	1,021.17	194.13
			For 3 Or 7-Pin NEMA Photocell Receptacle, Add	16.78	
			For Field Adjustable Output, Add	25.19	
			For Backlight Control Shield, Add	47.61	
			For Field Adjustable Output And Utility Label, Add	33.58	
			For Field Adjustable Output, Utility Label And 3 Or 7-Pin NEMA Photocell Receptacle, Add	50.37	
			For Bird Spikes, Add	79.36	
			For 480 Volt, Add	75.56	
			For >50 To 100, Deduct	-51.06	
			For >100 To 250, Deduct	-76.59	
			For >250 To 500, Deduct	-117.94	
			For >500 To 1000, Deduct	-159.29	
			For >1000, Deduct	-200.64	
26 56 19 00-0043	EA		14,408 Lumens, 5700K, Horizontal Tenon Mount, LED Cobra Head Street Light (CREE® XSP2™ BXSP-C-HT-XXX-F).....	1,021.17	194.13
			For 3 Or 7-Pin NEMA Photocell Receptacle, Add	16.78	
			For Field Adjustable Output, Add	25.19	
			For Backlight Control Shield, Add	47.61	
			For Field Adjustable Output And Utility Label, Add	33.58	
			For Field Adjustable Output, Utility Label And 3 Or 7-Pin NEMA Photocell Receptacle, Add	50.37	
			For Bird Spikes, Add	79.36	
			For 480 Volt, Add	75.56	
			For >50 To 100, Deduct	-51.06	
			For >100 To 250, Deduct	-76.59	
			For >250 To 500, Deduct	-117.94	
			For >500 To 1000, Deduct	-159.29	
			For >1000, Deduct	-200.64	
26 56 19 00-0044	EA		2,529 Lumens, 4000K CCT, Horizontal Tenon Mount, LED Cobra Head Street Light (CREE® XSPR™ BXSPR-A-O-X-X-G).....	626.27	194.13
			For Utility Label, Add	8.39	
			For 3 Or 7-Pin NEMA Photocell Receptacle, Add	16.78	
			For Utility Label And 3 Or 7-Pin NEMA Photocell Receptacle, Add	25.19	
			For 0 To 10 Volt Dimming, Add	50.37	
			For >50 To 100, Deduct	-31.31	
			For >100 To 250, Deduct	-46.97	
			For >250 To 500, Deduct	-68.58	
			For >500 To 1000, Deduct	-90.18	
			For >1000, Deduct	-111.79	
26 56 19 00-0045	EA		2,722 Lumens, 5700K, Horizontal Tenon Mount, LED Cobra Head Street Light (CREE® XSPR™ BXSPR-A-O-X-X-G).....	626.27	194.13
			For Utility Label, Add	8.39	
			For 3 Or 7-Pin NEMA Photocell Receptacle, Add	16.78	
			For Utility Label And 3 Or 7-Pin NEMA Photocell Receptacle, Add	25.19	
			For 0 To 10 Volt Dimming, Add	50.37	
			For >50 To 100, Deduct	-31.31	
			For >100 To 250, Deduct	-46.97	
			For >250 To 500, Deduct	-68.58	
			For >500 To 1000, Deduct	-90.18	
			For >1000, Deduct	-111.79	
26 56 19 00-0046	EA		3,819 Lumens, 4000K CCT, Horizontal Tenon Mount, LED Cobra Head Street Light (CREE® XSPR™ BXSPR-A-O-X-X-C).....	652.72	194.13
			For Utility Label, Add	8.39	
			For 3 Or 7-Pin NEMA Photocell Receptacle, Add	16.78	
			For Utility Label And 3 Or 7-Pin NEMA Photocell Receptacle, Add	25.19	
			For 0 To 10 Volt Dimming, Add	50.37	
			For >50 To 100, Deduct	-32.64	
			For >100 To 250, Deduct	-48.95	
			For >250 To 500, Deduct	-71.88	
			For >500 To 1000, Deduct	-94.81	
			For >1000, Deduct	-117.74	
26 56 19 00-0047	EA		4,109 Lumens, 5700K, Horizontal Tenon Mount, LED Cobra Head Street Light (CREE® XSPR™ BXSPR-A-O-X-X-C).....	652.72	194.13
			For Utility Label, Add	8.39	
			For 3 Or 7-Pin NEMA Photocell Receptacle, Add	16.78	
			For Utility Label And 3 Or 7-Pin NEMA Photocell Receptacle, Add	25.19	
			For 0 To 10 Volt Dimming, Add	50.37	
			For >50 To 100, Deduct	-32.64	
			For >100 To 250, Deduct	-48.95	
			For >250 To 500, Deduct	-71.88	
			For >500 To 1000, Deduct	-94.81	
			For >1000, Deduct	-117.74	
26 56 19 00-0048	EA		4,548 Lumens, 4000K CCT, Horizontal Tenon Mount, LED Cobra Head Street Light (CREE® XSPR™ BXSPR-B-HT-XXX-A).....	661.53	194.13
			For 3 Or 7-Pin NEMA Photocell Receptacle, Add	16.78	
			For Field Adjustable Output, Add	25.19	
			For Field Adjustable Output And Utility Label, Add	33.58	
			For Field Adjustable Output, Utility Label And 3 Or 7-Pin NEMA Photocell Receptacle, Add	50.37	
			For 0 To 10 Volt Dimming, Add	50.37	
			For >50 To 100, Deduct	-33.08	
			For >100 To 250, Deduct	-49.61	
			For >250 To 500, Deduct	-72.98	
			For >500 To 1000, Deduct	-96.35	
			For >1000, Deduct	-119.72	





Electrical		26
Lighting		26 50
Exterior Lighting		26 56

MINOR	CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
26 56 19 00-0049	EA		4,627 Lumens, 5700K, Horizontal Tenon Mount, LED Cobra Head Street Light (CREE® XSPR™ BXSPR-B-HT-XXX-A) .....	661.53	194.13
			For 3 Or 7-Pin NEMA Photocell Receptacle, Add	16.78	
			For Field Adjustable Output, Add	25.19	
			For Field Adjustable Output And Utility Label, Add	33.58	
			For Field Adjustable Output, Utility Label And 3 Or 7-Pin NEMA Photocell Receptacle, Add	50.37	
			For 0 To 10 Volt Dimming, Add	50.37	
			For >50 To 100, Deduct	-33.08	
			For >100 To 250, Deduct	-49.61	
			For >250 To 500, Deduct	-72.98	
			For >500 To 1000, Deduct	-96.35	
			For >1000, Deduct	-119.72	
26 56 19 00-0050			Horizontal Tenon Mount, LED Cobra Head Street Lights (CREE® RSW™)		
			(26 56 19 00-0014)		
			Note: UL wet listed. Includes 120-277 voltage, die-cast extruded aluminum housing assembly and gray powder coat finish. Includes utility label and NEMA® photocell receptacle. Excludes sensors.		
26 56 19 00-0051	EA		3,300 Lumens, 3000K CCT, Horizontal Tenon Mount, LED Cobra Head Street Light (CREE® RSW-HT-XXX-30W-30K-UL-GY-N) .....	643.90	194.13
			For Field Adjustable Output, Add	25.19	
			For Backlight Control Shield, Add	61.39	
			For Bird Spikes, Add	79.85	
			For >50 To 100, Deduct	-32.20	
			For >100 To 250, Deduct	-48.29	
			For >250 To 500, Deduct	-70.78	
			For >500 To 1000, Deduct	-93.27	
			For >1000, Deduct	-115.76	
26 56 19 00-0052	EA		3,300 Lumens, 4000K CCT, Horizontal Tenon Mount, LED Cobra Head Street Light (CREE® RSW-HT-XXX-30W-40K-UL-GY-N) .....	643.90	194.13
			For Field Adjustable Output, Add	25.19	
			For Backlight Control Shield, Add	61.39	
			For Bird Spikes, Add	79.85	
			For >50 To 100, Deduct	-32.20	
			For >100 To 250, Deduct	-48.29	
			For >250 To 500, Deduct	-70.78	
			For >500 To 1000, Deduct	-93.27	
			For >1000, Deduct	-115.76	
26 56 19 00-0053	EA		5,000 Lumens, 3000K CCT, Horizontal Tenon Mount, LED Cobra Head Street Light (CREE® RSW-HT-2ME-50W-30K-UL-GY-N) .....	661.53	194.13
			For Field Adjustable Output, Add	25.19	
			For Backlight Control Shield, Add	61.39	
			For Bird Spikes, Add	79.85	
			For >50 To 100, Deduct	-33.08	
			For >100 To 250, Deduct	-49.61	
			For >250 To 500, Deduct	-72.98	
			For >500 To 1000, Deduct	-96.35	
			For >1000, Deduct	-119.72	
26 56 19 00-0054	EA		5,000 Lumens, 4000K CCT, Horizontal Tenon Mount, LED Cobra Head Street Light (CREE® RSW-HT-2ME-50W-40K-UL-GY-N) .....	661.53	194.13
			For Field Adjustable Output, Add	25.19	
			For Backlight Control Shield, Add	61.39	
			For Bird Spikes, Add	79.85	
			For >50 To 100, Deduct	-33.08	
			For >100 To 250, Deduct	-49.61	
			For >250 To 500, Deduct	-72.98	
			For >500 To 1000, Deduct	-96.35	
			For >1000, Deduct	-119.72	
26 56 19 00-0055			LED Roadway Lighting (Cooper Lighting) (26 56 19 00-0001)		
26 56 19 00-0056			Horizontal Tenon Mount, LED Roadway Fixtures (Cooper Lighting Streetworks NVN™) (26 56 19 00-0055)		
			Note: UL wet listed. Includes 4,000K color temperature, 120-480 voltage, die-cast extruded aluminum housing assembly and powder coat finish. Excludes sensors.		
26 56 19 00-0057	EA		1 LED Light Square, 51 Watt, Horizontal Tenon Mount, LED Roadway Fixture (Cooper Lighting Streetworks™ NVN-AA) .....	1,054.33	194.13
			For >50 To 100, Deduct	-52.72	
			For >100 To 250, Deduct	-79.07	
			For >250 To 500, Deduct	-122.08	
			For >500 To 1000, Deduct	-165.09	
			For >1000, Deduct	-208.10	
26 56 19 00-0058	EA		2 LED Light Squares, 103 Watt, Horizontal Tenon Mount, LED Roadway Fixture (Cooper Lighting Streetworks™ NVN-AA) .....	1,412.84	215.70
			For >50 To 100, Deduct	-70.64	
			For >100 To 250, Deduct	-105.96	
			For >250 To 500, Deduct	-165.82	
			For >500 To 1000, Deduct	-225.68	
			For >1000, Deduct	-285.53	
26 56 19 00-0059	EA		3 LED Light Squares, 154 Watt, Horizontal Tenon Mount, LED Roadway Fixture (Cooper Lighting Streetworks™ NVN-AA) .....	1,521.17	248.06
			For >50 To 100, Deduct	-76.06	
			For >100 To 250, Deduct	-114.09	
			For >250 To 500, Deduct	-177.74	
			For >500 To 1000, Deduct	-241.40	
			For >1000, Deduct	-305.06	

<b>26</b>	<b>Electrical</b>
<b>26 50</b>	<b>Lighting</b>
<b>26 56</b>	<b>Exterior Lighting</b>



MINOR	CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
26 56 19 00-0060	EA		4 LED Light Squares, 206 Watt, Horizontal Tenon Mount, LED Roadway Fixture (Cooper Lighting Streetworks™ NVN-AA) .....	2,229.36	269.63
			For >50 To 100, Deduct	-111.47	
			For >100 To 250, Deduct	-167.20	
			For >250 To 500, Deduct	-265.19	
			For >500 To 1000, Deduct	-363.18	
			For >1000, Deduct	-461.16	
26 56 19 00-0061	EA		6 LED Light Squares, 309 Watt, Horizontal Tenon Mount, LED Roadway Fixture (Cooper Lighting Streetworks™ NVN-AA) .....	2,907.96	306.97
			For >50 To 100, Deduct	-145.40	
			For >100 To 250, Deduct	-218.10	
			For >250 To 500, Deduct	-348.15	
			For >500 To 1000, Deduct	-478.20	
			For >1000, Deduct	-608.25	
26 56 19 00-0062			LED Roadway Lighting (PlanLED) (26 56 19 00-0001)		
26 56 19 00-0063			Horizontal Tenon Mount, LED Roadway Fixtures (PlanLED GigaTera HERA) (26 56 19 00-0062)		
			Note: UL wet listed. Includes 3,000K, 4,000K or 5,000K color temperature, 120-277 voltage, integral 20kV surge suppression, die-cast extruded aluminum housing assembly and powder coat finish. Excludes sensors.		
26 56 19 00-0064	EA		8,500 Lumens, 85 Watt, Horizontal Tenon Mount, LED Roadway Fixture (PlanLED GigaTera HERA 85W) .....	1,251.92	188.74
			For >50 To 100, Deduct	-62.60	
			For >100 To 250, Deduct	-93.89	
			For >250 To 500, Deduct	-147.05	
			For >500 To 1000, Deduct	-200.21	
			For >1000, Deduct	-253.37	
26 56 19 00-0065	EA		11,000 Lumens, 110 Watt, Horizontal Tenon Mount, LED Roadway Fixture (PlanLED GigaTera HERA 110W) .....	1,356.81	190.82
			For >50 To 100, Deduct	-67.84	
			For >100 To 250, Deduct	-101.76	
			For >250 To 500, Deduct	-160.06	
			For >500 To 1000, Deduct	-218.36	
			For >1000, Deduct	-276.66	
26 56 19 00-0066	EA		15,000 Lumens, 150 Watt, Horizontal Tenon Mount, LED Roadway Fixture (PlanLED GigaTera HERA 150W) .....	1,440.02	194.13
			For >50 To 100, Deduct	-72.00	
			For >100 To 250, Deduct	-108.00	
			For >250 To 500, Deduct	-170.30	
			For >500 To 1000, Deduct	-232.59	
			For >1000, Deduct	-294.88	
26 56 19 00-0067			Horizontal Tenon Mount, LED Roadway Fixtures (PlanLED GigaTera SETA) (26 56 19 00-0062)		
			Note: UL wet listed. Includes 3,000K, 3,500K, 4,000K or 5,000K color temperature, 120-277 voltage, integral 20kV surge suppression, die-cast extruded aluminum housing assembly and powder coat finish. Excludes sensors.		
26 56 19 00-0068	EA		7,200 Lumens, 60 Watt, Horizontal Tenon Mount, LED Roadway Fixture (PlanLED GigaTera SETA SET060) .....	845.88	184.17
			For >50 To 100, Deduct	-42.29	
			For >100 To 250, Deduct	-63.44	
			For >250 To 500, Deduct	-96.53	
			For >500 To 1000, Deduct	-129.61	
			For >1000, Deduct	-162.70	
26 56 19 00-0069	EA		10,000 Lumens, 80 Watt, Horizontal Tenon Mount, LED Roadway Fixture (PlanLED GigaTera SETA SET080) .....	902.88	187.50
			For >50 To 100, Deduct	-45.14	
			For >100 To 250, Deduct	-67.72	
			For >250 To 500, Deduct	-103.49	
			For >500 To 1000, Deduct	-139.25	
			For >1000, Deduct	-175.02	
26 56 19 00-0070	EA		12,500 Lumens, 100 Watt, Horizontal Tenon Mount, LED Roadway Fixture (PlanLED GigaTera SETA SET100) .....	992.13	190.82
			For >50 To 100, Deduct	-49.61	
			For >100 To 250, Deduct	-74.41	
			For >250 To 500, Deduct	-114.48	
			For >500 To 1000, Deduct	-154.54	
			For >1000, Deduct	-194.61	
26 56 19 00-0071			Horizontal Tenon Mount, LED Roadway Fixtures (PlanLED GigaTera META) (26 56 19 00-0062)		
			Note: UL wet listed. Includes 3,000K, 4,000K or 5,000K color temperature, 120-277 voltage, integral 20kV surge suppression, die-cast extruded aluminum housing assembly and powder coat finish. Excludes sensors.		
26 56 19 00-0072	EA		13,000 Lumens, 100 Watt, Horizontal Tenon Mount, LED Roadway Fixture (PlanLED GigaTera META MT100) .....	1,050.56	190.82
			For 0 To 10 Volt Dimming, Add	87.05	
			For 347-480 Volt, Add	87.05	
			For >50 To 100, Deduct	-52.53	
			For >100 To 250, Deduct	-78.79	
			For >250 To 500, Deduct	-121.78	
			For >500 To 1000, Deduct	-164.77	
			For >1000, Deduct	-207.75	



Electrical		26
Lighting		26 50
Exterior Lighting		26 56

26

MINOR	CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
26 56 19 00-0073	EA		16,900 Lumens, 130 Watt, Horizontal Tenon Mount, LED Roadway Fixture (PlanLED GigaTera META MT130) ..... <i>For 0 To 10 Volt Dimming, Add</i> <i>For 347-480 Volt, Add</i> <i>For &gt;50 To 100, Deduct</i> <i>For &gt;100 To 250, Deduct</i> <i>For &gt;250 To 500, Deduct</i> <i>For &gt;500 To 1000, Deduct</i> <i>For &gt;1000, Deduct</i>	1,158.65 87.05 26.27 -57.93 -86.90 -135.21 -183.52 -231.83	192.48
26 56 19 00-0074	EA		19,500 Lumens, 150 Watt, Horizontal Tenon Mount, LED Roadway Fixture (PlanLED GigaTera META MT150) ..... <i>For 0 To 10 Volt Dimming, Add</i> <i>For 347-480 Volt, Add</i> <i>For &gt;50 To 100, Deduct</i> <i>For &gt;100 To 250, Deduct</i> <i>For &gt;250 To 500, Deduct</i> <i>For &gt;500 To 1000, Deduct</i> <i>For &gt;1000, Deduct</i>	1,242.56 87.05 108.78 -62.13 -93.19 -145.61 -198.03 -250.46	194.13
26 56 19 00-0075			LED Roadway Lighting (General Electric) <small>(26 56 19 00-0001)</small>		
26 56 19 00-0076			Horizontal Tenon Mount, LED Cobra Head Street Lights (General Electric) <small>(26 56 19 00-0075)</small> Note: UL wet listed. Includes 4,000K or 5,700K color temperature, 120-480 voltage, die-cast extruded aluminum housing assembly and black or gray powder coat finish. Excludes sensors.		
26 56 19 00-0077	EA		2,000 Lumens, Horizontal Tenon Mount, LED Cobra Head Street Light (General Electric ERL1 0 02XX 40 A GRAY) ..... <i>For LightGrid™ Wireless Outdoor Controller, Add</i> <i>For &gt;50 To 100, Deduct</i> <i>For &gt;100 To 250, Deduct</i> <i>For &gt;250 To 500, Deduct</i> <i>For &gt;500 To 1000, Deduct</i> <i>For &gt;1000, Deduct</i>	660.98 20.00 -33.05 -49.57 -73.46 -97.34 -121.22	183.34
26 56 19 00-0078	EA		3,000 Lumens, Horizontal Tenon Mount, LED Cobra Head Street Light (General Electric ERL1 0 03XX 40 A GRAY) ..... <i>For LightGrid™ Wireless Outdoor Controller, Add</i> <i>For &gt;50 To 100, Deduct</i> <i>For &gt;100 To 250, Deduct</i> <i>For &gt;250 To 500, Deduct</i> <i>For &gt;500 To 1000, Deduct</i> <i>For &gt;1000, Deduct</i>	665.95 20.00 -33.30 -49.95 -73.95 -97.96 -121.96	185.84
26 56 19 00-0079	EA		4,000 Lumens, Horizontal Tenon Mount, LED Cobra Head Street Light (General Electric ERL1 0 04XX 40 A GRAY) ..... <i>For LightGrid™ Wireless Outdoor Controller, Add</i> <i>For &gt;50 To 100, Deduct</i> <i>For &gt;100 To 250, Deduct</i> <i>For &gt;250 To 500, Deduct</i> <i>For &gt;500 To 1000, Deduct</i> <i>For &gt;1000, Deduct</i>	692.12 20.00 -34.61 -51.91 -77.08 -102.25 -127.42	188.74
26 56 19 00-0080	EA		5,000 Lumens, Horizontal Tenon Mount, LED Cobra Head Street Light (General Electric ERL1 0 05XX 40 A GRAY) ..... <i>For LightGrid™ Wireless Outdoor Controller, Add</i> <i>For &gt;50 To 100, Deduct</i> <i>For &gt;100 To 250, Deduct</i> <i>For &gt;250 To 500, Deduct</i> <i>For &gt;500 To 1000, Deduct</i> <i>For &gt;1000, Deduct</i>	718.48 20.00 -35.92 -53.89 -80.27 -106.65 -133.04	190.82
26 56 19 00-0081	EA		7,000 Lumens, Horizontal Tenon Mount, LED Cobra Head Street Light (General Electric ERL1 0 07XX 40 A GRAY) ..... <i>For LightGrid™ Wireless Outdoor Controller, Add</i> <i>For &gt;50 To 100, Deduct</i> <i>For &gt;100 To 250, Deduct</i> <i>For &gt;250 To 500, Deduct</i> <i>For &gt;500 To 1000, Deduct</i> <i>For &gt;1000, Deduct</i>	787.85 20.00 -39.39 -59.09 -88.73 -118.38 -148.02	194.96
26 56 19 00-0082	EA		8,000 Lumens, Horizontal Tenon Mount, LED Cobra Head Street Light (General Electric ERL1 0 08XX 40 A GRAY) ..... <i>For LightGrid™ Wireless Outdoor Controller, Add</i> <i>For &gt;50 To 100, Deduct</i> <i>For &gt;100 To 250, Deduct</i> <i>For &gt;250 To 500, Deduct</i> <i>For &gt;500 To 1000, Deduct</i> <i>For &gt;1000, Deduct</i>	824.48 20.00 -41.22 -61.84 -93.23 -124.62 -156.02	196.62
26 56 19 00-0083	EA		9,800 Lumens, Horizontal Tenon Mount, LED Cobra Head Street Light (General Electric ERL1 0 10XX 40 A GRAY) ..... <i>For LightGrid™ Wireless Outdoor Controller, Add</i> <i>For &gt;50 To 100, Deduct</i> <i>For &gt;100 To 250, Deduct</i> <i>For &gt;250 To 500, Deduct</i> <i>For &gt;500 To 1000, Deduct</i> <i>For &gt;1000, Deduct</i>	893.21 20.00 -44.66 -66.99 -101.68 -136.36 -171.04	199.53



MINOR CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
26 56 19 00-0084	EA	13,000 Lumens, Horizontal Tenon Mount, LED Cobra Head Street Light (General Electric ERLH 0 13XX 40 A GRAY) .....	1,039.11	204.91
		For LightGrid™ Wireless Outdoor Controller, Add	20.00	
		For >50 To 100, Deduct	-51.96	
		For >100 To 250, Deduct	-77.93	
		For >250 To 500, Deduct	-119.64	
		For >500 To 1000, Deduct	-161.35	
		For >1000, Deduct	-203.06	
26 56 19 00-0085	EA	19,000 Lumens, Horizontal Tenon Mount, LED Cobra Head Street Light (General Electric ERL2 0 19XX 40 A GRAY) .....	1,208.75	215.70
		For LightGrid™ Wireless Outdoor Controller, Add	20.00	
		For >50 To 100, Deduct	-60.44	
		For >100 To 250, Deduct	-90.66	
		For >250 To 500, Deduct	-140.31	
		For >500 To 1000, Deduct	-189.96	
		For >1000, Deduct	-239.61	
26 56 19 00-0086		LED Roadway Lighting (Acuity AEL Autobahn) (26 56 19 00-0001)		
26 56 19 00-0087		Horizontal Tenon Mount, LED Cobra Head Street Lights (Acuity AEL Autobahn) (26 56 19 00-0086)		
		Note: UL wet listed. Includes 4,000K or 5,000K color temperature, 120-480 voltage, integral 10kV surge suppression, 0-10V dimming, die-cast extruded aluminum housing assembly and white, black, gray, graphite or bronze powder coat finish. Excludes sensors.		
26 56 19 00-0088	EA	4,200 Lumens, Horizontal Tenon Mount, LED Cobra Head Street Light (Acuity AEL Autobahn ATB0 20ALEDE70) .....	1,215.67	188.74
		For >50 To 100, Deduct	-60.78	
		For >100 To 250, Deduct	-91.18	
		For >250 To 500, Deduct	-142.52	
		For >500 To 1000, Deduct	-193.87	
		For >1000, Deduct	-245.21	
26 56 19 00-0089	EA	6,700 Lumens, Horizontal Tenon Mount, LED Cobra Head Street Light (Acuity AEL Autobahn ATB0 30BLEDE70) .....	1,495.25	194.13
		For >50 To 100, Deduct	-74.76	
		For >100 To 250, Deduct	-112.14	
		For >250 To 500, Deduct	-177.20	
		For >500 To 1000, Deduct	-242.26	
		For >1000, Deduct	-307.31	
26 56 19 00-0090	EA	9,000 Lumens, Horizontal Tenon Mount, LED Cobra Head Street Light (Acuity AEL Autobahn ATB2 40BLEDE70) .....	2,059.65	199.53
		For >50 To 100, Deduct	-102.98	
		For >100 To 250, Deduct	-154.47	
		For >250 To 500, Deduct	-247.48	
		For >500 To 1000, Deduct	-340.49	
		For >1000, Deduct	-433.49	
26 56 19 00-0091	EA	13,500 Lumens, Horizontal Tenon Mount, LED Cobra Head Street Light (Acuity AEL Autobahn ATB2 60BLEDE70) .....	2,628.89	207.41
		For >50 To 100, Deduct	-131.44	
		For >100 To 250, Deduct	-197.17	
		For >250 To 500, Deduct	-318.24	
		For >500 To 1000, Deduct	-439.32	
		For >1000, Deduct	-560.39	
26 56 19 00-0092	EA	17,800 Lumens, Horizontal Tenon Mount, LED Cobra Head Street Light (Acuity AEL Autobahn ATB2 80BLEDE70) .....	3,184.54	213.22
		For >50 To 100, Deduct	-159.23	
		For >100 To 250, Deduct	-238.84	
		For >250 To 500, Deduct	-387.41	
		For >500 To 1000, Deduct	-535.97	
		For >1000, Deduct	-684.54	
26 56 19 00-0093		LED Roadway Lighting (Leotek) (26 56 19 00-0001)		
26 56 19 00-0094		Horizontal Tenon Mount, LED Cobra Head Street Lights (Leotek) (26 56 19 00-0093)		
		Note: UL wet listed. Includes 4,000K color temperature, 120-277 voltage, integral surge protector, die-cast and extruded aluminum housing assembly and gray powder coat finish. Excludes sensors.		
26 56 19 00-0095	EA	Up To 3,900 Lumens, Horizontal Tenon Mount, LED Cobra Head Street Light (Leotek® EC1-4M2-MV-NW-X-GY-XXX-WL) .....	676.75	188.74
		For LightGrid™ Wireless Outdoor Controller, Add	20.00	
		For Twist Lock Shorting Cap, Add	9.25	
		For ANSI 7-wire Photocontrol Receptacle, Add	27.76	
		For Ripley Long-Life Twist Lock Photocontrol, Add	49.68	
		For >50 To 100, Deduct	-33.84	
		For >100 To 250, Deduct	-50.76	
		For >250 To 500, Deduct	-75.16	
		For >500 To 1000, Deduct	-99.56	
		For >1000, Deduct	-123.96	
26 56 19 00-0096	EA	Up To 5,150 Lumens, Horizontal Tenon Mount, LED Cobra Head Street Light (Leotek® EC1-4M2-MV-NW-X-GY-1AMP-WL) .....	690.62	190.82
		For LightGrid™ Wireless Outdoor Controller, Add	20.00	
		For Twist Lock Shorting Cap, Add	9.25	
		For ANSI 7-wire Photocontrol Receptacle, Add	27.76	
		For Ripley Long-Life Twist Lock Photocontrol, Add	49.68	
		For >50 To 100, Deduct	-34.53	
		For >100 To 250, Deduct	-51.80	
		For >250 To 500, Deduct	-76.79	
		For >500 To 1000, Deduct	-101.78	
		For >1000, Deduct	-126.77	



Electrical		26	26
Lighting		26 50	
Exterior Lighting		26 56	

MINOR	CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
26 56 19 00-0097	EA	Up To 5,950 Lumens, Horizontal Tenon Mount, LED Cobra Head Street Light (Leotek® EC1-6M2-MV-NW-X-GY-XXX-WL).....	731.98	192.06	
		For LightGrid™ Wireless Outdoor Controller, Add	20.00		
		For Twist Lock Shorting Cap, Add	9.25		
		For ANSI 7-wire Photocontrol Receptacle, Add	27.76		
		For Ripley Long-Life Twist Lock Photocontrol, Add	49.68		
		For >50 To 100, Deduct	-36.60		
		For >100 To 250, Deduct	-54.90		
		For >250 To 500, Deduct	-81.89		
		For >500 To 1000, Deduct	-108.89		
		For >1000, Deduct	-135.89		
26 56 19 00-0098	EA	Up To 9,550 Lumens, Horizontal Tenon Mount, LED Cobra Head Street Light (Leotek® EC3-10M2-MV-NW-X-GY-XXX-WL).....	840.19	199.53	
		For LightGrid™ Wireless Outdoor Controller, Add	20.00		
		For Twist Lock Shorting Cap, Add	9.25		
		For ANSI 7-wire Photocontrol Receptacle, Add	27.76		
		For Ripley Long-Life Twist Lock Photocontrol, Add	49.68		
		For >50 To 100, Deduct	-42.01		
		For >100 To 250, Deduct	-63.01		
		For >250 To 500, Deduct	-95.05		
		For >500 To 1000, Deduct	-127.08		
		For >1000, Deduct	-159.11		
26 56 19 00-0099	EA	Up To 11,450 Lumens, Horizontal Tenon Mount, LED Cobra Head Street Light (Leotek® EC4-12M2-MV-NW-X-GY-XXX-WL).....	971.47	204.91	
		For LightGrid™ Wireless Outdoor Controller, Add	20.00		
		For Twist Lock Shorting Cap, Add	9.25		
		For ANSI 7-wire Photocontrol Receptacle, Add	27.76		
		For Ripley Long-Life Twist Lock Photocontrol, Add	49.68		
		For >50 To 100, Deduct	-48.57		
		For >100 To 250, Deduct	-72.86		
		For >250 To 500, Deduct	-111.19		
		For >500 To 1000, Deduct	-149.52		
		For >1000, Deduct	-187.84		
26 56 19 00-0100	EA	Up To 14,550 Lumens, Horizontal Tenon Mount, LED Cobra Head Street Light (Leotek® EC4-15M2-MV-NW-X-GY-XXX-WL).....	978.10	208.24	
		For LightGrid™ Wireless Outdoor Controller, Add	20.00		
		For Twist Lock Shorting Cap, Add	9.25		
		For ANSI 7-wire Photocontrol Receptacle, Add	27.76		
		For Ripley Long-Life Twist Lock Photocontrol, Add	49.68		
		For >50 To 100, Deduct	-48.91		
		For >100 To 250, Deduct	-73.36		
		For >250 To 500, Deduct	-111.85		
		For >500 To 1000, Deduct	-150.34		
		For >1000, Deduct	-188.84		
26 56 19 00-0101	EA	Up To 16,900 Lumens, Horizontal Tenon Mount, LED Cobra Head Street Light (Leotek® EC7-18M2-MV-NW-X-GY-XXX-WL).....	1,181.01	211.56	
		For LightGrid™ Wireless Outdoor Controller, Add	20.00		
		For Twist Lock Shorting Cap, Add	9.25		
		For ANSI 7-wire Photocontrol Receptacle, Add	27.76		
		For Ripley Long-Life Twist Lock Photocontrol, Add	49.68		
		For >50 To 100, Deduct	-59.05		
		For >100 To 250, Deduct	-88.58		
		For >250 To 500, Deduct	-137.05		
		For >500 To 1000, Deduct	-185.52		
		For >1000, Deduct	-233.99		
26 56 19 00-0102	EA	Up To 18,750 Lumens, Horizontal Tenon Mount, LED Cobra Head Street Light (Leotek® EC7-20M2-MV-NW-X-GY-XXX-WL).....	1,235.95	215.70	
		For LightGrid™ Wireless Outdoor Controller, Add	20.00		
		For Twist Lock Shorting Cap, Add	9.25		
		For ANSI 7-wire Photocontrol Receptacle, Add	27.76		
		For Ripley Long-Life Twist Lock Photocontrol, Add	49.68		
		For >50 To 100, Deduct	-61.80		
		For >100 To 250, Deduct	-92.70		
		For >250 To 500, Deduct	-143.71		
		For >500 To 1000, Deduct	-194.72		
		For >1000, Deduct	-245.73		
26 56 19 00-0103	EA	Up To 22,700 Lumens, Horizontal Tenon Mount, LED Cobra Head Street Light (Leotek® EC7-24M2-MV-NW-X-GY-XXX-WL).....	1,370.84	219.02	
		For LightGrid™ Wireless Outdoor Controller, Add	20.00		
		For Twist Lock Shorting Cap, Add	9.25		
		For ANSI 7-wire Photocontrol Receptacle, Add	27.76		
		For Ripley Long-Life Twist Lock Photocontrol, Add	49.68		
		For >50 To 100, Deduct	-68.54		
		For >100 To 250, Deduct	-102.81		
		For >250 To 500, Deduct	-160.40		
		For >500 To 1000, Deduct	-218.00		
		For >1000, Deduct	-275.59		

<b>26</b>	<b>Electrical</b>
<b>26 50</b>	<b>Lighting</b>
<b>26 56</b>	<b>Exterior Lighting</b>



MINOR	CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
26 56 19 00-0104	EA		Up To 29,150 Lumens, Horizontal Tenon Mount, LED Cobra Head Street Light (Leotek® EC9-30M2-MV-NW-X-GY-XXX-WL) .....	1,464.93	222.34
			For LightGrid™ Wireless Outdoor Controller, Add	20.00	
			For Twist Lock Shorting Cap, Add	9.25	
			For ANSI 7-wire Photocontrol Receptacle, Add	27.76	
			For Ripley Long-Life Twist Lock Photocontrol, Add	49.68	
			For >50 To 100, Deduct	-73.25	
			For >100 To 250, Deduct	-109.87	
			For >250 To 500, Deduct	-172.00	
			For >500 To 1000, Deduct	-234.13	
			For >1000, Deduct	-296.26	
26 56 19 00-0105	EA		Up To 4,800 Lumens, Horizontal Tenon Mount, LED Cobra Head Street Light (Leotek GC1-20F-MV-NW-X-GY-XXX-WL) .....	772.24	190.82
			For LightGrid™ Wireless Outdoor Controller, Add	20.00	
			For Twist Lock Shorting Cap, Add	9.25	
			For ANSI 7-wire Photocontrol Receptacle, Add	27.76	
			For Ripley Long-Life Twist Lock Photocontrol, Add	49.68	
			For >50 To 100, Deduct	-38.61	
			For >100 To 250, Deduct	-57.92	
			For >250 To 500, Deduct	-86.99	
			For >500 To 1000, Deduct	-116.06	
			For >1000, Deduct	-145.13	
26 56 19 00-0106	EA		Up To 7,000 Lumens, Horizontal Tenon Mount, LED Cobra Head Street Light (Leotek GC1-30F-MV-NW-X-GY-XXX-WL) .....	842.43	195.79
			For LightGrid™ Wireless Outdoor Controller, Add	20.00	
			For Twist Lock Shorting Cap, Add	9.25	
			For ANSI 7-wire Photocontrol Receptacle, Add	27.76	
			For Ripley Long-Life Twist Lock Photocontrol, Add	49.68	
			For >50 To 100, Deduct	-42.12	
			For >100 To 250, Deduct	-63.18	
			For >250 To 500, Deduct	-95.51	
			For >500 To 1000, Deduct	-127.85	
			For >1000, Deduct	-160.18	
26 56 19 00-0107	EA		Up To 9,300 Lumens, Horizontal Tenon Mount, LED Cobra Head Street Light (Leotek GC1-40F-MV-NW-X-GY-XXX-WL) .....	904.32	199.53
			For LightGrid™ Wireless Outdoor Controller, Add	20.00	
			For Twist Lock Shorting Cap, Add	9.25	
			For ANSI 7-wire Photocontrol Receptacle, Add	27.76	
			For Ripley Long-Life Twist Lock Photocontrol, Add	49.68	
			For >50 To 100, Deduct	-45.22	
			For >100 To 250, Deduct	-67.82	
			For >250 To 500, Deduct	-103.06	
			For >500 To 1000, Deduct	-138.30	
			For >1000, Deduct	-173.54	
26 56 19 00-0108	EA		Up To 12,300 Lumens, Horizontal Tenon Mount, LED Cobra Head Street Light (Leotek GC1-40F-MV-NW-X-GY-1AMP-WL) .....	958.15	204.08
			For LightGrid™ Wireless Outdoor Controller, Add	20.00	
			For Twist Lock Shorting Cap, Add	9.25	
			For ANSI 7-wire Photocontrol Receptacle, Add	27.76	
			For Ripley Long-Life Twist Lock Photocontrol, Add	49.68	
			For >50 To 100, Deduct	-47.91	
			For >100 To 250, Deduct	-71.86	
			For >250 To 500, Deduct	-109.56	
			For >500 To 1000, Deduct	-147.27	
			For >1000, Deduct	-184.97	
26 56 19 00-0109	EA		Up To 13,400 Lumens, Horizontal Tenon Mount, LED Cobra Head Street Light (Leotek GC1-60F-MV-NW-X-GY-XXX-WL) .....	1,011.98	205.75
			For LightGrid™ Wireless Outdoor Controller, Add	20.00	
			For Twist Lock Shorting Cap, Add	9.25	
			For ANSI 7-wire Photocontrol Receptacle, Add	27.76	
			For Ripley Long-Life Twist Lock Photocontrol, Add	49.68	
			For >50 To 100, Deduct	-50.60	
			For >100 To 250, Deduct	-75.90	
			For >250 To 500, Deduct	-116.21	
			For >500 To 1000, Deduct	-156.52	
			For >1000, Deduct	-196.83	
26 56 19 00-0110	EA		Up To 17,700 Lumens, Horizontal Tenon Mount, LED Cobra Head Street Light (Leotek GC1-80F-MV-NW-X-GY-XXX-WL) .....	1,192.11	213.22
			For LightGrid™ Wireless Outdoor Controller, Add	20.00	
			For Twist Lock Shorting Cap, Add	9.25	
			For ANSI 7-wire Photocontrol Receptacle, Add	27.76	
			For Ripley Long-Life Twist Lock Photocontrol, Add	49.68	
			For >50 To 100, Deduct	-59.61	
			For >100 To 250, Deduct	-89.41	
			For >250 To 500, Deduct	-138.35	
			For >500 To 1000, Deduct	-187.30	
			For >1000, Deduct	-236.24	



Electrical		26
Lighting		26 50
Exterior Lighting		26 56

26

MINOR	CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
26 56 19 00-0111	EA		Up To 19,800 Lumens, Horizontal Tenon Mount, LED Cobra Head Street Light (Leotek GC2-90F-MV-NW-X-GY-XXX-WL).....	1,338.37	217.36
			For LightGrid™ Wireless Outdoor Controller, Add	20.00	
			For Twist Lock Shorting Cap, Add	9.25	
			For ANSI 7-wire Photocontrol Receptacle, Add	27.76	
			For Ripley Long-Life Twist Lock Photocontrol, Add	49.68	
			For >50 To 100, Deduct	-66.92	
			For >100 To 250, Deduct	-100.38	
			For >250 To 500, Deduct	-156.43	
			For >500 To 1000, Deduct	-212.48	
			For >1000, Deduct	-268.53	
26 56 19 00-0112	EA		Up To 22,000 Lumens, Horizontal Tenon Mount, LED Cobra Head Street Light (Leotek GC2-100F-MV-NW-X-GY-XXX-WL).....	1,417.77	218.19
			For LightGrid™ Wireless Outdoor Controller, Add	20.00	
			For Twist Lock Shorting Cap, Add	9.25	
			For ANSI 7-wire Photocontrol Receptacle, Add	27.76	
			For Ripley Long-Life Twist Lock Photocontrol, Add	49.68	
			For >50 To 100, Deduct	-70.89	
			For >100 To 250, Deduct	-106.33	
			For >250 To 500, Deduct	-166.31	
			For >500 To 1000, Deduct	-226.29	
			For >1000, Deduct	-286.27	
26 56 19 00-0113	EA		Up To 26,400 Lumens, Horizontal Tenon Mount, LED Cobra Head Street Light (Leotek GC2-120F-MV-NW-X-GY-XXX-WL).....	1,494.66	220.68
			For LightGrid™ Wireless Outdoor Controller, Add	20.00	
			For Twist Lock Shorting Cap, Add	9.25	
			For ANSI 7-wire Photocontrol Receptacle, Add	27.76	
			For Ripley Long-Life Twist Lock Photocontrol, Add	49.68	
			For >50 To 100, Deduct	-74.73	
			For >100 To 250, Deduct	-112.10	
			For >250 To 500, Deduct	-175.80	
			For >500 To 1000, Deduct	-239.50	
			For >1000, Deduct	-303.20	
26 56 19 00-0114	EA		Up To 11,720 Lumens, Horizontal Tenon Mount, LED Cobra Head Street Light (Leotek® GCM2-30H-MV-NW-X-GY-1AMP).....	830.40	208.24
			For LightGrid™ Wireless Outdoor Controller, Add	20.00	
			For Twist Lock Shorting Cap, Add	9.25	
			For ANSI 7-wire Photocontrol Receptacle, Add	27.76	
			For Ripley Long-Life Twist Lock Photocontrol, Add	49.68	
			For >50 To 100, Deduct	-41.52	
			For >100 To 250, Deduct	-62.28	
			For >250 To 500, Deduct	-93.39	
			For >500 To 1000, Deduct	-124.50	
			For >1000, Deduct	-155.60	
26 56 19 00-0115	EA		Up To 15,430 Lumens, Horizontal Tenon Mount, LED Cobra Head Street Light (Leotek® GCM2-40H-MV-NW-X-GY-1AMP).....	892.86	210.31
			For LightGrid™ Wireless Outdoor Controller, Add	20.00	
			For Twist Lock Shorting Cap, Add	9.25	
			For ANSI 7-wire Photocontrol Receptacle, Add	27.76	
			For Ripley Long-Life Twist Lock Photocontrol, Add	49.68	
			For >50 To 100, Deduct	-44.64	
			For >100 To 250, Deduct	-66.96	
			For >250 To 500, Deduct	-101.09	
			For >500 To 1000, Deduct	-135.22	
			For >1000, Deduct	-169.35	
26 56 19 00-0116	EA		Up To 4,180 Lumens, Horizontal Tenon Mount, LED Cobra Head Street Light (Leotek® GCJ0-15H-MV-NW-X-GY-XXX-WL).....	650.91	190.40
			For LightGrid™ Wireless Outdoor Controller, Add	20.00	
			For Twist Lock Shorting Cap, Add	9.25	
			For ANSI 7-wire Photocontrol Receptacle, Add	27.76	
			For Ripley Long-Life Twist Lock Photocontrol, Add	49.68	
			For >50 To 100, Deduct	-32.55	
			For >100 To 250, Deduct	-48.82	
			For >250 To 500, Deduct	-71.84	
			For >500 To 1000, Deduct	-94.87	
			For >1000, Deduct	-117.90	
26 56 19 00-0117	EA		Up To 5,510 Lumens, Horizontal Tenon Mount, LED Cobra Head Street Light (Leotek® GCJ1-20H-MV-NW-X-GY-XXX-WL).....	662.02	192.06
			For LightGrid™ Wireless Outdoor Controller, Add	20.00	
			For Twist Lock Shorting Cap, Add	9.25	
			For ANSI 7-wire Photocontrol Receptacle, Add	27.76	
			For Ripley Long-Life Twist Lock Photocontrol, Add	49.68	
			For >50 To 100, Deduct	-33.10	
			For >100 To 250, Deduct	-49.65	
			For >250 To 500, Deduct	-73.15	
			For >500 To 1000, Deduct	-96.65	
			For >1000, Deduct	-120.15	

<b>26</b>	<b>Electrical</b>
<b>26 50</b>	<b>Lighting</b>
<b>26 56</b>	<b>Exterior Lighting</b>



MINOR	CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
26 56 19 00-0118	EA		Up To 7,430 Lumens, Horizontal Tenon Mount, LED Cobra Head Street Light (Leotek® GCJ2-20H-MV-NW-X-GY-1AMP-WL) .....	714.17	195.79
			For LightGrid™ Wireless Outdoor Controller, Add .....	20.00	
			For Twist Lock Shorting Cap, Add .....	9.25	
			For ANSI 7-wire Photocontrol Receptacle, Add .....	27.76	
			For Ripley Long-Life Twist Lock Photocontrol, Add .....	49.68	
			For >50 To 100, Deduct .....	-35.71	
			For >100 To 250, Deduct .....	-53.56	
			For >250 To 500, Deduct .....	-79.48	
			For >500 To 1000, Deduct .....	-105.40	
			For >1000, Deduct .....	-131.32	
26 56 19 00-0119	EA		Up To 16,400 Lumens, Horizontal Tenon Mount, LED Cobra Head Street Light (Leotek® GCL1-60G-MV-NW-X-GY-XXX-WL) .....	1,062.47	211.56
			For LightGrid™ Wireless Outdoor Controller, Add .....	20.00	
			For Twist Lock Shorting Cap, Add .....	9.25	
			For ANSI 7-wire Photocontrol Receptacle, Add .....	27.76	
			For Ripley Long-Life Twist Lock Photocontrol, Add .....	49.68	
			For >50 To 100, Deduct .....	-53.12	
			For >100 To 250, Deduct .....	-79.69	
			For >250 To 500, Deduct .....	-122.23	
			For >500 To 1000, Deduct .....	-164.78	
			For >1000, Deduct .....	-207.32	
26 56 19 00-0120	EA		Up To 22,100 Lumens, Horizontal Tenon Mount, LED Cobra Head Street Light (Leotek® GCL1-80G-MV-NW-X-GY-XXX-WL) .....	1,363.35	218.19
			For LightGrid™ Wireless Outdoor Controller, Add .....	20.00	
			For Twist Lock Shorting Cap, Add .....	9.25	
			For ANSI 7-wire Photocontrol Receptacle, Add .....	27.76	
			For Ripley Long-Life Twist Lock Photocontrol, Add .....	49.68	
			For >50 To 100, Deduct .....	-68.17	
			For >100 To 250, Deduct .....	-102.25	
			For >250 To 500, Deduct .....	-159.51	
			For >500 To 1000, Deduct .....	-216.77	
			For >1000, Deduct .....	-274.03	
26 56 19 00-0121	EA		Up To 22,900 Lumens, Horizontal Tenon Mount, LED Cobra Head Street Light (Leotek® GCL2-60G-MV-NW-X-GY-1AMP-WL) .....	1,225.09	219.02
			For LightGrid™ Wireless Outdoor Controller, Add .....	20.00	
			For Twist Lock Shorting Cap, Add .....	9.25	
			For ANSI 7-wire Photocontrol Receptacle, Add .....	27.76	
			For Ripley Long-Life Twist Lock Photocontrol, Add .....	49.68	
			For >50 To 100, Deduct .....	-61.25	
			For >100 To 250, Deduct .....	-91.88	
			For >250 To 500, Deduct .....	-142.19	
			For >500 To 1000, Deduct .....	-192.49	
			For >1000, Deduct .....	-242.79	
26 56 19 00-0122	EA		Up To 5,484 Lumens, Horizontal Tenon Mount, LED Security Light (Leotek® SafeGuard™ SG1-01-MV-NW-5-GY) .....	628.43	190.82
			For Twist Lock Shorting Cap, Add .....	9.25	
			For ANSI 7-wire Photocontrol Receptacle, Add .....	27.76	
			For Ripley Long-Life Twist Lock Photocontrol, Add .....	49.68	
			For >50 To 100, Deduct .....	-31.42	
			For >100 To 250, Deduct .....	-47.13	
			For >250 To 500, Deduct .....	-69.01	
			For >500 To 1000, Deduct .....	-90.89	
			For >1000, Deduct .....	-112.77	

**26 56 21 HID Exterior Lighting** (26 56)26 56 21 00-0001 HID, Pole Mounted (26 56 21)26 56 21 00-0002 High Pressure Sodium, Pole Mounted (26 56 21 00-0001)

26 56 21 00-0003	EA	100 Watt High Pressure Sodium, Enclosed And Gasketed, Exterior Roadway Fixture .....	876.34	391.17
26 56 21 00-0004	EA	150 Watt High Pressure Sodium, Enclosed And Gasketed, Exterior Roadway Fixture .....	899.80	391.17
26 56 21 00-0005	EA	175 Watt High Pressure Sodium, Enclosed And Gasketed, Exterior Roadway Fixture .....	940.47	391.17
26 56 21 00-0006	EA	250 Watt High Pressure Sodium, Enclosed And Gasketed, Exterior Roadway Fixture .....	1,042.33	391.17

26 56 21 00-0007 Induction, Roadway Lighting (26 56 21)26 56 21 00-0008 Induction Roadway Lighting (US Lighting Tech) (26 56 21 00-0007)

Note: Includes gray powder coat finish heavy duty die cast aluminum body and flat glass lens.

26 56 21 00-0009	EA	40 Watt Induction, Horizontal Tenon Mount, Street Light (US Lighting Tech Jersey HR, 511) .....	743.97	248.89
26 56 21 00-0010	EA	70 Watt Induction, Horizontal Tenon Mount, Street Light (US Lighting Tech Jersey HR, 511) .....	808.84	257.18
26 56 21 00-0011	EA	100 Watt Induction, Horizontal Tenon Mount, Street Light (US Lighting Tech Jersey HR, 511) .....	842.02	273.78
26 56 21 00-0012	EA	150 Watt Induction, Horizontal Tenon Mount, Street Light (US Lighting Tech Jersey HR, 511) .....	875.21	290.37
26 56 21 00-0013	EA	200 Watt Induction, Horizontal Tenon Mount, Street Light (US Lighting Tech Jersey HR, 511) .....	1,002.84	298.66
26 56 21 00-0014	EA	250 Watt Induction, Horizontal Tenon Mount, Street Light (US Lighting Tech Jersey HR, 511) .....	1,023.28	306.97
26 56 21 00-0015	EA	40 Watt Induction, Horizontal Tenon Mount, Cobra Head Street Light (US Lighting Tech Cobra 100, 512) .....	703.42	248.89
26 56 21 00-0016	EA	70 Watt Induction, Horizontal Tenon Mount, Cobra Head Street Light (US Lighting Tech Cobra 100, 512) .....	774.08	257.18
26 56 21 00-0017	EA	100 Watt Induction, Horizontal Tenon Mount, Cobra Head Street Light (US Lighting Tech Cobra 100, 512) .....	807.26	273.78
26 56 21 00-0018	EA	150 Watt Induction, Horizontal Tenon Mount, Cobra Head Street Light (US Lighting Tech Cobra 100, 512) .....	840.45	290.37





Electrical		26	26
Lighting		26 50	
Exterior Lighting		26 56	

MINOR			TOTAL DIRECT	DEMOLITION
CSI	UOM	DESCRIPTION	UNIT COST	UNIT COST

END OF SECTION 26

26	26	Electrical
	26 50	Lighting
	26 56	Exterior Lighting



MINOR			TOTAL DIRECT	DEMOLITION
CSI	UOM	DESCRIPTION	UNIT COST	UNIT COST

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	<b>Communications</b>	<b>27</b>	
	<b>Structured Cabling</b>	<b>27 10</b>	<b>27</b>
	<b>Communications Backbone Cabling</b>	<b>27 13</b>	

MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
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## 27 Communications

Note: Termination costs are included with all communication equipment, panel boards, and devices. Terminations are not included with patch panels.

### 27 10 Structured Cabling<sup>(27)</sup>

Note: Includes testing.

#### 27 13 Communications Backbone Cabling<sup>(27 10)</sup>

##### 27 13 13 Communications Copper Backbone Cabling<sup>(27 13)</sup>

##### 27 13 13 13 Communications Copper Cable Splicing and Terminations<sup>(27 13 13)</sup>

27 13 13 13-0001	Building Entrance Terminals <sup>(27 13 13 13)</sup>		
27 13 13 13-0002	EA 25 Pair Gas Protective Unit Assembly Complete With Gas Protector.....	1,888.13	329.84
27 13 13 13-0003	EA 50 Pair Gas Protective Unit Assembly Complete With Gas Protector.....	2,658.57	549.74
27 13 13 13-0004	EA 100 Pair Gas Protective Unit Assembly Complete With Gas Protector.....	3,902.44	880.28

#### 27 15 Communications Horizontal Cabling<sup>(27 10)</sup>

##### 27 15 13 Communications Copper Horizontal Cabling<sup>(27 15)</sup>

Note: Cable installed in conduit includes pull wires and installation in conduit, innerduct, wiremold, etc. Cable installed exposed includes installation on exposed surfaces, uncovered wireways, cable trays, etc.

27 15 13 00-0001	Copper Telecommunications Cable <sup>(27 15 13)</sup>		
27 15 13 00-0002	Indoor Telecommunications Cable <sup>(27 15 13 00-0001)</sup>		
	Note: Shielded twisted pair cables (STP) includes a metallic foil wrap. Un-shielded twisted pair cables (UTP) excludes any shielding.		
27 15 13 00-0003	Category 3, Indoor Telecommunications Cable <sup>(27 15 13 00-0002)</sup>		
	Note: Un-shielded twisted pair cables (UTP).		
27 15 13 00-0004	Category 3, Indoor Telecommunications Riser Cable <sup>(27 15 13 00-0003)</sup>		
27 15 13 00-0005	24 AWG, Category 3, Indoor Telecommunications Riser Cable <sup>(27 15 13 00-0004)</sup>		
27 15 13 00-0006	24 AWG, Category 3, Indoor Telecommunications Riser Cable, Installed In Conduit <sup>(27 15 13 00-0005)</sup>		
27 15 13 00-0007	MLF 2-Pair 24 AWG, Category 3, Indoor Telecommunications Riser Cable, Installed In Conduit.....	1,154.99	631.74
27 15 13 00-0008	MLF 3-Pair 24 AWG, Category 3, Indoor Telecommunications Riser Cable, Installed In Conduit.....	1,198.55	631.74
27 15 13 00-0009	MLF 4-Pair 24 AWG, Category 3, Indoor Telecommunications Riser Cable, Installed In Conduit.....	1,213.95	631.74
27 15 13 00-0010	MLF 6-Pair 24 AWG, Category 3, Indoor Telecommunications Riser Cable, Installed In Conduit.....	1,451.05	721.99
27 15 13 00-0011	MLF 12-Pair 24 AWG, Category 3, Indoor Telecommunications Riser Cable, Installed In Conduit.....	1,771.76	721.99
27 15 13 00-0012	MLF 25-Pair 24 AWG, Category 3, Indoor Telecommunications Riser Cable, Installed In Conduit.....	2,281.00	721.99
27 15 13 00-0013	MLF 50-Pair 24 AWG, Category 3, Indoor Telecommunications Riser Cable, Installed In Conduit.....	3,544.63	902.49
27 15 13 00-0014	MLF 100-Pair 24 AWG, Category 3, Indoor Telecommunications Riser Cable, Installed In Conduit.....	6,340.78	1,443.97
27 15 13 00-0015	MLF 150-Pair 24 AWG, Category 3, Indoor Telecommunications Riser Cable, Installed In Conduit.....	8,463.03	1,624.47
27 15 13 00-0016	MLF 200-Pair 24 AWG, Category 3, Indoor Telecommunications Riser Cable, Installed In Conduit.....	11,113.45	1,804.97
27 15 13 00-0017	MLF 300-Pair 24 AWG, Category 3, Indoor Telecommunications Riser Cable, Installed In Conduit.....	16,213.02	2,526.96
27 15 13 00-0018	MLF 400-Pair 24 AWG, Category 3, Indoor Telecommunications Riser Cable, Installed In Conduit.....	21,180.18	3,122.60
27 15 13 00-0019	MLF 600-Pair 24 AWG, Category 3, Indoor Telecommunications Riser Cable, Installed In Conduit.....	33,333.82	4,331.93
27 15 13 00-0020	MLF 900-Pair 24 AWG, Category 3, Indoor Telecommunications Riser Cable, Installed In Conduit.....	54,746.01	8,663.85
27 15 13 00-0021	MLF 1,200-Pair 24 AWG, Category 3, Indoor Telecommunications Riser Cable, Installed In Conduit.....	74,880.87	12,995.78
27 15 13 00-0022	24 AWG, Category 3, Indoor Telecommunications Riser Cable, Installed Exposed <sup>(27 15 13 00-0006)</sup>		
27 15 13 00-0023	MLF 2-Pair 24 AWG, Category 3, Indoor Telecommunications Riser Cable, Installed Exposed.....	2,207.89	1,263.48
27 15 13 00-0024	MLF 3-Pair 24 AWG, Category 3, Indoor Telecommunications Riser Cable, Installed Exposed.....	2,251.45	1,263.48
27 15 13 00-0025	MLF 4-Pair 24 AWG, Category 3, Indoor Telecommunications Riser Cable, Installed Exposed.....	2,266.85	1,263.48
27 15 13 00-0026	MLF 6-Pair 24 AWG, Category 3, Indoor Telecommunications Riser Cable, Installed Exposed.....	2,353.54	1,263.48
27 15 13 00-0027	MLF 12-Pair 24 AWG, Category 3, Indoor Telecommunications Riser Cable, Installed Exposed.....	2,674.25	1,263.48
27 15 13 00-0028	MLF 25-Pair 24 AWG, Category 3, Indoor Telecommunications Riser Cable, Installed Exposed.....	3,484.32	1,443.97
27 15 13 00-0029	MLF 50-Pair 24 AWG, Category 3, Indoor Telecommunications Riser Cable, Installed Exposed.....	5,048.77	1,804.97
27 15 13 00-0030	MLF 100-Pair 24 AWG, Category 3, Indoor Telecommunications Riser Cable, Installed Exposed.....	7,544.09	2,165.97
27 15 13 00-0031	MLF 150-Pair 24 AWG, Category 3, Indoor Telecommunications Riser Cable, Installed Exposed.....	9,816.76	2,436.71
27 15 13 00-0032	MLF 200-Pair 24 AWG, Category 3, Indoor Telecommunications Riser Cable, Installed Exposed.....	12,617.60	2,707.45
27 15 13 00-0033	MLF 300-Pair 24 AWG, Category 3, Indoor Telecommunications Riser Cable, Installed Exposed.....	18,318.82	3,790.43
27 15 13 00-0034	MLF 400-Pair 24 AWG, Category 3, Indoor Telecommunications Riser Cable, Installed Exposed.....	23,797.38	4,692.92
27 15 13 00-0035	MLF 600-Pair 24 AWG, Category 3, Indoor Telecommunications Riser Cable, Installed Exposed.....	36,943.76	6,497.89
27 15 13 00-0036	MLF 900-Pair 24 AWG, Category 3, Indoor Telecommunications Riser Cable, Installed Exposed.....	61,965.89	12,995.78
27 15 13 00-0037	MLF 1,200-Pair 24 AWG, Category 3, Indoor Telecommunications Riser Cable, Installed Exposed.....	85,710.70	19,493.67
27 15 13 00-0038	22 AWG, Category 3, Indoor Telecommunications Riser Cable <sup>(27 15 13 00-0004)</sup>		
27 15 13 00-0039	22 AWG, Category 3, Indoor Telecommunications Riser Cable, Installed In Conduit <sup>(27 15 13 00-0038)</sup>		
27 15 13 00-0040	MLF 25-Pair 22 AWG, Category 3, Indoor Telecommunications Riser Cable, Installed In Conduit.....	3,549.37	721.99

<b>27</b>	<b>Communications</b>
<b>27 10</b>	<b>Structured Cabling</b>
<b>27 15</b>	<b>Communications Horizontal Cabling</b>



MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
27 15 13 00-0041 MLF 50-Pair 22 AWG, Category 3, Indoor Telecommunications Riser Cable, Installed In Conduit .....	5,228.20	902.49
27 15 13 00-0042 MLF 100-Pair 22 AWG, Category 3, Indoor Telecommunications Riser Cable, Installed In Conduit .....	9,479.12	1,443.97
27 15 13 00-0043 MLF 200-Pair 22 AWG, Category 3, Indoor Telecommunications Riser Cable, Installed In Conduit .....	16,579.82	1,804.97
27 15 13 00-0044 MLF 300-Pair 22 AWG, Category 3, Indoor Telecommunications Riser Cable, Installed In Conduit .....	24,342.34	2,526.96
27 15 13 00-0045 MLF 400-Pair 22 AWG, Category 3, Indoor Telecommunications Riser Cable, Installed In Conduit .....	31,650.56	3,122.60
27 15 13 00-0046 MLF 600-Pair 22 AWG, Category 3, Indoor Telecommunications Riser Cable, Installed In Conduit .....	46,826.47	4,331.93
<b>27 15 13 00-0047 22 AWG, Category 3, Indoor Telecommunications Riser Cable, Installed Exposed</b> (27 15 13 00-0038)		
27 15 13 00-0048 MLF 25-Pair 22 AWG, Category 3, Indoor Telecommunications Riser Cable, Installed Exposed.....	4,752.69	1,443.97
27 15 13 00-0049 MLF 50-Pair 22 AWG, Category 3, Indoor Telecommunications Riser Cable, Installed Exposed.....	6,732.34	1,804.97
27 15 13 00-0050 MLF 100-Pair 22 AWG, Category 3, Indoor Telecommunications Riser Cable, Installed Exposed.....	10,682.43	2,165.97
27 15 13 00-0051 MLF 200-Pair 22 AWG, Category 3, Indoor Telecommunications Riser Cable, Installed Exposed.....	18,083.97	2,707.45
27 15 13 00-0052 MLF 300-Pair 22 AWG, Category 3, Indoor Telecommunications Riser Cable, Installed Exposed.....	26,448.14	3,790.43
27 15 13 00-0053 MLF 400-Pair 22 AWG, Category 3, Indoor Telecommunications Riser Cable, Installed Exposed.....	34,267.76	4,692.92
27 15 13 00-0054 MLF 600-Pair 22 AWG, Category 3, Indoor Telecommunications Riser Cable, Installed Exposed.....	50,436.41	6,497.89
<b>27 15 13 00-0055 Category 3, Indoor Telecommunications Plenum Cable</b> (27 15 13 00-0003)		
<b>27 15 13 00-0056 24 AWG, Category 3, Indoor Telecommunications Plenum Cable</b> (27 15 13 00-0055)		
<b>27 15 13 00-0057 24 AWG, Category 3, Indoor Telecommunications Plenum Cable, Installed In Conduit</b> (27 15 13 00-0056)		
27 15 13 00-0058 MLF 2-Pair 24 AWG, Category 3, Indoor Telecommunications Plenum Cable, Installed In Conduit .....	1,190.22	631.74
27 15 13 00-0059 MLF 3-Pair 24 AWG, Category 3, Indoor Telecommunications Plenum Cable, Installed In Conduit .....	1,233.61	631.74
27 15 13 00-0060 MLF 4-Pair 24 AWG, Category 3, Indoor Telecommunications Plenum Cable, Installed In Conduit .....	1,266.06	631.74
27 15 13 00-0061 MLF 6-Pair 24 AWG, Category 3, Indoor Telecommunications Plenum Cable, Installed In Conduit .....	1,509.57	721.99
27 15 13 00-0062 MLF 12-Pair 24 AWG, Category 3, Indoor Telecommunications Plenum Cable, Installed In Conduit .....	1,859.16	721.99
27 15 13 00-0063 MLF 25-Pair 24 AWG, Category 3, Indoor Telecommunications Plenum Cable, Installed In Conduit .....	2,806.81	721.99
27 15 13 00-0064 MLF 50-Pair 24 AWG, Category 3, Indoor Telecommunications Plenum Cable, Installed In Conduit .....	4,615.15	902.49
27 15 13 00-0065 MLF 100-Pair 24 AWG, Category 3, Indoor Telecommunications Plenum Cable, Installed In Conduit .....	8,583.79	1,443.97
27 15 13 00-0066 MLF 200-Pair 24 AWG, Category 3, Indoor Telecommunications Plenum Cable, Installed In Conduit .....	14,628.37	1,804.97
27 15 13 00-0067 MLF 300-Pair 24 AWG, Category 3, Indoor Telecommunications Plenum Cable, Installed In Conduit .....	21,862.01	2,526.96
<b>27 15 13 00-0068 24 AWG, Category 3, Indoor Telecommunications Plenum Cable, Installed Exposed</b> (27 15 13 00-0066)		
27 15 13 00-0069 MLF 2-Pair 24 AWG, Category 3, Indoor Telecommunications Plenum Cable, Installed Exposed.....	2,243.12	1,263.48
27 15 13 00-0070 MLF 3-Pair 24 AWG, Category 3, Indoor Telecommunications Plenum Cable, Installed Exposed.....	2,286.51	1,263.48
27 15 13 00-0071 MLF 4-Pair 24 AWG, Category 3, Indoor Telecommunications Plenum Cable, Installed Exposed.....	2,318.96	1,263.48
27 15 13 00-0072 MLF 6-Pair 24 AWG, Category 3, Indoor Telecommunications Plenum Cable, Installed Exposed.....	2,412.06	1,263.48
27 15 13 00-0073 MLF 12-Pair 24 AWG, Category 3, Indoor Telecommunications Plenum Cable, Installed Exposed.....	2,761.65	1,263.48
27 15 13 00-0074 MLF 25-Pair 24 AWG, Category 3, Indoor Telecommunications Plenum Cable, Installed Exposed.....	4,010.13	1,443.97
27 15 13 00-0075 MLF 50-Pair 24 AWG, Category 3, Indoor Telecommunications Plenum Cable, Installed Exposed.....	6,119.29	1,804.97
27 15 13 00-0076 MLF 100-Pair 24 AWG, Category 3, Indoor Telecommunications Plenum Cable, Installed Exposed.....	9,787.10	2,165.97
27 15 13 00-0077 MLF 200-Pair 24 AWG, Category 3, Indoor Telecommunications Plenum Cable, Installed Exposed.....	16,132.52	2,707.45
27 15 13 00-0078 MLF 300-Pair 24 AWG, Category 3, Indoor Telecommunications Plenum Cable, Installed Exposed.....	23,967.81	3,790.43
<b>27 15 13 00-0079 Category 5E, Indoor Telecommunications Cable</b> (27 15 13 00-0002)		
<b>27 15 13 00-0080 Category 5E, Indoor Telecommunications Riser Cable</b> (27 15 13 00-0079)		
<b>27 15 13 00-0081 Category 5E, Indoor Telecommunications Riser Cable, Installed In Conduit</b> (27 15 13 00-0080)		
27 15 13 00-0082 MLF 4-Pair Solid UTP, 24 AWG, Category 5E, Indoor Telecommunications Riser Cable, Installed In Conduit.....	1,292.13	631.74
27 15 13 00-0083 MLF 4-Pair Stranded UTP, 24 AWG, Category 5E, Indoor Telecommunications Riser Cable, Installed In Conduit .....	1,348.17	631.74
27 15 13 00-0084 MLF 4-Pair Solid STP, 24 AWG, Category 5E, Indoor Telecommunications Riser Cable, Installed In Conduit.....	1,499.65	721.99
27 15 13 00-0085 MLF 4-Pair Stranded STP, 24 AWG, Category 5E, Indoor Telecommunications Riser Cable, Installed In Conduit .....	1,555.67	721.99
<b>27 15 13 00-0086 Category 5E, Indoor Telecommunications Riser Cable, Installed Exposed</b> (27 15 13 00-0080)		
27 15 13 00-0087 MLF 4-Pair Solid UTP, 24 AWG, Category 5E, Indoor Telecommunications Riser Cable, Installed Exposed.....	2,345.03	1,263.48
27 15 13 00-0088 MLF 4-Pair Stranded UTP, 24 AWG, Category 5E, Indoor Telecommunications Riser Cable, Installed Exposed.....	2,401.07	1,263.48
27 15 13 00-0089 MLF 4-Pair Solid STP, 24 AWG, Category 5E, Indoor Telecommunications Riser Cable, Installed Exposed.....	2,702.97	1,443.97
27 15 13 00-0090 MLF 4-Pair Stranded STP, 24 AWG, Category 5E, Indoor Telecommunications Riser Cable, Installed Exposed.....	2,758.99	1,443.97
<b>27 15 13 00-0091 Category 5E, Indoor Telecommunications Plenum Cable</b> (27 15 13 00-0079)		
<b>27 15 13 00-0092 Category 5E, Indoor Telecommunications Plenum Cable, Installed In Conduit</b> (27 15 13 00-0091)		
27 15 13 00-0093 MLF 4-Pair Solid UTP, 24 AWG, Category 5E, Indoor Telecommunications Plenum Cable, Installed In Conduit.....	1,498.19	631.74
27 15 13 00-0094 MLF 4-Pair Solid STP, 24 AWG, Category 5E, Indoor Telecommunications Plenum Cable, Installed In Conduit .....	2,086.44	721.99
<b>27 15 13 00-0095 Category 5E, Indoor Telecommunications Plenum Cable, Installed Exposed</b> (27 15 13 00-0091)		
27 15 13 00-0096 MLF 4-Pair Solid UTP, 24 AWG, Category 5E, Indoor Telecommunications Plenum Cable, Installed Exposed .....	2,551.09	1,263.48



Communications			27
Structured Cabling			27 10
Communications Horizontal Cabling			27 15

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MINOR CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
27 15 13 00-0097	MLF	4-Pair Solid STP, 24 AWG, Category 5E, Indoor Telecommunications Plenum Cable, Installed Exposed .....	3,289.76	1,443.97
27 15 13 00-0098		Category 6, Indoor Telecommunications Cable (27 15 13 00-0002)		
27 15 13 00-0099		Category 6, Indoor Telecommunications Riser Cable (27 15 13 00-0098)		
27 15 13 00-0100		Category 6, Indoor Telecommunications Riser Cable, Installed In Conduit (27 15 13 00-0099)		
27 15 13 00-0101	MLF	4-Pair Solid UTP, 23 AWG, Category 6, Indoor Telecommunications Riser Cable, Installed In Conduit .....	1,755.35	631.74
27 15 13 00-0102	MLF	4-Pair Stranded UTP, 23 AWG, Category 6, Indoor Telecommunications Riser Cable, Installed In Conduit .....	1,833.89	631.74
27 15 13 00-0103		Category 6, Indoor Telecommunications Riser Cable, Installed Exposed (27 15 13 00-0099)		
27 15 13 00-0104	MLF	4-Pair Solid UTP, 23 AWG, Category 6, Indoor Telecommunications Riser Cable, Installed Exposed .....	2,808.25	1,263.48
27 15 13 00-0105	MLF	4-Pair Stranded UTP, 23 AWG, Category 6, Indoor Telecommunications Riser Cable, Installed Exposed .....	2,886.79	1,263.48
27 15 13 00-0106		Category 6, Indoor Telecommunications Plenum Cable (27 15 13 00-0098)		
27 15 13 00-0107		Category 6, Indoor Telecommunications Plenum Cable, Installed In Conduit (27 15 13 00-0106)		
27 15 13 00-0108	MLF	4-Pair Solid UTP, 23 AWG, Category 6, Indoor Telecommunications Plenum Cable, Installed In Conduit .....	2,482.04	631.74
27 15 13 00-0109		Category 6, Indoor Telecommunications Plenum Cable, Installed Exposed (27 15 13 00-0108)		
27 15 13 00-0110	MLF	4-Pair Solid UTP, 23 AWG, Category 6, Indoor Telecommunications Plenum Cable, Installed Exposed .....	3,534.94	1,263.48
27 15 13 00-0111		Category 6a, Indoor Telecommunications Cable (27 15 13 00-0002)		
27 15 13 00-0112		Category 6a, Indoor Telecommunications Riser Cable (27 15 13 00-0111)		
27 15 13 00-0113		Category 6a Indoor Telecommunications Riser Cable, Installed In Conduit (27 15 13 00-0112)		
27 15 13 00-0114	MLF	4-Pair Solid UTP, 23 AWG, Category 6A, Indoor Telecommunications Riser Cable, Installed In Conduit .....	1,880.84	631.74
27 15 13 00-0115		Category 6a, Indoor Telecommunications Riser Cable, Installed Exposed (27 15 13 00-0112)		
27 15 13 00-0116	MLF	4-Pair Solid UTP, 23 AWG, Category 6A, Indoor Telecommunications Riser Cable, Installed Exposed .....	2,933.74	1,263.48
27 15 13 00-0117		Category 6a, Indoor Telecommunications Plenum Cable (27 15 13 00-0111)		
27 15 13 00-0118		Category 6a, Indoor Telecommunications Plenum Cable, Installed In Conduit (27 15 13 00-0117)		
27 15 13 00-0119	MLF	4-Pair Solid UTP, 23 AWG, Category 6A, Indoor Telecommunications Plenum Cable, Installed In Conduit .....	2,853.48	631.74
27 15 13 00-0120		Category 6a, Indoor Telecommunications Plenum Cable, Installed Exposed (27 15 13 00-0117)		
27 15 13 00-0121	MLF	4-Pair Solid UTP, 23 AWG, Category 6A, Indoor Telecommunications Plenum Cable, Installed Exposed .....	3,906.38	1,263.48
27 15 13 00-0122		Category 7, Indoor Telecommunications Cable (27 15 13 00-0002)		
27 15 13 00-0123		Category 7, Indoor Telecommunications Cable, Installed In Conduit (27 15 13 00-0122)		
27 15 13 00-0124	MLF	4-Pair Solid STP, 22 AWG, Category 7, Indoor Telecommunications Riser Cable, Installed In Conduit .....	4,395.07	721.99
27 15 13 00-0125	MLF	4-Pair Solid STP, 22 AWG, Category 7, Indoor Telecommunications Plenum Cable, Installed In Conduit .....	8,994.58	721.99
27 15 13 00-0126		Category 7, Indoor Telecommunications Cable, Installed Exposed (27 15 13 00-0122)		
27 15 13 00-0127	MLF	4-Pair Solid STP, 22 AWG, Category 7, Indoor Telecommunications Riser Cable, Installed Exposed .....	5,598.39	1,443.97
27 15 13 00-0128	MLF	4-Pair Solid STP, 22 AWG, Category 7, Indoor Telecommunications Plenum Cable, Installed Exposed .....	10,197.90	1,443.97
27 15 13 00-0129		Outdoor Telecommunications Cable (27 15 13 00-0001) Note: Cable buried in trench excludes excavation.		
27 15 13 00-0130		PE-89 Outdoor Telecommunications Cable (27 15 13 00-0129) Note: Includes foam-skin polyolefin insulated conductors.		
27 15 13 00-0131		24 AWG, PE-89 Outdoor Telecommunications Cable (27 15 13 00-0130)		
27 15 13 00-0132		24 AWG, PE-89 Outdoor Telecommunications Cable, Installed In Conduit (27 15 13 00-0131)		
27 15 13 00-0133	MLF	6-Pair 24 AWG, PE-89 Outdoor Telecommunications Cable, Installed In Conduit .....	1,854.29	721.99
27 15 13 00-0134	MLF	12-Pair 24 AWG, PE-89 Outdoor Telecommunications Cable, Installed In Conduit .....	2,129.63	1,263.48
27 15 13 00-0135	MLF	25-Pair 24 AWG, PE-89 Outdoor Telecommunications Cable, Installed In Conduit .....	2,873.19	812.24
27 15 13 00-0136	MLF	50-Pair 24 AWG, PE-89 Outdoor Telecommunications Cable, Installed In Conduit .....	4,153.57	902.49
27 15 13 00-0137	MLF	75-Pair 24 AWG, PE-89 Outdoor Telecommunications Cable, Installed In Conduit .....	5,878.35	1,263.48
27 15 13 00-0138	MLF	100-Pair 24 AWG, PE-89 Outdoor Telecommunications Cable, Installed In Conduit .....	7,304.91	1,443.97
27 15 13 00-0139	MLF	200-Pair 24 AWG, PE-89 Outdoor Telecommunications Cable, Installed In Conduit .....	12,002.26	1,624.47

<b>27</b>	<b>Communications</b>
<b>27 10</b>	<b>Structured Cabling</b>
<b>27 15</b>	<b>Communications Horizontal Cabling</b>



MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
27 15 13 00-0140 MLF 300-Pair 24 AWG, PE-89 Outdoor Telecommunications Cable, Installed In Conduit .....	17,617.46	2,346.46
27 15 13 00-0141 MLF 400-Pair 24 AWG, PE-89 Outdoor Telecommunications Cable, Installed In Conduit .....	23,318.22	3,068.45
27 15 13 00-0142 MLF 600-Pair 24 AWG, PE-89 Outdoor Telecommunications Cable, Installed In Conduit .....	31,658.41	4,151.43
27 15 13 00-0143 MLF 900-Pair 24 AWG, PE-89 Outdoor Telecommunications Cable, Installed In Conduit .....	51,101.30	8,302.86
27 15 13 00-0144 MLF 1,200-Pair 24 AWG, PE-89 Outdoor Telecommunications Cable, Installed In Conduit .....	70,431.63	12,273.79
<b>27 15 13 00-0145 24 AWG, PE-89 Outdoor Telecommunications Cable, Buried In Trench (27 15 13 00-0131)</b>		
27 15 13 00-0146 MLF 6-Pair 24 AWG, PE-89 Outdoor Telecommunications Cable, Buried In Trench .....	1,628.67	
27 15 13 00-0147 MLF 12-Pair 24 AWG, PE-89 Outdoor Telecommunications Cable, Buried In Trench.....	1,904.01	
27 15 13 00-0148 MLF 25-Pair 24 AWG, PE-89 Outdoor Telecommunications Cable, Buried In Trench.....	2,572.36	
27 15 13 00-0149 MLF 50-Pair 24 AWG, PE-89 Outdoor Telecommunications Cable, Buried In Trench.....	3,852.74	
27 15 13 00-0150 MLF 75-Pair 24 AWG, PE-89 Outdoor Telecommunications Cable, Buried In Trench.....	5,427.11	
27 15 13 00-0151 MLF 100-Pair 24 AWG, PE-89 Outdoor Telecommunications Cable, Buried In Trench.....	6,552.84	
27 15 13 00-0152 MLF 200-Pair 24 AWG, PE-89 Outdoor Telecommunications Cable, Buried In Trench.....	11,701.44	
27 15 13 00-0153 MLF 300-Pair 24 AWG, PE-89 Outdoor Telecommunications Cable, Buried In Trench.....	16,714.97	
27 15 13 00-0154 MLF 400-Pair 24 AWG, PE-89 Outdoor Telecommunications Cable, Buried In Trench.....	21,438.04	
27 15 13 00-0155 MLF 600-Pair 24 AWG, PE-89 Outdoor Telecommunications Cable, Buried In Trench.....	28,349.31	
27 15 13 00-0156 MLF 900-Pair 24 AWG, PE-89 Outdoor Telecommunications Cable, Buried In Trench.....	42,076.45	
27 15 13 00-0157 MLF 1,200-Pair 24 AWG, PE-89 Outdoor Telecommunications Cable, Buried In Trench .....	57,195.18	
<b>27 15 13 00-0158 22 AWG, PE-89 Outdoor Telecommunications Cable (27 15 13 00-0130)</b>		
<b>27 15 13 00-0159 22 AWG, PE-89 Outdoor Telecommunications Cable, Installed In Conduit (27 15 13 00-0158)</b>		
27 15 13 00-0160 MLF 6-Pair 22 AWG, PE-89 Outdoor Telecommunications Cable, Installed In Conduit .....	2,029.33	721.99
27 15 13 00-0161 MLF 12-Pair 22 AWG, PE-89 Outdoor Telecommunications Cable, Installed In Conduit .....	2,456.66	721.99
27 15 13 00-0162 MLF 25-Pair 22 AWG, PE-89 Outdoor Telecommunications Cable, Installed In Conduit .....	3,542.60	812.24
27 15 13 00-0163 MLF 50-Pair 22 AWG, PE-89 Outdoor Telecommunications Cable, Installed In Conduit .....	5,345.05	902.49
27 15 13 00-0164 MLF 75-Pair 22 AWG, PE-89 Outdoor Telecommunications Cable, Installed In Conduit .....	7,740.30	1,263.48
27 15 13 00-0165 MLF 100-Pair 22 AWG, PE-89 Outdoor Telecommunications Cable, Installed In Conduit .....	9,836.19	1,443.97
27 15 13 00-0166 MLF 200-Pair 22 AWG, PE-89 Outdoor Telecommunications Cable, Installed In Conduit .....	16,885.46	1,624.47
27 15 13 00-0167 MLF 300-Pair 22 AWG, PE-89 Outdoor Telecommunications Cable, Installed In Conduit .....	24,581.88	2,346.46
27 15 13 00-0168 MLF 400-Pair 22 AWG, PE-89 Outdoor Telecommunications Cable, Installed In Conduit .....	32,706.86	3,068.45
27 15 13 00-0169 MLF 600-Pair 22 AWG, PE-89 Outdoor Telecommunications Cable, Installed In Conduit .....	48,053.94	4,151.43
27 15 13 00-0170 MLF 900-Pair 22 AWG, PE-89 Outdoor Telecommunications Cable, Installed In Conduit .....	71,807.49	8,302.86
27 15 13 00-0171 MLF 1,200-Pair 22 AWG, PE-89 Outdoor Telecommunications Cable, Installed In Conduit .....	101,409.99	12,273.79
<b>27 15 13 00-0172 22 AWG, PE-89 Outdoor Telecommunications Cable, Buried In Trench (27 15 13 00-0158)</b>		
27 15 13 00-0173 MLF 6-Pair 22 AWG, PE-89 Outdoor Telecommunications Cable, Buried In Trench .....	1,803.71	
27 15 13 00-0174 MLF 12-Pair 22 AWG, PE-89 Outdoor Telecommunications Cable, Buried In Trench.....	2,231.04	
27 15 13 00-0175 MLF 25-Pair 22 AWG, PE-89 Outdoor Telecommunications Cable, Buried In Trench.....	3,241.77	
27 15 13 00-0176 MLF 50-Pair 22 AWG, PE-89 Outdoor Telecommunications Cable, Buried In Trench.....	5,044.22	
27 15 13 00-0177 MLF 75-Pair 22 AWG, PE-89 Outdoor Telecommunications Cable, Buried In Trench.....	7,289.06	
27 15 13 00-0178 MLF 100-Pair 22 AWG, PE-89 Outdoor Telecommunications Cable, Buried In Trench.....	9,384.94	
27 15 13 00-0179 MLF 200-Pair 22 AWG, PE-89 Outdoor Telecommunications Cable, Buried In Trench.....	16,584.64	
27 15 13 00-0180 MLF 300-Pair 22 AWG, PE-89 Outdoor Telecommunications Cable, Buried In Trench.....	23,679.39	
27 15 13 00-0181 MLF 400-Pair 22 AWG, PE-89 Outdoor Telecommunications Cable, Buried In Trench.....	30,826.68	
27 15 13 00-0182 MLF 600-Pair 22 AWG, PE-89 Outdoor Telecommunications Cable, Buried In Trench.....	44,744.84	
27 15 13 00-0183 MLF 900-Pair 22 AWG, PE-89 Outdoor Telecommunications Cable, Buried In Trench.....	62,782.64	
27 15 13 00-0184 MLF 1,200-Pair 22 AWG, PE-89 Outdoor Telecommunications Cable, Buried In Trench .....	88,173.54	
<b>27 15 13 00-0185 19 AWG, PE-89 Outdoor Telecommunications Cable (27 15 13 00-0130)</b>		
<b>27 15 13 00-0186 19 AWG, PE-89 Outdoor Telecommunications Cable, Installed In Conduit (27 15 13 00-0185)</b>		
27 15 13 00-0187 MLF 25-Pair 19 AWG, PE-89 Outdoor Telecommunications Cable, Installed In Conduit .....	5,606.27	812.24
27 15 13 00-0188 MLF 50-Pair 19 AWG, PE-89 Outdoor Telecommunications Cable, Installed In Conduit .....	9,378.85	902.49
27 15 13 00-0189 MLF 75-Pair 19 AWG, PE-89 Outdoor Telecommunications Cable, Installed In Conduit .....	14,915.70	1,263.48
27 15 13 00-0190 MLF 100-Pair 19 AWG, PE-89 Outdoor Telecommunications Cable, Installed In Conduit .....	17,825.99	1,443.97
<b>27 15 13 00-0191 19 AWG, PE-89 Outdoor Telecommunications Cable, Buried In Trench (27 15 13 00-0185)</b>		
27 15 13 00-0192 MLF 25-Pair 19 AWG, PE-89 Outdoor Telecommunications Cable, Buried In Trench.....	5,305.44	
27 15 13 00-0193 MLF 50-Pair 19 AWG, PE-89 Outdoor Telecommunications Cable, Buried In Trench.....	9,078.02	
27 15 13 00-0194 MLF 75-Pair 19 AWG, PE-89 Outdoor Telecommunications Cable, Buried In Trench.....	14,464.46	
27 15 13 00-0195 MLF 100-Pair 19 AWG, PE-89 Outdoor Telecommunications Cable, Buried In Trench.....	17,374.74	
<b>27 15 13 00-0196 PE-39 Outdoor Telecommunications Cable (27 15 13 00-0129)</b>		
Note: Includes solid polyolefin insulated conductors.		
<b>27 15 13 00-0197 24 AWG, PE-39 Outdoor Telecommunications Cable (27 15 13 00-0196)</b>		
<b>27 15 13 00-0198 24 AWG, PE-39 Outdoor Telecommunications Cable, Installed In Conduit (27 15 13 00-0197)</b>		
27 15 13 00-0199 MLF 6-Pair 24 AWG, PE-39 Outdoor Telecommunications Cable, Installed In Conduit .....	2,781.39	1,263.48
27 15 13 00-0200 MLF 12-Pair 24 AWG, PE-39 Outdoor Telecommunications Cable, Installed In Conduit .....	3,118.24	1,263.48
27 15 13 00-0201 MLF 25-Pair 24 AWG, PE-39 Outdoor Telecommunications Cable, Installed In Conduit .....	3,797.83	1,263.48



<b>Communications</b>		<b>27</b>	<b>27</b>
<b>Structured Cabling</b>		<b>27 10</b>	
<b>Communications Horizontal Cabling</b>		<b>27 15</b>	

MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
27 15 13 00-0202 MLF 50-Pair 24 AWG, PE-39 Outdoor Telecommunications Cable, Installed In Conduit .....	5,021.63	1,263.48
27 15 13 00-0203 MLF 100-Pair 24 AWG, PE-39 Outdoor Telecommunications Cable, Installed In Conduit .....	7,503.69	1,263.48
27 15 13 00-0204 MLF 200-Pair 24 AWG, PE-39 Outdoor Telecommunications Cable, Installed In Conduit .....	13,144.85	1,624.47
27 15 13 00-0205 MLF 300-Pair 24 AWG, PE-39 Outdoor Telecommunications Cable, Installed In Conduit .....	19,176.00	2,346.46
27 15 13 00-0206 MLF 400-Pair 24 AWG, PE-39 Outdoor Telecommunications Cable, Installed In Conduit .....	25,217.28	3,068.45
27 15 13 00-0207 MLF 600-Pair 24 AWG, PE-39 Outdoor Telecommunications Cable, Installed In Conduit .....	34,431.19	4,151.43
27 15 13 00-0208 MLF 900-Pair 24 AWG, PE-39 Outdoor Telecommunications Cable, Installed In Conduit .....	54,687.19	8,302.86
27 15 13 00-0209 MLF 1,200-Pair 24 AWG, PE-39 Outdoor Telecommunications Cable, Installed In Conduit .....	79,731.97	12,273.79
<b>27 15 13 00-0210 24 AWG, PE-39 Outdoor Telecommunications Cable, Buried In Trench (27 15 13 00-0197)</b>		
27 15 13 00-0211 MLF 6-Pair 24 AWG, PE-39 Outdoor Telecommunications Cable, Buried In Trench .....	2,330.15	
27 15 13 00-0212 MLF 12-Pair 24 AWG, PE-39 Outdoor Telecommunications Cable, Buried In Trench .....	2,667.00	
27 15 13 00-0213 MLF 25-Pair 24 AWG, PE-39 Outdoor Telecommunications Cable, Buried In Trench .....	3,346.59	
27 15 13 00-0214 MLF 50-Pair 24 AWG, PE-39 Outdoor Telecommunications Cable, Buried In Trench .....	4,570.39	
27 15 13 00-0215 MLF 100-Pair 24 AWG, PE-39 Outdoor Telecommunications Cable, Buried In Trench .....	7,052.45	
27 15 13 00-0216 MLF 200-Pair 24 AWG, PE-39 Outdoor Telecommunications Cable, Buried In Trench .....	12,844.03	
27 15 13 00-0217 MLF 300-Pair 24 AWG, PE-39 Outdoor Telecommunications Cable, Buried In Trench .....	18,273.51	
27 15 13 00-0218 MLF 400-Pair 24 AWG, PE-39 Outdoor Telecommunications Cable, Buried In Trench .....	23,337.10	
27 15 13 00-0219 MLF 600-Pair 24 AWG, PE-39 Outdoor Telecommunications Cable, Buried In Trench .....	31,122.09	
27 15 13 00-0220 MLF 900-Pair 24 AWG, PE-39 Outdoor Telecommunications Cable, Buried In Trench .....	45,662.34	
27 15 13 00-0221 MLF 1,200-Pair 24 AWG, PE-39 Outdoor Telecommunications Cable, Buried In Trench .....	66,495.52	
<b>27 15 13 00-0222 22 AWG, PE-39 Outdoor Telecommunications Cable (27 15 13 00-0196)</b>		
<b>27 15 13 00-0223 22 AWG, PE-39 Outdoor Telecommunications Cable, Installed In Conduit (27 15 13 00-0222)</b>		
27 15 13 00-0224 MLF 6-Pair 22 AWG, PE-39 Outdoor Telecommunications Cable, Installed In Conduit .....	2,976.13	1,263.48
27 15 13 00-0225 MLF 12-Pair 22 AWG, PE-39 Outdoor Telecommunications Cable, Installed In Conduit .....	3,471.12	1,263.48
27 15 13 00-0226 MLF 25-Pair 22 AWG, PE-39 Outdoor Telecommunications Cable, Installed In Conduit .....	4,524.49	1,263.48
27 15 13 00-0227 MLF 50-Pair 22 AWG, PE-39 Outdoor Telecommunications Cable, Installed In Conduit .....	6,462.31	1,263.48
27 15 13 00-0228 MLF 100-Pair 22 AWG, PE-39 Outdoor Telecommunications Cable, Installed In Conduit .....	10,506.29	1,263.48
27 15 13 00-0229 MLF 200-Pair 22 AWG, PE-39 Outdoor Telecommunications Cable, Installed In Conduit .....	18,923.28	1,624.47
27 15 13 00-0230 MLF 300-Pair 22 AWG, PE-39 Outdoor Telecommunications Cable, Installed In Conduit .....	27,705.69	2,346.46
27 15 13 00-0231 MLF 400-Pair 22 AWG, PE-39 Outdoor Telecommunications Cable, Installed In Conduit .....	35,533.77	3,068.45
27 15 13 00-0232 MLF 600-Pair 22 AWG, PE-39 Outdoor Telecommunications Cable, Installed In Conduit .....	49,547.22	4,151.43
27 15 13 00-0233 MLF 900-Pair 22 AWG, PE-39 Outdoor Telecommunications Cable, Installed In Conduit .....	79,163.54	8,302.86
<b>27 15 13 00-0234 22 AWG, PE-39 Outdoor Telecommunications Cable, Buried In Trench (27 15 13 00-0222)</b>		
27 15 13 00-0235 MLF 6-Pair 22 AWG, PE-39 Outdoor Telecommunications Cable, Buried In Trench .....	2,524.89	
27 15 13 00-0236 MLF 12-Pair 22 AWG, PE-39 Outdoor Telecommunications Cable, Buried In Trench .....	3,019.88	
27 15 13 00-0237 MLF 25-Pair 22 AWG, PE-39 Outdoor Telecommunications Cable, Buried In Trench .....	4,073.25	
27 15 13 00-0238 MLF 50-Pair 22 AWG, PE-39 Outdoor Telecommunications Cable, Buried In Trench .....	6,011.07	
27 15 13 00-0239 MLF 100-Pair 22 AWG, PE-39 Outdoor Telecommunications Cable, Buried In Trench .....	10,055.05	
27 15 13 00-0240 MLF 200-Pair 22 AWG, PE-39 Outdoor Telecommunications Cable, Buried In Trench .....	18,622.46	
27 15 13 00-0241 MLF 300-Pair 22 AWG, PE-39 Outdoor Telecommunications Cable, Buried In Trench .....	26,803.20	
27 15 13 00-0242 MLF 400-Pair 22 AWG, PE-39 Outdoor Telecommunications Cable, Buried In Trench .....	33,653.59	
27 15 13 00-0243 MLF 600-Pair 22 AWG, PE-39 Outdoor Telecommunications Cable, Buried In Trench .....	46,238.12	
27 15 13 00-0244 MLF 900-Pair 22 AWG, PE-39 Outdoor Telecommunications Cable, Buried In Trench .....	70,138.69	
<b>27 15 13 00-0245 19 AWG, PE-39 Outdoor Telecommunications Cable (27 15 13 00-0196)</b>		
<b>27 15 13 00-0246 19 AWG, PE-39 Outdoor Telecommunications Cable, Installed In Conduit (27 15 13 00-0245)</b>		
27 15 13 00-0247 MLF 25-Pair 19 AWG, PE-39 Outdoor Telecommunications Cable, Installed In Conduit .....	6,857.94	1,263.48
27 15 13 00-0248 MLF 50-Pair 19 AWG, PE-39 Outdoor Telecommunications Cable, Installed In Conduit .....	10,788.10	1,263.48
27 15 13 00-0249 MLF 100-Pair 19 AWG, PE-39 Outdoor Telecommunications Cable, Installed In Conduit .....	18,937.85	1,263.48
<b>27 15 13 00-0250 19 AWG, PE-39 Outdoor Telecommunications Cable, Buried In Trench (27 15 13 00-0245)</b>		
27 15 13 00-0251 MLF 25-Pair 19 AWG, PE-39 Outdoor Telecommunications Cable, Buried In Trench .....	6,406.70	
27 15 13 00-0252 MLF 50-Pair 19 AWG, PE-39 Outdoor Telecommunications Cable, Buried In Trench .....	10,336.86	
27 15 13 00-0253 MLF 100-Pair 19 AWG, PE-39 Outdoor Telecommunications Cable, Buried In Trench .....	18,486.61	
<b>27 15 13 00-0254 (Aerial) Outdoor Telecommunications Cable (27 15 13 00-0129)</b>		
Note: Includes support wire.		
<b>27 15 13 00-0255 24 AWG, (Aerial) Outdoor Telecommunications Cable, Installed On Poles (27 15 13 00-0254)</b>		
27 15 13 00-0256 MLF 6-Pair 24 AWG, (Aerial) Outdoor Telecommunications Cable, Installed On Poles .....	8,217.19	2,503.48
27 15 13 00-0257 MLF 12-Pair 24 AWG, (Aerial) Outdoor Telecommunications Cable, Installed On Poles .....	8,497.47	2,503.48
27 15 13 00-0258 MLF 25-Pair 24 AWG, (Aerial) Outdoor Telecommunications Cable, Installed On Poles .....	9,193.35	2,503.48
27 15 13 00-0259 MLF 50-Pair 24 AWG, (Aerial) Outdoor Telecommunications Cable, Installed On Poles .....	10,481.75	2,503.48
27 15 13 00-0260 MLF 100-Pair 24 AWG, (Aerial) Outdoor Telecommunications Cable, Installed On Poles .....	12,970.27	2,503.48
27 15 13 00-0261 MLF 200-Pair 24 AWG, (Aerial) Outdoor Telecommunications Cable, Installed On Poles .....	18,527.50	2,753.84
27 15 13 00-0262 MLF 300-Pair 24 AWG, (Aerial) Outdoor Telecommunications Cable, Installed On Poles .....	24,115.49	3,004.19

**27 Communications****27 10 Structured Cabling****27 15 Communications Horizontal Cabling**

MINOR CSI UOM DESCRIPTION		TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
27 15 13 00-0263	22 AWG, (Aerial) Outdoor Telecommunications Cable, Installed On Poles <sup>(27 15 13 00-0254)</sup>		
27 15 13 00-0264	MLF 6-Pair 22 AWG, (Aerial) Outdoor Telecommunications Cable, Installed On Poles .....	8,552.51	2,503.48
27 15 13 00-0265	MLF 12-Pair 22 AWG, (Aerial) Outdoor Telecommunications Cable, Installed On Poles .....	8,966.61	2,503.48
27 15 13 00-0266	MLF 25-Pair 22 AWG, (Aerial) Outdoor Telecommunications Cable, Installed On Poles .....	9,964.00	2,503.48
27 15 13 00-0267	MLF 50-Pair 22 AWG, (Aerial) Outdoor Telecommunications Cable, Installed On Poles .....	11,934.43	2,503.48
27 15 13 00-0268	MLF 100-Pair 22 AWG, (Aerial) Outdoor Telecommunications Cable, Installed On Poles .....	16,590.30	2,503.48
27 15 13 00-0269	MLF 200-Pair 22 AWG, (Aerial) Outdoor Telecommunications Cable, Installed On Poles .....	24,780.94	2,753.84
27 15 13 00-0270	19 AWG, (Aerial) Outdoor Telecommunications Cable, Installed On Poles <sup>(27 15 13 00-0254)</sup>		
27 15 13 00-0271	MLF 6-Pair 19 AWG, (Aerial) Outdoor Telecommunications Cable, Installed On Poles .....	8,995.84	2,503.48
27 15 13 00-0272	MLF 12-Pair 19 AWG, (Aerial) Outdoor Telecommunications Cable, Installed On Poles .....	9,932.30	2,503.48
27 15 13 00-0273	MLF 25-Pair 19 AWG, (Aerial) Outdoor Telecommunications Cable, Installed On Poles .....	11,773.53	2,503.48
27 15 13 00-0274	MLF 50-Pair 19 AWG, (Aerial) Outdoor Telecommunications Cable, Installed On Poles .....	15,456.01	2,503.48
27 15 13 00-0275	MLF 100-Pair 19 AWG, (Aerial) Outdoor Telecommunications Cable, Installed On Poles .....	23,174.76	2,503.48
27 15 13 00-0276	Solid Conductor Low Voltage Cable <sup>(27 15 13)</sup>		
27 15 13 00-0277	Solid, Shielded, Non-Plenum Rated, Low Voltage, Alarm And Communications Cable, Installed In Conduit <sup>(27 15 13 00-0276)</sup>		
27 15 13 00-0278	#12 AWG, Solid, Shielded, Non-Plenum Rated, Low Voltage, Alarm And Communications Cable, Installed In Conduit <sup>(27 15 13 00-0277)</sup>		
27 15 13 00-0279	MLF 1 Pair #12 AWG, Solid, Shielded, Non-Plenum Rated, Low Voltage, Alarm And Communications Cable, Installed In Conduit .....	2,752.39	1,360.62
	For #10 AWG, Add .....	613.46	
	For Placement In Trench, Deduct .....	-566.97	
	For Work In Restricted Working Space, Add .....	680.37	
27 15 13 00-0280	MLF 2 Pair #12 AWG, Solid, Shielded, Non-Plenum Rated, Low Voltage, Alarm And Communications Cable, Installed In Conduit .....	3,242.64	1,408.72
	For #10 AWG, Add .....	764.76	
	For Placement In Trench, Deduct .....	-587.14	
	For Work In Restricted Working Space, Add .....	704.57	
27 15 13 00-0281	MLF 3 Pair #12 AWG, Solid, Shielded, Non-Plenum Rated, Low Voltage, Alarm And Communications Cable, Installed In Conduit .....	3,675.27	1,458.20
	For #10 AWG, Add .....	896.99	
	For Placement In Trench, Deduct .....	-607.41	
	For Work In Restricted Working Space, Add .....	728.89	
27 15 13 00-0282	MLF 4 Pair #12 AWG, Solid, Shielded, Non-Plenum Rated, Low Voltage, Alarm And Communications Cable, Installed In Conduit .....	4,132.85	1,507.67
	For #10 AWG, Add .....	1,037.08	
	For Placement In Trench, Deduct .....	-628.39	
	For Work In Restricted Working Space, Add .....	754.07	
27 15 13 00-0283	MLF 5 Pair #12 AWG, Solid, Shielded, Non-Plenum Rated, Low Voltage, Alarm And Communications Cable, Installed In Conduit .....	4,653.93	1,609.38
	For #10 AWG, Add .....	1,187.00	
	For Placement In Trench, Deduct .....	-670.77	
	For Work In Restricted Working Space, Add .....	804.93	
27 15 13 00-0284	MLF 6 Pair #12 AWG, Solid, Shielded, Non-Plenum Rated, Low Voltage, Alarm And Communications Cable, Installed In Conduit .....	5,132.84	1,709.71
	For #10 AWG, Add .....	1,323.30	
	For Placement In Trench, Deduct .....	-712.57	
	For Work In Restricted Working Space, Add .....	855.08	
27 15 13 00-0285	MLF 8 Pair #12 AWG, Solid, Shielded, Non-Plenum Rated, Low Voltage, Alarm And Communications Cable, Installed In Conduit .....	5,591.61	1,913.11
	For #10 AWG, Add .....	1,430.80	
	For Placement In Trench, Deduct .....	-796.98	
	For Work In Restricted Working Space, Add .....	956.38	
27 15 13 00-0286	MLF 12 Pair #12 AWG, Solid, Shielded, Non-Plenum Rated, Low Voltage, Alarm And Communications Cable, Installed In Conduit .....	7,407.37	2,521.96
	For #10 AWG, Add .....	1,898.11	
	For Placement In Trench, Deduct .....	-1,050.61	
	For Work In Restricted Working Space, Add .....	1,260.74	
27 15 13 00-0287	MLF 24 Pair #12 AWG, Solid, Shielded, Non-Plenum Rated, Low Voltage, Alarm And Communications Cable, Installed In Conduit .....	11,013.32	3,724.52
	For #10 AWG, Add .....	2,827.62	
	For Placement In Trench, Deduct .....	-1,551.49	
	For Work In Restricted Working Space, Add .....	1,861.79	
27 15 13 00-0288	#14 AWG, Solid, Shielded, Non-Plenum Rated, Low Voltage, Alarm And Communications Cable, Installed In Conduit <sup>(27 15 13 00-0277)</sup>		
27 15 13 00-0289	MLF 1 Pair #14 AWG, Solid, Shielded, Non-Plenum Rated, Low Voltage, Alarm And Communications Cable, Installed In Conduit .....	2,446.14	1,190.20
	For Placement In Trench, Deduct .....	-495.80	
	For Work In Restricted Working Space, Add .....	594.96	
27 15 13 00-0290	MLF 2 Pair #14 AWG, Solid, Shielded, Non-Plenum Rated, Low Voltage, Alarm And Communications Cable, Installed In Conduit .....	2,908.93	1,232.80
	For Placement In Trench, Deduct .....	-513.67	
	For Work In Restricted Working Space, Add .....	616.40	





<b>Communications</b>		<b>27</b>	<b>27</b>
<b>Structured Cabling</b>		<b>27 10</b>	
<b>Communications Horizontal Cabling</b>		<b>27 15</b>	

MINOR CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
27 15 13 00-0291	MLF	3 Pair #14 AWG, Solid, Shielded, Non-Plenum Rated, Low Voltage, Alarm And Communications Cable, Installed In Conduit.....	3,316.30	1,275.41
		For Placement In Trench, Deduct	-531.54	
		For Work In Restricted Working Space, Add	637.84	
27 15 13 00-0292	MLF	4 Pair #14 AWG, Solid, Shielded, Non-Plenum Rated, Low Voltage, Alarm And Communications Cable, Installed In Conduit.....	3,746.17	1,319.39
		For Placement In Trench, Deduct	-549.75	
		For Work In Restricted Working Space, Add	659.69	
27 15 13 00-0293	MLF	5 Pair #14 AWG, Solid, Shielded, Non-Plenum Rated, Low Voltage, Alarm And Communications Cable, Installed In Conduit.....	4,230.49	1,408.72
		For Placement In Trench, Deduct	-586.85	
		For Work In Restricted Working Space, Add	704.22	
27 15 13 00-0294	MLF	6 Pair #14 AWG, Solid, Shielded, Non-Plenum Rated, Low Voltage, Alarm And Communications Cable, Installed In Conduit.....	4,674.02	1,496.68
		For Placement In Trench, Deduct	-623.27	
		For Work In Restricted Working Space, Add	747.93	
27 15 13 00-0295	MLF	8 Pair #14 AWG, Solid, Shielded, Non-Plenum Rated, Low Voltage, Alarm And Communications Cable, Installed In Conduit.....	5,086.59	1,673.98
		For Placement In Trench, Deduct	-697.49	
		For Work In Restricted Working Space, Add	836.99	
27 15 13 00-0296	MLF	12 Pair #14 AWG, Solid, Shielded, Non-Plenum Rated, Low Voltage, Alarm And Communications Cable, Installed In Conduit.....	6,738.60	2,205.85
		For Placement In Trench, Deduct	-919.10	
		For Work In Restricted Working Space, Add	1,102.92	
27 15 13 00-0297	MLF	24 Pair #14 AWG, Solid, Shielded, Non-Plenum Rated, Low Voltage, Alarm And Communications Cable, Installed In Conduit.....	10,024.77	3,258.62
		For Placement In Trench, Deduct	-1,357.87	
		For Work In Restricted Working Space, Add	1,629.44	
27 15 13 00-0298		Solid, Shielded, Non-Plenum Rated, Low Voltage, Alarm And Communications Cable, Installed Exposed (27 15 13 00-0276)		
27 15 13 00-0299		#12 AWG, Solid, Shielded, Non-Plenum Rated, Low Voltage, Alarm And Communications Cable, Installed Exposed (27 15 13 00-0298)		
27 15 13 00-0300	MLF	1 Pair #12 AWG, Solid, Shielded, Non-Plenum Rated, Low Voltage, Alarm And Communications Cable, Installed Exposed .....	5,020.28	2,721.24
		For #10 AWG, Add	1,067.04	
		For Work In Restricted Working Space, Add	1,360.73	
27 15 13 00-0301	MLF	2 Pair #12 AWG, Solid, Shielded, Non-Plenum Rated, Low Voltage, Alarm And Communications Cable, Installed Exposed .....	5,591.20	2,817.45
		For #10 AWG, Add	1,234.47	
		For Work In Restricted Working Space, Add	1,409.14	
27 15 13 00-0302	MLF	3 Pair #12 AWG, Solid, Shielded, Non-Plenum Rated, Low Voltage, Alarm And Communications Cable, Installed Exposed .....	6,104.91	2,916.40
		For #10 AWG, Add	1,382.91	
		For Work In Restricted Working Space, Add	1,457.78	
27 15 13 00-0303	MLF	4 Pair #12 AWG, Solid, Shielded, Non-Plenum Rated, Low Voltage, Alarm And Communications Cable, Installed Exposed .....	6,646.42	3,015.35
		For #10 AWG, Add	1,539.79	
		For Work In Restricted Working Space, Add	1,508.14	
27 15 13 00-0304	MLF	5 Pair #12 AWG, Solid, Shielded, Non-Plenum Rated, Low Voltage, Alarm And Communications Cable, Installed Exposed .....	7,337.01	3,218.76
		For #10 AWG, Add	1,723.61	
		For Work In Restricted Working Space, Add	1,609.85	
27 15 13 00-0305	MLF	6 Pair #12 AWG, Solid, Shielded, Non-Plenum Rated, Low Voltage, Alarm And Communications Cable, Installed Exposed .....	7,983.11	3,419.42
		For #10 AWG, Add	1,893.36	
		For Work In Restricted Working Space, Add	1,710.16	
27 15 13 00-0306	MLF	8 Pair #12 AWG, Solid, Shielded, Non-Plenum Rated, Low Voltage, Alarm And Communications Cable, Installed Exposed .....	8,779.53	3,826.23
		For #10 AWG, Add	2,068.39	
		For Work In Restricted Working Space, Add	1,912.75	
27 15 13 00-0307	MLF	12 Pair #12 AWG, Solid, Shielded, Non-Plenum Rated, Low Voltage, Alarm And Communications Cable, Installed Exposed .....	11,609.81	5,043.91
		For #10 AWG, Add	2,738.60	
		For Work In Restricted Working Space, Add	2,521.47	
27 15 13 00-0308	MLF	24 Pair #12 AWG, Solid, Shielded, Non-Plenum Rated, Low Voltage, Alarm And Communications Cable, Installed Exposed .....	17,219.25	7,449.05
		For #10 AWG, Add	4,068.81	
		For Work In Restricted Working Space, Add	3,723.56	
27 15 13 00-0309		#14 AWG, Solid, Shielded, Non-Plenum Rated, Low Voltage, Alarm And Communications Cable, Installed Exposed (27 15 13 00-0298)		
27 15 13 00-0310	MLF	1 Pair #14 AWG, Solid, Shielded, Non-Plenum Rated, Low Voltage, Alarm And Communications Cable, Installed Exposed .....	4,429.35	2,380.40
		For Work In Restricted Working Space, Add	1,189.93	
27 15 13 00-0311	MLF	2 Pair #14 AWG, Solid, Shielded, Non-Plenum Rated, Low Voltage, Alarm And Communications Cable, Installed Exposed .....	4,963.61	2,465.61
		For Work In Restricted Working Space, Add	1,232.81	
27 15 13 00-0312	MLF	3 Pair #14 AWG, Solid, Shielded, Non-Plenum Rated, Low Voltage, Alarm And Communications Cable, Installed Exposed .....	5,442.44	2,550.82
		For Work In Restricted Working Space, Add	1,275.68	

**27 Communications****27 10 Structured Cabling****27 15 Communications Horizontal Cabling**

MINOR CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
27 15 13 00-0313	MLF	4 Pair #14 AWG, Solid, Shielded, Non-Plenum Rated, Low Voltage, Alarm And Communications Cable, Installed Exposed.....	5,945.15	2,638.78
		<i>For Work In Restricted Working Space, Add</i>	1,319.39	
27 15 13 00-0314	MLF	5 Pair #14 AWG, Solid, Shielded, Non-Plenum Rated, Low Voltage, Alarm And Communications Cable, Installed Exposed.....	6,577.91	2,817.45
		<i>For Work In Restricted Working Space, Add</i>	1,408.45	
27 15 13 00-0315	MLF	6 Pair #14 AWG, Solid, Shielded, Non-Plenum Rated, Low Voltage, Alarm And Communications Cable, Installed Exposed.....	7,167.12	2,993.36
		<i>For Work In Restricted Working Space, Add</i>	1,495.86	
27 15 13 00-0316	MLF	8 Pair #14 AWG, Solid, Shielded, Non-Plenum Rated, Low Voltage, Alarm And Communications Cable, Installed Exposed.....	7,876.56	3,347.95
		<i>For Work In Restricted Working Space, Add</i>	1,673.98	
27 15 13 00-0317	MLF	12 Pair #14 AWG, Solid, Shielded, Non-Plenum Rated, Low Voltage, Alarm And Communications Cable, Installed Exposed.....	10,415.01	4,411.71
		<i>For Work In Restricted Working Space, Add</i>	2,205.85	
27 15 13 00-0318	MLF	24 Pair #14 AWG, Solid, Shielded, Non-Plenum Rated, Low Voltage, Alarm And Communications Cable, Installed Exposed.....	15,456.26	6,517.24
		<i>For Work In Restricted Working Space, Add</i>	3,258.89	
<b>27 15 13 00-0319 #16 AWG, Solid, Shielded, Non-Plenum Rated, Low Voltage, Alarm And Communications Cable, Installed Exposed</b> (27 15 13 00-0298)				
27 15 13 00-0320	MLF	1 Pair #16 AWG, Solid, Shielded, Non-Plenum Rated, Low Voltage, Alarm And Communications Cable, Installed Exposed.....	3,950.76	2,124.77
		<i>For Work In Restricted Working Space, Add</i>	1,062.93	
27 15 13 00-0321	MLF	2 Pair #16 AWG, Solid, Shielded, Non-Plenum Rated, Low Voltage, Alarm And Communications Cable, Installed Exposed.....	4,323.69	2,201.74
		<i>For Work In Restricted Working Space, Add</i>	1,100.87	
27 15 13 00-0322	MLF	3 Pair #16 AWG, Solid, Shielded, Non-Plenum Rated, Low Voltage, Alarm And Communications Cable, Installed Exposed.....	4,844.04	2,278.69
		<i>For Work In Restricted Working Space, Add</i>	1,138.80	
27 15 13 00-0323	MLF	4 Pair #16 AWG, Solid, Shielded, Non-Plenum Rated, Low Voltage, Alarm And Communications Cable, Installed Exposed.....	5,290.39	2,355.66
		<i>For Work In Restricted Working Space, Add</i>	1,178.38	
27 15 13 00-0324	MLF	5 Pair #16 AWG, Solid, Shielded, Non-Plenum Rated, Low Voltage, Alarm And Communications Cable, Installed Exposed.....	5,850.05	2,515.09
		<i>For Work In Restricted Working Space, Add</i>	1,257.54	
27 15 13 00-0325	MLF	6 Pair #16 AWG, Solid, Shielded, Non-Plenum Rated, Low Voltage, Alarm And Communications Cable, Installed Exposed.....	6,373.47	2,671.77
		<i>For Work In Restricted Working Space, Add</i>	1,335.88	
27 15 13 00-0326	MLF	7 Pair #16 AWG, Solid, Shielded, Non-Plenum Rated, Low Voltage, Alarm And Communications Cable, Installed Exposed.....	6,688.29	2,831.19
		<i>For Work In Restricted Working Space, Add</i>	1,415.04	
27 15 13 00-0327	MLF	8 Pair #16 AWG, Solid, Shielded, Non-Plenum Rated, Low Voltage, Alarm And Communications Cable, Installed Exposed.....	7,005.86	2,990.62
		<i>For Work In Restricted Working Space, Add</i>	1,495.03	
27 15 13 00-0328	MLF	9 Pair #16 AWG, Solid, Shielded, Non-Plenum Rated, Low Voltage, Alarm And Communications Cable, Installed Exposed.....	7,659.04	3,180.28
		<i>For Work In Restricted Working Space, Add</i>	1,589.86	
27 15 13 00-0329	MLF	12 Pair #16 AWG, Solid, Shielded, Non-Plenum Rated, Low Voltage, Alarm And Communications Cable, Installed Exposed.....	9,261.90	3,938.93
		<i>For Work In Restricted Working Space, Add</i>	1,969.60	
27 15 13 00-0330	MLF	24 Pair #16 AWG, Solid, Shielded, Non-Plenum Rated, Low Voltage, Alarm And Communications Cable, Installed Exposed.....	13,743.74	5,819.06
		<i>For Work In Restricted Working Space, Add</i>	2,909.67	
<b>27 15 13 00-0331 #18 AWG, Solid, Shielded, Non-Plenum Rated, Low Voltage, Alarm And Communications Cable, Installed Exposed</b> (27 15 13 00-0298)				
27 15 13 00-0332	MLF	1 Pair #18 AWG, Solid, Shielded, Non-Plenum Rated, Low Voltage, Alarm And Communications Cable, Installed Exposed.....	3,404.90	1,871.88
		<i>For Work In Restricted Working Space, Add</i>	935.12	
27 15 13 00-0333	MLF	2 Pair #18 AWG, Solid, Shielded, Non-Plenum Rated, Low Voltage, Alarm And Communications Cable, Installed Exposed.....	3,760.92	1,937.86
		<i>For Work In Restricted Working Space, Add</i>	968.93	
27 15 13 00-0334	MLF	3 Pair #18 AWG, Solid, Shielded, Non-Plenum Rated, Low Voltage, Alarm And Communications Cable, Installed Exposed.....	4,082.47	2,003.82
		<i>For Work In Restricted Working Space, Add</i>	1,002.74	
27 15 13 00-0335	MLF	4 Pair #18 AWG, Solid, Shielded, Non-Plenum Rated, Low Voltage, Alarm And Communications Cable, Installed Exposed.....	4,417.17	2,072.54
		<i>For Work In Restricted Working Space, Add</i>	1,036.55	
27 15 13 00-0336	MLF	5 Pair #18 AWG, Solid, Shielded, Non-Plenum Rated, Low Voltage, Alarm And Communications Cable, Installed Exposed.....	4,859.66	2,212.73
		<i>For Work In Restricted Working Space, Add</i>	1,106.64	
27 15 13 00-0337	MLF	6 Pair #18 AWG, Solid, Shielded, Non-Plenum Rated, Low Voltage, Alarm And Communications Cable, Installed Exposed.....	5,275.75	2,350.16
		<i>For Work In Restricted Working Space, Add</i>	1,175.90	
27 15 13 00-0338	MLF	8 Pair #18 AWG, Solid, Shielded, Non-Plenum Rated, Low Voltage, Alarm And Communications Cable, Installed Exposed.....	5,812.24	2,630.53
		<i>For Work In Restricted Working Space, Add</i>	1,315.27	
27 15 13 00-0339	MLF	12 Pair #18 AWG, Solid, Shielded, Non-Plenum Rated, Low Voltage, Alarm And Communications Cable, Installed Exposed.....	7,681.84	3,466.14
		<i>For Work In Restricted Working Space, Add</i>	1,733.35	



Communications			27
Structured Cabling			27 10
Communications Horizontal Cabling			27 15

27

MINOR CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
27 15 13 00-0340	MLF	24 Pair #18 AWG, Solid, Shielded, Non-Plenum Rated, Low Voltage, Alarm And Communications Cable, Installed Exposed ..... For Work In Restricted Working Space, Add .....	11,390.81 2,560.43	5,120.88
<b>27 15 13 00-0341 #20 AWG, Solid, Shielded, Non-Plenum Rated, Low Voltage, Alarm And Communications Cable, Installed Exposed (27 15 13 00-0298)</b>				
27 15 13 00-0342	MLF	1 Pair #20 AWG, Solid, Shielded, Non-Plenum Rated, Low Voltage, Alarm And Communications Cable, Installed Exposed ..... For Work In Restricted Working Space, Add .....	3,055.14 850.18	1,701.46
27 15 13 00-0343	MLF	2 Pair #20 AWG, Solid, Shielded, Non-Plenum Rated, Low Voltage, Alarm And Communications Cable, Installed Exposed ..... For Work In Restricted Working Space, Add .....	3,345.04 880.69	1,761.94
27 15 13 00-0344	MLF	3 Pair #20 AWG, Solid, Shielded, Non-Plenum Rated, Low Voltage, Alarm And Communications Cable, Installed Exposed ..... For Work In Restricted Working Space, Add .....	3,606.04 911.21	1,823.78
27 15 13 00-0345	MLF	4 Pair #20 AWG, Solid, Shielded, Non-Plenum Rated, Low Voltage, Alarm And Communications Cable, Installed Exposed ..... For Work In Restricted Working Space, Add .....	3,879.06 942.54	1,885.63
27 15 13 00-0346	MLF	5 Pair #20 AWG, Solid, Shielded, Non-Plenum Rated, Low Voltage, Alarm And Communications Cable, Installed Exposed ..... For Work In Restricted Working Space, Add .....	4,251.86 1,005.62	2,012.07
27 15 13 00-0347	MLF	6 Pair #20 AWG, Solid, Shielded, Non-Plenum Rated, Low Voltage, Alarm And Communications Cable, Installed Exposed ..... For Work In Restricted Working Space, Add .....	4,604.46 1,068.71	2,138.51
27 15 13 00-0348	MLF	8 Pair #20 AWG, Solid, Shielded, Non-Plenum Rated, Low Voltage, Alarm And Communications Cable, Installed Exposed ..... For Work In Restricted Working Space, Add .....	5,099.03 1,195.70	2,391.39
27 15 13 00-0349	MLF	12 Pair #20 AWG, Solid, Shielded, Non-Plenum Rated, Low Voltage, Alarm And Communications Cable, Installed Exposed ..... For Work In Restricted Working Space, Add .....	6,716.03 1,575.85	3,152.79
27 15 13 00-0350	MLF	24 Pair #20 AWG, Solid, Shielded, Non-Plenum Rated, Low Voltage, Alarm And Communications Cable, Installed Exposed ..... For Work In Restricted Working Space, Add .....	9,954.44 2,327.89	4,656.35
27 15 13 00-0351	MLF	25 Pair #20 AWG, Solid, Shielded, Non-Plenum Rated, Low Voltage, Alarm And Communications Cable, Installed Exposed ..... For Work In Restricted Working Space, Add .....	10,386.29 2,383.14	4,766.29
27 15 13 00-0352	MLF	36 Pair #20 AWG, Solid, Shielded, Non-Plenum Rated, Low Voltage, Alarm And Communications Cable, Installed Exposed ..... For Work In Restricted Working Space, Add .....	12,242.42 2,774.85	5,549.68
27 15 13 00-0353	MLF	40 Pair #20 AWG, Solid, Shielded, Non-Plenum Rated, Low Voltage, Alarm And Communications Cable, Installed Exposed ..... For Work In Restricted Working Space, Add .....	13,120.86 2,970.27	5,939.99
27 15 13 00-0354	MLF	50 Pair #20 AWG, Solid, Shielded, Non-Plenum Rated, Low Voltage, Alarm And Communications Cable, Installed Exposed ..... For Work In Restricted Working Space, Add .....	16,018.52 3,711.59	7,424.31
27 15 13 00-0355	MLF	100 Pair #20 AWG, Solid, Shielded, Non-Plenum Rated, Low Voltage, Alarm And Communications Cable, Installed Exposed ..... For Work In Restricted Working Space, Add .....	21,449.06 4,886.66	9,774.47
<b>27 15 13 00-0356 #22 AWG, Shielded, Low Voltage Cable, Installed Exposed (27 15 13 00-0298)</b>				
27 15 13 00-0357	MLF	1 Pair #22 AWG, Solid, Shielded, Non-Plenum Rated, Low Voltage, Alarm And Communications Cable, Installed Exposed ..... For Work In Restricted Working Space, Add .....	2,666.54 765.25	1,531.04
27 15 13 00-0358	MLF	2 Pair #22 AWG, Solid, Shielded, Non-Plenum Rated, Low Voltage, Alarm And Communications Cable, Installed Exposed ..... For Work In Restricted Working Space, Add .....	2,799.88 792.46	1,586.02
27 15 13 00-0359	MLF	3 Pair #22 AWG, Solid, Shielded, Non-Plenum Rated, Low Voltage, Alarm And Communications Cable, Installed Exposed ..... For Work In Restricted Working Space, Add .....	2,952.22 820.50	1,640.99
27 15 13 00-0360	MLF	4 Pair #22 AWG, Solid, Shielded, Non-Plenum Rated, Low Voltage, Alarm And Communications Cable, Installed Exposed ..... For Work In Restricted Working Space, Add .....	3,112.65 848.53	1,695.96
27 15 13 00-0361	MLF	5 Pair #22 AWG, Solid, Shielded, Non-Plenum Rated, Low Voltage, Alarm And Communications Cable, Installed Exposed ..... For Work In Restricted Working Space, Add .....	3,382.71 905.43	1,811.41
27 15 13 00-0362	MLF	6 Pair #22 AWG, Solid, Shielded, Non-Plenum Rated, Low Voltage, Alarm And Communications Cable, Installed Exposed ..... For Work In Restricted Working Space, Add .....	3,649.29 959.86	1,918.62
<b>27 15 13 00-0363 Triad, Installed Exposed (27 15 13 00-0298)</b>				
27 15 13 00-0364	MLF	1 Triad, #16 AWG, Stranded, Low Voltage Copper Communication Cable, Installed Exposed.....	2,920.64	1,139.35
27 15 13 00-0365	MLF	4 Triad, #20 AWG, Stranded, Low Voltage Copper Communication Cable, Installed Exposed.....	3,856.18	1,576.40
27 15 13 00-0366	MLF	8 Triad, #20 AWG, Stranded, Low Voltage Copper Communication Cable, Installed Exposed.....	5,951.00	2,328.17
27 15 13 00-0367	MLF	12 Triad, #20 AWG, Stranded, Low Voltage Copper Communication Cable, Installed Exposed.....	7,343.17	2,774.84
27 15 13 00-0368	MLF	24 Triad, #20 AWG, Stranded, Low Voltage Copper Communication Cable, Installed Exposed.....	11,889.44	4,299.01
27 15 13 00-0369	MLF	36 Triad, #20 AWG, Stranded, Low Voltage Copper Communication Cable, Installed Exposed.....	13,646.01	4,887.24
<b>27 15 13 00-0370 Solid, Shielded, Low Voltage, Alarm And Communications Cable, Installed On Poles (Aerial) (27 15 13 00-0276)</b>				

**27 Communications****27 10 Structured Cabling****27 15 Communications Horizontal Cabling**

MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
27 15 13 00-0371 MLF 1 Pair, #14 AWG, Solid, Shielded, Low Voltage, Alarm And Communications Cable, Installed On Poles (Aerial) .....	2,383.96	730.23
27 15 13 00-0372 MLF 2 Pair, #14 AWG, Solid, Shielded, Low Voltage, Alarm And Communications Cable, Installed On Poles (Aerial) .....	2,912.51	782.34
27 15 13 00-0373 MLF 3 Pair, #14 AWG, Solid, Shielded, Low Voltage, Alarm And Communications Cable, Installed On Poles (Aerial) .....	3,792.01	989.03
27 15 13 00-0374 MLF 4 Pair, #14 AWG, Solid, Shielded, Low Voltage, Alarm And Communications Cable, Installed On Poles (Aerial) .....	4,556.63	1,143.94
27 15 13 00-0375 MLF 5 Pair, #14 AWG, Solid, Shielded, Low Voltage, Alarm And Communications Cable, Installed On Poles (Aerial) .....	7,063.09	1,303.85
27 15 13 00-0376 MLF 6 Pair, #14 AWG, Solid, Shielded, Low Voltage, Alarm And Communications Cable, Installed On Poles (Aerial) .....	8,589.86	1,665.76
<b>27 15 33 Communications Coaxial Horizontal Cabling (27 15)</b>		
Note: Cable installed in conduit includes pull wires and installation in conduit, innerduct, wiremold, etc. Cable installed exposed includes installation on exposed surfaces, uncovered wireways, cable trays, etc.		
<b>27 15 33 00-0001 Indoor Coaxial Cable (27 15 33)</b>		
<b>27 15 33 00-0002 Coaxial, Indoor Telecommunications Cable (27 15 33 00-0001)</b>		
<b>27 15 33 00-0003 Coaxial, Indoor Telecommunications Cable, Installed In Conduit (27 15 33 00-0002)</b>		
27 15 33 00-0004 MLF RG 59/U Coaxial, Indoor Telecommunications Cable, Installed In Conduit (Belden 9108) .....	1,518.88	631.74
27 15 33 00-0005 MLF RG 59/U Plenum Coaxial, Indoor Telecommunications Cable, Installed In Conduit (Belden 82108) .....	2,848.00	631.74
27 15 33 00-0006 MLF RG 6/U Coaxial, Indoor Telecommunications Cable, Installed In Conduit (Belden 9114) .....	1,427.70	721.99
27 15 33 00-0007 MLF RG 6/U Plenum Coaxial, Indoor Telecommunications Cable, Installed In Conduit (Belden 82120) .....	3,521.99	721.99
<b>27 15 33 00-0008 Coaxial, Indoor Telecommunications Cable, Installed Exposed (27 15 33 00-0002)</b>		
27 15 33 00-0009 MLF RG 59/U Coaxial, Indoor Telecommunications Cable, Installed Exposed (Belden 9108) .....	2,571.78	1,263.48
27 15 33 00-0010 MLF RG 59/U Plenum Coaxial, Indoor Telecommunications Cable, Installed Exposed (Belden 82108) .....	3,900.90	1,263.48
27 15 33 00-0011 MLF RG 6/U Coaxial, Indoor Telecommunications Cable, Installed Exposed (Belden 9114) .....	2,631.02	1,443.97
27 15 33 00-0012 MLF RG 6/U Plenum Coaxial, Indoor Telecommunications Cable, Installed Exposed (Belden 82120) .....	4,725.31	1,443.97

**END OF SECTION 27**



Earthwork		31	15
Maintenance of Earthwork		31 01	
Maintenance of Earth Moving		31 01 20	

MINOR	CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
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## 31 Earthwork

### 31 01 Maintenance of Earthwork<sup>(31)</sup>

#### 31 01 20 Maintenance of Earth Moving<sup>(31 01)</sup>

##### 31 01 20 00-0001 Rip Settling Basins<sup>(31 01 20)</sup>

Note: Rip through light soil and sand in settling basin. 8' on center (machine width).

31 01 20 00-0002	ACR	Rip Light Soil And Sand, By Dozer .....	672.31
31 01 20 00-0003	ACR	Rip Light Soil And Sand, By Grader With Rear Ripper .....	1,029.50
31 01 20 00-0004	ACR	Rip Light Soil And Sand, By Rubber Tire Front End Loader .....	877.01

### 31 05 Common Work Results for Earthwork<sup>(31)</sup>

#### 31 05 13 Soils for Earthwork<sup>(31 05)</sup>

Note: Includes delivery up to 15 miles from the closest approved source and dumping. Excludes spreading or backfilling. See CSI section 01 74 19 00-0015 for hauling greater than 15 miles.

##### 31 05 13 00-0001 Fill Material (Loose, Purchased Material)<sup>(31 05 13)</sup>

Note: Includes delivery up to 15 miles from the closest approved source, loading and dumping. Excludes spreading or backfilling. See CSI section 01 74 19 00-0015 for hauling greater than 15 miles.

31 05 13 00-0002	CY	Bank Run/Fill Sand .....	46.07
		For Up To 8, Add .....	9.21
		For >8 To 16, Add .....	4.61
		For >48 To 64, Deduct .....	-3.20
		For >64 To 96, Deduct .....	-5.50
		For >96, Deduct .....	-7.80
31 05 13 00-0003	CY	Screened/Washed Filter/Septic Sand .....	55.79
		For Up To 8, Add .....	11.16
		For >8 To 16, Add .....	5.58
		For >48 To 64, Deduct .....	-3.68
		For >64 To 96, Deduct .....	-6.47
		For >96, Deduct .....	-9.26
31 05 13 00-0004	CY	3/8" Minus, ASTM C33, Screened/Washed Bedding Sand .....	79.12
		For Up To 8, Add .....	15.82
		For >8 To 16, Add .....	7.91
		For >48 To 64, Deduct .....	-4.85
		For >64 To 96, Deduct .....	-8.81
		For >96, Deduct .....	-12.76
31 05 13 00-0005	CY	3/16" Minus, Screened/Washed Concrete Sand .....	70.37
		For Up To 8, Add .....	14.07
		For >8 To 16, Add .....	7.04
		For >48 To 64, Deduct .....	-4.41
		For >64 To 96, Deduct .....	-7.93
		For >96, Deduct .....	-11.45
31 05 13 00-0006	CY	3/32" Minus, Screened/Washed Masonry/Mortar Sand .....	130.66
		For Up To 8, Add .....	26.13
		For >8 To 16, Add .....	13.07
		For >48 To 64, Deduct .....	-7.43
		For >64 To 96, Deduct .....	-13.96
		For >96, Deduct .....	-20.49
31 05 13 00-0007	CY	Common Fill, Native Soil/Dirt .....	58.71
		For Up To 8, Add .....	11.74
		For >8 To 16, Add .....	5.87
		For >48 To 64, Deduct .....	-3.83
		For >64 To 96, Deduct .....	-6.76
		For >96, Deduct .....	-9.70
31 05 13 00-0008	CY	Lime Rock Screening .....	52.58
		For Up To 8, Add .....	10.52
		For >8 To 16, Add .....	5.26
		For >48 To 64, Deduct .....	-3.52
		For >64 To 96, Deduct .....	-6.15
		For >96, Deduct .....	-8.78
31 05 13 00-0009	CY	Crushed Lime Rock Maximum 3-1/2" .....	52.58
		For Up To 8, Add .....	10.52
		For >8 To 16, Add .....	5.26
		For >48 To 64, Deduct .....	-3.52
		For >64 To 96, Deduct .....	-6.15
		For >96, Deduct .....	-8.78
31 05 13 00-0010	CY	Sand/Clay .....	42.05
		For Up To 8, Add .....	8.41
		For >8 To 16, Add .....	4.21
		For >48 To 64, Deduct .....	-3.00
		For >64 To 96, Deduct .....	-5.10
		For >96, Deduct .....	-7.20

#### 31 05 16 Aggregates for Earthwork<sup>(31 05)</sup>

See CSI section 01 74 19 00-0015 for hauling greater than 15 miles.

##### 31 05 16 00-0001 Aggregate (Loose, Purchased Material)<sup>(31 05 16)</sup>

**31 Earthwork****31 05 Common Work Results for Earthwork****31 05 16 Aggregates for Earthwork**

MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
Note: Includes delivery up to 15 miles from the closest approved source, loading and dumping. Excludes spreading or backfilling. See CSI section 01 74 19 00-0015 for hauling greater than 15 miles.		
31 05 16 00-0002 CY #2 Stone Aggregate Fill (1-1/2" To 2-1/2" Clean).....	72.32	
For Up To 8, Add	14.46	
For >8 To 16, Add	7.23	
For >48 To 64, Deduct	-4.51	
For >64 To 96, Deduct	-8.13	
For >96, Deduct	-11.74	
31 05 16 00-0003 CY #3 Stone Aggregate Fill (1" To 2" Clean).....	75.51	
For Up To 8, Add	15.10	
For >8 To 16, Add	7.55	
For >48 To 64, Deduct	-4.67	
For >64 To 96, Deduct	-8.44	
For >96, Deduct	-12.22	
31 05 16 00-0004 CY #4 Stone Aggregate Fill (3/4" To 1-1/2" Clean).....	72.32	
For Up To 8, Add	14.46	
For >8 To 16, Add	7.23	
For >48 To 64, Deduct	-4.51	
For >64 To 96, Deduct	-8.13	
For >96, Deduct	-11.74	
31 05 16 00-0005 CY #5 Stone Aggregate Fill (1/2" To 1" Clean).....	77.82	
For Up To 8, Add	15.56	
For >8 To 16, Add	7.78	
For >48 To 64, Deduct	-4.78	
For >64 To 96, Deduct	-8.68	
For >96, Deduct	-12.57	
31 05 16 00-0006 CY #6 Stone Aggregate Fill (3/8" To 3/4" Clean).....	81.07	
For Up To 8, Add	16.21	
For >8 To 16, Add	8.11	
For >48 To 64, Deduct	-4.95	
For >64 To 96, Deduct	-9.00	
For >96, Deduct	-13.05	
31 05 16 00-0007 CY #56 Stone Aggregate Fill (3/8" To 1").....	78.33	
For Up To 8, Add	15.67	
For >8 To 16, Add	7.83	
For >48 To 64, Deduct	-4.81	
For >64 To 96, Deduct	-8.73	
For >96, Deduct	-12.64	
31 05 16 00-0008 CY #57 Stone Aggregate Fill (3/8" To 1").....	83.99	
For Up To 8, Add	16.80	
For >8 To 16, Add	8.40	
For >48 To 64, Deduct	-5.09	
For >64 To 96, Deduct	-9.29	
For >96, Deduct	-13.49	
31 05 16 00-0009 CY #67 Or #68 Stone Aggregate Fill (3/16" To 3/4").....	75.33	
For Up To 8, Add	15.07	
For >8 To 16, Add	7.53	
For >48 To 64, Deduct	-4.66	
For >64 To 96, Deduct	-8.43	
For >96, Deduct	-12.19	
31 05 16 00-0010 CY #7 Stone Aggregate Fill (3/8" To 1/2").....	76.91	
For Up To 8, Add	15.38	
For >8 To 16, Add	7.69	
For >48 To 64, Deduct	-4.74	
For >64 To 96, Deduct	-8.58	
For >96, Deduct	-12.43	
31 05 16 00-0011 CY #78 Stone Aggregate Fill (3/32" To 1/2").....	77.59	
For Up To 8, Add	15.52	
For >8 To 16, Add	7.76	
For >48 To 64, Deduct	-4.77	
For >64 To 96, Deduct	-8.65	
For >96, Deduct	-12.53	
31 05 16 00-0012 CY #8 Stone Aggregate Fill (3/32" To 3/8").....	81.07	
For Up To 8, Add	16.21	
For >8 To 16, Add	8.11	
For >48 To 64, Deduct	-4.95	
For >64 To 96, Deduct	-9.00	
For >96, Deduct	-13.05	
31 05 16 00-0013 CY #89 Stone Aggregate Fill (1/16" To 3/8").....	82.04	
For Up To 8, Add	16.41	
For >8 To 16, Add	8.20	
For >48 To 64, Deduct	-5.00	
For >64 To 96, Deduct	-9.10	
For >96, Deduct	-13.20	
31 05 16 00-0014 CY #9 Stone Aggregate Fill (3/32" To 3/16").....	81.07	
For Up To 8, Add	16.21	
For >8 To 16, Add	8.11	
For >48 To 64, Deduct	-4.95	
For >64 To 96, Deduct	-9.00	
For >96, Deduct	-13.05	
31 05 16 00-0015 CY #10 Stone Aggregate Fill (1/16" To 3/16").....	83.07	
For Up To 8, Add	16.61	
For >8 To 16, Add	8.31	
For >48 To 64, Deduct	-5.05	
For >64 To 96, Deduct	-9.20	
For >96, Deduct	-13.35	



Earthwork		31
Common Work Results for Earthwork		31 05
Aggregates for Earthwork		31 05 16

MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
31 05 16 00-0016 CY #610 Modified Stone Aggregate Fill (1/16" To 3/4").....	82.04	
For Up To 8, Add	16.41	
For >8 To 16, Add	8.20	
For >48 To 64, Deduct	-5.00	
For >64 To 96, Deduct	-9.10	
For >96, Deduct	-13.20	
31 05 16 00-0017 CY Screenings Stone Aggregate Fill (3/16" Max) .....	67.85	
For Up To 8, Add	13.57	
For >8 To 16, Add	6.79	
For >48 To 64, Deduct	-4.29	
For >64 To 96, Deduct	-7.68	
For >96, Deduct	-11.07	
31 05 16 00-0018 CY Over 6" To 12" Stone Aggregate Fill, Random Size .....	74.26	
For Up To 8, Add	14.85	
For >8 To 16, Add	7.43	
For >48 To 64, Deduct	-4.61	
For >64 To 96, Deduct	-8.32	
For >96, Deduct	-12.03	
31 05 16 00-0019 CY Over 6" To 12" Graded Stone Aggregate Fill .....	74.26	
For Up To 8, Add	14.85	
For >8 To 16, Add	7.43	
For >48 To 64, Deduct	-4.61	
For >64 To 96, Deduct	-8.32	
For >96, Deduct	-12.03	
31 05 16 00-0020 CY 3" To 7" Surge Stone Aggregate Fill, Random Size.....	80.68	
For Up To 8, Add	16.14	
For >8 To 16, Add	8.07	
For >48 To 64, Deduct	-4.93	
For >64 To 96, Deduct	-8.96	
For >96, Deduct	-13.00	
31 05 16 00-0021 CY 3" To 7" Surge Stone Graded Aggregate Fill .....	85.25	
For Up To 8, Add	17.05	
For >8 To 16, Add	8.53	
For >48 To 64, Deduct	-5.16	
For >64 To 96, Deduct	-9.42	
For >96, Deduct	-13.68	
31 05 16 00-0022 CY Crusher Run Aggregate Fill (2-1/2" Minus) .....	45.50	
For Up To 8, Add	9.10	
For >8 To 16, Add	4.55	
For >48 To 64, Deduct	-3.17	
For >64 To 96, Deduct	-5.44	
For >96, Deduct	-7.72	
31 05 16 00-0023 CY Crusher Run Aggregate Fill (1-1/2" Minus) .....	50.54	
For Up To 8, Add	10.11	
For >8 To 16, Add	5.05	
For >48 To 64, Deduct	-3.42	
For >64 To 96, Deduct	-5.95	
For >96, Deduct	-8.47	
31 05 16 00-0024 CY Crusher Run Aggregate Fill (3/4" Minus) .....	47.27	
For Up To 8, Add	9.45	
For >8 To 16, Add	4.73	
For >48 To 64, Deduct	-3.26	
For >64 To 96, Deduct	-5.62	
For >96, Deduct	-7.98	

### 31 05 36 Equipment Delivery, Pickup, Mobilization and Demobilization<sup>(31)</sup>

<sup>(05)</sup>  
See CSI section 01 71 13 00-0001 for equipment delivery, pickup, mobilization and demobilization.

## 31 10 Site Clearing<sup>(31)</sup>

### 31 11 Clearing and Grubbing<sup>(31 10)</sup>

#### 31 11 00 00-0001 Clear And Grub Roots And Stumps<sup>(31 11)</sup>

Note: Tree diameter (diameter at breast height) is the diameter of the tree trunk measured at 4.5' above ground level. Based on tree density (light, medium or heavy) to be removed. Excludes loading.

31 11 00 00-0002	ACR Clear And Grub Light Trees Up To 6" Diameter, Cut And Chip .....	8,140.76
Note: Includes grub and removal of stump		
31 11 00 00-0003	ACR Clear And Grub Light Stumps Only Up To 6" Diameter .....	2,290.39
31 11 00 00-0004	ACR Clear And Grub Medium Trees Up To 10" Diameter, Cut And Chip .....	9,497.55
Note: Includes grub and removal of stump		
31 11 00 00-0005	ACR Clear And Grub Medium Stumps Only Up To 10" Diameter .....	3,817.31
31 11 00 00-0006	ACR Clear And Grub Heavy Trees Up To 16" Diameter, Cut And Chip .....	10,792.67
Note: Includes grub and removal of stump		
31 11 00 00-0007	ACR Clear And Grub Heavy Stumps Only Up To 16" Diameter.....	4,338.37
31 11 00 00-0008	ACR Clearing By Machine - Light Brush Without Grub .....	313.73
31 11 00 00-0009	ACR Clearing By Machine - Medium Brush Without Grub .....	663.49
31 11 00 00-0010	ACR Clearing By Machine - Heavy Brush Without Grub .....	944.06
31 11 00 00-0011	ACR Chipping - Light Brush .....	2,533.13
31 11 00 00-0012	ACR Chipping - Medium Brush .....	3,257.05
31 11 00 00-0013	ACR Chipping - Heavy Brush.....	4,560.28

#### 31 11 00 00-0014 Loading Of Cleared And Grubbed Material<sup>(31 11)</sup>

**31 Earthwork****31 10 Site Clearing****31 11 Clearing and Grubbing**

MINOR	CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
			See CSI section 01 74 19 00-0015 for hauling.		
31 11 00 00-0015	CY		Machine Loading Of Cleared And Grubbed Material .....	11.06	
31 11 00 00-0016	CY		Chute Loading Of Cleared And Grubbed Material .....	13.27	
31 11 00 00-0017	CY		Hand Loading Of Cleared And Grubbed Material .....	36.76	
31 11 00 00-0018	CY		Wheel And Ramp Loading Of Cleared And Grubbed Material .....	28.88	

**31 20 Earth Moving** <sup>(31)</sup>

Note: Per OSHA -Soil Classification - 1926 Subpart P App A. Light material: Class A site material, normally referred to as "easy digging". Consisting of loose, soft, free running materials. Close lying, which will fill blade, digger or bucket to capacity, and frequently provide a heaped load. Materials such as dry sand, small gravel, unpacked earth, loam, etc., would fall into this category. Medium material: Class B site material, normally referred to as "medium and tough, wet and sticky clay would be examples of this medium digging", consisting of harder materials that are not difficult to dig without assistance such as ripping, blasting, etc. Material break up with some bulkiness causing voids in digger or bucket. Materials such as packed earth, common earth with some clay, soil with less than 25% rock content would be examples of this category. Heavy/wet material: Class C site material, normally referred to as "hard digging", consisting of materials which may require some assistance in breaking up. Bulky and somewhat hard to penetrate materials would be found in this category and voids in dipper or bucket would be common. Materials such as very hard packed soil, with up to 50% to 70% rock content and hard category. Soil conditions will be determined by soil analysis to provide appropriate percentage (%) for the various types of soil conditions. Apply the percentages to the various soil types to generate an appropriate representation of the soil condition.

**31 23 Excavation and Fill** <sup>(31 20)</sup>**31 23 16 Excavation** <sup>(31 23)</sup>**31 23 16 13 Trenching** <sup>(31 23 16)</sup>

Note: Use this section for trenching operations even if the total project volume exceeds 500 CY. Use tasks for work by hand only for areas not accessible by machine.

**31 23 16 13-0001 Excavation For Trenching By Machine** <sup>(31 23 16 13)</sup>

Note: Includes stockpiling excess materials and trimming sides and bottom of trench.

31 23 16 13-0002	CY	12" Wide or Less, Excavation for Trenching by Machine in Soil .....	10.74	
		For Excavation In Light Material (Class A), Deduct .....	-1.34	
		For Excavation In Heavy/Wet Material (Class C), Add .....	4.30	
		For Up To 20, Add .....	8.59	
		For >20 To 50, Add .....	5.37	
		For >50 To 250, Add .....	2.69	
		For >500 To 1,000, Deduct .....	-1.61	
		For >1,000, Deduct .....	-3.22	
31 23 16 13-0003	CY	Over 12" Wide, Excavation for Trenching by Machine in Soil .....	7.20	
		For Excavation In Light Material (Class A), Deduct .....	-0.90	
		For Excavation In Heavy/Wet Material (Class C), Add .....	2.88	
		For Up To 20, Add .....	5.76	
		For >20 To 50, Add .....	3.60	
		For >50 To 250, Add .....	1.80	
		For >500 To 1,000, Deduct .....	-1.08	
		For >1,000, Deduct .....	-2.16	
31 23 16 13-0004	CY	12" Wide or Less, Excavation for Trenching by Machine in Loose Rock .....	17.78	
		Note: Includes compacted aggregate .....		
		For Up To 20, Add .....	14.22	
		For >20 To 50, Add .....	8.89	
		For >50 To 250, Add .....	4.45	
		For >500 To 1,000, Deduct .....	-2.67	
		For >1,000, Deduct .....	-5.33	
31 23 16 13-0005	CY	Over 12" Wide, Excavation for Trenching by Machine in Loose Rock .....	12.79	
		Note: Includes compacted aggregate .....		
		For Up To 20, Add .....	10.23	
		For >20 To 50, Add .....	6.40	
		For >50 To 250, Add .....	3.20	
		For >500 To 1,000, Deduct .....	-1.92	
		For >1,000, Deduct .....	-3.84	

**31 23 16 13-0006 Excavation For Trenching By Hand** <sup>(31 23 16 13)</sup>

31 23 16 13-0007	CY	Excavation For Trenching By Hand In Soil .....	121.30	
		Note: Includes stockpiling excess materials and trimming sides and bottom of trench.		
31 23 16 13-0008	CY	Excavation For Trenching By Hand In Loose Rock Or Compacted Aggregate .....	208.08	
		Note: Includes stockpiling excess materials and trimming sides and bottom of trench.		

**31 23 16 13-0009 Backfilling Or Placing Subbase For Trenches** <sup>(31 23 16 13)</sup>

Note: With imported or stockpiled materials.

31 23 16 13-0010	CY	Backfilling or Placing Subbase for Trenches with Imported or Stockpiled Materials by Machine .....	3.88	
		For Up To 20, Add .....	3.10	
		For >20 To 50, Add .....	1.94	
		For >50 To 250, Add .....	0.97	
		For >500 To 1,000, Deduct .....	-0.58	
		For >1,000, Deduct .....	-1.16	
31 23 16 13-0011	CY	Backfilling or Placing Subbase for Trenches with Imported or Stockpiled Materials by Hand .....	33.70	

**31 23 16 13-0012 Compaction Of Fill Or Subbase For Trenches** <sup>(31 23 16 13)</sup>

Note: Includes restoration of final grade.





	<b>Earthwork</b>	<b>31</b>	
	<b>Earth Moving</b>	<b>31 20</b>	
	<b>Excavation and Fill</b>	<b>31 23</b>	

MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
31 23 16 13-0013 CY Compaction of Fill or Subbase for Trenches by Vibratory Plate, Air Tamper, Etcetera.....	7.07	
For Up To 20, Add	5.66	
For >20 To 50, Add	3.54	
For >50 To 250, Add	1.77	
For >500 To 1,000, Deduct	-1.06	
For >1,000, Deduct	-2.12	
31 23 16 13-0014 CY Compaction of Fill or Subbase for Trenches by Hand .....	38.01	
<b>31 23 16 13-0015 Loading Excess Material For Removal From Excavation For Trenches</b> (31 23 16 13)		
Note: Includes hand work by laborer for clean-up. Not to be used when excavated material can be loaded directly into truck instead of stock-piling. See CSI section 01 74 19 00-0015 for hauling.		
31 23 16 13-0016 CY Load Excess Material by Machine for Removal from Excavation for Trenching .....	6.75	
For Up To 20, Add	5.40	
For >20 To 50, Add	3.38	
For >50 To 250, Add	1.69	
For >500 To 1,000, Deduct	-1.01	
For >1,000, Deduct	-2.03	
31 23 16 13-0017 CY Load Excess Material by Hand for Removal from Excavation for Trenching .....	88.95	
<b>31 23 16 13-0018 Spread Excess Or Imported Material For Trenches</b> (31 23 16 13)		
Note: Includes hand work by laborer for clean-up.		
31 23 16 13-0019 CY Spread Excess Or Imported Material On Site With Machine .....	3.15	
For Up To 20, Add	2.52	
For >20 To 50, Add	1.58	
For >50 To 250, Add	0.79	
For >500 To 1,000, Deduct	-0.47	
For >1,000, Deduct	-0.95	
<b>31 23 16 13-0020 Utility Chain Trencher</b> (31 23 16 13)		
<b>31 23 16 13-0021 Utility Trench, Chain Trencher</b> (31 23 16 13-0020)		
Note: Earth left adjacent to trench.		
31 23 16 13-0022 LF 4" Wide, 12" Deep Trench, Medium Soil, Chain Trencher .....	1.28	
31 23 16 13-0023 LF 4" Wide, 18" Deep Trench, Medium Soil, Chain Trencher .....	1.40	
31 23 16 13-0024 LF 4" Wide, 24" Deep Trench, Medium Soil, Chain Trencher .....	1.45	
31 23 16 13-0025 LF 6" Wide, 12" Deep Trench, Medium Soil, Chain Trencher .....	1.53	
31 23 16 13-0026 LF 6" Wide, 18" Deep Trench, Medium Soil, Chain Trencher .....	1.68	
31 23 16 13-0027 LF 6" Wide, 24" Deep Trench, Medium Soil, Chain Trencher .....	1.92	
31 23 16 13-0028 LF 6" Wide, 36" Deep Trench, Medium Soil, Chain Trencher .....	2.29	
31 23 16 13-0029 LF 8" Wide, 12" Deep Trench, Medium Soil, Chain Trencher .....	2.17	
31 23 16 13-0030 LF 8" Wide, 18" Deep Trench, Medium Soil, Chain Trencher .....	2.56	
31 23 16 13-0031 LF 8" Wide, 24" Deep Trench, Medium Soil, Chain Trencher .....	2.90	
31 23 16 13-0032 LF 8" Wide, 36" Deep Trench, Medium Soil, Chain Trencher .....	3.44	
<b>31 23 16 13-0033 Backfill Trenches With Compaction</b> (31 23 16 13-0020)		
31 23 16 13-0034 LF Backfill 4" Wide, 12" Deep Trench, With Compaction.....	0.20	
31 23 16 13-0035 LF Backfill 4" Wide, 18" Deep Trench, With Compaction.....	0.31	
31 23 16 13-0036 LF Backfill 4" Wide, 24" Deep Trench, With Compaction.....	0.41	
31 23 16 13-0037 LF Backfill 6" Wide, 12" Deep Trench, With Compaction.....	0.31	
31 23 16 13-0038 LF Backfill 6" Wide, 18" Deep Trench, With Compaction.....	0.41	
31 23 16 13-0039 LF Backfill 6" Wide, 24" Deep Trench, With Compaction.....	0.63	
31 23 16 13-0040 LF Backfill 6" Wide, 36" Deep Trench, With Compaction.....	0.89	
31 23 16 13-0041 LF Backfill 8" Wide, 12" Deep Trench, With Compaction.....	0.41	
31 23 16 13-0042 LF Backfill 8" Wide, 18" Deep Trench, With Compaction.....	0.63	
31 23 16 13-0043 LF Backfill 8" Wide, 24" Deep Trench, With Compaction.....	0.83	
31 23 16 13-0044 LF Backfill 8" Wide, 36" Deep Trench, With Compaction.....	1.24	
<b>31 23 16 33 Bulk Excavation</b> (31 23 16)		
Note: For excavations where the total quantity for a project is greater than 500 cubic yards. See CSI section 31 05 16 00-0000 for imported material, 31 23 16 36-0000 for For less than 500 CY excavation.		
<b>31 23 16 33-0001 Excavation</b> (31 23 16 33)		
Note: For bulk excavation. Includes stockpiling excavated materials within 100' of point of excavation.		
31 23 16 33-0002 CY Bulk Excavation by Dozer in Soil .....	9.87	
For Excavation In Light Material (Class A), Deduct	-1.23	
For Excavation In Heavy/Wet Material (Class C), Add	3.95	
For >1,000, Deduct	-1.48	
31 23 16 33-0003 CY Bulk Excavation by Hydraulic Excavator, Front End Loader, Backhoe in Soil .....	5.81	
For Excavation In Light Material (Class A), Deduct	-0.73	
For Excavation In Heavy/Wet Material (Class C), Add	2.32	
For >1,000, Deduct	-0.87	
31 23 16 33-0004 CY Bulk Excavation by Dozer in Loose Rock .....	12.15	
Note: Includes compacted aggregate		
For >1,000, Deduct	-1.82	
31 23 16 33-0005 CY Bulk Excavation by Hydraulic Excavator, Front End Loader, Backhoe in Loose Rock .....	7.15	
Note: Includes compacted aggregate		
For >1,000, Deduct	-1.07	

**31 Earthwork****31 20 Earth Moving****31 23 Excavation and Fill**

MINOR CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
31 23 16 33-0006		<b>Spreading, Shaping And Rough Grading</b> (31 23 16 33) Note: Imported or stockpiled material for bulk excavation.		
31 23 16 33-0007	CY	Spreading, Shaping, and Rough Grading Imported or Stockpiled Material for Bulk Excavation by Machine .....	6.09	
		For >1,000, Deduct .....	-0.91	
31 23 16 33-0008		<b>Cutting, Shaping and Rough Grading Of Existing Elevations</b> (31 23 16 33) Note: For bulk excavation.		
31 23 16 33-0009	CY	Cutting, Shaping and Rough Grading Existing Elevations For Bulk Excavation by Machine .....	6.77	
		For >1,000, Deduct .....	-1.02	
31 23 16 33-0010		<b>Relocating On Site Excavated Material From Excavation</b> (31 23 16 33) Note: For bulk excavation.		
31 23 16 33-0011	CY	Relocating On Site Excavated Material From Bulk Excavation >100' to 300' .....	5.42	
		For >1,000, Deduct .....	-0.81	
31 23 16 33-0012	CY	Relocating On Site Excavated Material From Bulk Excavation >300' to 500' .....	8.12	
		For >1,000, Deduct .....	-1.22	
31 23 16 33-0013	CY	Relocating On Site Excavated Material From Bulk Excavation >500' To 1,000' .....	12.19	
		For >1,000, Deduct .....	-1.83	
31 23 16 33-0014	CY	Relocating On Site Excavated Material From Bulk Excavation >1,000' .....	16.25	
		For >1,000, Deduct .....	-2.44	
31 23 16 33-0015		<b>Finish Grading</b> (31 23 16 33) Note: For bulk excavation.		
31 23 16 33-0016	SY	Finish Grading for Bulk Excavation by Machine .....	0.68	
31 23 16 33-0017		<b>Compaction Of Fill Or Subbase, Per Lift</b> (31 23 16 33) Note: For bulk excavation. See CSI section 31 23 23 23-0001 for compaction water.		
31 23 16 33-0018	SY	Compaction of Fill or Subbase for Bulk Excavation by Machine .....	0.68	
		Note: Per Lift		
31 23 16 33-0019		<b>Loading Excess Material For Removal From Excavation</b> (31 23 16 33) Note: For bulk excavation. Includes hand work by laborer for clean-up. Not to be used when excavated material can be loaded directly into truck instead of stock-piling. See CSI section 01 74 19 00-0015 for hauling.		
31 23 16 33-0020	CY	Loading Excess Material For Removal From Bulk Excavation .....	5.96	
		For >1,000, Deduct .....	-0.89	
31 23 16 36		<b>Excavation for Building Foundations and Other Structures</b> (31 23 16) Note: Use of a Bobcat is limited to access restricted areas and by owner's approval. See CSI section 31 05 16 00-0000 for imported material, 31 23 16 33-0000 for bulk excavation operations over 500 CY.		
31 23 16 36-0001		<b>Excavation</b> (31 23 16 36) Note: For building foundations and other structures by machine. Includes stockpiling excess materials within 100' of point of excavation, shaping, trimming and rough grading excavation.		
31 23 16 36-0002		<b>Excavation For Building Foundations And Other Structures By Skid-Steer Loader</b> (31 23 16 36-0001)		
31 23 16 36-0003	CY	Excavation For Building Foundations And Other Structures By Skid-Steer Loader In Soil .....	8.93	
		For Excavation In Light Material (Class A), Deduct .....	-1.12	
		For Excavation In Heavy/Wet Material (Class C), Add .....	3.57	
		For Up To 20, Add .....	8.93	
		For >20 To 50, Add .....	6.70	
		For >50 To 250, Add .....	3.57	
		For >250 To 500, Add .....	1.34	
31 23 16 36-0004	CY	Excavation For Building Foundations And Other Structures By Skid-Steer Loader In Loose Rock .....	11.10	
		Note: Includes compacted aggregate		
		For Up To 20, Add .....	11.10	
		For >20 To 50, Add .....	8.33	
		For >50 To 250, Add .....	4.44	
		For >250 To 500, Add .....	1.67	
31 23 16 36-0005		<b>Excavation For Building Foundations And Other Structures By Hydraulic Excavator, Backhoe, Loader</b> (31 23 16 36-0001)		
31 23 16 36-0006	CY	Excavation For Building Foundations And Other Structures By Hydraulic Excavator, Backhoe, Loader in Soil .....	6.98	
		For Excavation In Light Material (Class A), Deduct .....	-0.87	
		For Excavation In Heavy/Wet Material (Class C), Add .....	2.79	
		For Up To 20, Add .....	6.98	
		For >20 To 50, Add .....	5.24	
		For >50 To 250, Add .....	2.79	
		For >250 To 500, Add .....	1.05	
31 23 16 36-0007	CY	Excavation For Building Foundations And Other Structures By Hydraulic Excavator, Backhoe, Loader in Loose Rock .....	8.31	
		Note: Includes compacted aggregate		
		For Up To 20, Add .....	8.31	
		For >20 To 50, Add .....	6.23	
		For >50 To 250, Add .....	3.32	
		For >250 To 500, Add .....	1.25	



	<b>Earthwork</b>	<b>31</b>	
	<b>Earth Moving</b>	<b>31 20</b>	
	<b>Excavation and Fill</b>	<b>31 23</b>	

MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
<b>31 23 16 36-0008 Excavation For Building Foundations And Other Structures By Hand</b> (31 23 16 36-0001) Note: For areas not accessible by machine and only with owner's approval.		
31 23 16 36-0009 CY Excavation For Building Foundations And Other Structures By Hand in Soil .....	121.30	
For Excavation In Light Material (Class A), Deduct .....	-15.16	
For Excavation In Heavy/Wet Material (Class C), Add .....	48.52	
31 23 16 36-0010 CY Excavation For Building Foundations And Other Structures By Hand in Loose Rock.....	208.08	
Note: Includes compacted aggregate		
<b>31 23 16 36-0011 Relocating On Site Excavated Material From Excavation</b> (31 23 16 36) Note: For building foundations and other structures over 100'.		
31 23 16 36-0012 CY Relocating On Site Excavated Material From Excavation For Building Foundations and Other Structures >100' to 300'.....	5.42	
For Up To 20, Add .....	5.42	
For >20 To 50, Add .....	4.07	
For >50 To 250, Add .....	2.17	
For >250 To 500, Add .....	0.81	
31 23 16 36-0013 CY Relocating On Site Excavated Material From Excavation For Building Foundations and Other Structures >300' to 500'.....	8.12	
For Up To 20, Add .....	8.12	
For >20 To 50, Add .....	6.09	
For >50 To 250, Add .....	3.25	
For >250 To 500, Add .....	1.22	
31 23 16 36-0014 CY Relocating On Site Excavated Material From Excavation For Building Foundations and Other Structures >500' to 1,000'.....	12.19	
For Up To 20, Add .....	12.19	
For >20 To 50, Add .....	9.14	
For >50 To 250, Add .....	4.88	
For >250 To 500, Add .....	1.83	
31 23 16 36-0015 CY Relocating On Site Excavated Material From Excavation For Building Foundations and Other Structures >1,000' .....	16.25	
For Up To 20, Add .....	16.25	
For >20 To 50, Add .....	12.19	
For >50 To 250, Add .....	6.50	
For >250 To 500, Add .....	2.44	
<b>31 23 16 36-0016 Backfilling</b> (31 23 16 36) Note: For building foundations and other structures with imported or stockpiled materials. Includes rough grading.		
31 23 16 36-0017 CY Backfilling Around Building Foundations And Other Structures By Skid-Steer Loader .....	4.41	
For Up To 20, Add .....	4.41	
For >20 To 50, Add .....	3.31	
For >50 To 250, Add .....	1.76	
For >250 To 500, Add .....	0.66	
31 23 16 36-0018 CY Backfilling Around Building Foundations And Other Structures By Hydraulic Excavator, Backhoe, Loader .....	5.40	
For Up To 20, Add .....	5.40	
For >20 To 50, Add .....	4.05	
For >50 To 250, Add .....	2.16	
For >250 To 500, Add .....	0.81	
31 23 16 36-0019 CY Backfilling Around Building Foundations And Other Structures By Hand .....	57.77	
<b>31 23 16 36-0020 Compaction Of Fill Or Subbase</b> (31 23 16 36) Note: For building foundations and other structures. See CSI section 31 23 23 23-0001 for compaction water.		
31 23 16 36-0021 CY Compaction Of Fill Or Subbase For Building Foundations and Other Structures by Vibratory Plate, Air Tamper, Etcetera .....	11.20	
For Up To 20, Add .....	11.20	
For >20 To 50, Add .....	8.40	
For >50 To 250, Add .....	4.48	
For >250 To 500, Add .....	1.68	
31 23 16 36-0022 CY Compaction Of Fill Or Subbase For Building Foundations and Other Structures by Hand.....	38.01	
<b>31 23 16 36-0023 Grading</b> (31 23 16 36) Note: For building foundations and other structures.		
31 23 16 36-0024 SY Rough Grading For Building Foundations And Other Structures by Machine.....	1.17	
31 23 16 36-0025 SY Finish Grading For Building Foundations And Other Structures by Machine.....	1.88	
31 23 16 36-0026 SY Finish Grading For Building Foundations And Other Structures by Hand.....	11.23	
<b>31 23 16 36-0027 Loading Excess Material For Removal From Excavation</b> (31 23 16 36) Note: For building foundations and other structures. Includes hand work by laborer for clean-up. Not to be used when excavated material can be loaded directly into truck instead of stock-piling. See CSI section 01 74 19 00-0015 for hauling.		
31 23 16 36-0028 CY Load Excess Material For Removal From Excavation For Building Foundations and Other Structures by Machine .....	6.21	
For Up To 20, Add .....	6.21	
For >20 To 50, Add .....	4.66	
For >50 To 250, Add .....	2.48	
For >250 To 500, Add .....	0.93	
31 23 16 36-0029 CY Load Excess Material For Removal From Excavation For Building Foundations and Other Structures by Hand.....	88.95	

<b>31</b>	<b>Earthwork</b>
<b>31 20</b>	<b>Earth Moving</b>
<b>31 23</b>	<b>Excavation and Fill</b>



MINOR CSI UOM DESCRIPTION				TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
31 23 16 36-0030			<b>Spread Material</b> (31 23 16 36)		
			Note: For building foundations and other structures.		
31 23 16 36-0031	CY		Spread Excess Or Imported Material On Site By Machine .....	3.15	
			For Up To 20, Add .....	3.15	
			For >20 To 50, Add .....	2.36	
			For >50 To 250, Add .....	1.26	
			For >250 To 500, Add .....	0.47	
31 23 16 36-0032	CY		Spread Excess Or Imported Material On Site By Hand .....	49.08	
<b>31 23 19</b>			<b>Dewatering</b> (31 23)		
31 23 19 00-0001			<b>Well Point Dewatering System</b> (31 23 19)		
31 23 19 00-0002			<b>Delivery, Installation And Removal Cost</b> (31 23 19 00-0001)		
			Note: Priced by linear foot of header used.		
31 23 19 00-0003	LF		Up To 100' In Length Well Point System Delivery, Installation And Removal .....	124.32	
31 23 19 00-0004	LF		>100' To 250' In Length Well Point System Delivery, Installation And Removal .....	68.37	
31 23 19 00-0005	LF		>250' To 500' In Length Well Point System Delivery, Installation And Removal .....	62.16	
31 23 19 00-0006	LF		>250' To 500' In Length Well Point System Delivery, Installation And Removal .....	55.95	
31 23 19 00-0007	LF		>500' To 1,000' In Length Well Point System Delivery, Installation And Removal .....	49.73	
31 23 19 00-0008	LF		>1,000' In Length Well Point System Delivery, Installation And Removal .....	43.51	
31 23 19 00-0009			<b>Well Point Dewatering System Rental</b> (31 23 19 00-0001)		
			Note: Includes all necessary equipment for a well point system (well point with risers, pump, valves, header pipe, discharge pipe, etc.). Use normal adjustment factor only for rental tasks and modifiers. Unit of measure and modifier quantities are based on linear feet of header per day (ex. 200 ft of header for four days - quantity should be 200x4 or 800 ft). Rental days include weekends, when appropriate, regardless if the system is operational during that time. Use weekly modifier for system use of five days to less than a month. Use monthly modifier for system use of one month or greater. See CSI section 31 23 19 00-0002 for installation, 31 23 19 00-0015 for operational costs.		
31 23 19 00-0010	LFD		Up To 100' In Length Well Point System Rental (LF x Days = Quantity) .....	1.85	
			For >5 Days And <1 Month, Deduct .....	-0.41	
			For >1 Month, Deduct .....	-0.52	
31 23 19 00-0011	LFD		>100' To 250' In Length Well Point System Rental (LF x Days = Quantity) .....	1.08	
			For >5 Days And <1 Month, Deduct .....	-0.24	
			For >1 Month, Deduct .....	-0.30	
31 23 19 00-0012	LFD		>250' To 500' In Length Well Point System Rental (LF x Days = Quantity) .....	0.77	
			For >5 Days And <1 Month, Deduct .....	-0.17	
			For >1 Month, Deduct .....	-0.22	
31 23 19 00-0013	LFD		>500' To 1,000' In Length Well Point System Rental (LF x Days = Quantity) .....	0.57	
			For >5 Days And <1 Month, Deduct .....	-0.13	
			For >1 Month, Deduct .....	-0.16	
31 23 19 00-0014	LFD		>1,000' In Length Well Point System Rental (LF x Days = Quantity) .....	0.52	
			For >5 Days And <1 Month, Deduct .....	-0.11	
			For >1 Month, Deduct .....	-0.15	
31 23 19 00-0015			<b>Well Point Dewatering System Operation Costs</b> (31 23 19 00-0001)		
			Note: The quantity for operation shall be the total number of hours the well point system is operational.		
31 23 19 00-0016	HR		Operation Costs .....	148.34	
<b>31 23 23</b>			<b>Fill</b> (31 23)		
<b>31 23 23 23</b>			<b>Compaction</b> (31 23 23)		
31 23 23 23-0001			<b>Compaction Water, Water Truck And Operator</b> (31 23 23 23)		
31 23 23 23-0002	MGL		Compaction Water, Water Truck And Operator .....	275.46	
			Note: Use this task in situations where earth fill, base material, etc. requires additional moisture to comply with the compaction specification. Includes delivery up to 15 miles. (Per each 1,000 gallons of water)		
<b>31 23 23 33</b>			<b>Flowable Fill</b> (31 23 23)		
31 23 23 33-0001			<b>Flowable Cement Backfill For Trenches</b> (31 23 23 33)		
			Note: Includes compaction and restoration of final grade.		
31 23 23 33-0002	CY		Flowable Cement Backfill for Trenches .....	353.12	
			For Up To 20, Add .....	120.17	
			For >20 To 50, Add .....	79.17	
			For >50 To 250, Add .....	39.58	
			For >500 To 1,000, Deduct .....	-20.50	
			For >1,000, Deduct .....	-41.01	
31 24			<b>Embankments</b> (31 20)		
<b>31 24 13</b>			<b>Roadway Embankments</b> (31 24)		
31 24 13 00-0001			<b>Roadway, Parking Areas, Landscaping And Embankment Excavation And Shaping Operations</b> (31 24 13)		
			Note: Use this section for excavation and shaping operations even if the total quantity for the project exceeds 500 CY. See CSI section 31 05 16 00-0000 for imported material, 32 12 16 00-0000 for asphalt paving.		



		<b>Earthwork</b>	<b>31</b>	<b>15</b>
		<b>Earth Moving</b>	<b>31 20</b>	
		<b>Embankments</b>	<b>31 24</b>	

MINOR		TOTAL DIRECT		DEMOLITION
CSI UOM DESCRIPTION		UNIT COST		UNIT COST
31 24 13 00-0002	Cutting, Shaping And Rough Grading (31 24 13 00-0001) Note: For roadways, parking areas, landscaping, and embankments. Includes loading or stockpiling excess materials within 300' of initial cut.			
31 24 13 00-0003	Cutting, Shaping, And Rough Grading (31 24 13 00-0002)			
31 24 13 00-0004	CY	Cut, Shape, and Rough Grading for Roadways, Parking Areas, Landscaping and Embankments by Machine in Soil .....	6.77	
		For Up To 20, Add .....	6.77	
		For >20 To 50, Add .....	5.08	
		For >50 To 250, Add .....	2.71	
		For >250 To 500, Add .....	1.02	
		For >1,000, Deduct .....	-1.02	
31 24 13 00-0005	CY	Cut, Shape, and Rough Grading for Roadways, Parking Areas, Landscaping and Embankments by Machine in Loose Rock.....	8.40	
		Note: Includes compacted aggregate .....		
		For Up To 20, Add .....	8.40	
		For >20 To 50, Add .....	6.30	
		For >50 To 250, Add .....	3.36	
		For >250 To 500, Add .....	1.26	
		For >1,000, Deduct .....	-1.26	
31 24 13 00-0006	Cutting, Shaping, And Rough Grading By Hand (31 24 13 00-0002)			
31 24 13 00-0007	SY	Shape Embankment/Slope By Hand Up To 1 On 4 Slope .....	6.22	
31 24 13 00-0008	SY	Shape Embankment/Slope By Hand Greater Than 1 On 4 Slope .....	8.09	
31 24 13 00-0009	Scarify Soil (31 24 13 00-0001) Note: For roadways, parking areas, landscaping and embankments by machine.			
31 24 13 00-0010	CSF	Scarify Soil For Roadways, Parking Areas, Landscaping And Embankments By Machine .....	6.26	
		For Up To 20, Add .....	3.13	
		For >20 To 50, Add .....	1.57	
		For >250 To 500, Deduct .....	-0.63	
		For >500, Deduct .....	-1.25	
31 24 13 00-0011	Relocating On Site Excavated Material (31 24 13 00-0001)			
31 24 13 00-0012	CY	>500' To 1,000', Relocating On Site Excavated Material For Roadways, Parking Areas, Landscaping And Embankments By Machine .....	12.19	
		For Up To 20, Add .....	12.19	
		For >20 To 50, Add .....	9.14	
		For >50 To 250, Add .....	4.88	
		For >250 To 500, Add .....	1.83	
		For >1,000, Deduct .....	-1.83	
31 24 13 00-0013	CY	>1,000', Relocating On Site Excavated Material For Roadways, Parking Areas, Landscaping And Embankments By Machine.....	16.25	
		For Up To 20, Add .....	16.25	
		For >20 To 50, Add .....	12.19	
		For >50 To 250, Add .....	6.50	
		For >250 To 500, Add .....	2.44	
		For >1,000, Deduct .....	-2.44	
31 24 13 00-0014	Spread And Shape Imported Or Stockpiled Material (31 24 13 00-0001) Note: For roadways, parking areas, landscaping and embankments. See CSI section 31 23 16 36-0032 for spreading material by hand.			
31 24 13 00-0015	CY	Spread And Shape Imported Or Stockpiled Material For Roadways, Parking Areas, Landscaping and Embankments By Machine .....	7.45	
		For Up To 20, Add .....	7.45	
		For >20 To 50, Add .....	5.59	
		For >50 To 250, Add .....	2.98	
		For >250 To 500, Add .....	1.12	
		For >1,000, Deduct .....	-1.12	
31 24 13 00-0016	Grading (31 24 13 00-0001) Note: For roadways, parking areas, landscaping and embankments by machine.			
31 24 13 00-0017	SY	Rough Grade Roadway, Parking Areas, Landscaping And Embankments By Machine .....	0.77	
31 24 13 00-0018	SY	Finish Grade Roadway, Parking Areas, Landscaping And Embankments By Machine .....	1.02	
31 24 13 00-0019	LF	Finish Grade For Curb .....	1.15	
31 24 13 00-0020	LF	Finish Grade For Curb And Gutter .....	1.41	
31 24 13 00-0021	Compaction Of Fill Or Subbase (31 24 13 00-0001) Note: For roadways, parking areas, landscaping and embankments by machine, per lift.			
31 24 13 00-0022	SY	Compaction Of Fill Or Subbase For Roadways, Parking Areas, Landscaping And Embankments By Machine Per Lift.....	0.68	
		For Up To 250, Add .....	0.68	
		For >250 To 500, Add .....	0.51	
		For >500 To 1,000, Add .....	0.27	
		For >5,000, Deduct .....	-0.10	

<b>31</b>	<b>Earthwork</b>
<b>31 20</b>	<b>Earth Moving</b>
<b>31 24</b>	<b>Embankments</b>



MINOR CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
31 24 13 00-0023		<b>Loading Excess Material For Removal From Excavation</b> (31 24 13 00-0001) Note: For roadways, parking areas, landscaping and embankments by machine. Includes hand work by laborer for clean-up.		
31 24 13 00-0024	CY	Load Excess Material For Removal For Roadways, Parking Areas, Landscaping and Embankments by Machine .....	5.96	
		For Up To 20, Add .....	5.96	
		For >20 To 50, Add .....	4.47	
		For >50 To 250, Add .....	2.38	
		For >250 To 500, Add .....	0.89	
		For >1,000, Deduct .....	-0.89	
31 25		<b>Erosion and Sedimentation Controls</b> (31 20)		
31 25 14		<b>Stabilization Measures for Erosion and Sedimentation Control</b> (31 25)		
31 25 14 13		<b>Hydraulically-Applied Erosion Control</b> (31 25 14)		
31 25 14 13-0001		<b>Bonded Fiber Matrix</b> (31 25 14 13)		
31 25 14 13-0002	MSF	Up To 25,000 SF Bonded Fiber Matrix, Hydraulically Applied .....	58.53	
31 25 14 13-0003	MSF	>25,000 To 50,000 SF Bonded Fiber Matrix, Hydraulically Applied .....	53.82	
31 25 14 13-0004	MSF	>50,000 To 100,000 SF Bonded Fiber Matrix, Hydraulically Applied .....	49.83	
31 25 14 13-0005	MSF	>100,000 Bonded Fiber Matrix, Hydraulically Applied .....	47.55	
31 25 14 16		<b>Rolled Erosion Control Mats and Blankets</b> (31 25 14)		
		Note: Includes all staples and stakes for erosion control blankets and turf reinforcement mats.		
31 25 14 16-0001		<b>Erosion Control Blankets And Turf Reinforcement Mats</b> (31 25 14 16)		
31 25 14 16-0002		<b>Erosion Control Blankets, Short Term, Light Duty</b> (31 25 14 16-0001)		
31 25 14 16-0003	SY	S75 Single Net Erosion Control Blanket .....	2.82	
		Note: Straw matrix with degradable thread to a single standard photodegradable polypropylene netting as manufactured by North American Green.		
31 25 14 16-0004	SY	S75BN Single Net Erosion Control Blanket .....	3.64	
		Note: Straw Matrix with Biodegradable Thread to a Single Natural Fiber Netting as manufactured by North American Green.		
31 25 14 16-0005	SY	Curlex 1, Single Net Erosion Control Blanket .....	2.68	
		Note: As manufactured by American Excelsior		
31 25 14 16-0006	SY	Curlex 1, Single Net Erosion Control Blanket .....	2.82	
		Note: As manufactured by American Green.		
31 25 14 16-0007	SY	Futerra Erosion Control Blanket, Wood Fibers With Biodegradable Netting .....	2.50	
31 25 14 16-0008		<b>Erosion Control Blankets, Intermediate Duration</b> (31 25 14 16-0001)		
31 25 14 16-0009	SY	S150 Double Net Erosion Control Blanket .....	3.62	
		Note: Straw matrix with degradable thread to a double standard photodegradable polypropylene netting as manufactured by North American Green.		
31 25 14 16-0010	SY	S150 BN Double Net Erosion Control Blanket .....	4.90	
		Note: Straw matrix with biodegradable thread to a double natural fiber netting as manufactured by North American Green.		
31 25 14 16-0011	SY	Curlex II, Double Net Erosion Control Blanket, Natural .....	3.02	
		Note: As manufactured by American Excelsior.		
31 25 14 16-0012	SY	Curlex II, Double Net Erosion Control Blanket, Green .....	3.16	
		Note: As manufactured by American Excelsior.		
31 25 14 16-0013	SY	Enforcer Double Net Erosion Control Blanket .....	3.37	
		Note: As manufactured by American Excelsior.		
31 25 14 16-0014		<b>Turf Reinforcement Mats (TRM)</b> (31 25 14 16-0001)		
		Note: Permanent, UV stabilized.		
31 25 14 16-0015	SY	P300 Permanent Polypropylene Turf Reinforcement Mat .....	13.64	
		Note: 100% synthetic, UV stabilized, two layer netting.		
31 25 14 16-0016	SY	C350 Permanent Turf Reinforcement Mat .....	12.53	
		Note: 100% synthetic, UV stabilized netting incorporating natural coconut fibers as manufactured by North American Green.		
31 25 14 16-0017	SY	Recyclex TRM, Permanent Turf Reinforcement Mat .....	14.97	
		Note: As manufactured by American Excelsior, 100% recycled		
31 25 14 16-0018		<b>Jute Mesh Erosion Control Blankets</b> (31 25 14 16-0001)		
31 25 14 16-0019	SY	Jute Mesh, Open Uniform Weave .....	3.80	
31 25 14 16-0020		<b>Revegetation Mat</b> (31 25 14 16-0001)		
31 25 14 16-0021	SY	3-Dimensional Webbed Revegetation Mat, Polyolefin Fiber .....	10.76	
		Note: Polyolefin fibers oriented and mechanically bonded between two nets. Landlok TRM 450 or equal.		
31 25 14 16-0022	SY	Webbed Revegetation Mat, Polypropylene Fiber .....	15.43	
		Note: Polypropylene fibers positioned between two high strength biaxially oriented nets and mechanically held together by parallel stitching with polypropylene thread. Landlok TRM 1060 or equal.		
31 25 14 16-0023		<b>Erosion Control Rolls</b> (31 25 14 16-0001)		
31 25 14 16-0024	SY	Erosion Control Rolls, Mirafi 140N .....	2.24	



	<b>Earthwork</b>	<b>31</b>	
	<b>Earth Moving</b>	<b>31 20</b>	
	<b>Erosion and Sedimentation Controls</b>	<b>31 25</b>	

MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
31 25 14 16-0025 SY Erosion Control Rolls, Amoco 4547 .....	2.29	
<b>31 25 14 23 Stabilization Measures for Erosion Control</b> (31 25 14)		
See CSI section 01 74 19 00-0015 for hauling greater than 15 miles.		
<b>31 25 14 23-0001 Sand Bags</b> (31 25 14 23)		
Note: Bags filled on site with delivered material. Includes material and placement of bags.		
31 25 14 23-0002 BAG 50 LB Capacity Sand Bag With Sand .....	6.25	2.56
For >2,500 To 5,000, Deduct	-0.51	
For >5,000, Deduct	-1.14	
31 25 14 23-0003 BAG 75 LB Capacity Sand Bag With Sand .....	8.08	3.18
For >2,500 To 5,000, Deduct	-0.63	
For >5,000, Deduct	-1.44	
31 25 14 23-0004 BAG 100 LB Capacity Sand Bag With Sand .....	10.24	3.80
For >2,500 To 5,000, Deduct	-0.76	
For >5,000, Deduct	-1.78	
31 25 14 23-0005 BAG 125 LB Capacity Sand Bag With Sand .....	12.60	4.75
For >2,500 To 5,000, Deduct	-0.95	
For >5,000, Deduct	-2.21	
31 25 14 23-0006 BAG 150 LB Capacity Sand Bag With Sand .....	15.34	5.69
For >2,500 To 5,000, Deduct	-1.14	
For >5,000, Deduct	-2.67	
31 25 14 23-0007 BAG 175 LB Capacity Sand Bag With Sand .....	17.91	6.48
For >2,500 To 5,000, Deduct	-1.29	
For >5,000, Deduct	-3.09	
31 25 14 23-0008 BAG 2,000 LB Capacity Sand Bag With Sand .....	150.79	46.31
For >2,500 To 5,000, Deduct	-8.82	
For >5,000, Deduct	-23.90	
31 25 14 23-0009 BAG 3,000 LB Capacity Sand Bag With Sand .....	196.46	50.94
For >2,500 To 5,000, Deduct	-9.70	
For >5,000, Deduct	-29.35	
<b>31 25 14 23-0010 Gravel Bags</b> (31 25 14 23)		
Note: Bags filled on site with delivered material. Includes material and placement of bags.		
31 25 14 23-0011 BAG 30 LB Capacity Gravel Bag With Gravel .....	6.05	1.70
For >2,500 To 5,000, Deduct	-0.34	
For >5,000, Deduct	-0.94	
31 25 14 23-0012 BAG 50 LB Capacity Gravel Bag With Gravel .....	10.90	2.56
For >2,500 To 5,000, Deduct	-0.51	
For >5,000, Deduct	-1.60	
<b>31 25 14 23-0013 Floating Turbidity Curtain</b> (31 25 14 23)		
Note: Type 2 DOT fabric - 18 oz. nominal laminated vinyl/polyester. EPS flotation, 6 in. x 6 in., 13.5 lb./ft. buoyancy in fresh water and 14.4 lb./ft buoyancy in saltwater.		
31 25 14 23-0014 LF 3' High, 18 Oz PVC Coated Polyester, Type 2 DOT Turbidity Curtain .....	25.96	
For Type 1, Deduct	-4.04	
For 13 Oz PVC Fabric, Type 2, Deduct	-2.46	
For 22 Oz PVC Fabric, Type 2 Heavy Duty, Add	2.99	
31 25 14 23-0015 LF 4' High, 18 Oz PVC Coated Polyester, Type 2 DOT Turbidity Curtain .....	28.13	
For Type 1, Deduct	-4.45	
For 13 Oz PVC Fabric, Type 2, Deduct	-2.71	
For 22 Oz PVC Fabric, Type 2 Heavy Duty, Add	3.29	
31 25 14 23-0016 LF 5' High, 18 Oz PVC Coated Polyester, Type 2 DOT Turbidity Curtain .....	31.15	
For Type 1, Deduct	-5.04	
For 13 Oz PVC Fabric, Type 2, Deduct	-3.07	
For 22 Oz PVC Fabric, Type 2 Heavy Duty, Add	3.72	
31 25 14 23-0017 LF 6' High, 18 Oz PVC Coated Polyester, Type 2 DOT Turbidity Curtain .....	33.72	
For Type 1, Deduct	-5.52	
For 13 Oz PVC Fabric, Type 2, Deduct	-3.36	
For 22 Oz PVC Fabric, Type 2 Heavy Duty, Add	4.08	
31 25 14 23-0018 LF 7' High, 18 Oz PVC Coated Polyester, Type 2 DOT Turbidity Curtain .....	35.38	
For Type 1, Deduct	-5.79	
For 13 Oz PVC Fabric, Type 2, Deduct	-3.53	
For 22 Oz PVC Fabric, Type 2 Heavy Duty, Add	4.28	
31 25 14 23-0019 LF 8' High, 18 Oz PVC Coated Polyester, Type 2 DOT Turbidity Curtain .....	37.06	
For Type 1, Deduct	-6.06	
For 13 Oz PVC Fabric, Type 2, Deduct	-3.69	
For 22 Oz PVC Fabric, Type 2 Heavy Duty, Add	4.48	
31 25 14 23-0020 LF 9' High, 18 Oz PVC Coated Polyester, Type 2 DOT Turbidity Curtain .....	39.00	
For Type 1, Deduct	-6.39	
For 13 Oz PVC Fabric, Type 2, Deduct	-3.89	
For 22 Oz PVC Fabric, Type 2 Heavy Duty, Add	4.72	
31 25 14 23-0021 LF 10' High, 18 Oz PVC Coated Polyester, Type 2 DOT Turbidity Curtain .....	41.68	
For Type 1, Deduct	-6.87	
For 13 Oz PVC Fabric, Type 2, Deduct	-4.18	
For 22 Oz PVC Fabric, Type 2 Heavy Duty, Add	5.08	
31 25 14 23-0022 LF 12' High, 18 Oz PVC Coated Polyester, Type 2 DOT Turbidity Curtain .....	43.78	
For Type 1, Deduct	-7.22	
For 13 Oz PVC Fabric, Type 2, Deduct	-4.40	
For 22 Oz PVC Fabric, Type 2 Heavy Duty, Add	5.34	

**31 Earthwork****31 20 Earth Moving****31 25 Erosion and Sedimentation Controls**

MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
31 25 14 23-0023 LF 13' High, 18 Oz PVC Coated Polyester, Type 2 DOT Turbidity Curtain.....	46.63	
For Type 1, Deduct	-7.73	
For 13 Oz PVC Fabric, Type 2, Deduct	-4.71	
For 22 Oz PVC Fabric, Type 2 Heavy Duty, Add	5.72	
31 25 14 23-0024 LF 14' High, 18 Oz PVC Coated Polyester, Type 2 DOT Turbidity Curtain.....	49.28	
For Type 1, Deduct	-8.19	
For 13 Oz PVC Fabric, Type 2, Deduct	-4.99	
For 22 Oz PVC Fabric, Type 2 Heavy Duty, Add	6.06	
31 25 14 23-0025 LF 15' High, 18 Oz PVC Coated Polyester, Type 2 DOT Turbidity Curtain.....	51.83	
For Type 1, Deduct	-8.62	
For 13 Oz PVC Fabric, Type 2, Deduct	-5.25	
For 22 Oz PVC Fabric, Type 2 Heavy Duty, Add	6.37	
31 25 14 23-0026 LF 16' High, 18 Oz PVC Coated Polyester, Type 2 DOT Turbidity Curtain.....	56.41	
For Type 1, Deduct	-9.51	
For 13 Oz PVC Fabric, Type 2, Deduct	-5.79	
For 22 Oz PVC Fabric, Type 2 Heavy Duty, Add	7.03	
31 25 14 23-0027 LF 17' High, 18 Oz PVC Coated Polyester, Type 2 DOT Turbidity Curtain.....	59.15	
For Type 1, Deduct	-9.97	
For 13 Oz PVC Fabric, Type 2, Deduct	-6.07	
For 22 Oz PVC Fabric, Type 2 Heavy Duty, Add	7.37	
31 25 14 23-0028 LF 18' High, 18 Oz PVC Coated Polyester, Type 2 DOT Turbidity Curtain.....	61.83	
For Type 1, Deduct	-10.40	
For 13 Oz PVC Fabric, Type 2, Deduct	-6.33	
For 22 Oz PVC Fabric, Type 2 Heavy Duty, Add	7.69	
31 25 14 23-0029 LF 19' High, 18 Oz PVC Coated Polyester, Type 2 DOT Turbidity Curtain.....	64.64	
For Type 1, Deduct	-10.86	
For 13 Oz PVC Fabric, Type 2, Deduct	-6.61	
For 22 Oz PVC Fabric, Type 2 Heavy Duty, Add	8.03	
31 25 14 23-0030 LF 20' High, 18 Oz PVC Coated Polyester, Type 2 DOT Turbidity Curtain.....	67.38	
For Type 1, Deduct	-11.29	
For 13 Oz PVC Fabric, Type 2, Deduct	-6.87	
For 22 Oz PVC Fabric, Type 2 Heavy Duty, Add	8.35	
<b>31 25 14 23-0031 Turbidity Curtain Anchors (31 25 14 23)</b>		
31 25 14 23-0032 EA 14 LB, Turbidity Curtain Anchor System.....	700.30	
Note: Includes anchor, anchor chain, and marker buoy and rope.		
31 25 14 23-0033 EA 25 LB, Turbidity Curtain Anchor System.....	960.29	
Note: Includes anchor, anchor chain, and marker buoy and rope.		
31 25 14 23-0034 EA 40 LB, Turbidity Curtain Anchor System.....	1,221.43	
Note: Includes anchor, anchor chain, and marker buoy and rope.		
31 25 14 23-0035 EA 65 LB, Turbidity Curtain Anchor System.....	1,597.54	
Note: Includes anchor, anchor chain, and marker buoy and rope.		
<b>31 25 14 23-0036 Filter Bags (31 25 14 23)</b>		
<b>31 25 14 23-0037 Non-Woven Filter Bags (31 25 14 23-0036)</b>		
31 25 14 23-0038 EA 6' x 15' Non-Woven Filter Bag.....	236.11	
31 25 14 23-0039 EA 13' x 15' Non-Woven Filter Bag.....	341.79	
31 25 14 23-0040 EA 15' x 15' Non-Woven Filter Bag.....	392.80	
<b>31 25 14 23-0041 Monofilament Filter Bags (31 25 14 23-0036)</b>		
31 25 14 23-0042 EA 5' x 15' Monofilament Filter Bag.....	245.53	
31 25 14 23-0043 EA 10' x 15' Monofilament Filter Bag.....	340.12	
<b>31 25 14 26 Stabilization Measures for Sedimentation Control (31 25 14)</b>		
<b>31 25 14 26-0001 Silt Fences And Dike Barriers (31 25 14 26)</b>		
Note: Includes stakes and embedding.		
<b>31 25 14 26-0002 Silt Fences 2' High (31 25 14 26-0001)</b>		
See CSI section 31 25 14 26-0014 for removal of silt fence.		
31 25 14 26-0003 LF 2' High Silt Fence with Stakes at 4' On Center.....	2.85	
31 25 14 26-0004 LF 2' High Silt Fence with Stakes at 6' On Center.....	2.22	
31 25 14 26-0005 LF 2' High Silt Fence with Stakes at 8' On Center.....	1.59	
31 25 14 26-0006 LF 2' High Silt Fence with Stakes at 10' On Center.....	1.38	
<b>31 25 14 26-0007 Silt Fences 3' High (31 25 14 26-0001)</b>		
See CSI section 31 25 14 26-0014 for removal of silt fence.		
31 25 14 26-0008 LF 3' High Silt Fence with Stakes at 4' On Center.....	2.94	
31 25 14 26-0009 LF 3' High Silt Fence with Stakes at 6' On Center.....	2.40	
31 25 14 26-0010 LF 3' High Silt Fence with Stakes at 8' On Center.....	2.08	
31 25 14 26-0011 LF 3' High Silt Fence with Stakes at 10' On Center.....	1.44	
<b>31 25 14 26-0012 Silt Dike Barrier (31 25 14 26-0001)</b>		
31 25 14 26-0013 LF Silt Dike Barrier With Stakes.....	3.33	





		<b>Earthwork</b>	<b>31</b>
		<b>Earth Moving</b>	<b>31 20</b>
		<b>Erosion and Sedimentation Controls</b>	<b>31 25</b>

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MINOR CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
31 25 14 26-0014		<b>Silt Fences Removal</b> (31 25 14 26-0001)		
31 25 14 26-0015	LF	Removal Of Silt Fence And Stakes.....	0.81	
31 25 14 26-0016		<b>Hay And Straw Bales</b> (31 25 14 26)		
		Note: Includes trench for placement, and stakes.		
31 25 14 26-0017	LF	Place Sterlized Straw Bales.....	4.03	
		Note: Includes securing in ground with stakes. See CSI section 31 25 14 26-0020 for removal of straw bale.		
31 25 14 26-0018	LF	Place Hay Bales .....	3.80	
		Note: Includes securing in ground with stakes. See CSI section 31 25 14 26-0020 for removal of hay bale.		
31 25 14 26-0019	EA	Place And Remove Hay Bales, Includes Securing In Ground With Stakes .....	11.39	
31 25 14 26-0020	LF	Removal Of Hay Or Straw Bales .....	1.45	
		Note: Includes removal of stakes.		
31 25 14 26-0021		<b>Sediment Logs (Degradable)</b> (31 25 14 26)		
31 25 14 26-0022		<b>Sediment Logs (Degradable)</b> (31 25 14 26-0021)		
		Note: Includes stakes and removal after use. Curlex sediment logs as manufactured by American Excelsior.		
31 25 14 26-0023	LF	12" Sediment Log .....	7.53	
31 25 14 26-0024	LF	20" Sediment Log .....	9.98	
31 25 14 26-0025		<b>Wattles (Degradable) With UV Stabilizied Synthetic Netting</b> (31 25 14 26-0021)		
		Note: Includes trench for placement, 24" wood staking at 4' on-center		
31 25 14 26-0026	EA	Wattles (Sterile Straw Filled Rolls), 9" x 25' .....	174.76	
31 25 14 26-0027	EA	Wattles (Sterile Straw Filled Rolls), 12" x 20' .....	170.05	
31 25 14 26-0028		<b>Fiber Roll (CALTRANS Type 1)</b> (31 25 14 26)		
		Note: Includes furrow trench for placement, 24" wood staking at 4' on-center		
31 25 14 26-0029	LF	8" Diameter Fiber Roll, (Sterile Straw Filled Rolls, With Natural Fiber Wrapping), CALTRANS Type 1.....	7.05	
		For >1,000 To 10,000, Deduct	-0.74	
		For >10,000, Deduct	-1.25	
31 25 14 26-0030	LF	9" Diameter Fiber Roll, (Sterile Straw Filled Rolls, With Natural Fiber Wrapping), CALTRANS Type 1.....	8.20	
		For >1,000 To 10,000, Deduct	-0.77	
		For >10,000, Deduct	-1.32	
31 25 14 26-0031	LF	12" Diameter Fiber Roll, (Sterile Straw Filled Rolls, With Natural Fiber Wrapping), CALTRANS Type 1.....	10.40	
		For >1,000 To 10,000, Deduct	-0.92	
		For >10,000, Deduct	-1.58	
31 25 14 26-0032		<b>Fiber Roll (CALTRANS Type 2)</b> (31 25 14 26)		
		Note: Includes 24" wood stakes at 2' on-center off-set on sides with ropes.		
31 25 14 26-0033	LF	8" Diameter Fiber Roll, (Sterile Straw Filled Rolls, With Natural Fiber Wrapping), CALTRANS Type 2.....	6.14	
		For >1,000 To 10,000, Deduct	-0.60	
		For >10,000, Deduct	-1.03	
31 25 14 26-0034	LF	9" Diameter Fiber Roll, (Sterile Straw Filled Rolls, With Natural Fiber Wrapping), CALTRANS Type 2.....	7.25	
		For >1,000 To 10,000, Deduct	-0.63	
		For >10,000, Deduct	-1.08	
31 25 14 26-0035	LF	12" Diameter Fiber Roll, (Sterile Straw Filled Rolls, With Natural Fiber Wrapping), CALTRANS Type 2.....	8.77	
		For >1,000 To 10,000, Deduct	-0.68	
		For >10,000, Deduct	-1.17	
31 25 14 26-0036		<b>Inlet Protection Sediment Bags</b> (31 25 14 26)		
		Note: Includes removal, cleaning, and replacement per each location.		
31 25 14 26-0037	EA	2' x 2' x 3' Inlet Protection Sediment Bag.....	58.92	
31 25 14 26-0038	EA	2' x 3' x 3' Inlet Protection Sediment Bag.....	74.78	
31 25 14 26-0039	EA	2' x 4' x 3' Inlet Protection Sediment Bag.....	93.32	
31 25 14 26-0040		<b>Clean Sediment Logs/Wattles</b> (31 25 14 26)		
		Note: Includes removal, cleaning, and replacement per each location.		
31 25 14 26-0041	EA	Clean Sediment Logs/Wattles.....	80.87	
31 30		<b>Earthwork Methods</b> (31)		
31 32		<b>Soil Stabilization</b> (31 30)		
31 32 13		<b>Soil Mixing Stabilization</b> (31 32)		
31 32 13 16		<b>Cement Soil Stabilization</b> (31 32 13)		
31 32 13 16-0001		<b>Soil Cement Course</b> (31 32 13 16)		
		Note: Includes soil material, adding and mixing of cement, water and calcium chloride (if required), shaping, finishing and final compaction. Excludes cement, calcium chloride, foundation preparation, compaction water and additional surface treatments.		
31 32 13 16-0002	CY	Compacted Soil Cement Course, Material mixed in Central Plant.....	78.70	
31 32 13 16-0003	CY	Compacted Soil Cement Course, Material mixed in Traveling Pugmill. Cement.....	82.98	
31 32 13 16-0004	LB	Cement, Per Unit Of Measure.....	0.06	
31 32 13 16-0005	LB	Flake Calcium Chloride, Per Unit Of Measure.....	0.73	

<b>31</b>	<b>Earthwork</b>
<b>31 30</b>	<b>Earthwork Methods</b>
<b>31 32</b>	<b>Soil Stabilization</b>



MINOR CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
31 32 13 16-0006	EA	Mobilize And Demobilize Traveling Pugmill .....	150.00	
<b>31 32 13 16-0007</b>		<b>Cementitious Soil Binder</b> (31 32 13 16)		
31 32 13 16-0008	CY	Cementitious Soil Binder, 4% Cement Mix By Volume .....	46.04	
31 32 13 16-0009	CY	Cementitious Soil Binder, 6% Cement Mix By Volume .....	55.43	
31 32 13 16-0010	CY	Cementitious Soil Binder, 9% Cement Mix By Volume .....	70.90	
31 32 13 16-0011	CY	Cementitious Soil Binder, 12% Cement Mix By Volume .....	86.14	
<b>31 32 13 19</b>		<b>Lime Soil Stabilization</b> (31 32 13)		
Note: Includes delivery up to 15 miles from the closest approved source, the cost for loading, and dumping. The price excludes the cost for spreading or backfilling. See CSI section 01 74 19 00-0015 for hauling greater than 15 miles.				
<b>31 32 13 19-0001</b>		<b>Lime Stabilized Subgrade</b> (31 32 13 19)		
Note: Based on soil weight of 110 LB/CF using lime weight of 5.5 LB/CF (5%).				
31 32 13 19-0002	SY	6" Thick Lime Stabilized Subgrade, 25 LB .....	13.01	
		For 4% Lime Instead Of 5%, Deduct .....	-0.40	
		For 6% Lime Instead Of 5%, Add .....	0.40	
		For >5,000 SY, Deduct .....	-0.82	
31 32 13 19-0003	SY	7" Thick Lime Stabilized Subgrade, 29 LB .....	15.09	
		For 4% Lime Instead Of 5%, Deduct .....	-0.46	
		For 6% Lime Instead Of 5%, Add .....	0.46	
		For >5,000 SY, Deduct .....	-0.95	
31 32 13 19-0004	SY	8" Thick Lime Stabilized Subgrade, 33 LB .....	17.21	
		For 4% Lime Instead Of 5%, Deduct .....	-0.53	
		For 6% Lime Instead Of 5%, Add .....	0.53	
		For >5,000 SY, Deduct .....	-1.09	
31 32 13 19-0005	SY	10" Thick Lime Stabilized Subgrade, 41 LB/SY .....	21.51	
		For 4% Lime Instead Of 5%, Deduct .....	-0.66	
		For 6% Lime Instead Of 5%, Add .....	0.66	
		For >5,000 SY, Deduct .....	-1.36	
31 32 13 19-0006	SY	12" Thick Lime Stabilized Subgrade, 50 LB/SY .....	25.83	
		For 4% Lime Instead Of 5%, Deduct .....	-0.79	
		For 6% Lime Instead Of 5%, Add .....	0.79	
		For >5,000 SY, Deduct .....	-1.63	
31 32 13 19-0007	SY	14" Thick Lime Stabilized Subgrade, 58 LB/SY .....	30.09	
		For 4% Lime Instead Of 5%, Deduct .....	-0.93	
		For 6% Lime Instead Of 5%, Add .....	0.93	
		For >5,000 SY, Deduct .....	-1.90	
31 32 13 19-0008	SY	16" Thick Lime Stabilized Subgrade, 66 LB/SY .....	34.42	
		For 4% Lime Instead Of 5%, Deduct .....	-1.06	
		For 6% Lime Instead Of 5%, Add .....	1.06	
		For >5,000 SY, Deduct .....	-2.17	
31 32 13 19-0009	SY	18" Thick Lime Stabilized Subgrade, 74 LB/SY .....	38.74	
		For 4% Lime Instead Of 5%, Deduct .....	-1.19	
		For 6% Lime Instead Of 5%, Add .....	1.19	
		For >5,000 SY, Deduct .....	-2.44	
<b>31 32 13 19-0010</b>		<b>Hydrated Lime Stabilized Subgrade</b> (31 32 13 19)		
Note: Includes scarifying, adding and mixing of hydrated lime and water, light sealing, curing, secondary mixing, shaping, finishing and final compaction. Excludes hydrated lime, foundation preparation, compaction water and additional surface treatments.				
31 32 13 19-0011	CY	Compacted Hydrated Lime Stabilized Subgrade .....	78.12	
31 32 13 19-0012	LB	Hydrated Lime .....	1.51	
<b>31 32 13 29</b>		<b>Liquid Soil Stabilization</b> (31 32 13)		
31 32 13 29-0001	GAL	Polyacrylamide And Calcium Solution .....	4.01	
<b>31 32 19</b>		<b>Geosynthetic Soil Stabilization and Layer Separation</b> (31 32)		
<b>31 32 19 13</b>		<b>Geogrid Soil Stabilization</b> (31 32 19)		
<b>31 32 19 13-0001</b>		<b>Geogrid Fabrics</b> (31 32 19 13)		
Note: For reinforcement of over steepened earth slopes, segmental retaining walls and other mechanically stabilized earth applications.				
31 32 19 13-0002	SY	5.3 Ounce/SY, 1,700 LB/FT Wide Width Tensile Ultimate Bi-Directional Woven Polyester Geogrid Fabric (Carthage Mills GX-150) .....	5.96	
		For Up To 50, Add .....	1.29	
		For >50 To 150, Add .....	0.96	
		For >150 To 250, Add .....	0.63	
		For >250 To 500, Add .....	0.31	
31 32 19 13-0003	SY	6.9 Ounce/SY, 3,100 LB/FT Wide Width Tensile Ultimate Bi-Directional Woven Polyester Geogrid Fabric (Carthage Mills GX-300) .....	6.82	
		For Up To 50, Add .....	1.47	
		For >50 To 150, Add .....	1.09	
		For >150 To 250, Add .....	0.72	
		For >250 To 500, Add .....	0.36	



		<b>Earthwork</b>	<b>31</b>	<b>15</b>
		<b>Earthwork Methods</b>	<b>31 30</b>	
		<b>Soil Stabilization</b>	<b>31 32</b>	

MINOR CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
31 32 19 13-0004	SY	8.7 Ounce/SY, 4,280 LB/FT Wide Width Tensile Ultimate Bi-Directional Woven Polyester Geogrid Fabric (Carthage Mills GX-500).....	7.44	
		For Up To 50, Add	1.60	
		For >50 To 150, Add	1.19	
		For >150 To 250, Add	0.78	
		For >250 To 500, Add	0.39	
31 32 19 13-0005	SY	12.6 Ounce/SY, 7,315 LB/FT Wide Width Tensile Ultimate Bi-Directional Woven Polyester Geogrid Fabric (Carthage Mills GX-800).....	10.75	
		For Up To 50, Add	2.26	
		For >50 To 150, Add	1.69	
		For >150 To 250, Add	1.11	
		For >250 To 500, Add	0.56	
31 32 19 13-0006	SY	14.1 Ounce/SY, 9,790 LB/FT Wide Width Tensile Ultimate Bi-Directional Woven Polyester Geogrid Fabric (Carthage Mills GX-1000).....	12.32	
		For Up To 50, Add	2.58	
		For >50 To 150, Add	1.93	
		For >150 To 250, Add	1.27	
		For >250 To 500, Add	0.64	
31 32 19 13-0007	SY	4.3 Ounce/SY, 1,658 LB/FT Wide Width Tensile Ultimate Bi-Axial Extruded Polypropylene Geogrid Fabric (Carthage Mills Enkagrid Max 20) .....	6.06	
		For Up To 50, Add	1.31	
		For >50 To 150, Add	0.98	
		For >150 To 250, Add	0.64	
		For >250 To 500, Add	0.32	
31 32 19 13-0008	SY	5.9 Ounce/SY, 2,192 LB/FT Wide Width Tensile Ultimate Bi-Axial Extruded Polypropylene Geogrid Fabric (Carthage Mills Enkagrid Max 30) .....	8.97	
		For Up To 50, Add	1.90	
		For >50 To 150, Add	1.42	
		For >150 To 250, Add	0.93	
		For >250 To 500, Add	0.47	

### 31 32 19 16 Geotextile Soil Stabilization (31 32 19)

#### 31 32 19 16-0001 Nonwoven Polypropylene Geotextiles (31 32 19 16)

Note: For drainage, filtration and separation.

31 32 19 16-0002	SY	3.0 Ounce/SY, 40 Mil, 80 LB Grab Tensile Nonwoven Polypropylene Geotextile Fabric (Carthage Mills FX-30HS).....	1.85	
		For Up To 50, Add	0.41	
		For >50 To 150, Add	0.30	
		For >150 To 250, Add	0.20	
		For >250 To 500, Add	0.10	
31 32 19 16-0003	SY	3.5 Ounce/SY, 50 Mil, 95 LB Grab Tensile Nonwoven Polypropylene Geotextile Fabric (Carthage Mills FX-35HS).....	1.98	
		For Up To 50, Add	0.44	
		For >50 To 150, Add	0.32	
		For >150 To 250, Add	0.21	
		For >250 To 500, Add	0.11	
31 32 19 16-0004	SY	4.0 Ounce/SY, 60 Mil, 115 LB Grab Tensile Nonwoven Polypropylene Geotextile Fabric (Carthage Mills FX-40HS).....	2.15	
		For Up To 50, Add	0.47	
		For >50 To 150, Add	0.35	
		For >150 To 250, Add	0.23	
		For >250 To 500, Add	0.11	
31 32 19 16-0005	SY	4.5 Ounce/SY, 55 Mil, 120 LB Grab Tensile Nonwoven Polypropylene Geotextile Fabric (Carthage Mills FX-45HS).....	2.32	
		For Up To 50, Add	0.50	
		For >50 To 150, Add	0.37	
		For >150 To 250, Add	0.25	
		For >250 To 500, Add	0.12	
31 32 19 16-0006	SY	6.0 Ounce/SY, 70 Mil, 160 LB Grab Tensile Nonwoven Polypropylene Geotextile Fabric (Carthage Mills FX-60HS).....	2.76	
		For Up To 50, Add	0.59	
		For >50 To 150, Add	0.44	
		For >150 To 250, Add	0.29	
		For >250 To 500, Add	0.14	
31 32 19 16-0007	SY	7.0 Ounce/SY, 85 Mil, 180 LB Grab Tensile Nonwoven Polypropylene Geotextile Fabric (Carthage Mills FX-70HS).....	3.24	
		For Up To 50, Add	0.70	
		For >50 To 150, Add	0.52	
		For >150 To 250, Add	0.34	
		For >250 To 500, Add	0.17	
31 32 19 16-0008	SY	8.0 Ounce/SY, 85 Mil, 205 LB Grab Tensile Nonwoven Polypropylene Geotextile Fabric (Carthage Mills FX-80HS).....	3.57	
		For Up To 50, Add	0.77	
		For >50 To 150, Add	0.57	
		For >150 To 250, Add	0.37	
		For >250 To 500, Add	0.19	
31 32 19 16-0009	SY	10 Ounce/SY, 115 Mil, 250 LB Grab Tensile Nonwoven Polypropylene Geotextile Fabric (Carthage Mills FX-100HS) .....	4.41	
		For Up To 50, Add	0.93	
		For >50 To 150, Add	0.70	
		For >150 To 250, Add	0.46	
		For >250 To 500, Add	0.23	
31 32 19 16-0010	SY	16 Ounce/SY, 175 Mil, 425 LB Grab Tensile Nonwoven Polypropylene Geotextile Fabric.....	6.49	
		For Up To 50, Add	1.35	
		For >50 To 150, Add	1.01	
		For >150 To 250, Add	0.67	
		For >250 To 500, Add	0.33	

#### 31 32 19 16-0011 Woven Geotextiles Fabric (31 32 19 16)

**31 Earthwork****31 30 Earthwork Methods****31 32 Soil Stabilization**

MINOR CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
31 32 19 16-0012	SY	200 LB Grab Tensile Woven Slit Film Geotextile Fabric (Carthage Mills FX-55) .....	2.69	
		For Up To 50, Add .....	0.58	
		For >50 To 150, Add .....	0.43	
		For >150 To 250, Add .....	0.28	
		For >250 To 500, Add .....	0.14	
31 32 19 16-0013	SY	315 LB Grab Tensile Woven Slit Film Geotextile Fabric (Carthage Mills FX-66) .....	3.80	
		For Up To 50, Add .....	0.80	
		For >50 To 150, Add .....	0.60	
		For >150 To 250, Add .....	0.39	
		For >250 To 500, Add .....	0.20	
31 32 19 16-0014	SY	4 To 6% Open Area, 370 x 250 LB Grab Tensile Woven Monofilament Geotextile Fabric (Carthage Mills Carthage 6%) .....	6.74	
		For Up To 50, Add .....	1.40	
		For >50 To 150, Add .....	1.05	
		For >150 To 250, Add .....	0.69	
		For >250 To 500, Add .....	0.35	
31 32 19 16-0015	SY	11 To 15% Open Area, 370 x 220 LB Grab Tensile Woven Monofilament Geotextile Fabric (Carthage Mills Carthage 15%) .....	6.57	
		For Up To 50, Add .....	1.37	
		For >50 To 150, Add .....	1.02	
		For >150 To 250, Add .....	0.67	
		For >250 To 500, Add .....	0.34	
31 32 19 16-0016	SY	6.9 Oz/SY, 250 LB/IN Wide Width Tensile Ultimate Woven Twill Weave Geotextile Fabric (Carthage Mills FX-250TF) .....	5.73	
		For Up To 50, Add .....	1.20	
		For >50 To 150, Add .....	0.89	
		For >150 To 250, Add .....	0.59	
		For >250 To 500, Add .....	0.30	
31 32 19 16-0017	SY	9.1 Oz/SY, 333 LB/IN Wide Width Tensile Ultimate Woven Twill Weave Geotextile Fabric (Carthage Mills FX-330TF) .....	6.13	
		For Up To 50, Add .....	1.28	
		For >50 To 150, Add .....	0.95	
		For >150 To 250, Add .....	0.63	
		For >250 To 500, Add .....	0.32	
31 32 19 16-0018	SY	12.1 Oz/SY, 400 LB/IN Wide Width Tensile Ultimate Woven Twill Weave Geotextile Fabric (Carthage Mills FX-400TF) .....	7.85	
		For Up To 50, Add .....	1.62	
		For >50 To 150, Add .....	1.21	
		For >150 To 250, Add .....	0.80	
		For >250 To 500, Add .....	0.40	
31 32 19 16-0019	SY	12.1 Oz/SY, 400 LB/IN Wide Width Tensile Ultimate Woven Monofilament And Fibrillated Geotextile Fabric (Carthage Mills FX-400MF) .....	11.22	
		For Up To 50, Add .....	2.30	
		For >50 To 150, Add .....	1.72	
		For >150 To 250, Add .....	1.14	
		For >250 To 500, Add .....	0.57	
31 32 19 16-0020		<b>Geomembranes</b> (31 32 19 16)		
31 32 19 16-0021		<b>Polyvinyl Chloride (PVC) Geomembrane</b> (31 32 19 16-0020)		
31 32 19 16-0022	SF	20 Mil Polyvinyl Chloride (PVC) Geomembrane (US Fabrics) .....	1.36	
31 32 19 16-0023	SF	30 Mil Polyvinyl Chloride (PVC) Geomembrane (US Fabrics) .....	1.57	
31 32 19 16-0024	SF	40 Mil Polyvinyl Chloride (PVC) Geomembrane (US Fabrics) .....	1.90	
31 32 19 16-0025	SF	50 Mil Polyvinyl Chloride (PVC) Geomembrane (US Fabrics) .....	2.29	
31 32 19 16-0026	SF	60 Mil Polyvinyl Chloride (PVC) Geomembrane (US Fabrics) .....	2.61	
31 32 19 16-0027	SF	70 Mil Polyvinyl Chloride (PVC) Geomembrane (US Fabrics) .....	2.86	
31 32 19 16-0028	SF	80 Mil Polyvinyl Chloride (PVC) Geomembrane (US Fabrics) .....	3.11	
31 32 19 16-0029	SF	90 Mil Polyvinyl Chloride (PVC) Geomembrane (US Fabrics) .....	3.44	
31 32 19 16-0030	SF	100 Mil Polyvinyl Chloride (PVC) Geomembrane (US Fabrics) .....	3.76	
31 32 19 16-0031		<b>High Density Polyethylene (HDPE) Geomembrane</b> (31 32 19 16-0020)		
31 32 19 16-0032	SF	20 Mil High Density Polyethylene Membrane (US Fabrics) .....	0.98	
31 32 19 16-0033	SF	30 Mil High Density Polyethylene Membrane (US Fabrics) .....	1.01	
31 32 19 16-0034	SF	40 Mil High Density Polyethylene Membrane (US Fabrics) .....	1.14	
31 32 19 16-0035	SF	50 Mil High Density Polyethylene Membrane (US Fabrics) .....	1.70	
31 32 19 16-0036	SF	60 Mil High Density Polyethylene Membrane (US Fabrics) .....	1.37	
31 32 19 16-0037	SF	80 Mil High Density Polyethylene Membrane (US Fabrics) .....	1.63	
31 32 19 16-0038	SF	100 Mil High Density Polyethylene Membrane (US Fabrics) .....	1.89	
31 32 19 16-0039	SF	120 Mil High Density Polyethylene Membrane (US Fabrics) .....	3.20	
31 32 19 16-0040	SF	140 Mil High Density Polyethylene Membrane (US Fabrics) .....	3.31	
31 32 19 26		<b>Geoweb Cellular Confinement System</b> (31 32 19)		
		Note: Includes staples, stakes and filling cells with stockpiled material. Excludes site preparation and imported materials.		
31 32 19 26-0001		<b>Geoweb Cellular Confinement System</b> (31 32 19 26)		
		Note: Includes staples, stakes and filling cells with stockpiled material. Excludes site preparation and imported materials.		
31 32 19 26-0002	SF	4" Geoweb Cellular Confinement System (Presto Geosystems) .....	7.75	
		For >20,000, Deduct .....	-0.21	
		For >2:1 Slope, Add .....	1.15	



Earthwork			31
Earthwork Methods			31 30
Soil Stabilization			31 32

MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
31 32 19 26-0003 SF 6" Geoweb Cellular Confinement System (Presto Geosystems) ..... For >20,000, Deduct For >2:1 Slope, Add	9.67 -0.31 1.15	
31 32 19 26-0004 SF 8" Geoweb Cellular Confinement System (Presto Geosystems) ..... For >20,000, Deduct For >2:1 Slope, Add	11.95 -0.42 1.15	
<b>31 32 36 Soil Nailing<sup>(31 32)</sup></b>		
<b>31 32 36 11 Soil Nailing Stabilization<sup>(31 32 36)</sup></b>		
31 32 36 11-0001 Landslide and Slip-Out Stabilization <sup>(31 32 36 11)</sup> Note: Work shall consist of the Contractor stabilizing identified slides by internally reinforcing the soil mass with reinforcing elements (nails) by using one or more of the installation methods specified in this contract. The Owner will identify locations for work to be performed as specified herein. The Contractor shall review all locations with Owner representatives to determine the method to be used. The Contractor will provide all necessary engineering plans and details required to successfully repair slides as noted. These plans shall be stamped by a registered professional engineer with a current California license who is knowledgeable in the design and implementation of slope stabilization with soil nails and related work. The contractor shall furnish all labor, materials, and equipment required to complete the work. Any necessary installation methods and associated costs are the responsibility of the contractor. The Contractor and the Contractor's Engineer will also warrant the stability of the repaired roadway section for a period of 5 years.		
31 32 36 11-0002 BioWall® <sup>(31 32 36 11-0001)</sup> Note: Furnish and install the BioWall® to integrate with Launched Soil Nails™, SuperNails® or Self Drilling SuperNails®. The BioWall® is a confined soil/compost mass capable of sustaining vegetation at slope angles up to ¼(H):1(V), and is composed of 2 layers of galvanized wire mesh and 2 layers of lightweight geosynthetic encasing a seeded compost and/or topsoil mix, tied to the soil nails by steel plates. Furnish equipment and incidentals necessary to complete the work. BioWall® to soil nail connection details will be determined by the Contractor's Engineer and identified in the Contractor's stamped plans and submittals. Unit Pricing excludes Daily Crew Rates for items See CSI section 31 32 36 11-0066 for Daily Crew Rates (DCR).		
31 32 36 11-0003 SF BioWall® Construction.....	25.00	
31 32 36 11-0004 Green Terra Mesh <sup>(31 32 36 11-0001)</sup> Note: Furnish and install the Green Terra Mesh. Furnish equipment and incidentals necessary to complete the work. Unit Pricing excludes Daily Crew Rates for items See CSI section 31 32 36 11-0066 for Daily Crew Rates (DCR).		
31 32 36 11-0005 EA Green Terra Mesh .....	635.25	
31 32 36 11-0006 GeoSynthetically Confined Soil™ (GCS®) Components <sup>(31 32 36 11-0001)</sup> Note: Furnish and install geosynthetic reinforcement, backfill and facing element to construct a Geosynthetically Confined Soil Wall™ (GCS®). Designs shall comply with the Design Standards for Geosynthetically Confined Soil Walls (adapted from the NCHRP Report 556 – Design and Construction Guidelines for Geosynthetic – Reinforced Soil Bridge Abutments with a Flexible Facing) noted below. Reinforcement Selection and Placement: Geosynthetic reinforcement shall consist of high-tenacity geotextiles manufactured for soil reinforcement applications. Geotextiles shall not be exposed to sunlight and extreme temperatures for an extended period of time. Damaged or improperly handled geosynthetic reinforcement shall be rejected. Use a woven polypropylene geotextile with ultimate tensile strength of 2400 lbs/ft (Amoco 2044 or similar) in the cross-machine direction (as per ASTM D4595). The geosynthetic reinforcement perpendicular to the wall face should consist of one continuous piece of material. Overlap of reinforcement in the design strength direction is not permitted. Adjacent sections of geosynthetic reinforcement should be placed so as to ensure that horizontal coverage shown on the plans is provided. Tracked construction equipment shall not be operated directly on the geosynthetic reinforcement. A minimum backfill thickness of 150 mm (6 in.) is required before operation of tracked vehicles over the geosynthetic reinforcement. Turning of tracked vehicles should be kept to a minimum to prevent displacing the fill and damaging or moving the geosynthetic reinforcement. Rubber-tired equipment may pass over the geosynthetic reinforcement at slow speeds less than 17 km/hr (10 miles/hr). Sudden braking and sharp turning should be avoided. Backfill Specifications: Structure backfill material should consist of material free from organic or other unsuitable material as determined by the Contractor's Engineer. Grading of the backfill should be as follows: 100 percent passing 100 mm (4 in.) sieve, 0-60 percent passing No. 40 (0.425 mm) sieve, and 0-15 percent passing No. 200 (0.075mm) sieve; plasticity index (PI) as determined by AASHTO T90, should not exceed 6. The backfill should exhibit an angle of internal friction of not less than 34 degrees, as determined by the standard direct shear test on the portion finer than 2 mm (No.10) sieve, using a sample compacted to 95 percent of AASHTO T-99, Methods C or D, at optimum moisture content. No testing is required for backfills where 80 percent of sizes are greater than 19 mm. The backfill should be substantially free of shale or other soft, poor durability particles and should have an organic content not larger than 1 percent. The backfill should have a pH between 4.5 and 9. Backfill Placement: Reinforced fill should be placed as specified in construction plans in compacted lift thickness of 8in, but in no case in lifts greater than 12in. Reinforced fill should be placed and compacted at or within 2 percent dry of the optimum moisture content. If the reinforced fill is free draining (i.e., with less than 5 percent passing a No. 200 sieve), water content of the fill may be within ±3 percent of the optimum. A minimum density of 90 percent of standard Proctor density is required. Optimum compaction is 100 percent of AASHTO T-99 (or 95 percent of AASHTO T-180) but this may not be possible throughout the wall structure. If significant percentage of the backfill is coarse material (i.e., greater than 30 percent retained on the 19 mm, or ¾ in., sieve), a procedural specification may be used to verify compaction, (no less than two passes with a conventional vibratory plate compaction equipment). Backfill should be placed, spread, and compacted so as to prevent the development of wrinkles or movement of the geosynthetic reinforcement and the wall facing units. Only hand-operated compaction equipment should be allowed within 0.5 m (1.5 ft) of the front of the See CSI section 31 32 36 11-0066 for Daily Crew Rates (DCR).		
31 32 36 11-0007 SF GeoSynthetically Confined Soil™ (GCS®) Wall Construction ..... Note: Installation sold per square face foot (excludes materials)	23.75	
31 32 36 11-0008 EA GeoSynthetically Confined Soil™ (GCS®) Wall Galvanized Wire Basket Units (approximately 10" x 120") .....	108.50	
31 32 36 11-0009 EA GeoSynthetically Confined Soil™ (GCS®) Wall Concrete Masonry Units (approximately 8" x 8" x 16") .....	6.50	
31 32 36 11-0010 SF GeoSynthetically Confined Soil™ (GCS®) Wall Woven Geotextile .....	0.75	

<b>31</b>	<b>Earthwork</b>
<b>31 30</b>	<b>Earthwork Methods</b>
<b>31 32</b>	<b>Soil Stabilization</b>



MINOR			TOTAL DIRECT		DEMOLITION
CSI	UOM	DESCRIPTION	UNIT COST		UNIT COST
31 32 36 11-0011		<b>Turf</b> <small>(31 32 36 11-0001)</small> Note: Unit Pricing excludes Daily Crew Rates for items See CSI section 31 32 36 11-0066 for Daily Crew Rates (DCR).			
31 32 36 11-0012		<b>Permanent Turf Reinforcing Mat (TRM)</b> <small>(31 32 36 11-0011)</small> Note: Furnish a web of mechanically bonded synthetic fibers that are entangled to form a strong and dimensionally stable mat. Place fibers between 2 or 3 high-strength, biaxially oriented nets mechanically bound together by stitching with polyolefin thread. The netting material must be resistant to biological, chemical, and ultra-violet degradation.			
31 32 36 11-0013	SF	Permanent Turf Reinforcement Mat..... Note: sold per square face foot	1.50		
31 32 36 11-0014		<b>Biodegradable Turf Reinforcing Mat (TRM)</b> <small>(31 32 36 11-0011)</small> Note: Furnish a geotextile composed of seed free processed natural fiber matrix mechanically bound together with 100% degradable binding fiber or netting to form a continuous matrix.			
31 32 36 11-0015	SF	Biodegradable Turf Reinforcement Mat ..... Note: sold per square face foot	0.75		
31 32 36 11-0016		<b>Shotcrete or Gunite</b> <small>(31 32 36 11-0001)</small> Note: Unit Pricing excludes Daily Crew Rates for items See CSI section 31 32 36 11-0066 for Daily Crew Rates (DCR).			
31 32 36 11-0017		<b>Wet-Mix Shotcrete for use with Launched Soil Nails™, SuperNails®, SuperMicropiles™, Self-Drilling SuperNails® / SuperMicropiles™</b> <small>(31 32 36 11-0016)</small> Note: Furnish steel reinforced shotcrete to integrate with Launched Soil Nails™, SuperNails®, SuperMicropiles™, Self Drilling SuperMicropiles™ or Self Drilling SuperNails® and complying with the requirements of ACI 506.2, "Specifications for Materials, Proportioning and Application of Shotcrete", except as otherwise specified. Shotcreting consists applying of one or more layers of concrete conveyed through a hose pneumatically projected at a high velocity against a prepared surface. Produce shotcrete by a wet-mix. The wet-mix process consists of thoroughly mixing all the ingredients except accelerating admixtures, but including the mixing water, introducing the mixture into the delivery equipment and delivering it, by positive displacement, to the nozzle. Air jet the wet-mix shotcrete from the nozzle at high velocity onto the surface. For additional descriptive information, refer to the American Concrete Institute ACI 506R "Guide to Shotcrete." The Contractor's Engineer shall provide all necessary details required to successfully construct the temporary or permanent facing and facing drainage system to satisfy the design intent of the facing. Comply with AASHTO Specifications, or accepted industry standards for any specific items that may not be addressed herein or elsewhere in this Contract Document. Use materials for shotcrete conforming to the following requirements: Cement AASHTO M85/ ASTM C150, Type I, II, III or V. Fine Aggregate AASHTO M6/ASTM C33 clean, natural. Coarse Aggregate AASHTO M80, Class B for quality Water Clean and Potable. AASHTO M157/ASTM C94 Chemical Admixtures Accelerator Fluid type, applied at nozzle, meeting requirements of AASHTO M194/ASTM C494/ASTM C1141. Water-reducer and Superplasticizer AASHTO M194/ASTM C494 Type A, C, D, E, F, or G Retarders AASHTO M194/ ASTM C494 Type B or D. Mineral Admixtures Fly Ash AASHTO M295/ASTM C618 Type F or C, cement replacement up to 35 percent by weight of cement. Silica Fume ASTM C1240, 90 percent minimum silicon dioxide solids content, not to exceed 12 percent by weight of cement. Welded Wire Fabric AASHTO M55/ASTM A185 or A497. Double twisted hexagonal ASTM A975-97 guidelines for Double Twisted Hexagonal Mesh Gabions Prepackaged Shotcrete ASTM C928. PVC Drain Pipes: Pipe ASTM 1785 Schedule 40 PVC, solid and perforated wall, cell classification 12454-B or 12354-C, wall thickness SDR 35, with solvent weld or elastomeric gasket joints. Deliver, store and handle materials to prevent contamination, segregation, corrosion or damage. Store liquid admixtures to prevent evaporation and freezing. Use aggregate for shotcrete meeting the strength and durability requirements of AASHTO M6/M80, as applicable, and the following gradation requirements: Sieve Size Percent Passing by Weight 1/2" 100 3/8" 90-100 No. 4 70-85 No. 8 100 Proportion the shotcrete to be pumpable with the concrete pump furnished for the work, with a cementing materials content of at least 390 kilograms per cubic meter and water/cement ratio not greater than 0.50. Do not use admixtures unless approved by the Contractor's Engineer. Thoroughly mix admixtures into the shotcrete at the rate specified by the manufacturer. Use only accelerators compatible with the cement used, non-corrosive to steel, and not promoting other detrimental effects such as cracking or excessive shrinkage. The maximum allowable chloride ion content of all ingredients is 0.10% when tested to AASHTO T260. Air entrainment is not required for temporary shotcrete construction facings. Provide shotcrete with a design compressive strength of 2000 psi in 3 days and 4000 psi in 28 days. Batch aggregate and cement by weight or by volume in accordance with the requirements of ASTM C94 or AASHTO M241/ASTM C685. Use mixing equipment that thoroughly blends the materials in sufficient quantity to maintain placing continuity. Produce ready mix shotcrete complying			
31 32 36 11-0018	SFI	Wet-Mix Reinforced Shotcrete ..... Note: sold per inch thickness over one square face foot of area (includes reinforcing steel).	5.50		



	<b>Earthwork</b>	<b>31</b>	
	<b>Earthwork Methods</b>	<b>31 30</b>	
	<b>Soil Stabilization</b>	<b>31 32</b>	

MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
31 32 36 11-0019 Dry-Mix Shotcrete for use with Launched Soil Nails™, SuperNails®, SuperMicropiles™, Self-Drilling SuperNails® / SuperMicropiles™ <small>(31 32 36 11-0016)</small> Note: Furnish steel reinforced shotcrete to integrate with Launched Soil Nails™, SuperNails®, SuperMicropiles™, Self Drilling SuperMicropiles™ or Self Drilling SuperNails® and complying with the requirements of ACI 506.2, "Specifications for Materials, Proportioning and Application of Shotcrete", except as otherwise specified. Shotcreting consists applying of one or more layers of concrete conveyed through a hose pneumatically projected at a high velocity against a prepared surface. Produce shotcrete by a dry-mix. The dry-mix process consists of thoroughly mixing Portland cement and aggregate (and or synthetic fiber) thoroughly mixed dry, passed through a cement gun and conveyed by air through a flexible tube, hydrated at a nozzle at the end of such flexible tube and deposited by air pressure in its place of final repose. For additional descriptive information, refer to the American Concrete Institute ACI 506R "Guide to Shotcrete." The Contractor's Engineer shall provide all necessary details required to successfully construct the temporary or permanent facing and facing drainage system to satisfy the design intent of the facing. Comply with AASHTO Specifications, or accepted industry standards for any specific items that may not be addressed herein or elsewhere in this Contract Document. Use materials for shotcrete conforming to the following requirements: Cement AASHTO M85/ ASTM C150, Type I, II, or III. Fine Aggregate AASHTO M6/ASTM C33 clean, natural. Coarse Aggregate AASHTO M80, Class B for quality Fiber Reinforcement ASTM C116-00 Water Clean and Potable. AASHTO M157/ASTM C94 and shall be maintained at a uniform pressure which shall be at least 15 pounds per square inch above air pressure at the nozzle. Chemical Admixtures Accelerator Fluid type, applied at nozzle, meeting requirements of AASHTO M194/ASTM C494/ASTM C1141. Water-reducer and Superplasticizer AASHTO M194/ASTM C494 Type A, C, D, E, F, or G Retarders AASHTO M194/ ASTM C494 Type B or D. Mineral Admixtures Fly Ash AASHTO M295/ASTM C618 Type F or C, cement replacement up to 35 percent by weight of cement. Silica Fume ASTM C1240, 90 percent minimum silicon dioxide solids content, not to exceed 12 percent by weight of cement. Welded Wire Fabric AASHTO M55/ASTM A185 or A497. Double twisted hexagonal ASTM A975-97 guidelines for Double Twisted Hexagonal Mesh Gabions Prepackaged Shotcrete ASTM C928. PVC Drain Pipes: Pipe ASTM 1785 Schedule 40 PVC, solid and perforated wall, cell classification 12454-B or 12354-C, wall thickness SDR 35, with solvent weld or elastomeric gasket joints. Deliver, store and handle materials to prevent contamination, segregation, corrosion or damage. Store liquid admixtures to prevent evaporation and freezing. Use aggregate for shotcrete meeting the strength and durability requirements of AASHTO M6/M80, as applicable, and the following gradation requirements: Sieve Size Percent Passing by Weight 1/2" 100 3/8" 90-100 No. 4 70-85 No. 8 100 Proportion the shotcrete to be pumpable with the concrete pump furnished for the work, with a cementing materials content of at least 390 kilograms per cubic meter and water/cement ratio not greater than 0.50. Do not use admixtures unless approved by the Contractor's Engineer. Thoroughly mix admixtures into the shotcrete at the rate specified by the manufacturer. Use only accelerators compatible with the cement used, non-corrosive to steel, and not promoting other detrimental effects such as cracking or excessive shrinkage. The maximum allowable chloride ion content of all ingredients is 0.10% when tested to AASHTO T260. Air entrainment is not required for temporary shotcrete construction facings. Provide shotcrete with a design compressive strength of 2000 psi in 3 days and 4000 psi in 28 days. Batch aggregate and cement by weight or by volume in accordance with the requirements of ASTM C94 or AASHTO M241/ASTM C6		
31 32 36 11-0020 SF Dry-Mix Reinforced Gunite..... Note: sold per inch thickness over one square face foot of area (includes reinforcing steel).	8.50	
31 32 36 11-0021 Steel Fiber Reinforcement for use with Launched Soil Nails™, SuperNails®, SuperMicropiles™, Self-Drilling SuperNails® / SuperMicropiles™ <small>(31 32 36 11-0016)</small>		
31 32 36 11-0022 SF Steel Fiber Reinforcement ..... Note: sold per inch thickness over one square face foot of area	1.25	
31 32 36 11-0023 Steel Mesh and Steel Plates for use with Launched Soil Nails™, SuperNails® and Self Drilling SuperNails® <small>(31 32 36 11-0001)</small> Note: Unit Pricing excludes Daily Crew Rates for items See CSI section 31 32 36 11-0066 for Daily Crew Rates (DCR).		
31 32 36 11-0024 Steel Mesh Surface Treatment for use with Launched Soil Nails™, SuperNails® and Self Drilling SuperNails® <small>(31 32 36 11-0023)</small> Note: Furnish Galfan® Coated Steel Mesh for use with Launched Soil Nails™, SuperNails®, or Self Drilling SuperNails® that is a double twisted hexagonal galvanized steel wire mesh manufactured according to ASTM A975-97 guidelines for Double Twisted Hexagonal Mesh Gabions. Alternately, the mesh may be a diamond shaped, three dimensional mesh made with high capacity 3-millimeter diameter wire. Furnish steel plates to connect the mesh to the nail systems described herein. Furnish equipment and incidentals necessary to complete the work. Soil Nail to mesh connection details will be determined by the Contractor's Engineer and identified in the Contractor's stamped plans and submittals.		
31 32 36 11-0025 SF High Capacity Diamond Mesh ..... Note: sold per square face foot	11.00	
31 32 36 11-0026 SF Double Twist Wire Mesh..... Note: sold per square face foot	13.75	
31 32 36 11-0027 Steel Plates <small>(31 32 36 11-0023)</small>		
31 32 36 11-0028 EA Galvanized Steel Plates (8x8).....	35.00	
31 32 36 11-0029 EA Galvanized Steel Plates (10x10).....	54.75	
31 32 36 11-0030 EA Galvanized Steel Plates (12x12).....	78.75	
31 32 36 11-0031 EA Epoxy Coated Steel Plates (8x8).....	76.00	
31 32 36 11-0032 EA Epoxy Coated Steel Plates (10x10).....	89.25	
31 32 36 11-0033 EA Epoxy Coated Steel Plates (12x12).....	105.25	

<b>31</b>	<b>Earthwork</b>
<b>31 30</b>	<b>Earthwork Methods</b>
<b>31 32</b>	<b>Soil Stabilization</b>



MINOR  
CSI UOM DESCRIPTION

TOTAL DIRECT UNIT COST DEMOLITION UNIT COST

**31 32 36 11-0034****Drilled Horizontal Drains** (31 32 36 11-0001)

Note: Unit Pricing excludes Daily Crew Rates for items See CSI section 31 32 36 11-0066 for Daily Crew Rates (DCR).

31 32 36 11-0035	LF	Drilled PVC Horizontal Drains (up to 2" Diameter).....	26.00
31 32 36 11-0036	LF	Stripdrain - 6" Wide.....	3.25
31 32 36 11-0037	LF	Stripdrain - 12" Wide.....	4.00
31 32 36 11-0038	LF	PVC Drain Collector Pipe System.....	26.75

**31 32 36 11-0039****Rockfall Stabilization** (31 32 36 11-0001)

Note: Unit Pricing excludes Daily Crew Rates for items See CSI section 31 32 36 11-0066 for Daily Crew Rates (DCR).

31 32 36 11-0040	SF	Scaling.....	3.75
31 32 36 11-0041	SF	Trim Blasting.....	155.00
31 32 36 11-0042	SY	Slope Drape - Double Twist Wire Mesh.....	45.00
31 32 36 11-0043	SY	Slope Drape - Cable Net.....	135.00
31 32 36 11-0044	SY	Slope Drape - Tecco Mesh (4mm).....	135.00
31 32 36 11-0045	LF	Temporary Rockfall Barrier.....	500.00
31 32 36 11-0046	LF	Low Reach Drilling (<25 feet).....	25.00
31 32 36 11-0047	LF	High Reach Drilling (>25 feet).....	45.00
31 32 36 11-0048	LF	Limited Access Drilling.....	100.00
31 32 36 11-0049	LF	F&I Rock Dowel - #8 Grade 75 All-Thread Bar (Galvanized).....	18.50
31 32 36 11-0050	LF	F&I Rock Dowel - #8 Grade 75 All-Thread Bar (Epoxy Coated).....	15.25
31 32 36 11-0051	LF	F&I Rock Dowel - #8 Grade 150 All-Thread Bar (Galvanized).....	23.25
31 32 36 11-0052	LF	F&I Rock Dowel - #8 Grade 150 All-Thread Bar (Epoxy Coated).....	17.25
31 32 36 11-0053	LF	F&I Rock Dowel - #10 Grade 75 All-Thread Bar (Galvanized).....	23.50
31 32 36 11-0054	LF	F&I Rock Dowel - #10 Grade 75 All-Thread Bar (Epoxy Coated).....	18.75
31 32 36 11-0055	LF	F&I Rock Dowel - #10 Grade 150 All-Thread Bar (Galvanized).....	26.50
31 32 36 11-0056	LF	F&I Rock Dowel - #10 Grade 150 All-Thread Bar (Epoxy Coated).....	21.00
31 32 36 11-0057	LF	F&I Rock Dowel - #11 Grade 75 All-Thread Bar (Galvanized).....	29.25
31 32 36 11-0058	LF	F&I Rock Dowel - #11 Grade 75 All-Thread Bar (Epoxy Coated).....	21.00
31 32 36 11-0059	LF	F&I Rock Dowel - #11 Grade 150 All-Thread Bar (Galvanized).....	34.50
31 32 36 11-0060	LF	F&I Rock Dowel - #11 Grade 150 All-Thread Bar (Epoxy Coated).....	31.75
31 32 36 11-0061	EA	Rock Anchor Testing.....	825.00

**31 32 36 11-0062****Mobilization / Demobilization** (31 32 36 11-0001)

31 32 36 11-0063	EA	Mobilization - In State.....	10,000.00
31 32 36 11-0064	EA	Mobilization - Out Of State.....	25,000.00
31 32 36 11-0065	EA	Mobilization - Specialty Equipment Adder.....	9,800.00

**31 32 36 11-0066****Daily Crew Rates (DCR)** (31 32 36 11-0001)

31 32 36 11-0067	DAY	Soils Stabilization Crew - DCR , Per Workday.....	13,150.00
31 32 36 11-0068	DAY	Rockfall Stabilization Crew - DCR, Per Workday.....	15,200.00
31 32 36 11-0069	DAY	Compaction Grouting Crew - DCR, Per Workday.....	12,925.00
31 32 36 11-0070	DAY	Additional Crew Member/Crew - DCR, Per Workday.....	2,050.00
31 32 36 11-0071	EA	Out of State Crew Rotation.....	4,950.00
31 32 36 11-0072	EA	Spider Excavation.....	5,500.00

**31 32 36 13** **Driven Soil Nailing** (31 32 36)**31 32 36 13-0001****Large Diameter Micropiles** (31 32 36 13)

Note: Unit Pricing excludes Daily Crew Rates for items See CSI section 31 32 36 11-0066 for Daily Crew Rates (DCR).

31 32 36 13-0002	LF	5" Micropiles (with up to 5.5" steel casing).....	94.50
31 32 36 13-0003	LF	7" Micropiles (with up to 7.625" steel casing).....	130.25
31 32 36 13-0004	LF	10" Micropiles (with up to 9.625" steel casing).....	166.50
31 32 36 13-0005	LF	12" Micropiles (with up to 11.875" steel casing).....	213.25

**31 32 36 16** **Grouted Soil Nailing** (31 32 36)**31 32 36 16-0001****Grouting** (31 32 36 16)

Note: Unit Pricing excludes Daily Crew Rates for items See CSI section 31 32 36 11-0066 for Daily Crew Rates (DCR).





	<b>Earthwork</b>	<b>31</b>	
	<b>Earthwork Methods</b>	<b>31 30</b>	
	<b>Soil Stabilization</b>	<b>31 32</b>	

MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
31 32 36 16-0002	<b>Compaction Grouting</b> (31 32 36 16-0001) Note: A. Furnish compaction grout material manufactured on-site (at the project location) in volumetric batching equipment so that grout rheology can be controlled real-time. The grout shall have a slump of 0.50" to 3.0" depending on the specific requirements of the project and shall conform to the engineering plans developed and submitted by the Contractor. Grout components shall consist of Type I/II cement, potable water and aggregate. Fly Ash may be added to the mix per the engineering plans. All aggregate for the compaction grout material shall meet the following requirements: a. 100% passing the 1/2" sieve b. Less than 2% organics c. No bentonite or other clay of medium to high plasticity shall be used. Site conditions and re-leveling requirements shall determine the exact proportions of cement, water and soil. The grout mix shall generally consist of aggregate with up to 12% cement by weight and water to form a very stiff mortar-like mixture. No admixtures shall be used without the Project Manager's approval, and previous testing. Mix design and test results of grout mixture must be submitted and approved by the Project Manager 15 Days prior to the commencement of the work. A. Gradations of the aggregate material to be utilized shall be submitted as part of the submittal process and prior to any work taking place. B. The compaction grouting mixer shall be of a type to ensure complete mixing of the stiff grout, as approved by the Project Manager. The compaction grout mixer shall be of sufficient capacity to continuously deliver grout having a slump of less than 1.5 inches at pressures up to 1,000 psi, at flow rates ranging from 0.1 to 5.0 cubic feet per minute. Gauges shall be provided at the pump and the grout pipe head to measure pressure the rate of flow. Type and location of gauges shall be as specified by the Contractor. A dial gauge or meter capable of measuring to 0.5 cubic feet or less shall be provided to measure the amount of grout pumped into the hole. A pressure gauge shall be graduated in 10-psi increments or less and used to measure the applied pressure. Compaction grout hose shall have a minimum inside diameter of 2 inches with non-restrictive full flow couplings. The hose shall be of sufficient strength for the pressures anticipated, and shall be in good condition.	
31 32 36 16-0003 LF	Compaction Grouting Casing Installation.....	52.75
31 32 36 16-0004 CF	Compaction Grout Injection for Soils Densification.....	55.50
31 32 36 16-0005 CF	Compaction Grout For Void Fill.....	39.00
31 32 36 16-0006	<b>Polyurethane Grouting</b> (31 32 36 16-0001) Note: The material shall be a two part 1:1 ratio by volume, polyurethane-forming mixture, having a water insoluble diluent, which permits the formation of polyurethanes in excess water. The material shall reach 90% Compressive strength in 30 minutes such that traffic may be returned to roadway within 30 minutes after last injection of material. Polyurethane Free-rise Physical Properties Property I Units ASTM Minimum Maximum Density - lb/cf D 1622 3.0 lb/cf 6.0 lb/cf Tensile Strength - psi D 1623 80 psi Compressive Strength at Yield Point - psi D 1621 60 psi Furnish equipment and incidentals necessary to complete the work. Polyurethane grout shall not be used for deep injection (deeper than 3 ft below bottom of structure) or soils densification, it shall only be used for void filling under structures and for re-leveling. The Contractor shall prepare a profile to determine the areas that require void filling and re-leveling and determine the locations of the injection holes for each treated area. The Contractor shall obtain approval for the final proposed grades and the location of injection holes. The Contractor shall submit a plan for approval of the proposed polyurethane injection methods for the designated project areas. The plan shall include, but not be limited to: proposed diameter of casing (if required), depth of placement, angle of inclination, injection tube spacing, and project staging. The plan shall include monitoring procedures to ensure that damage will not occur to any existing structures due to the injection process. Monitoring devices shall be installed on mechanically stabilized earth retaining systems and between approach slabs and approach slab footings or other components to help prevent damage. The Contractor shall drill a pattern of holes as proposed in his plan. The holes shall be located in a manner that the void filling and structure lifting process does not affect any adjoining structures, such as mechanically stabilized earth retaining walls. Holes shall not be drilled within 4" of the edge of the slab, construction joints or major cracks. No more holes shall be drilled and tubes installed during the day than can be filled during that day. On bridge approach and roadway projects, and as applicable, the initial lift shall be at the sleeper footer. The Contractor shall lift the sleeper footer and the approach slab to the desired elevation by injecting material under the structures with care to assure that polyurethane material is not placed between the sleeper footer and the approach slab. The amount of rise shall be controlled by regulating the rate of injection of the high density polyurethane material. When the nozzle is removed from the hole, any excessive polyurethane material shall be removed from the area.	
31 32 36 16-0007 LB	Polyurethane Grouting For Void Fill and Re-Leveling.....	11.50
31 32 36 19	<b>Corrosion-Protected Soil Nailing</b> (31 32 36)	
31 32 36 19-0001	<b>Self-Drilling SuperNails® / SuperMicropiles™</b> (31 32 36 19) Note: Furnish Self-Drilling SuperNails® / SuperMicropiles™ that consist of a hollow, threaded bar with a sacrificial drill bit. Multiple bars may be coupled to produce final length. Bar thread pattern should be continuous and conform to the pullout requirements of ASTM A 615 (Williams Form Engineering B7X or Ischebeck Titan bars, or approved equivalent). R-thread bars, bars/couplers made from high carbon (>0.20%) or high phosphorous (>0.06%) steels, or bars/couplers made from steels that do not meet the tensile ductility requirements of ASTM A 615 shall not be used for any tensile applications. Bar outer diameters shall be a minimum of 1.5 inches and up to and 3 inches depending on design load. Corrosion Protection for Self Drilling Nails shall follow current FHWA guidance. Inserted length and spacing of Self-Drilling SuperNails® / SuperMicropiles™ will be determined by the Contractor's Engineer and identified in the Contractor's stamped plans and submittals. Unit Pricing excludes Daily Crew Rates for items See CSI section 31 32 36 11-0066 for Daily Crew Rates (DCR).	
31 32 36 19-0002	<b>Self-Drilling SuperNails®</b> (31 32 36 19-0001)	
31 32 36 19-0003 EA	Self Drilling SuperNails® Up To 10 Ft. Length.....	559.00
31 32 36 19-0004 EA	Self Drilling SuperNails® Up To 20 Ft. Length.....	939.25
31 32 36 19-0005 EA	Self Drilling SuperNails® Up To 30 Ft. Length.....	1,305.75
31 32 36 19-0006 EA	Self Drilling SuperNails® Up To 40 Ft. Length.....	1,735.75
31 32 36 19-0007 EA	Self Drilling SuperNails® Up To 50 Ft. Length.....	2,119.75
31 32 36 19-0008 EA	Self Drilling SuperNails® Up To 60 Ft. Length.....	2,459.25
31 32 36 19-0009 EA	Self Drilling SuperNails® Up To 70 Ft. Length.....	2,879.25
31 32 36 19-0010 EA	Self Drilling SuperNails® Up To 80 Ft. Length.....	3,253.50
31 32 36 19-0011 EA	Additional Cost for 10' High Capacity X-51 Bar .....	129.50
31 32 36 19-0012	<b>SuperNail® Testing</b> (31 32 36 19) Note: Unit Pricing excludes Daily Crew Rates for items See CSI section 31 32 36 11-0066 for Daily Crew Rates (DCR).	

<b>31</b>	<b>Earthwork</b>
<b>31 30</b>	<b>Earthwork Methods</b>
<b>31 32</b>	<b>Soil Stabilization</b>



MINOR CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
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31 32 36 19-0013	EA	SuperNail® Proof Testing .....	769.00	
31 32 36 19-0014	EA	SuperNail® Verification Testing .....	2,339.75	

### 31 32 36 26 Launched Soil Nailing (31 32 36)

31 32 36 26-0001		<b>Launched SuperDrain™ (Horizontal Drains)</b> <small>(31 32 36 26)</small> Note: Furnish Launched SuperDrain™ up to 20 feet in length composed of a tube (1.5 inch outside diameter, 0.120 inch wall thickness hot-dipped galvanized 36ksi steel (ASTM A513) that is mechanically deformed or GalvaDized™ to produce a plurality of surficial asperities). Drainage perforations consist of 0.5-inch diameter holes drilled or torch-cut at 6 inch spacing along the distal 5 feet of nail. Every other hole is rotated 90° about the longitudinal axis of the nail. Furnish equipment and incidentals necessary to complete the work. Insert Launched SuperDrain™ with a single stroke at initial velocities in excess of 200 miles per hour. Inserted length and spacing will be determined by the Contractor's Engineer and identified in the Contractor's stamped plans and submittals. Unit Pricing excludes Daily Crew Rates for items See CSI section 31 32 36 11-0066 for Daily Crew Rates (DCR).		
31 32 36 26-0002	EA	GalvaDized™ SuperDrain™ - Up To 20' .....	605.00	
		Note: perforated GalvaDized™ steel tube up to 20 ft. length.		
31 32 36 26-0003	EA	Fiberglass SuperNail® - Up To 20' .....	621.50	
		Note: perforated fiberglass tube up to 20 ft. length, pressure grouted with #6 epoxy coated inner Bar.		
31 32 36 26-0004	EA	GalvaDized™ SuperNail® - Up To 20' .....	478.50	
		Note: perforated GalvaDized™ steel tube up to 20 ft. length, pressure grouted with #6 epoxy coated inner Bar.		
31 32 36 26-0005	EA	Temporary Launched Soil Nail .....	379.50	
		Note: bare steel tube up to 20 ft. length.		
31 32 36 26-0006	EA	Fiberglass SuperDrain™ .....	495.00	
		Note: perforated fiberglass tube up to 20 ft. length.		
31 32 36 26-0007	EA	GalvaDized™ SuperDrain™ .....	379.50	
		Note: perforated GalvaDized™ steel tube up to 20 ft. length.		

### 31 32 36 29 Drilled Soil Nailing (31 32 36)

31 32 36 29-0001		<b>Drilled SuperNails® (Permanently Cased Soil Nails)</b> <small>(31 32 36 29)</small> Note: Furnish SuperNails® that are a three stage construction including installation of (1) an outer tube (1.5 inch outside diameter, 0.120 inch wall thickness hot-dipped galvanized steel tube that is mechanically deformed or GalvaDized™ to produce a plurality of surficial asperities); (2) neat cement grout that completely encases and fills the outer tube; and (3) immediately install an epoxy coated, #6 (or greater) grade 75 threadbar as the inner bar. SuperNails® may be in lengths up to 60 feet. Although field adjustments in design may be allowed on certain projects (subject to approval by the Contractor's Engineer and the Owner) bidding an equivalent system is not allowed (i.e. the winning bidder must have the ability to install the above system). Furnish equipment and incidentals necessary to complete the work. Insert SuperNail® outer tubes with a single stroke at initial velocities in excess of 200 miles per hour or by drilling a hole to a prescribed depth and inserting the outer tube. Fill the outer tube with neat cement grout and immediately insert a #6 or larger epoxy coated inner threadbar. Inserted length and spacing will be determined by the Contractor's Engineer and identified in the Contractor's stamped plans and submittals. Unit Pricing excludes Daily Crew Rates for items See CSI section 31 32 36 11-0066 for Daily Crew Rates (DCR).		
31 32 36 29-0002	EA	Drilled GalvaDized™ SuperNail® Up To 10 Ft. Length .....	602.25	
		Note: GalvaDized™ steel tube, drilled and grouted with #6 epoxy coated inner Bar.		
31 32 36 29-0003	EA	Drilled GalvaDized™ SuperNail® Up To 20 Ft. Length .....	693.50	
		Note: GalvaDized™ steel tube, drilled and grouted with #6 epoxy coated inner Bar.		
31 32 36 29-0004	EA	Drilled GalvaDized™ SuperNail® Up To 30 Ft. Length .....	921.50	
		Note: GalvaDized™ steel tube, drilled and grouted with #6 epoxy coated inner Bar.		
31 32 36 29-0005	EA	Drilled GalvaDized™ SuperNail® Up To 40 Ft. Length .....	1,056.00	
		Note: GalvaDized™ steel tube, drilled and grouted with #6 epoxy coated inner Bar.		
31 32 36 29-0006	EA	Drilled GalvaDized™ SuperNail® Up To 50 Ft. Length .....	1,171.50	
		Note: GalvaDized™ steel tube, drilled and grouted with #6 epoxy coated inner Bar.		
31 32 36 29-0007	EA	Drilled GalvaDized™ SuperNail® Up To 60 Ft. Length .....	1,376.50	
		Note: GalvaDized™ steel tube, drilled and grouted with #6 epoxy coated inner Bar.		
31 32 36 29-0008	EA	Drilled GalvaDized™ SuperNail® Up To 70 Ft. Length .....	1,624.75	
		Note: GalvaDized™ steel tube, drilled and grouted with #6 epoxy coated inner Bar.		
31 32 36 29-0009	EA	Drilled GalvaDized™ SuperNail® Up To 80 Ft. Length .....	1,872.75	
		Note: GalvaDized™ steel tube, drilled and grouted with #6 epoxy coated inner Bar.		

### 31 32 36 33 Drilled / Launched Soil Nailing (31 32 36)

31 32 36 33-0001		<b>Drilled / Launched SuperMicropiles™</b> <small>(31 32 36 33)</small> Note: Furnish SuperMicropiles™ that are a three stage construction including installation of (1) an outer tube (1.5 inch outside diameter, 0.120 inch wall thickness hot-dipped galvanized steel tube that is mechanically deformed or GalvaDized™ to produce a plurality of surficial asperities); (2) neat cement grout that completely encases and fills the outer tube; and (3) immediately install an epoxy coated, #6 (or greater) grade 75 threadbar as the inner bar. SuperMicropiles™ may be in lengths up to 60 feet. Although field adjustments in design may be allowed on certain projects (subject to approval by the Contractor's Engineer and the Owner) bidding an equivalent system is not allowed (i.e. the winning bidder must have the ability to install the above system). Furnish equipment and incidentals necessary to complete the work. Insert SuperMicropile™ outer tubes with a single stroke at initial velocities in excess of 200 miles per hour or by drilling a hole to a prescribed depth and inserting the outer tube. Fill the outer tube with neat cement grout and immediately insert a #6 or larger epoxy coated inner threadbar. Inserted length and spacing will be determined by the Contractor's Engineer and identified in the Contractor's stamped plans and submittals.		
31 32 36 33-0002	EA	Drilled / Launched GalvaDized™ SuperMicropiles™ Up To 20 Ft. Length .....	695.00	
		Note: GalvaDized™ steel tube, grouted with #6 epoxy coated inner Bar.		
31 32 36 33-0003	EA	Drilled / Launched GalvaDized™ SuperMicropiles™ Up To 30 Ft. Length .....	1,020.00	
		Note: GalvaDized™ steel tube, grouted with #6 epoxy coated inner Bar.		
31 32 36 33-0004	EA	Drilled / Launched GalvaDized™ SuperMicropiles™ Up To 40 Ft. Length .....	1,280.00	
		Note: GalvaDized™ steel tube, grouted with #6 epoxy coated inner Bar.		
31 32 36 33-0005	EA	Drilled / Launched GalvaDized™ SuperMicropiles™ Up To 50 Ft. Length .....	1,540.00	
		Note: GalvaDized™ steel tube, grouted with #6 epoxy coated inner Bar.		



	<b>Earthwork</b>	<b>31</b>	<b>15</b>
	<b>Earthwork Methods</b>	<b>31 30</b>	
	<b>Soil Stabilization</b>	<b>31 32</b>	

MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
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### 31 35 Slope Protection <sup>(31 30)</sup>

#### 31 35 19 Geosynthetic Slope Protection <sup>(31 35)</sup>

##### 31 35 19 19 Slope Protection with Mulch Control Netting <sup>(31 35 19)</sup>

##### 31 35 19 19-0001 Erosion Control Fabric <sup>(31 35 19 19)</sup>

31 35 19 19-0002 SY 26.6 OZ/SY Erosion Control Fabric (Belton Industries Geocoir 900) .....5.01

### 31 36 Gabions <sup>(31 30)</sup>

Note: Includes the cost for loading, hauling up to 15 miles from the closest approved source, unloading and placing. See CSI section 01 74 19 00-0015 for hauling greater than 15 miles.

#### 31 36 13 Gabion Boxes <sup>(31 36)</sup>

##### 31 36 13 00-0001 Stone Filled Gabion Slope Protection <sup>(31 36 13)</sup>

Note: Machine placed by SY of total top face area for depth indicated.

31 36 13 00-0002 SY 6" Deep Stone Filled Gabion Slope Protection .....66.33  
31 36 13 00-0003 SY 9" Deep Stone Filled Gabion Slope Protection .....78.31  
31 36 13 00-0004 SY 12" Deep Stone Filled Gabion Slope Protection .....94.51  
31 36 13 00-0005 SY 15" Deep Stone Filled Gabion Slope Protection .....111.63  
31 36 13 00-0006 SY 18" Deep Stone Filled Gabion Slope Protection .....131.07  
31 36 13 00-0007 SY 24" Deep Stone Filled Gabion Slope Protection .....179.43  
31 36 13 00-0008 SY 36" Deep Stone Filled Gabion Slope Protection .....226.79

### 31 37 Riprap <sup>(31 30)</sup>

Note: Includes the cost for loading, hauling up to 15 miles from the closest approved source, and dumping. See CSI section 01 74 19 00-0015 for hauling greater than 15 miles.

#### 31 37 13 Machined Riprap <sup>(31 37)</sup>

##### 31 37 13 00-0001 Random - Filter Stone <sup>(31 37 13)</sup>

31 37 13 00-0002 CY 10 To 50 LB Average Pieces Random, Dumped From Truck, Rip Rap .....62.42  
*For Chinking Material, Add* .....14.47  
31 37 13 00-0003 CY >50 To 100 LB Average Pieces Random, Dumped From Truck, Rip Rap .....71.87  
*For Chinking Material, Add* .....14.47  
31 37 13 00-0004 CY >100 To 200 LB Average Pieces Random, Dumped From Truck, Rip Rap .....76.32  
*For Chinking Material, Add* .....14.47  
31 37 13 00-0005 CY >200 To 300 LB Average Pieces Random, Dumped From Truck, Rip Rap .....81.39  
*For Chinking Material, Add* .....14.47  
31 37 13 00-0006 CY >300 To 600 LB Average Pieces Random, Dumped From Truck, Rip Rap .....85.48  
*For Chinking Material, Add* .....14.47  
31 37 13 00-0007 CY >600 LB Average Pieces Random, Dumped From Truck, Rip Rap .....92.17  
31 37 13 00-0008 CY 3/8 To 1/4 CY Pieces Random, Dumped From Truck, Machine Spread And Placed Slope Protection (Keyed) Rip  
Rap .....109.67  
31 37 13 00-0009 TON 10 To 50 LB Average Pieces Random, Dumped From Truck, Rip Rap .....41.68  
31 37 13 00-0010 TON >50 To 100 LB Average Pieces Random, Dumped From Truck, Rip Rap .....47.68  
31 37 13 00-0011 TON >100 To 200 LB Average Pieces Random, Dumped From Truck, Rip Rap .....50.51  
31 37 13 00-0012 TON >200 To 300 LB Average Pieces Random, Dumped From Truck, Rip Rap .....53.73  
31 37 13 00-0013 TON >300 To 600 LB Average Pieces Random, Dumped From Truck, Rip Rap .....56.32  
31 37 13 00-0014 TON >600 LB Average Pieces Random, Dumped From Truck, Rip Rap .....60.62

### 31 40 Shoring and Underpinning <sup>(31)</sup>

#### 31 41 Shoring <sup>(31 40)</sup>

##### 31 41 13 Timber Shoring <sup>(31 41)</sup>

##### 31 41 13 00-0001 Wood Sheet Piling <sup>(31 41 13)</sup>

##### 31 41 13 00-0002 Pull And Salvage <sup>(31 41 13 00-0001)</sup>

Note: Includes soldier beams and lagging (wales, braces and spacers). Excludes tie-backs (rock bolting) where required.

31 41 13 00-0003 SF 8' Deep Excavation, Wood Shoring, Pull And Salvage .....15.37  
*For Wood Sheeting Left In Place* .....1.08  
31 41 13 00-0004 SF 10' Deep Excavation, Wood Shoring, Pull And Salvage .....16.51  
*For Wood Sheeting Left In Place* .....0.95  
31 41 13 00-0005 SF 12' Deep Excavation, Wood Shoring, Pull And Salvage .....17.77  
*For Wood Sheeting Left In Place* .....0.81  
31 41 13 00-0006 SF 14' Deep Excavation, Wood Shoring, Pull And Salvage .....19.11  
*For Wood Sheeting Left In Place* .....0.61  
31 41 13 00-0007 SF 16' Deep Excavation, Wood Shoring, Pull And Salvage .....20.58  
*For Wood Sheeting Left In Place* .....0.42  
31 41 13 00-0008 SF 18' Deep Excavation, Wood Shoring, Pull And Salvage .....22.14  
*For Wood Sheeting Left In Place* .....0.17  
31 41 13 00-0009 SF 20' Deep Excavation, Wood Shoring, Pull And Salvage .....23.86  
*For Wood Sheeting Left In Place* .....-0.09

<b>31</b>	<b>Earthwork</b>
<b>31 40</b>	<b>Shoring and Underpinning</b>
<b>31 41</b>	<b>Shoring</b>



MINOR  
CSI UOM DESCRIPTION

TOTAL DIRECT DEMOLITION  
UNIT COST UNIT COST

### 31 41 16 Sheet Piling <sup>(31 41)</sup>

#### 31 41 16 13 Steel Sheet Piling <sup>(31 41 16)</sup>

31 41 16 13-0001	Standard Carbon Grade Steel Sheeting - Pull And Salvage <sup>(31 41 16 13)</sup>	
	Note: Up to 3 months. 38.5 KSI steel per SF minimum. PSF indicated is for the weight of the material per square foot. Includes soldier beams and lagging (wales, braces and spacers). Excludes tie-backs (rock bolting) where required.	
31 41 16 13-0002	TON Driven Steel Sheet Piling, 15' Excavation, 22 PSF Steel Sheeting, Pull And Salvage.....	2,105.74
	For Standard Sheeting Left In Place, Add	1,133.97
	For Lightweight Steel Sheeting 8.6 And 9.2 PSF Left In Place, Add	1,091.09
	For High Strength Sheeting 45,000 To 50,000 PSI Grade, Add	96.48
	For High Strength Sheeting 55,000 PSI Grade, Add	107.20
	For Lightweight Steel Sheeting 8.6 And 9.2 PSF, Add	332.31
	For Each Additional Month >3 Months, Add	53.60
31 41 16 13-0003	TON Driven Steel Sheet Piling, 20' Excavation, 27 PSF Steel Sheeting, Pull And Salvage.....	2,190.32
	For Standard Sheeting Left In Place, Add	1,091.68
	For Lightweight Steel Sheeting 8.6 And 9.2 PSF Left In Place, Add	1,048.80
	For High Strength Sheeting 45,000 To 50,000 PSI Grade, Add	96.48
	For High Strength Sheeting 55,000 PSI Grade, Add	107.20
	For Lightweight Steel Sheeting 8.6 And 9.2 PSF, Add	332.31
	For Each Additional Month >3 Months, Add	53.60
31 41 16 13-0004	TON Driven Steel Sheet Piling, 25' Excavation, 38 PSF Steel Sheeting, Pull And Salvage.....	2,583.49
	For Standard Sheeting Left In Place, Add	895.09
	For Lightweight Steel Sheeting 8.6 And 9.2 PSF Left In Place, Add	852.22
	For High Strength Sheeting 45,000 To 50,000 PSI Grade, Add	96.48
	For High Strength Sheeting 55,000 PSI Grade, Add	107.20
	For Lightweight Steel Sheeting 8.6 And 9.2 PSF, Add	332.31
	For Each Additional Month >3 Months, Add	53.60
31 41 16 13-0005	TON Driven Steel Sheet Piling, 30' Excavation, 38 PSF Steel Sheeting, Pull And Salvage.....	2,961.84
	For Standard Sheeting Left In Place, Add	705.92
	For Lightweight Steel Sheeting 8.6 And 9.2 PSF Left In Place, Add	663.04
	For High Strength Sheeting 45,000 To 50,000 PSI Grade, Add	96.48
	For High Strength Sheeting 55,000 PSI Grade, Add	107.20
	For Lightweight Steel Sheeting 8.6 And 9.2 PSF, Add	332.31
	For Each Additional Month >3 Months, Add	53.60

## 31 60 Special Foundations and Load-bearing Elements <sup>(31)</sup>

### 31 62 Driven Piles <sup>(31 60)</sup>

#### 31 62 13 Concrete Piles <sup>(31 62)</sup>

##### 31 62 13 23 Prestressed Concrete Piles <sup>(31 62 13)</sup>

31 62 13 23-0001	Straight Cylinder <sup>(31 62 13 23)</sup>	
31 62 13 23-0002	VLF 12" Diameter, 2-3/8" Wall, Straight Cylinder Prestressed Driven Concrete Pile.....	53.20
	For Piles Driven In Water, Add	17.72
31 62 13 23-0003	VLF 14" Diameter, 2-1/2" Wall, Straight Cylinder Prestressed Driven Concrete Pile.....	63.01
	For Piles Driven In Water, Add	19.42
31 62 13 23-0004	VLF 16" Diameter, 3" Wall, Straight Cylinder Prestressed Driven Concrete Pile.....	74.63
	For Piles Driven In Water, Add	21.41
31 62 13 23-0005	VLF 18" Diameter, 3-1/2" Wall, Straight Cylinder Prestressed Driven Concrete Pile.....	84.41
	For Piles Driven In Water, Add	23.31
31 62 13 23-0006	VLF 20" Diameter, 4" Wall, Straight Cylinder Prestressed Driven Concrete Pile.....	106.04
	For Piles Driven In Water, Add	26.54
31 62 13 23-0007	VLF 24" Diameter, 5" Wall, Straight Cylinder Prestressed Driven Concrete Pile.....	131.01
	For Piles Driven In Water, Add	30.26

#### 31 62 16 Steel Piles <sup>(31 62)</sup>

##### 31 62 16 16 Steel H Piles <sup>(31 62 16)</sup>

31 62 16 16-0001	Rolled, Driven Steel H Piles <sup>(31 62 16 16)</sup>	
31 62 16 16-0002	VLF 8" x 8" x 36 LB/FT, Rolled, Driven Steel H Pile.....	33.95
	For Piles Driven In Water, Add	17.35
31 62 16 16-0003	VLF 10" x 10" x 42 LB/FT, Rolled, Driven Steel H Pile.....	37.80
	For Piles Driven In Water, Add	18.42
31 62 16 16-0004	VLF 10" x 10" x 57 LB/FT, Rolled, Driven Steel H Pile.....	45.48
	For Piles Driven In Water, Add	19.19
31 62 16 16-0005	VLF 12" x 12" x 53 LB/FT, Rolled, Driven Steel H Pile.....	43.91
	For Piles Driven In Water, Add	19.47
31 62 16 16-0006	VLF 12" x 12" x 63 LB/FT, Rolled, Driven Steel H Pile.....	49.04
	For Piles Driven In Water, Add	19.98
31 62 16 16-0007	VLF 12" x 12" x 74 LB/FT, Rolled, Driven Steel H Pile.....	56.07
	For Piles Driven In Water, Add	21.93
31 62 16 16-0008	VLF 12" x 12" x 84 LB/FT, Rolled, Driven Steel H Pile.....	61.19
	For Piles Driven In Water, Add	22.45
31 62 16 16-0009	VLF 14" x 14" x 73 LB/FT, Rolled, Driven Steel H Pile.....	56.00
	For Piles Driven In Water, Add	22.33
31 62 16 16-0010	VLF 14" x 14" x 89 LB/FT, Rolled, Driven Steel H Pile.....	64.72
	For Piles Driven In Water, Add	23.20



		<b>Earthwork</b>	<b>31</b>
		<b>Special Foundations and Load-bearing Elements</b>	<b>31 60</b>
		<b>Driven Piles</b>	<b>31 62</b>

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MINOR CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
31 62 16 16-0011	VLF	14" x 14" x 102 LB/FT, Rolled, Driven Steel H Pile..... <i>For Piles Driven In Water, Add</i>	72.42 25.37	
31 62 16 16-0012	VLF	14" x 14" x 117 LB/FT, Rolled, Driven Steel H Pile..... <i>For Piles Driven In Water, Add</i>	80.62 26.19	
31 62 16 16-0013		<b>Splices, Caps, And Points For H-Piles</b> (31 62 16 16)		
31 62 16 16-0014		<b>Rolled Steel H Pile Splices</b> (31 62 16 16-0013)		
31 62 16 16-0015	EA	8" Rolled Steel H Pile Splice.....	302.88	
31 62 16 16-0016	EA	10" Rolled Steel H Pile Splice.....	339.28	
31 62 16 16-0017	EA	12" Rolled Steel H Pile Splice.....	465.31	
31 62 16 16-0018	EA	14" Rolled Steel H Pile Splice.....	483.51	
31 62 16 16-0019		<b>Rolled Steel H Driving Caps</b> (31 62 16 16-0013)		
31 62 16 16-0020	EA	8" Rolled Steel H Driving Cap.....	3,027.30	
31 62 16 16-0021	EA	10" Rolled Steel H Driving Cap.....	3,027.30	
31 62 16 16-0022	EA	12" Rolled Steel H Driving Cap.....	3,083.90	
31 62 16 16-0023	EA	14" Rolled Steel H Driving Cap.....	4,631.05	
31 62 16 16-0024		<b>Rolled Steel H Standard Pile Points</b> (31 62 16 16-0013)		
31 62 16 16-0025	EA	8" Rolled Steel H Standard Pile Point.....	321.08	
31 62 16 16-0026	EA	10" Rolled Steel H Standard Pile Point.....	339.28	
31 62 16 16-0027	EA	12" Rolled Steel H Standard Pile Point.....	465.31	
31 62 16 16-0028	EA	14" Rolled Steel H Standard Pile Point.....	519.92	
31 62 16 16-0029	EA	10" Rolled Steel H Standard Pile Point.....	465.31	
31 62 16 16-0030	EA	14" Rolled Steel H Standard Pile Point.....	555.17	
31 62 16 19		<b>Unfilled Tubular Steel Piles</b> (31 62 16)		
31 62 16 19-0001		<b>Unfilled Tubular Driven Steel Piles</b> (31 62 16 19)		
31 62 16 19-0002	VLF	8" Diameter x 29 LB/FT, Unfilled Tubular Driven Steel Pile..... <i>For Piles Driven In Water, Add</i>	53.78 23.23	
31 62 16 19-0003	VLF	8" Diameter x 36 LB/FT, Unfilled Tubular Driven Steel Pile..... <i>For Piles Driven In Water, Add</i>	62.26 24.08	
31 62 16 19-0004	VLF	8" Diameter x 43 LB/FT, Unfilled Tubular Driven Steel Pile..... <i>For Piles Driven In Water, Add</i>	71.43 25.00	
31 62 16 19-0005	VLF	10" Diameter x 34 LB/FT, Unfilled Tubular Driven Steel Pile..... <i>For Piles Driven In Water, Add</i>	62.26 24.08	
31 62 16 19-0006	VLF	10" Diameter x 41 LB/FT, Unfilled Tubular Driven Steel Pile..... <i>For Piles Driven In Water, Add</i>	70.33 24.89	
31 62 16 19-0007	VLF	10" Diameter x 55 LB/FT, Unfilled Tubular Driven Steel Pile..... <i>For Piles Driven In Water, Add</i>	88.14 26.67	
31 62 16 19-0008	VLF	12" Diameter x 42 LB/FT, Unfilled Tubular Driven Steel Pile..... <i>For Piles Driven In Water, Add</i>	73.30 26.12	
31 62 16 19-0009	VLF	12" Diameter x 50 LB/FT, Unfilled Tubular Driven Steel Pile..... <i>For Piles Driven In Water, Add</i>	82.73 27.07	
31 62 16 19-0010	VLF	12" Diameter x 54 LB/FT, Unfilled Tubular Driven Steel Pile..... <i>For Piles Driven In Water, Add</i>	87.98 27.59	
31 62 16 19-0011	VLF	12" Diameter x 65 LB/FT, Unfilled Tubular Driven Steel Pile..... <i>For Piles Driven In Water, Add</i>	102.65 29.06	
31 62 16 19-0012	VLF	14" Diameter x 46 LB/FT, Unfilled Tubular Driven Steel Pile..... <i>For Piles Driven In Water, Add</i>	79.25 28.68	
31 62 16 19-0013	VLF	14" Diameter x 55 LB/FT, Unfilled Tubular Driven Steel Pile..... <i>For Piles Driven In Water, Add</i>	89.93 29.75	
31 62 16 19-0014	VLF	14" Diameter x 64 LB/FT, Unfilled Tubular Driven Steel Pile..... <i>For Piles Driven In Water, Add</i>	100.60 30.81	
31 62 16 19-0015	VLF	14" Diameter x 72 LB/FT, Unfilled Tubular Driven Steel Pile..... <i>For Piles Driven In Water, Add</i>	111.28 31.88	
31 62 16 19-0016	VLF	16" Diameter x 52 LB/FT, Unfilled Tubular Driven Steel Pile..... <i>For Piles Driven In Water, Add</i>	88.17 32.00	
31 62 16 19-0017	VLF	16" Diameter x 63 LB/FT, Unfilled Tubular Driven Steel Pile..... <i>For Piles Driven In Water, Add</i>	100.65 33.25	
31 62 16 19-0018	VLF	16" Diameter x 83 LB/FT, Unfilled Tubular Driven Steel Pile..... <i>For Piles Driven In Water, Add</i>	124.99 35.68	
31 62 16 19-0019	VLF	18" Diameter x 59 LB/FT, Unfilled Tubular Driven Steel Pile..... <i>For Piles Driven In Water, Add</i>	109.02 36.05	
31 62 16 19-0020	VLF	18" Diameter x 71 LB/FT, Unfilled Tubular Driven Steel Pile..... <i>For Piles Driven In Water, Add</i>	125.23 37.67	
31 62 16 19-0021	VLF	18" Diameter x 93 LB/FT, Unfilled Tubular Driven Steel Pile..... <i>For Piles Driven In Water, Add</i>	156.04 40.75	
31 62 16 19-0022		<b>Splices And Points For Pipe Piles</b> (31 62 16 19)		
31 62 16 19-0023		<b>Steel Pipe Pile Splices</b> (31 62 16 19-0022)		
31 62 16 19-0024	EA	8" Diameter, Steel Pipe Pile Splice.....	299.23	
31 62 16 19-0025	EA	10" Diameter, Steel Pipe Pile Splice.....	324.96	
31 62 16 19-0026	EA	12" Diameter, Steel Pipe Pile Splice.....	419.32	
31 62 16 19-0027	EA	14" Diameter, Steel Pipe Pile Splice.....	444.70	

**31 Earthwork****31 60 Special Foundations and Load-bearing Elements****31 62 Driven Piles**

MINOR CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
31 62 16 19-0028	EA	16" Diameter, Steel Pipe Pile Splice .....	542.21	
31 62 16 19-0029	EA	18" Diameter, Steel Pipe Pile Splice .....	659.30	
<b>31 62 16 19-0030</b>		<b>Steel Pipe Standard Pile Points</b> (31 62 16 19-0022)		
31 62 16 19-0031	EA	8" Diameter, Steel Pipe Standard Pile Point .....	290.39	
31 62 16 19-0032	EA	10" Diameter, Steel Pipe Standard Pile Point .....	311.01	
31 62 16 19-0033	EA	12" Diameter, Steel Pipe Standard Pile Point .....	353.74	
31 62 16 19-0034	EA	14" Diameter, Steel Pipe Standard Pile Point .....	410.42	
31 62 16 19-0035	EA	16" Diameter, Steel Pipe Standard Pile Point .....	461.94	
31 62 16 19-0036	EA	18" Diameter, Steel Pipe Standard Pile Point .....	531.54	
<b>31 62 16 19-0037</b>		<b>Steel Pipe Heavy Duty Pile Points</b> (31 62 16 19-0022)		
31 62 16 19-0038	EA	10" Diameter, Steel Pipe Heavy Duty Pile Point .....	421.09	
31 62 16 19-0039	EA	12" Diameter, Steel Pipe Heavy Duty Pile Point .....	446.85	
31 62 16 19-0040	EA	14" Diameter, Steel Pipe Heavy Duty Pile Point .....	503.39	
31 62 16 19-0041	EA	16" Diameter, Steel Pipe Heavy Duty Pile Point .....	606.45	
31 62 16 19-0042	EA	18" Diameter, Steel Pipe Heavy Duty Pile Point .....	692.35	
<b>31 62 19</b>		<b>Timber Piles</b> (31 62)		
<b>31 62 19 00-0001</b>		<b>Driven Pressure-Impregnated Treated (Preservative) Piles</b> (31 62 19)		
Note: 12" minimum butt diameter. Excludes equipment mobilization, transportation, set-up and demobilization.				
31 62 19 00-0002	VLF	Up To 10', Driven Pressure-Impregnated Treated (Preservative) Pile .....	162.33	
		For Water Driven Piles, Add .....	56.11	
31 62 19 00-0003	VLF	>10 To 15', Driven Pressure-Impregnated Treated (Preservative) Pile .....	115.99	
		For Water Driven Piles, Add .....	38.15	
31 62 19 00-0004	VLF	>15 To 20', Driven Pressure-Impregnated Treated (Preservative) Pile .....	92.19	
		For Water Driven Piles, Add .....	29.17	
31 62 19 00-0005	VLF	>20 To 25', Driven Pressure-Impregnated Treated (Preservative) Pile .....	78.44	
		For Water Driven Piles, Add .....	24.18	
31 62 19 00-0006	VLF	>25 To 30', Driven Pressure-Impregnated Treated (Preservative) Pile .....	68.94	
		For Water Driven Piles, Add .....	20.84	
31 62 19 00-0007	VLF	>30 To 35', Driven Pressure-Impregnated Treated (Preservative) Pile .....	61.89	
		For Water Driven Piles, Add .....	18.46	
31 62 19 00-0008	VLF	>35 To 40', Driven Pressure-Impregnated Treated (Preservative) Pile .....	56.46	
		For Water Driven Piles, Add .....	16.69	
<b>31 62 19 00-0009</b>		<b>Driven Greenheart Piles</b> (31 62 19)		
Note: 12" minimum butt diameter. Excludes equipment mobilization, transportation, set-up and demobilization.				
31 62 19 00-0010	VLF	Up To 10', Driven Greenheart Pile .....	244.02	
		For Water Driven Piles, Add .....	81.88	
31 62 19 00-0011	VLF	>10 To 15', Driven Greenheart Pile .....	161.26	
		For Water Driven Piles, Add .....	54.02	
31 62 19 00-0012	VLF	>15 To 20', Driven Greenheart Pile .....	139.54	
		For Water Driven Piles, Add .....	40.09	
31 62 19 00-0013	VLF	>20 To 25', Driven Greenheart Pile .....	119.28	
		For Water Driven Piles, Add .....	35.14	
31 62 19 00-0014	VLF	>25 To 30', Driven Greenheart Pile .....	105.81	
		For Water Driven Piles, Add .....	31.84	
31 62 19 00-0015	VLF	>30 To 35', Driven Greenheart Pile .....	96.17	
		For Water Driven Piles, Add .....	29.48	
31 62 19 00-0016	VLF	>35 To 40', Driven Greenheart Pile .....	88.97	
		For Water Driven Piles, Add .....	27.72	
<b>31 62 23</b>		<b>Composite Piles</b> (31 62)		
<b>31 62 23 13</b>		<b>Concrete-Filled Steel Piles</b> (31 62 23)		
<b>31 62 23 13-0001</b>		<b>Concrete-Filled Driven Steel Pipe Piles</b> (31 62 23 13)		
Note: Includes 4,000 PSI concrete grout. Excludes reinforcing.				
31 62 23 13-0002	VLF	8" Diameter x 29 LB/FT, Concrete-Filled Driven Steel Pipe Pile .....	58.97	
		For 5,000 PSI Concrete Grout Fill, Add .....	8.40	
		For Piles Driven In Water, Add .....	25.30	
31 62 23 13-0003	VLF	8" Diameter x 36 LB/FT, Concrete-Filled Driven Steel Pipe Pile .....	67.45	
		For 5,000 PSI Concrete Grout Fill, Add .....	9.25	
		For Piles Driven In Water, Add .....	26.15	
31 62 23 13-0004	VLF	8" Diameter x 43 LB/FT, Concrete-Filled Driven Steel Pipe Pile .....	76.61	
		For 5,000 PSI Concrete Grout Fill, Add .....	10.17	
		For Piles Driven In Water, Add .....	27.07	
31 62 23 13-0005	VLF	10" Diameter x 34 LB/FT, Concrete-Filled Driven Steel Pipe Pile .....	69.98	
		For 5,000 PSI Concrete Grout Fill, Add .....	12.07	
		For Piles Driven In Water, Add .....	26.83	
31 62 23 13-0006	VLF	10" Diameter x 41 LB/FT, Concrete-Filled Driven Steel Pipe Pile .....	78.04	
		For 5,000 PSI Concrete Grout Fill, Add .....	12.88	
		For Piles Driven In Water, Add .....	27.64	
31 62 23 13-0007	VLF	10" Diameter x 55 LB/FT, Concrete-Filled Driven Steel Pipe Pile .....	95.86	
		For 5,000 PSI Concrete Grout Fill, Add .....	14.66	
		For Piles Driven In Water, Add .....	29.42	



		<b>Earthwork</b>	<b>31</b>
		<b>Special Foundations and Load-bearing Elements</b>	<b>31 60</b>
		<b>Driven Piles</b>	<b>31 62</b>

MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
31 62 23 13-0008 VLF 12" Diameter x 42 LB/FT, Concrete-Filled Driven Steel Pipe Pile.....	84.19	
For 5,000 PSI Concrete Grout Fill, Add	16.52	
For Piles Driven In Water, Add	29.92	
31 62 23 13-0009 VLF 12" Diameter x 50 LB/FT, Concrete-Filled Driven Steel Pipe Pile.....	93.62	
For 5,000 PSI Concrete Grout Fill, Add	17.46	
For Piles Driven In Water, Add	30.86	
31 62 23 13-0010 VLF 12" Diameter x 54 LB/FT, Concrete-Filled Driven Steel Pipe Pile.....	98.86	
For 5,000 PSI Concrete Grout Fill, Add	17.99	
For Piles Driven In Water, Add	31.39	
31 62 23 13-0011 VLF 12" Diameter x 65 LB/FT, Concrete-Filled Driven Steel Pipe Pile.....	113.54	
For 5,000 PSI Concrete Grout Fill, Add	19.46	
For Piles Driven In Water, Add	32.86	
31 62 23 13-0012 VLF 14" Diameter x 46 LB/FT, Concrete-Filled Driven Steel Pipe Pile.....	93.52	
For 5,000 PSI Concrete Grout Fill, Add	20.82	
For Piles Driven In Water, Add	34.50	
31 62 23 13-0013 VLF 14" Diameter x 55 LB/FT, Concrete-Filled Driven Steel Pipe Pile.....	104.20	
For 5,000 PSI Concrete Grout Fill, Add	21.89	
For Piles Driven In Water, Add	35.57	
31 62 23 13-0014 VLF 14" Diameter x 64 LB/FT, Concrete-Filled Driven Steel Pipe Pile.....	114.87	
For 5,000 PSI Concrete Grout Fill, Add	22.95	
For Piles Driven In Water, Add	36.63	
31 62 23 13-0015 VLF 14" Diameter x 72 LB/FT, Concrete-Filled Driven Steel Pipe Pile.....	125.55	
For 5,000 PSI Concrete Grout Fill, Add	24.02	
For Piles Driven In Water, Add	37.70	
31 62 23 13-0016 VLF 16" Diameter x 52 LB/FT, Concrete-Filled Driven Steel Pipe Pile.....	104.42	
For 5,000 PSI Concrete Grout Fill, Add	26.12	
For Piles Driven In Water, Add	37.08	
31 62 23 13-0017 VLF 16" Diameter x 63 LB/FT, Concrete-Filled Driven Steel Pipe Pile.....	116.91	
For 5,000 PSI Concrete Grout Fill, Add	27.37	
For Piles Driven In Water, Add	38.33	
31 62 23 13-0018 VLF 16" Diameter x 83 LB/FT, Concrete-Filled Driven Steel Pipe Pile.....	141.25	
For 5,000 PSI Concrete Grout Fill, Add	29.81	
For Piles Driven In Water, Add	40.77	
31 62 23 13-0019 VLF 18" Diameter x 59 LB/FT, Concrete-Filled Driven Steel Pipe Pile.....	128.92	
For 5,000 PSI Concrete Grout Fill, Add	33.32	
For Piles Driven In Water, Add	41.68	
31 62 23 13-0020 VLF 18" Diameter x 71 LB/FT, Concrete-Filled Driven Steel Pipe Pile.....	145.13	
For 5,000 PSI Concrete Grout Fill, Add	34.94	
For Piles Driven In Water, Add	43.30	
31 62 23 13-0021 VLF 18" Diameter x 93 LB/FT, Concrete-Filled Driven Steel Pipe Pile.....	175.94	
For 5,000 PSI Concrete Grout Fill, Add	38.03	
For Piles Driven In Water, Add	46.39	

### 31 63 Bored Piles (31 60)

#### 31 63 36 Drilled Steel Piles (31 63)

##### 31 63 36 00-0001 Drill Hole (31 63 36)

Note: Excludes removal of excess material.

##### 31 63 36 00-0002 Drilling Mobilization (31 63 36 00-0001)

31 63 36 00-0003 EA >12" To 24" Diameter Hole, Drilling Mobilization .....	947.90
31 63 36 00-0004 EA >24" Diameter Hole, Drilling Mobilization.....	1,263.87

##### 31 63 36 00-0005 Drill Hole In Soil (31 63 36 00-0001)

31 63 36 00-0006 LF 18" Diameter, Up To 24' Depth, Drilled/Augered Hole .....	51.72
31 63 36 00-0007 LF 20" Diameter, Up To 24' Depth, Drilled/Augered Hole .....	60.14
31 63 36 00-0008 LF 22" Diameter, Up To 24' Depth, Drilled/Augered Hole .....	70.66
31 63 36 00-0009 LF 24" Diameter, Up To 24' Depth, Drilled/Augered Hole .....	83.29
31 63 36 00-0010 LF 26" Diameter, Up To 24' Depth, Drilled/Augered Hole .....	90.03
31 63 36 00-0011 LF 28" Diameter, Up To 24' Depth, Drilled/Augered Hole .....	99.04
31 63 36 00-0012 LF 30" Diameter, Up To 24' Depth, Drilled/Augered Hole .....	108.49

##### 31 63 36 00-0013 Steel H Piles (31 63 36)

##### 31 63 36 00-0014 Placed In Drilled Hole, Rolled Steel H-Section Piles (31 63 36 00-0013)

Note: Includes guides, bracing and alignment.

31 63 36 00-0015 VLF 8" x 8" x 36 LB/FT, Placed In Drilled Hole, Rolled Steel H Pile.....	30.97
For >3 To 9, Deduct	-1.38
For >9, Deduct	-2.86
For >2,400 To 3,600, Deduct	-1.09
For >3,600 To 4,800, Deduct	-2.17
For >4,800 To 6,000, Deduct	-3.72
For >6,000, Deduct	-5.27
31 63 36 00-0016 VLF 10" x 10" x 42 LB/FT, Placed In Drilled Hole, Rolled Steel H Pile.....	34.69
For >3 To 9, Deduct	-1.61
For >9, Deduct	-3.34
For >2,400 To 3,600, Deduct	-1.20
For >3,600 To 4,800, Deduct	-2.39
For >4,800 To 6,000, Deduct	-4.13
For >6,000, Deduct	-5.86

**31 Earthwork****31 60 Special Foundations and Load-bearing Elements****31 63 Bored Piles**

MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
31 63 36 00-0017 VLF 10" x 10" x 57 LB/FT, Placed In Drilled Hole, Rolled Steel H Pile .....	42.37	
For >3 To 9, Deduct	-2.19	
For >9, Deduct	-4.53	
For >2,400 To 3,600, Deduct	-1.39	
For >3,600 To 4,800, Deduct	-2.78	
For >4,800 To 6,000, Deduct	-4.90	
For >6,000, Deduct	-7.01	
31 63 36 00-0018 VLF 12" x 12" x 53 LB/FT, Placed In Drilled Hole, Rolled Steel H Pile .....	40.70	
For >3 To 9, Deduct	-2.04	
For >9, Deduct	-4.21	
For >2,400 To 3,600, Deduct	-1.36	
For >3,600 To 4,800, Deduct	-2.71	
For >4,800 To 6,000, Deduct	-4.75	
For >6,000, Deduct	-6.78	
31 63 36 00-0019 VLF 12" x 12" x 63 LB/FT, Placed In Drilled Hole, Rolled Steel H Pile .....	45.83	
For >3 To 9, Deduct	-2.42	
For >9, Deduct	-5.00	
For >2,400 To 3,600, Deduct	-1.48	
For >3,600 To 4,800, Deduct	-2.97	
For >4,800 To 6,000, Deduct	-5.26	
For >6,000, Deduct	-7.55	
31 63 36 00-0020 VLF 12" x 12" x 74 LB/FT, Placed In Drilled Hole, Rolled Steel H Pile .....	52.59	
For >3 To 9, Deduct	-2.84	
For >9, Deduct	-5.88	
For >2,400 To 3,600, Deduct	-1.68	
For >3,600 To 4,800, Deduct	-3.36	
For >4,800 To 6,000, Deduct	-5.99	
For >6,000, Deduct	-8.62	
31 63 36 00-0021 VLF 12" x 12" x 84 LB/FT, Placed In Drilled Hole, Rolled Steel H Pile .....	57.71	
For >3 To 9, Deduct	-3.23	
For >9, Deduct	-6.67	
For >2,400 To 3,600, Deduct	-1.81	
For >3,600 To 4,800, Deduct	-3.62	
For >4,800 To 6,000, Deduct	-6.50	
For >6,000, Deduct	-9.39	
31 63 36 00-0022 VLF 14" x 14" x 73 LB/FT, Placed In Drilled Hole, Rolled Steel H Pile .....	52.44	
For >3 To 9, Deduct	-2.81	
For >9, Deduct	-5.80	
For >2,400 To 3,600, Deduct	-1.69	
For >3,600 To 4,800, Deduct	-3.37	
For >4,800 To 6,000, Deduct	-6.00	
For >6,000, Deduct	-8.62	
31 63 36 00-0023 VLF 14" x 14" x 89 LB/FT, Placed In Drilled Hole, Rolled Steel H Pile .....	61.16	
For >3 To 9, Deduct	-3.46	
For >9, Deduct	-7.15	
For >2,400 To 3,600, Deduct	-1.90	
For >3,600 To 4,800, Deduct	-3.81	
For >4,800 To 6,000, Deduct	-6.87	
For >6,000, Deduct	-9.93	
31 63 36 00-0024 VLF 14" x 14" x 102 LB/FT, Placed In Drilled Hole, Rolled Steel H Pile .....	68.56	
For >3 To 9, Deduct	-3.92	
For >9, Deduct	-8.10	
For >2,400 To 3,600, Deduct	-2.12	
For >3,600 To 4,800, Deduct	-4.24	
For >4,800 To 6,000, Deduct	-7.67	
For >6,000, Deduct	-11.10	
31 63 36 00-0025 VLF 14" x 14" x 117 LB/FT, Placed In Drilled Hole, Rolled Steel H Pile .....	76.76	
For >3 To 9, Deduct	-4.54	
For >9, Deduct	-9.37	
For >2,400 To 3,600, Deduct	-2.33	
For >3,600 To 4,800, Deduct	-4.65	
For >4,800 To 6,000, Deduct	-8.49	
For >6,000, Deduct	-12.33	
<b>31 63 36 00-0026 Welded Steel Stud Pins</b> <small>(31 63 36 00-0013)</small>		
Note: Includes welding to steel piles.		
31 63 36 00-0027 EA 5/8" Diameter x 2-1/2" Long, Welded Steel Stud Pins .....	12.99	
For >3 To 9, Deduct	-0.09	
For >9, Deduct	-0.18	
For >50 To 150, Deduct	-0.59	
For >150 To 250, Deduct	-1.21	
For >250 To 500, Deduct	-1.83	
For >500, Deduct	-2.45	
31 63 36 00-0028 EA 5/8" Diameter x 5" Long, Welded Steel Stud Pins .....	14.22	
For >3 To 9, Deduct	-0.18	
For >9, Deduct	-0.38	
For >50 To 150, Deduct	-0.59	
For >150 To 250, Deduct	-1.24	
For >250 To 500, Deduct	-1.89	
For >500, Deduct	-2.54	





		<b>Earthwork</b>	<b>31</b>
		<b>Special Foundations and Load-bearing Elements</b>	<b>31 60</b>
		Bored Piles	31 63

15

MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
31 63 36 00-0029 EA 5/8" Diameter x 7" Long, Welded Steel Stud Pins ..... 15.40 For >3 To 9, Deduct -0.27 For >9, Deduct -0.56 For >50 To 150, Deduct -0.59 For >150 To 250, Deduct -1.27 For >250 To 500, Deduct -1.95 For >500, Deduct -2.63		
31 63 36 00-0030 EA 3/4" Diameter x 2-1/2" Long, Welded Steel Stud Pins ..... 14.32 For >3 To 9, Deduct -0.14 For >9, Deduct -0.30 For >50 To 150, Deduct -0.62 For >150 To 250, Deduct -1.29 For >250 To 500, Deduct -1.96 For >500, Deduct -2.62		
31 63 36 00-0031 EA 3/4" Diameter x 5" Long, Welded Steel Stud Pins ..... 16.17 For >3 To 9, Deduct -0.28 For >9, Deduct -0.59 For >50 To 150, Deduct -0.62 For >150 To 250, Deduct -1.33 For >250 To 500, Deduct -2.05 For >500, Deduct -2.76		
31 63 36 00-0032 EA 3/4" Diameter x 7" Long, Welded Steel Stud Pins ..... 17.46 For >3 To 9, Deduct -0.38 For >9, Deduct -0.79 For >50 To 150, Deduct -0.62 For >150 To 250, Deduct -1.37 For >250 To 500, Deduct -2.11 For >500, Deduct -2.86		
31 63 36 00-0033 EA 7/8" Diameter x 2-1/2" Long, Welded Steel Stud Pins ..... 15.92 For >3 To 9, Deduct -0.23 For >9, Deduct -0.47 For >50 To 150, Deduct -0.65 For >150 To 250, Deduct -1.37 For >250 To 500, Deduct -2.09 For >500, Deduct -2.81		
31 63 36 00-0034 EA 7/8" Diameter x 5" Long, Welded Steel Stud Pins ..... 18.94 For >3 To 9, Deduct -0.45 For >9, Deduct -0.93 For >50 To 150, Deduct -0.65 For >150 To 250, Deduct -1.44 For >250 To 500, Deduct -2.24 For >500, Deduct -3.03		
31 63 36 00-0035 EA 7/8" Diameter x 7" Long, Welded Steel Stud Pins ..... 20.42 For >3 To 9, Deduct -0.56 For >9, Deduct -1.16 For >50 To 150, Deduct -0.65 For >150 To 250, Deduct -1.48 For >250 To 500, Deduct -2.31 For >500, Deduct -3.15		
<b>31 63 36 00-0036 Concrete Fill</b> <small>(31 63 36)</small> See CSI section 03 37 16 00-0001 for pumping equipment.		
31 63 36 00-0037 VLF 18" Diameter Hole Pumped Concrete Fill For Drilled Pile ..... 62.76 For >3 To 9, Deduct -3.90 For >9, Deduct -8.06		
31 63 36 00-0038 VLF 20" Diameter Hole Pumped Concrete Fill For Drilled Pile ..... 69.73 For >3 To 9, Deduct -4.33 For >9, Deduct -8.95		
31 63 36 00-0039 VLF 22" Diameter Hole Pumped Concrete Fill For Drilled Pile ..... 76.71 For >3 To 9, Deduct -4.77 For >9, Deduct -9.85		
31 63 36 00-0040 VLF 24" Diameter Hole Pumped Concrete Fill For Drilled Pile ..... 83.68 For >3 To 9, Deduct -5.20 For >9, Deduct -10.75		
31 63 36 00-0041 VLF 26" Diameter Hole Pumped Concrete Fill For Drilled Pile ..... 90.64 For >3 To 9, Deduct -5.63 For >9, Deduct -11.64		
31 63 36 00-0042 VLF 28" Diameter Hole Pumped Concrete Fill For Drilled Pile ..... 97.62 For >3 To 9, Deduct -6.07 For >9, Deduct -12.54		
31 63 36 00-0043 VLF 30" Diameter Hole Pumped Concrete Fill For Drilled Pile ..... 111.04 For >3 To 9, Deduct -6.50 For >9, Deduct -13.43		

END OF SECTION 31

31	31	Earthwork
	31 60	Special Foundations and Load-bearing Elements
	31 63	Bored Piles



MINOR				TOTAL DIRECT		DEMOLITION
CSI	UOM	DESCRIPTION		UNIT	COST	UNIT COST

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Exterior Improvements		32
Operation and Maintenance of Exterior Improvements		32 01
Paving Cleaning		32 01 11

MINOR	CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
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## 32 Exterior Improvements

### 32 01 Operation and Maintenance of Exterior Improvements <sup>(32)</sup>

#### 32 01 11 Paving Cleaning <sup>(32 01)</sup>

##### 32 01 11 53 Paint Removal from Paving <sup>(32 01 11)</sup>

##### 32 01 11 53-0001 Remove Pavement Markings <sup>(32 01 11 53)</sup>

Note: Includes stripe removal by grinding, vacuuming of removed striped area and containment of debris.

32 01 11 53-0002	LF	Removal Of 4" Wide Painted Or Epoxy Pavement Striping .....	2.01
		For Up To 250, Add	1.01
		For >250 To 1,000, Add	0.50
		For >5,000 To 10,000, Deduct	-0.30
		For >10,000 To 25,000, Deduct	-0.50
		For >25,000 To 50,000, Deduct	-0.70
		For >50,000, Deduct	-0.80
32 01 11 53-0003	LF	Removal Of 6" Wide Painted Or Epoxy Pavement Striping .....	2.42
		For Up To 250, Add	1.21
		For >250 To 1,000, Add	0.61
		For >5,000 To 10,000, Deduct	-0.36
		For >10,000 To 25,000, Deduct	-0.61
		For >25,000 To 50,000, Deduct	-0.85
		For >50,000, Deduct	-0.97
32 01 11 53-0004	LF	Removal Of 8" Wide Painted Or Epoxy Pavement Striping .....	2.90
		For Up To 250, Add	1.45
		For >250 To 1,000, Add	0.73
		For >5,000 To 10,000, Deduct	-0.44
		For >10,000 To 25,000, Deduct	-0.73
		For >25,000 To 50,000, Deduct	-1.02
		For >50,000, Deduct	-1.16
32 01 11 53-0005	LF	Removal Of 12" Wide Painted Or Epoxy Pavement Striping .....	3.47
		For Up To 250, Add	1.74
		For >250 To 1,000, Add	0.87
		For >5,000 To 10,000, Deduct	-0.52
		For >10,000 To 25,000, Deduct	-0.87
		For >25,000 To 50,000, Deduct	-1.21
		For >50,000, Deduct	-1.39
32 01 11 53-0006	SF	Removal Of Painted Or Epoxy Pavement Marking, Letters Or Symbols .....	3.47
		For Up To 250, Add	1.74
		For >250 To 1,000, Add	0.87
		For >5,000 To 10,000, Deduct	-0.52
		For >10,000 To 25,000, Deduct	-0.87
		For >25,000 To 50,000, Deduct	-1.21
		For >50,000, Deduct	-1.39
32 01 11 53-0007	LF	Removal Of 4" Wide Thermoplastic Pavement Striping .....	2.59
		For Up To 250, Add	1.30
		For >250 To 1,000, Add	0.65
		For >5,000 To 10,000, Deduct	-0.39
		For >10,000 To 25,000, Deduct	-0.65
		For >25,000 To 50,000, Deduct	-0.91
		For >50,000, Deduct	-1.04
32 01 11 53-0008	LF	Removal Of 6" Wide Thermoplastic Pavement Striping .....	3.05
		For Up To 250, Add	1.53
		For >250 To 1,000, Add	0.76
		For >5,000 To 10,000, Deduct	-0.46
		For >10,000 To 25,000, Deduct	-0.76
		For >25,000 To 50,000, Deduct	-1.07
		For >50,000, Deduct	-1.22
32 01 11 53-0009	LF	Removal Of 8" Wide Thermoplastic Pavement Striping .....	3.69
		For Up To 250, Add	1.85
		For >250 To 1,000, Add	0.92
		For >5,000 To 10,000, Deduct	-0.55
		For >10,000 To 25,000, Deduct	-0.92
		For >25,000 To 50,000, Deduct	-1.29
		For >50,000, Deduct	-1.48
32 01 11 53-0010	LF	Removal Of 12" Wide Thermoplastic Pavement Striping .....	4.42
		For Up To 250, Add	2.21
		For >250 To 1,000, Add	1.11
		For >5,000 To 10,000, Deduct	-0.66
		For >10,000 To 25,000, Deduct	-1.11
		For >25,000 To 50,000, Deduct	-1.55
		For >50,000, Deduct	-1.77
32 01 11 53-0011	SF	Removal Of Thermoplastic Pavement Marking, Letters Or Symbols .....	4.42
		For Up To 250, Add	2.21
		For >250 To 1,000, Add	1.11
		For >5,000 To 10,000, Deduct	-0.66
		For >10,000 To 25,000, Deduct	-1.11
		For >25,000 To 50,000, Deduct	-1.55
		For >50,000, Deduct	-1.77

#### 32 01 13 Flexible Paving Surface Treatment <sup>(32 01)</sup>

**32 Exterior Improvements****32 01 Operation and Maintenance of Exterior Improvements****32 01 13 Flexible Paving Surface Treatment**

MINOR  
CSI UOM DESCRIPTION

TOTAL DIRECT DEMOLITION  
UNIT COST UNIT COST

**32 01 13 61 Slurry Seal (Latex Modified)** (32 01 13)**32 01 13 61-0001 Asphalt Seal Coating, For Roads And Parking Lot** (32 01 13 61)

Note: Includes sweeping and cleaning of area.

32 01 13 61-0002	EA	Asphalt Seal Coating Minimum Charge .....	809.23	
		Note: For projects where the total charges are less than the minimum set-up charge, use this task exclusively. This task should not be used in conjunction with any other tasks in this section.		
32 01 13 61-0003	SY	Up To 500 SY, Type II Slurry Seal Asphalt Coating, Per Coat.....	4.37	
		Note: 1/4" thick, 14 to 18 Lbs/SY.		
		For Tire Rubber Modified Slurry Seal (TRMSS), Add	0.33	
		For Rubberized Emulsion Aggregate Slurry (REAS), Add	0.39	
		For Rubberized Polymer Modified Emulsion (RPME), Add	0.49	
		For Each 0.5% Of Latex Addition, Add	0.36	
32 01 13 61-0004	SY	>500 To 1,000 SY, Type II Slurry Seal Asphalt Coating, Per Coat .....	4.06	
		Note: 1/4" thick, 14 to 18 Lbs/SY.		
		For Tire Rubber Modified Slurry Seal (TRMSS), Add	0.32	
		For Rubberized Emulsion Aggregate Slurry (REAS), Add	0.38	
		For Rubberized Polymer Modified Emulsion (RPME), Add	0.48	
		For Each 0.5% Of Latex Addition, Add	0.36	
32 01 13 61-0005	SY	>1,000 To 5,000 SY, Type II Slurry Seal Asphalt Coating, Per Coat .....	3.82	
		Note: 1/4" thick, 14 to 18 Lbs/SY.		
		For Tire Rubber Modified Slurry Seal (TRMSS), Add	0.31	
		For Rubberized Emulsion Aggregate Slurry (REAS), Add	0.37	
		For Rubberized Polymer Modified Emulsion (RPME), Add	0.47	
		For Each 0.5% Of Latex Addition, Add	0.36	
32 01 13 61-0006	SY	>5,000 To 20,000 SY, Type II Slurry Seal Asphalt Coating, Per Coat .....	3.59	
		Note: 1/4" thick, 14 to 18 Lbs/SY.		
		For Tire Rubber Modified Slurry Seal (TRMSS), Add	0.30	
		For Rubberized Emulsion Aggregate Slurry (REAS), Add	0.36	
		For Rubberized Polymer Modified Emulsion (RPME), Add	0.46	
		For Each 0.5% Of Latex Addition, Add	0.36	
32 01 13 61-0007	SY	>20,000 To 50,000 SY, Type II Slurry Seal Asphalt Coating, Per Coat .....	3.38	
		Note: 1/4" thick, 14 to 18 Lbs/SY.		
		For Tire Rubber Modified Slurry Seal (TRMSS), Add	0.28	
		For Rubberized Emulsion Aggregate Slurry (REAS), Add	0.34	
		For Rubberized Polymer Modified Emulsion (RPME), Add	0.44	
		For Each 0.5% Of Latex Addition, Add	0.36	
32 01 13 61-0008	SY	>50,000 SY, Type II Slurry Seal Asphalt Coating, Per Coat .....	3.18	
		Note: 1/4" thick, 14 to 18 Lbs/SY.		
		For Tire Rubber Modified Slurry Seal (TRMSS), Add	0.27	
		For Rubberized Emulsion Aggregate Slurry (REAS), Add	0.33	
		For Rubberized Polymer Modified Emulsion (RPME), Add	0.43	
		For Each 0.5% Of Latex Addition, Add	0.36	
32 01 13 61-0009	SY	Up To 500 SY, Type III Slurry Seal Asphalt Coating, Per Coat.....	5.44	
		Note: 3/8" thick, 25 to 30 Lbs/SY.		
		For Tire Rubber Modified Slurry Seal (TRMSS), Add	0.34	
		For Rubberized Emulsion Aggregate Slurry (REAS), Add	0.40	
		For Rubberized Polymer Modified Emulsion (RPME), Add	0.50	
		For Each 0.5% Of Latex Addition, Add	0.58	
32 01 13 61-0010	SY	>500 To 1,000 SY, Type III Slurry Seal Asphalt Coating, Per Coat .....	5.10	
		Note: 3/8" thick, 25 to 30 Lbs/SY.		
		For Tire Rubber Modified Slurry Seal (TRMSS), Add	0.33	
		For Rubberized Emulsion Aggregate Slurry (REAS), Add	0.39	
		For Rubberized Polymer Modified Emulsion (RPME), Add	0.49	
		For Each 0.5% Of Latex Addition, Add	0.58	
32 01 13 61-0011	SY	>1,000 To 5,000 SY, Type III Slurry Seal Asphalt Coating, Per Coat .....	4.85	
		Note: 3/8" thick, 25 to 30 Lbs/SY.		
		For Tire Rubber Modified Slurry Seal (TRMSS), Add	0.31	
		For Rubberized Emulsion Aggregate Slurry (REAS), Add	0.37	
		For Rubberized Polymer Modified Emulsion (RPME), Add	0.47	
		For Each 0.5% Of Latex Addition, Add	0.58	
32 01 13 61-0012	SY	>5,000 To 20,000 SY, Type III Slurry Seal Asphalt Coating, Per Coat .....	4.60	
		Note: 3/8" thick, 25 to 30 Lbs/SY.		
		For Tire Rubber Modified Slurry Seal (TRMSS), Add	0.30	
		For Rubberized Emulsion Aggregate Slurry (REAS), Add	0.36	
		For Rubberized Polymer Modified Emulsion (RPME), Add	0.46	
		For Each 0.5% Of Latex Addition, Add	0.58	
32 01 13 61-0013	SY	>20,000 To 50,000 SY, Type III Slurry Seal Asphalt Coating, Per Coat .....	4.38	
		Note: 3/8" thick, 25 to 30 Lbs/SY.		
		For Tire Rubber Modified Slurry Seal (TRMSS), Add	0.29	
		For Rubberized Emulsion Aggregate Slurry (REAS), Add	0.35	
		For Rubberized Polymer Modified Emulsion (RPME), Add	0.45	
		For Each 0.5% Of Latex Addition, Add	0.58	
32 01 13 61-0014	SY	>50,000 SY, Type III Slurry Seal Asphalt Coating, Per Coat .....	4.17	
		Note: 3/8" thick, 25 to 30 Lbs/SY.		
		For Tire Rubber Modified Slurry Seal (TRMSS), Add	0.28	
		For Rubberized Emulsion Aggregate Slurry (REAS), Add	0.34	
		For Rubberized Polymer Modified Emulsion (RPME), Add	0.44	
		For Each 0.5% Of Latex Addition, Add	0.58	

**32 01 13 62 Asphalt Surface Treatment** (32 01 13)**32 01 13 62-0001 Polymer-Modified, Microsurfacing Emulsion (MSE Microsurfacing)** (32 01 13 62)

Note: Use a blend of emulsified quick-set polymer-modified emulsion asphalt and latex-based polymer. Includes sweeping and cleaning of area.



Exterior Improvements		32
Operation and Maintenance of Exterior Improvements		32 01
Flexible Paving Surface Treatment		32 01 13

32

MINOR	CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
32 01 13 62-0002	SY		Up To 200 SY, 3/8" Polymer-Modified Microsurfacing Emulsion (MSE).....	9.68	
32 01 13 62-0003	SY		Up To 500 SY, 3/8" Polymer-Modified Microsurfacing Emulsion (MSE).....	9.15	
32 01 13 62-0004	SY		>500 To 1,000 SY, 3/8" Polymer-Modified Microsurfacing Emulsion (MSE).....	8.70	
32 01 13 62-0005	SY		>1,000 To 5,000 SY, 3/8" Polymer-Modified Microsurfacing Emulsion (MSE).....	8.30	
32 01 13 62-0006	SY		>5,000 To 10,000 SY, 3/8" Polymer-Modified Microsurfacing Emulsion (MSE).....	7.95	
32 01 13 62-0007	SY		>10,000 To 20,000 SY, 3/8" Polymer-Modified Microsurfacing Emulsion (MSE).....	7.64	
32 01 13 62-0008	SY		>20,000 To 50,000 SY, 3/8" Polymer-Modified Microsurfacing Emulsion (MSE).....	7.42	
32 01 13 62-0009	SY		>50,000 SY, 3/8" Polymer-Modified Microsurfacing Emulsion (MSE).....	7.30	

## 32 01 16 Flexible Paving Rehabilitation (32 01)

### 32 01 16 71 Cold Milling Asphalt Pavement (32 01 16)

#### 32 01 16 71-0001 Removal Of Asphalt Surface Course (32 01 16 71)

Note: Includes direct loading into truck.

#### 32 01 16 71-0002 Production Cold Milling Of Roads And Parking Areas (32 01 16 71-0001)

Note: For removal of entire lanes of roads or parking areas. Includes work around man holes, scuppers, drainage structures, catch basins, etc. Includes sweeping and loading into truck. See CSI section 01 74 19 00-0015 for hauling.

32 01 16 71-0003	SY	Up To 3" Depth, Production Cold Milling Of Asphalt.....	4.58	
		For Up To 2,500, Add	3.44	
		For >2,500 To 5,000, Add	1.15	
		For >10,000 To 25,000, Deduct	-0.46	
		For >25,000, Deduct	-0.69	
32 01 16 71-0004	SY	>3" To 6" Depth, Production Cold Milling Of Asphalt.....	6.11	
		For Up To 2,500, Add	4.58	
		For >2,500 To 5,000, Add	1.53	
		For >10,000 To 25,000, Deduct	-0.61	
		For >25,000, Deduct	-0.92	
32 01 16 71-0005	SY	>6" To 12" Depth, Production Cold Milling Of Asphalt.....	8.12	
		For Up To 2,500, Add	6.09	
		For >2,500 To 5,000, Add	2.03	
		For >10,000 To 25,000, Deduct	-0.81	
		For >25,000, Deduct	-1.22	

#### 32 01 16 71-0006 Limited Production Cold Milling (32 01 16 71-0001)

Note: For cross sections of roadways, trenching, partial shoulders, and other small or narrow areas. Includes work around man holes, scuppers, drainage structures, catch basins, etc. Includes sweeping and loading into truck. See CSI section 01 74 19 00-0015 for hauling.

32 01 16 71-0007	SY	Up To 3" Depth, Limited Cold Milling Of Asphalt.....	28.96	
		For >100 To 1,000, Deduct	-14.48	
		For >1,000, Deduct	-21.72	
32 01 16 71-0008	SY	>3" To 6" Depth, Limited Cold Milling Of Asphalt.....	38.35	
		For >100 To 1,000, Deduct	-19.18	
		For >1,000, Deduct	-28.76	
32 01 16 71-0009	SY	>6" To 12" Depth, Limited Cold Milling Of Asphalt.....	51.08	
		For >100 To 1,000, Deduct	-25.54	
		For >1,000, Deduct	-38.31	

### 32 01 16 73 In Place Cold Reused Asphalt Paving (32 01 16)

#### 32 01 16 73-0001 Cold-In-Place-Partial Depth Recycling Process With Foam Asphalt (32 01 16 73)

Note: Includes milling between 3"-6" of existing AC surface, computerized metered injection of liquid asphalt, cement, and water mix together as binder with milled material, spread and place with paver, follow by vibratory steel drum roller, Cat CB534D or equivalent, then follow by rubber tired roller, Hypac C560A or equivalent. The Contractor will provide all the necessary engineering, preconstruction soil analysis, stamped mix design, in-place compaction testing of recycled material and any other QC/QA during construction. The recycled material (from milled surface mixed with liquid asphalt, cement, and water) shall meet Class II AB (3/4" max.) gradation and shall compact at 96% relative compaction or higher. The Contractor's process shall be capable of producing between 450-500 tons per hour of recycled, in-place material. The Contractor shall warranty their work for a period of two years. Excludes traffic control, grading, utilities adjustment and wearing course of either Chip Seal or HMA overlay of the finished surface.

32 01 16 73-0002	SF	Up To 30,000 SF Cold In Place Recycling Process With Foam Asphalt.....	4.12	
32 01 16 73-0003	SF	>30,000 To 42,000 SF Cold In Place Recycling Process With Foam Asphalt.....	3.82	
32 01 16 73-0004	SF	>42,000 To 71,000 SF Cold In Place Recycling Process With Foam Asphalt.....	3.14	
32 01 16 73-0005	SF	>71,000 To 130,000 SF Cold In Place Recycling Process With Foam Asphalt.....	2.63	
32 01 16 73-0006	SF	>130,000 To 250,000 SF Cold In Place Recycling Process With Foam Asphalt.....	2.31	
32 01 16 73-0007	SF	>250,000 To 500,000 SF Cold In Place Recycling Process With Foam Asphalt.....	2.09	
32 01 16 73-0008	SF	>500,000 SF Cold In Place Recycling Process With Foam Asphalt.....	1.95	

## 32 01 17 Flexible Paving Repair (32 01)

See CSI section 32 12 16 00-0000 for large area resurfacing.

### 32 01 17 61 Sealing Cracks in Asphalt Paving (32 01 17)

Note: Includes removing loose materials and cleaning.

#### 32 01 17 61-0001 Hot-Applied, Pourable, Self-Adhesive Asphalt Binder Compounded With Standard Weight Aggregate Longitudinal Crack And Sealing Repair (32 01 17 61)

Note: Includes removing loose materials and cleaning.

**32 Exterior Improvements****32 01 Operation and Maintenance of Exterior Improvements****32 01 17 Flexible Paving Repair**

MINOR	CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
32 01 17 61-0002	LF	Up To 200 LF Fill Cracks Up To 1/2" x 1/2" With Hot Asphalt Crack Filler.....	1.79		
		Note: Includes air cleaning of cracks. Excludes backer rod where required and routing of crack.			
		For 3/4" x 1/2" Fill, Add	0.52		
		For 1" x 1/2" Fill, Add	0.98		
		For Backer Rod, Add	1.05		
32 01 17 61-0003	LF	>200 To 500 LF Fill Cracks Up To 1/2" x 1/2" With Hot Asphalt Crack Filler .....	1.46		
		Note: Includes air cleaning of cracks. Excludes backer rod where required and routing of crack.			
		For 3/4" x 1/2" Fill, Add	0.43		
		For 1" x 1/2" Fill, Add	0.82		
		For Backer Rod, Add	0.94		
32 01 17 61-0004	LF	>500 To 2,000 LF Fill Cracks Up To 1/2" x 1/2" With Hot Asphalt Crack Filler .....	1.16		
		Note: Includes air cleaning of cracks. Excludes backer rod where required and routing of crack.			
		For 3/4" x 1/2" Fill, Add	0.35		
		For 1" x 1/2" Fill, Add	0.66		
		For Backer Rod, Add	0.83		
32 01 17 61-0005	LF	>2,000 To 5,000 LF Fill Cracks Up To 1/2" x 1/2" With Hot Asphalt Crack Filler .....	1.00		
		Note: Includes air cleaning of cracks. Excludes backer rod where required and routing of crack.			
		For 3/4" x 1/2" Fill, Add	0.30		
		For 1" x 1/2" Fill, Add	0.58		
		For Backer Rod, Add	0.78		
32 01 17 61-0006	LF	>5,000 To 10,000 LF Fill Cracks Up To 1/2" x 1/2" With Hot Asphalt Crack Filler .....	0.90		
		Note: Includes air cleaning of cracks. Excludes backer rod where required and routing of crack.			
		For 3/4" x 1/2" Fill, Add	0.27		
		For 1" x 1/2" Fill, Add	0.52		
		For Backer Rod, Add	0.73		
32 01 17 61-0007	LF	>10,000 LF Fill Cracks Up To 1/2" x 1/2" With Hot Asphalt Crack Filler .....	0.83		
		Note: Includes air cleaning of cracks. Excludes backer rod where required and routing of crack.			
		For 3/4" x 1/2" Fill, Add	0.25		
		For 1" x 1/2" Fill, Add	0.47		
		For Backer Rod, Add	0.69		
32 01 17 61-0008	LF	Up To 200 LF Fill Cracks Up To 1/4" x 1/4" With Cold Pour Rubberized Asphalt Crack Filler .....	2.97		
32 01 17 61-0009	LF	>200 To 500 LF Fill Cracks Up To 1/4" x 1/4" With Cold Pour Rubberized Asphalt Crack Filler .....	2.39		
32 01 17 61-0010	LF	>500 To 2,000 LF Fill Cracks Up To 1/4" x 1/4" With Cold Pour Rubberized Asphalt Crack Filler .....	1.86		
32 01 17 61-0011	LF	>2,000 To 5,000 LF Fill Cracks Up To 1/4" x 1/4" With Cold Pour Rubberized Asphalt Crack Filler .....	1.63		
32 01 17 61-0012	LF	>5,000 To 10,000 LF Fill Cracks Up To 1/4" x 1/4" With Cold Pour Rubberized Asphalt Crack Filler .....	1.47		
32 01 17 61-0013	LF	>10,000 LF Fill Cracks Up To 1/4" x 1/4" With Cold Pour Rubberized Asphalt Crack Filler .....	1.36		
32 01 17 61-0014	LF	For Routing And Cleaning Of Crack, Add Per 1/2" Depth .....	0.52		
32 01 17 61-0015	LNMI	Crack Seal/Filler Per Lane (10' to 12' Wide) Per Mile .....	3,926.67		
		Note: This work shall consist of removal of loose matter from cracks with brooms and compressed air and sealing the crack with rubber or other elastomeric modified asphalt, ASTM D 1190, D 3405 or AASHTO M-173. The sealant shall be applied from the bottom of the crack up and the sealant material shall be sprinkled with dry sand to prevent pick-up by traffic.			

**32 01 17 63 Flexible Pavement Repair (32 01 17)****32 01 17 63-0001 Temporary Pot Hole Repair (32 01 17 63)**

Note: Includes removal of loose material and moisture, bonding agent, compaction, safety cones and hauling up to 15 miles. Excludes signage, barricades, flagmen, field survey or marking. See CSI section 01 74 19 00-0015 for hauling greater than 15 miles.

32 01 17 63-0002	EA	Temporary Pot Hole Repairs With Cold Mix Modified, Up To 3 Tons .....	1,781.32		
32 01 17 63-0003	TON	Temporary Pot Hole Repairs With Cold Mix Modified .....	543.45		
		Note: Use for each ton over 3 tons.			
32 01 17 63-0004	EA	Temporary Pot Hole Repairs With Cold Mix, Up To 3 Tons .....	1,685.35		
32 01 17 63-0005	TON	Temporary Pot Hole Repairs With Cold Mix .....	511.46		
		Note: Use for each ton over 3 tons.			
32 01 17 63-0006	EA	Temporary Pot Hole Repairs With Hot Mix Modified, Up To 3 Tons .....	1,637.36		
32 01 17 63-0007	TON	Temporary Pot Hole Repairs With Hot Mix Modified .....	495.47		
		Note: Use for each ton over 3 tons.			
32 01 17 63-0008	EA	Temporary Pot Hole Repairs With Hot Mix, Up To 3 Tons .....	1,589.38		
32 01 17 63-0009	TON	Temporary Pot Hole Repairs With Hot Mix .....	479.47		
		Note: Use for each ton over 3 tons.			

**32 01 17 63-0010 Permanent Pot Hole Repair (32 01 17 63)**

Note: Includes removal of loose material and moisture, saw cutting, chipping, squaring off, bonding agent, compaction and hauling up to 15 miles. Tasks do not include signage, barricades, flagmen, field survey or marking. See CSI section 01 74 19 00-0015 for hauling greater than 15 miles.

32 01 17 63-0011	EA	Permanent Pot Hole Repairs With Cold Mix, Up To 3 Tons .....	1,855.90		
32 01 17 63-0012	TON	Permanent Pot Hole Repairs With Cold Mix .....	604.35		
		Note: Use for each ton over 3 tons.			
32 01 17 63-0013	EA	Permanent Pot Hole Repairs With Hot Mix Modified, Up To 3 Tons .....	1,807.91		
32 01 17 63-0014	TON	Permanent Pot Hole Repairs With Hot Mix Modified .....	588.36		
		Note: Use for each ton over 3 tons.			
32 01 17 63-0015	EA	Permanent Pot Hole Repairs With Hot Mix, Up To 3 Tons .....	1,759.93		
32 01 17 63-0016	TON	Permanent Pot Hole Repairs With Hot Mix .....	572.36		
		Note: Use for each ton over 3 tons.			



Exterior Improvements		32
Operation and Maintenance of Exterior Improvements		32 01
Flexible Paving Repair		32 01 17

32

MINOR CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
32 01 17 63-0017		<b>Asphalt Placement For Small Repairs</b> (32 01 17 63) Note: This section is used for placing up to 100 tons of asphalt after a small area of existing asphalt is removed to allow work such as trenching across or in a road, excavating a drainage structure, uncovering a utility line, etc. Includes mobilization of paving equipment such as a roller, placing the asphalt, compaction and hauling up to 15 miles. Excludes saw cutting, demolition of existing pavement, and new subbase material. Use approximately 0.055 tons per square yard per inch of depth. See CSI section 02 41 19 13-0001 for saw cutting, 32 12 16 13-0000 for areas requiring more than 100 tons.		
32 01 17 63-0018	EA	Asphalt Placement For Small Repair Areas, Cold Mix Modified, Up To 3 Tons..... Note: For small areas of existing asphalt is removed to allow work such as trenching across or in a road, excavating a drainage structure, uncovering a utility line, etc.	2,450.73	
32 01 17 63-0019	TON	Asphalt Placement For Small Repair Areas, Cold Mix Modified ..... Note: For each ton over 3 to 100 tons. For small areas of existing asphalt is removed to allow work such as trenching across or in a road, excavating a drainage structure, uncovering a utility line, etc.	344.96	
32 01 17 63-0020	EA	Asphalt Placement For Small Repair Areas, Cold Mix, Up To 3 Tons..... Note: For small areas of existing asphalt is removed to allow work such as trenching across or in a road, excavating a drainage structure, uncovering a utility line, etc.	2,354.76	
32 01 17 63-0021	TON	Asphalt Placement For Small Repair Areas, Cold Mix..... Note: For each ton over 3 to 100 tons. For small areas of existing asphalt is removed to allow work such as trenching across or in a road, excavating a drainage structure, uncovering a utility line, etc.	312.97	
32 01 17 63-0022	EA	Asphalt Placement For Small Repair Areas, Hot Mix Modified, Up To 3 Tons..... Note: For small areas of existing asphalt is removed to allow work such as trenching across or in a road, excavating a drainage structure, uncovering a utility line, etc.	2,306.77	
32 01 17 63-0023	TON	Asphalt Placement For Small Repair Areas, Hot Mix Modified ..... Note: For each ton over 3 to 100 tons. For small areas of existing asphalt is removed to allow work such as trenching across or in a road, excavating a drainage structure, uncovering a utility line, etc.	296.98	
32 01 17 63-0024	EA	Asphalt Placement For Small Repair Areas, Hot Mix, Up To 3 Tons..... Note: For small areas of existing asphalt is removed to allow work such as trenching across or in a road, excavating a drainage structure, uncovering a utility line, etc.	2,258.79	
32 01 17 63-0025	TON	Asphalt Placement For Small Repair Areas, Hot Mix..... Note: For each ton over 3 to 100 tons. For small areas of existing asphalt is removed to allow work such as trenching across or in a road, excavating a drainage structure, uncovering a utility line, etc.	280.98	
32 01 17 63-0026		<b>Grind Asphalt</b> (32 01 17 63)		
32 01 17 63-0027	SY	Grinding Asphalt To Level Bump Or Raised Area.....	20.24	
32 01 26		<b>Rigid Paving Rehabilitation</b> (32 01)		
32 01 26 71		<b>Grooving of Concrete Paving</b> (32 01 26)		
32 01 26 71-0001		<b>Roadway Grooving</b> (32 01 26 71)		
32 01 26 71-0002	EA	First 500 SY Of Pavement Grooving, Concrete, Longitudinal.....	4,002.19	
32 01 26 71-0003	SY	Each SY Over First 500 SY Of Pavement Grooving, Concrete, Longitudinal .....	3.71	
32 01 26 71-0004	EA	First 500 SY Of Pavement Grooving, Concrete, Traverse.....	4,458.59	
32 01 26 71-0005	SY	Each SY Over First 500 SY Of Pavement Grooving, Concrete, Traverse .....	4.83	
32 01 26 71-0006		<b>Rumble Strips</b> (32 01 26 71)		
32 01 26 71-0007	EA	First 5280 LF Of MIARDS, Rumble Strips, Asphalt.....	4,217.44	
32 01 26 71-0008	LF	Each LF Over First 5280 LF Of MIARDS, Rumble Strips, Asphalt.....	0.77	
32 01 26 71-0009	EA	First 2000 LF Of MIARDS, Rumble Strips, Concrete.....	4,699.96	
32 01 26 71-0010	LF	Each LF Over First 2000 LF Of MIARDS, Rumble Strips, Concrete.....	0.85	
32 01 26 73		<b>Milling Of Concrete Paving</b> (32 01 26)		
32 01 26 73-0001		<b>Removal Of Concrete</b> (32 01 26 73) Note: Includes direct loading into truck.		
32 01 26 73-0002		<b>Production Milling Of Roads And Parking Areas</b> (32 01 26 73-0001) Note: For removal of entire lanes of roads or parking areas. Includes work around man holes, scuppers, drainage structures, catch basins, etc. Includes sweeping and loading into truck. See CSI section 01 74 19 00-0015 for hauling.		
32 01 26 73-0003	SY	Production Milling Of Concrete Per Inch.....	6.93	
32 01 26 73-0004		<b>Limited Production Milling</b> (32 01 26 73-0001) Note: For cross sections of roadways, trenching, partial shoulders, and other small or narrow areas. Includes work around man holes, scuppers, drainage structures, catch basins, etc. Includes sweeping and loading into truck. See CSI section 01 74 19 00-0015 for hauling.		
32 01 26 73-0005	SY	Limited Production Milling Of Concrete Per Inch .....	43.53	
32 10		<b>Bases, Ballasts, and Paving</b> (32)		
32 11		<b>Base Courses</b> (32 10)		
32 11 16		<b>Subbase Courses</b> (32 11)		
32 11 16 16		<b>Aggregate Subbase Courses</b> (32 11 16)		

**32 Exterior Improvements****32 10 Bases, Ballasts, and Paving****32 11 Base Courses**

MINOR  
CSI UOM DESCRIPTION

TOTAL DIRECT DEMOLITION  
UNIT COST UNIT COST

32 11 16 16-0001	Base And Subbase Courses For Roadways And Parking Areas (32 11 16 16)	
	Note: Includes 3/4" To 1-1/2" aggregate material, hauling up to 15 miles, dumping, spreading, grading, compacting and watering. See CSI section 01 74 19 00-0015 for hauling greater than 15 miles.	
32 11 16 16-0002	Base And Subbase Courses By The CY (32 11 16 16-0001)	
32 11 16 16-0003	CY Class II Graded Crushed Aggregate Roadway Base Course .....	89.87
32 11 16 16-0004	CY Class III Graded Crushed Aggregate Roadway Base Course .....	86.97
32 11 16 16-0005	Class II Base Courses By The SY (32 11 16 16-0001)	
32 11 16 16-0006	SY 2" Class II Graded Crushed Aggregate Base Course .....	4.94
	For Up To 500, Add	1.31
	For >500 To 1,000, Add	0.49
	For >5,000 To 10,000, Deduct	-0.19
	For >10,000, Deduct	-0.32
32 11 16 16-0007	SY 4" Class II Graded Crushed Aggregate Base Course .....	9.88
	For Up To 500, Add	2.61
	For >500 To 1,000, Add	0.99
	For >5,000 To 10,000, Deduct	-0.38
	For >10,000, Deduct	-0.64
32 11 16 16-0008	SY 6" Class II Graded Crushed Aggregate Base Course .....	14.81
	For Up To 500, Add	3.91
	For >500 To 1,000, Add	1.48
	For >5,000 To 10,000, Deduct	-0.56
	For >10,000, Deduct	-0.96
32 11 16 16-0009	SY 9" Class II Graded Crushed Aggregate Base Course .....	22.21
	For Up To 500, Add	5.87
	For >500 To 1,000, Add	2.22
	For >5,000 To 10,000, Deduct	-0.84
	For >10,000, Deduct	-1.44
32 11 16 16-0010	SY 12" Class II Graded Crushed Aggregate Base Course .....	29.62
	For Up To 500, Add	7.82
	For >500 To 1,000, Add	2.96
	For >5,000 To 10,000, Deduct	-1.13
	For >10,000, Deduct	-1.93

**32 11 23 Aggregate Base Courses (32 11)****32 11 23 16 Aggregate Base Courses (32 11 23)**

32 11 23 16-0001	Base Courses For Sidewalk (Asphalt Or Concrete) (32 11 23 16)	
	Note: Includes material, hauling up to 15 miles, placement, spreading, grading, and compaction. See CSI section 01 74 19 00-0015 for hauling greater than 15 miles.	
32 11 23 16-0002	SF 2" Crushed Aggregate Base Course For Sidewalks .....	0.59
	For Up To 1,000, Add	0.16
	For >1,000 To 2,500, Add	0.06
32 11 23 16-0003	SF 3" Crushed Aggregate Base Course For Sidewalks .....	0.85
	For Up To 1,000, Add	0.24
	For >1,000 To 2,500, Add	0.09
32 11 23 16-0004	SF 4" Crushed Aggregate Base Course For Sidewalks .....	1.11
	For Up To 1,000, Add	0.31
	For >1,000 To 2,500, Add	0.11
32 11 23 16-0005	SF 5" Crushed Aggregate Base Course For Sidewalks .....	1.43
	For Up To 1,000, Add	0.40
	For >1,000 To 2,500, Add	0.14
32 11 23 16-0006	SF 6" Crushed Aggregate Base Course For Sidewalks .....	1.76
	For Up To 1,000, Add	0.49
	For >1,000 To 2,500, Add	0.18
32 11 23 16-0007	SF 7" Crushed Aggregate Base Course For Sidewalks .....	2.02
	For Up To 1,000, Add	0.57
	For >1,000 To 2,500, Add	0.20
32 11 23 16-0008	SF 8" Crushed Aggregate Base Course For Sidewalks .....	2.30
	For Up To 1,000, Add	0.65
	For >1,000 To 2,500, Add	0.23

**32 11 26 Asphaltic Base Courses (32 11)****32 11 26 19 Bituminous-Stabilized Base Courses (32 11 26)**

32 11 26 19-0001	Bituminous-Stabilized Base Courses (32 11 26 19)	
32 11 26 19-0002	CY Bituminous Stabilized Base Course .....	130.08
	Note: 3/4" ASTM C33.	

**32 12 Flexible Paving (32 10)****32 12 13 Preparatory Coats (32 12)****32 12 13 13 Tack Coats (32 12 13)**





<b>Exterior Improvements</b>		<b>32</b>
<b>Bases, Ballasts, and Paving</b>		<b>32 10</b>
<b>Flexible Paving</b>		<b>32 12</b>

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MINOR CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
32 12 13 13-0001	SY	Tack Coat, 0.04 Gallon/SY .....	0.58	
		For Up To 150, Add	0.11	
		For >150 To 300, Add	0.06	
		For >300 To 500, Add	0.03	
		For >3,500 To 5,000, Deduct	-0.01	
		For >5,000, Deduct	-0.03	
32 12 13 13-0002	SY	Tack Coat, 0.05 Gallon/SY .....	0.63	
		For Up To 150, Add	0.12	
		For >150 To 300, Add	0.06	
		For >300 To 500, Add	0.03	
		For >3,500 To 5,000, Deduct	-0.02	
		For >5,000, Deduct	-0.04	
32 12 13 13-0003	SY	Tack Coat, 0.07 Gallon/SY .....	0.74	
		For Up To 150, Add	0.15	
		For >150 To 300, Add	0.07	
		For >300 To 500, Add	0.04	
		For >3,500 To 5,000, Deduct	-0.02	
		For >5,000, Deduct	-0.05	
32 12 13 13-0004	SY	Tack Coat, 0.08 Gallon/SY .....	0.80	
		For Up To 150, Add	0.16	
		For >150 To 300, Add	0.08	
		For >300 To 500, Add	0.04	
		For >3,500 To 5,000, Deduct	-0.02	
		For >5,000, Deduct	-0.05	
32 12 13 13-0005	SY	Tack Coat, 0.10 Gallon/SY .....	0.90	
		For Up To 150, Add	0.19	
		For >150 To 300, Add	0.09	
		For >300 To 500, Add	0.05	
		For >3,500 To 5,000, Deduct	-0.02	
		For >5,000, Deduct	-0.06	
32 12 13 13-0006	SY	Tack Coat, 0.11 Gallon/SY .....	0.96	
		For Up To 150, Add	0.20	
		For >150 To 300, Add	0.10	
		For >300 To 500, Add	0.05	
		For >3,500 To 5,000, Deduct	-0.02	
		For >5,000, Deduct	-0.06	
<b>32 12 13 19 Prime Coats</b> (32 12 13)				
32 12 13 19-0001	SY	Surface Prime Coat, 0.26 Gallon/SY .....	1.58	
		For Up To 150, Add	0.35	
		For >150 To 300, Add	0.16	
		For >300 To 500, Add	0.08	
		For >3,500 To 5,000, Deduct	-0.04	
		For >5,000, Deduct	-0.11	
32 12 13 19-0002	SY	Surface Prime Coat, 0.28 Gallon/SY .....	1.66	
		For Up To 150, Add	0.37	
		For >150 To 300, Add	0.17	
		For >300 To 500, Add	0.08	
		For >3,500 To 5,000, Deduct	-0.04	
		For >5,000, Deduct	-0.11	
32 12 13 19-0003	SY	Surface Prime Coat, 0.30 Gallon/SY .....	1.75	
		For Up To 150, Add	0.39	
		For >150 To 300, Add	0.18	
		For >300 To 500, Add	0.09	
		For >3,500 To 5,000, Deduct	-0.04	
		For >5,000, Deduct	-0.12	
<b>32 12 16 Asphalt Paving</b> (32 12)				
<b>32 12 16 13 Plant-Mix Asphalt Paving</b> (32 12 16)				
Note: Includes delivery up to 15 miles, placement, rolling, finishing and sweeping. Excludes base, tack or prime coat, seal coats and roadway fabrics (where required). See CSI section 01 74 19 00-0015 for hauling greater than 15 miles, 32 11 00 00-0000 for base courses, 32 12 13 13-0000 for tack coats, 32 12 13 19-0000 for prime coats, 32 12 16 39-0000 for roadway fabrics, 32 12 36 00-0000 for seal coats.				
32 12 16 13-0001		Intermediate Binder Courses, Hot Mix Asphalt (HMA) (32 12 16 13)		
Note: Meets Caltrans requirements.				

**32 Exterior Improvements****32 10 Bases, Ballasts, and Paving****32 12 Flexible Paving**

MINOR  
CSI UOM DESCRIPTION

TOTAL DIRECT DEMOLITION  
UNIT COST UNIT COST

32 12 16 13-0002	TON	Bituminous Hot Mix Intermediate Course 3,954 LB/CY .....	177.90
		Note: Includes Type A and Type B with 1/2" to 3/4" course or medium aggregate, placement, rolling, finishing and sweeping. Used for applications not described elsewhere in this section.	
		For Up To 10, Add	63.81
		For < 10 To 25, Add	28.23
		For > 100 To 150, Deduct	-4.45
		For > 150 To 200, Deduct	-8.90
		For > 200 To 300, Deduct	-13.34
		For > 300 To 500, Deduct	-17.79
		For > 500, Deduct	-26.69
		For Delivery With Dump Truck In Lieu Of Semi, Add	3.00
		For PG64-10 Asphalt, Add	22.05
		For Up To 25, Add	23.36
		For >25 To 50, Add	12.76
		For >500 To 1,000, Deduct	-7.77
		For >1,000 To 2,500, Deduct	-14.08
		For >2,500 To 5,000, Deduct	-21.85
		For >5,000, Deduct	-31.31
		For Warm Mix Additive, Add	9.55
32 12 16 13-0003	SY	1" Thick Bituminous Hot Mix Binder Course .....	10.02
		Note: Includes placement, rolling, finishing and sweeping.	
		For Up To 1000, Add	2.10
		For > 1000 To 2000, Add	1.10
		For > 5000 To 7500, Deduct	-0.50
		For > 7500 To 10000, Deduct	-0.75
		For > 10000 To 20000, Deduct	-1.00
		For > 20000, Deduct	-1.25
		For PG64-10 Asphalt, Add	1.21
		For Up To 1,000, Add	1.35
		For >1,000 To 2,000, Add	0.74
		For >10,000 To 20,000, Deduct	-0.44
		For >20,000 To 50,000, Deduct	-0.80
		For >50,000 To 100,000, Deduct	-1.25
		For >100,000, Deduct	-1.79
32 12 16 13-0004	SY	1-1/2" Thick Bituminous Hot Mix Binder Course .....	14.91
		Note: Includes placement, rolling, finishing and sweeping.	
		For Up To 1000, Add	3.12
		For > 1000 To 2000, Add	1.63
		For > 5000 To 7500, Deduct	-0.75
		For > 7500 To 10000, Deduct	-1.12
		For > 10000 To 20000, Deduct	-1.49
		For > 20000, Deduct	-1.86
		For PG64-10 Asphalt, Add	1.82
		For Up To 700, Add	2.00
		For >700 To 1,400, Add	1.10
		For >7,000 To 14,000, Deduct	-0.66
		For >14,000 To 32,000, Deduct	-1.20
		For >32,000 To 64,000, Deduct	-1.86
		For >64,000, Deduct	-2.67
32 12 16 13-0005	SY	2" Thick Bituminous Hot Mix Binder Course .....	19.37
		Note: Includes placement, rolling, finishing and sweeping.	
		For Up To 1000, Add	4.04
		For > 1000 To 2000, Add	2.10
		For > 5000 To 7500, Deduct	-0.97
		For > 7500 To 10000, Deduct	-1.45
		For > 10000 To 20000, Deduct	-1.94
		For > 20000, Deduct	-2.42
		For PG64-10 Asphalt, Add	2.42
		For Up To 500, Add	2.52
		For >500 To 1,000, Add	1.37
		For >5,000 To 10,000, Deduct	-0.87
		For >10,000 To 24,000, Deduct	-1.58
		For >24,000 To 48,000, Deduct	-2.45
		For >48,000, Deduct	-3.52
32 12 16 13-0006	SY	2-1/2" Thick Bituminous Hot Mix Binder Course .....	24.42
		Note: Includes placement, rolling, finishing and sweeping.	
		For Up To 1000, Add	5.10
		For > 1000 To 2000, Add	2.65
		For > 5000 To 7500, Deduct	-1.22
		For > 7500 To 10000, Deduct	-1.83
		For > 10000 To 20000, Deduct	-2.44
		For > 20000, Deduct	-3.05
		For PG64-10 Asphalt, Add	3.03
		For Up To 400, Add	3.21
		For >400 To 800, Add	1.75
		For >4,000 To 8,000, Deduct	-1.09
		For >8,000 To 20,000, Deduct	-1.99
		For >20,000 To 40,000, Deduct	-3.08
		For >40,000, Deduct	-4.42



Exterior Improvements		32
Bases, Ballasts, and Paving		32 10
Flexible Paving		32 12

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MINOR CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
32 12 16 13-0007	SY	3" Thick Bituminous Hot Mix Binder Course ..... Note: Includes placement, rolling, finishing and sweeping.	29.30	
		For Up To 1000, Add	6.11	
		For > 1000 To 2000, Add	3.18	
		For > 5000 To 7500, Deduct	-1.47	
		For > 7500 To 10000, Deduct	-2.20	
		For > 10000 To 20000, Deduct	-2.93	
		For > 20000, Deduct	-3.66	
		For PG64-10 Asphalt, Add	3.63	
		For Up To 340, Add	3.85	
		For >340 To 680, Add	3.31	
		For >3,400 To 6,800, Deduct	-1.31	
		For >6,800 To 17,000, Deduct	-2.38	
		For >17,000 To 34,000, Deduct	-3.69	
		For >34,000, Deduct	-5.30	
32 12 16 13-0008	SY	3-1/2" Thick Bituminous Hot Mix Binder Course ..... Note: Includes placement, rolling, finishing and sweeping.	34.19	
		For Up To 1000, Add	7.14	
		For > 1000 To 2000, Add	3.72	
		For > 5000 To 7500, Deduct	-1.71	
		For > 7500 To 10000, Deduct	-2.56	
		For > 10000 To 20000, Deduct	-3.42	
		For > 20000, Deduct	-4.27	
		For PG64-10 Asphalt, Add	4.24	
		For Up To 280, Add	4.49	
		For >280 To 560, Add	2.45	
		For >2,800 To 5,600, Deduct	-1.53	
		For >5,600 To 14,000, Deduct	-2.78	
		For >14,000 To 28,000, Deduct	-4.31	
		For >28,000, Deduct	-6.18	
32 12 16 13-0009	SY	4" Thick Bituminous Hot Mix Binder Course ..... Note: Includes placement, rolling, finishing and sweeping.	39.07	
		For Up To 1000, Add	8.15	
		For > 1000 To 2000, Add	4.25	
		For > 5000 To 7500, Deduct	-1.95	
		For > 7500 To 10000, Deduct	-2.93	
		For > 10000 To 20000, Deduct	-3.91	
		For > 20000, Deduct	-4.88	
		For PG64-10 Asphalt, Add	4.84	
		For Up To 250, Add	5.13	
		For >250 To 500, Add	2.80	
		For >2,500 To 5,000, Deduct	-1.75	
		For >5,000 To 12,000, Deduct	-3.18	
		For >12,000 To 24,000, Deduct	-4.93	
		For >24,000, Deduct	-7.07	
32 12 16 13-0010	SY	5" Thick Bituminous Hot Mix Binder Course ..... Note: Includes placement, rolling, finishing and sweeping.	48.84	
		For Up To 1000, Add	10.19	
		For > 1000 To 2000, Add	5.31	
		For > 5000 To 7500, Deduct	-2.44	
		For > 7500 To 10000, Deduct	-3.66	
		For > 10000 To 20000, Deduct	-4.88	
		For > 20000, Deduct	-6.11	
		For PG64-10 Asphalt, Add	6.05	
		For Up To 200, Add	6.41	
		For >200 To 400, Add	3.50	
		For >2,000 To 4,000, Deduct	-2.19	
		For >4,000 To 10,000, Deduct	-3.97	
		For >10,000 To 20,000, Deduct	-6.16	
		For >20,000, Deduct	-8.83	
32 12 16 13-0011	SY	6" Thick Bituminous Hot Mix Binder Course ..... Note: Includes placement, rolling, finishing and sweeping.	58.62	
		For Up To 1000, Add	12.23	
		For > 1000 To 2000, Add	6.37	
		For > 5000 To 7500, Deduct	-2.93	
		For > 7500 To 10000, Deduct	-4.40	
		For > 10000 To 20000, Deduct	-5.86	
		For > 20000, Deduct	-7.33	
		For PG64-10 Asphalt, Add	7.26	
		For Up To 160, Add	7.70	
		For >160 To 320, Add	4.21	
		For >1,600 To 3,200, Deduct	-2.63	
		For >3,200 To 8,000, Deduct	-4.77	
		For >8,000 To 16,000, Deduct	-7.39	
		For >16,000, Deduct	-10.60	
32 12 16 13-0012		Surface Courses, Hot Mix Asphalt (HMA) (32 12 16 13) Note: Meets Caltrans requirements.		

**32 Exterior Improvements****32 10 Bases, Ballasts, and Paving****32 12 Flexible Paving**

MINOR	CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
32 12 16 13-0013	TON		Bituminous Hot Mix Surface Course 3954 LB/CY .....178.91 Note: Includes Type A and Type B with 1/2" to 3/4" course or medium aggregate, placement, rolling, finishing and sweeping. Used for applications not described elsewhere in this section.		
			For PG64-10 Asphalt, Add	3.51	
			For Up To 10, Add	64.55	
			For > 10 To 25, Add	28.77	
			For > 100 To 150, Deduct	-4.47	
			For > 150 To 200, Deduct	-8.95	
			For > 200 To 300, Deduct	-13.42	
			For > 300 To 500, Deduct	-17.89	
			For > 500, Deduct	-26.84	
			For Delivery With Dump Truck In Lieu Of Semi, Add	3.00	
			For Up To 25, Add	24.85	
			For >25 To 50, Add	13.78	
			For >500 To 1,000, Deduct	-7.54	
			For >1,000 To 2,500, Deduct	-13.69	
			For >2,500 To 5,000, Deduct	-21.23	
			For >5,000, Deduct	-30.44	
			For Warm Mix Additive, Add	9.12	
32 12 16 13-0014	TON		Tire Rubber Modified Paving Asphalt (TRMAC) Surface Course (MAC-15TR) .....197.98 Note: Includes 1/2" to 3/4" course or medium aggregate, placement, rolling, finishing and sweeping.		
			For Up To 25, Add	27.92	
			For >25 To 50, Add	15.54	
			For >500 To 1,000, Deduct	-8.26	
			For Warm Mix Additive, Add	9.94	
32 12 16 13-0015	TON		Asphalt Rubberized Hot Mix (ARHM) Surface Course .....212.01 Note: Includes 1/2" to 3/4" course or medium aggregate, placement, rolling, finishing and sweeping.		
			For Up To 25, Add	29.32	
			For >25 To 50, Add	16.24	
			For >500 To 1,000, Deduct	-8.97	
			For >1,000 To 2,500, Deduct	-16.26	
			For >2,500 To 5,000, Deduct	-25.23	
			For >5,000, Deduct	-36.17	
			For Warm Mix Additive, Add	10.85	
32 12 16 13-0016	SY		1" Thick Bituminous Hot Mix Surface Course .....9.68 Note: Includes placement, rolling, finishing and sweeping.		
			For PG64-10 Asphalt, Add	0.18	
			For Up To 1000, Add	2.05	
			For > 1000 To 2000, Add	1.08	
			For > 5000 To 7500, Deduct	-0.48	
			For > 7500 To 10000, Deduct	-0.73	
			For > 10000 To 20000, Deduct	-0.97	
			For > 20000, Deduct	-1.21	
			For Up To 1,000, Add	1.39	
			For >1,000 To 2,000, Add	0.78	
			For >10,000 To 20,000, Deduct	-0.41	
			For >20,000 To 50,000, Deduct	-0.75	
			For >50,000 To 100,000, Deduct	-1.17	
			For >100,000, Deduct	-1.68	
32 12 16 13-0017	SY		1-1/2" Thick Bituminous Hot Mix Surface Course .....14.38 Note: Includes placement, rolling, finishing and sweeping.		
			For PG64-10 Asphalt, Add	0.28	
			For Up To 1000, Add	3.04	
			For > 1000 To 2000, Add	1.61	
			For > 5000 To 7500, Deduct	-0.72	
			For > 7500 To 10000, Deduct	-1.08	
			For > 10000 To 20000, Deduct	-1.44	
			For > 20000, Deduct	-1.80	
			For Up To 700, Add	2.04	
			For >700 To 1,400, Add	1.14	
			For >7,000 To 14,000, Deduct	-0.62	
			For >14,000 To 32,000, Deduct	-1.13	
			For >32,000 To 64,000, Deduct	-1.75	
			For >64,000, Deduct	-2.51	
32 12 16 13-0018	SY		2" Thick Bituminous Hot Mix Surface Course .....18.56 Note: Includes placement, rolling, finishing and sweeping.		
			For PG64-10 Asphalt, Add	0.37	
			For Up To 1000, Add	3.91	
			For > 1000 To 2000, Add	2.05	
			For > 5000 To 7500, Deduct	-0.93	
			For > 7500 To 10000, Deduct	-1.39	
			For > 10000 To 20000, Deduct	-1.86	
			For > 20000, Deduct	-2.32	
			For Up To 500, Add	2.55	
			For >500 To 1,000, Add	1.41	
			For >5,000 To 10,000, Deduct	-0.81	
			For >10,000 To 24,000, Deduct	-1.48	
			For >24,000 To 48,000, Deduct	-2.29	
			For >48,000, Deduct	-3.29	



<b>Exterior Improvements</b>		<b>32</b>
<b>Bases, Ballasts, and Paving</b>		<b>32 10</b>
<b>Flexible Paving</b>		<b>32 12</b>

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MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
32 12 16 13-0019 SY 2-1/2" Thick Bituminous Hot Mix Surface Course .....23.44 Note: Includes placement, rolling, finishing and sweeping. For PG64-10 Asphalt, Add 0.46 For Up To 1000, Add 4.94 For > 1000 To 2000, Add 2.60 For > 5000 To 7500, Deduct -1.17 For > 7500 To 10000, Deduct -1.76 For > 10000 To 20000, Deduct -2.34 For > 20000, Deduct -2.93 For Up To 400, Add 3.25 For >400 To 800, Add 1.80 For >4,000 To 8,000, Deduct -1.02 For >8,000 To 20,000, Deduct -1.86 For >20,000 To 40,000, Deduct -2.88 For >40,000, Deduct -4.13		
32 12 16 13-0020 SY 3" Thick Bituminous Hot Mix Surface Course .....28.13 Note: Includes placement, rolling, finishing and sweeping. For PG64-10 Asphalt, Add 0.55 For Up To 1000, Add 5.93 For > 1000 To 2000, Add 3.12 For > 5000 To 7500, Deduct -1.41 For > 7500 To 10000, Deduct -2.11 For > 10000 To 20000, Deduct -2.81 For > 20000, Deduct -3.52 For Up To 340, Add 3.91 For >340 To 680, Add 3.27 For >3,400 To 6,800, Deduct -1.22 For >6,800 To 17,000, Deduct -2.23 For >17,000 To 34,000, Deduct -3.45 For >34,000, Deduct -4.96		
32 12 16 13-0021 CSF Type F Asphalt Surface Cap 1/8" To 1/4" Thick For Use Only On Top Concrete Filled Trench.....90.67		
<b>32 12 16 13-0022 Hand Placed, Hot Mix Asphalt (HMA) (32 12 16 13)</b>		
32 12 16 13-0023 TON Hand Placed Hot Mixed Asphalt 3,954 LB/CY .....399.75 Note: For small areas not reachable by machine. Includes placement, rolling, finishing and sweeping. For > 10, Deduct -19.99		
<b>32 12 16 39 Paving Fabrics (32 12 16)</b> See CSI section 31 32 19 16-0000 for geotextile fabric.		
<b>32 12 16 39-0001 Geotextile Paving Fabrics (32 12 16 39)</b>		
32 12 16 39-0002 SY 3.6 Ounce/SY, 90 LB Grab Tensile Nonwoven Polypropylene Geotextile Paving Fabric (Carthage Mills FX-38A/O) .....2.15 For Up To 50, Add 0.47 For >50 To 150, Add 0.35 For >150 To 250, Add 0.23 For >250 To 500, Add 0.11		
32 12 16 39-0003 SY 4.1 Ounce/SY, 101 LB Grab Tensile Nonwoven Polypropylene Geotextile Paving Fabric (Carthage Mills FX-42 A/O) .....2.32 For Up To 50, Add 0.50 For >50 To 150, Add 0.37 For >150 To 250, Add 0.25 For >250 To 500, Add 0.12		
<b>32 12 16 43 Waterproofing Membranes (32 12 16)</b>		
<b>32 12 16 43-0001 Waterproofing Membranes (32 12 16 43)</b>		
32 12 16 43-0002 SY Up To 500 SY, Preformed Rubberized Asphalt Membrane .....39.90		
32 12 16 43-0003 SY >500 To 1,000 SY, Preformed Rubberized Asphalt Membrane .....30.18		
32 12 16 43-0004 SY >1,000 SY, Preformed Rubberized Asphalt Membrane .....19.19		
<b>32 12 33 Flexible Paving Surface Treatments (32 12)</b>		
<b>32 12 33 00-0001 Bituminous Surface Treatment For Roadways (32 12 33)</b> Note: 0.25 Gal bitumen per SY and 30 lb of gravel/SY.		
32 12 33 00-0002 SY Single Course Bituminous Treatment, Prepare And Clean Surface Roadway .....3.72		
32 12 33 00-0003 SY Double Course Bituminous Treatment, Prepare And Clean Surface Roadway .....6.65		
<b>32 12 33 00-0004 Bituminous Surface Treatment For Trails (32 12 33)</b> Note: 0.25 Gal bitumen per SY and 20 lb of gravel/SY.		
32 12 33 00-0005 SY Bituminous Surface Treatment, For Trails .....2.58		
<b>32 12 36 Seal Coats (32 12)</b> See CSI section 32 01 13 62-0000 for slurry seal.		
<b>32 12 36 13 Asphaltic Seal and Fog Coats (32 12 36)</b>		
<b>32 12 36 13-0001 Asphalt Emulsion Seal Coat (Chip Seal) (32 12 36 13)</b> Note: Includes initial sweeping prior to placement, cleaning of area, rolling and final sweeping. Excludes crack repair, fog sealer, and any additional consecutive days sweeping following final sweeping.		

**32 Exterior Improvements****32 10 Bases, Ballasts, and Paving****32 12 Flexible Paving**

MINOR CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
32 12 36 13-0002		<b>Fine Screenings - PMCRS-2h, Asphalt Emulsion Seal Coat (Chip Seal)</b> (32 12 36 13-0001) Note: 12 to 20 Pounds Per SY of 1/4" No. 10 with 0.15 to 0.30 gallons asphalt emulsion per SY.		
32 12 36 13-0003	SY	Up To 200 SY, Fine Screenings - PMCRS-2h, Asphalt Emulsion Seal Coat (Chip Seal) .....	4.74	
		For Each Additional 0.5% Latex Additive, Add .....	0.45	
32 12 36 13-0004	SY	>200 To 500 SY, Fine Screenings - PMCRS-2h, Asphalt Emulsion Seal Coat (Chip Seal) .....	4.27	
		For Each Additional 0.5% Latex Additive, Add .....	0.45	
32 12 36 13-0005	SY	>500 To 1,000 SY, Fine Screenings - PMCRS-2h, Asphalt Emulsion Seal Coat (Chip Seal) .....	4.06	
		For Each Additional 0.5% Latex Additive, Add .....	0.45	
32 12 36 13-0006	SY	>1,000 To 5,000 SY, Fine Screenings - PMCRS-2h, Asphalt Emulsion Seal Coat (Chip Seal) .....	3.81	
		For Each Additional 0.5% Latex Additive, Add .....	0.45	
32 12 36 13-0007	SY	>5,000 To 10,000 SY, Fine Screenings - PMCRS-2h, Asphalt Emulsion Seal Coat (Chip Seal) .....	3.69	
		For Each Additional 0.5% Latex Additive, Add .....	0.45	
32 12 36 13-0008	SY	>10,000 To 20,000 SY, Fine Screenings - PMCRS-2h, Asphalt Emulsion Seal Coat (Chip Seal) .....	3.58	
		For Each Additional 0.5% Latex Additive, Add .....	0.45	
32 12 36 13-0009	SY	>20,000 To 50,000 SY, Fine Screenings - PMCRS-2h, Asphalt Emulsion Seal Coat (Chip Seal) .....	3.46	
		For Each Additional 0.5% Latex Additive, Add .....	0.45	
32 12 36 13-0010	SY	>50,000 SY, Fine Screenings - PMCRS-2h, Asphalt Emulsion Seal Coat (Chip Seal) .....	3.38	
		For Each Additional 0.5% Latex Additive, Add .....	0.45	
32 12 36 13-0011		<b>Medium Fine Screenings - PMCRS-2h, Asphalt Emulsion Seal Coat (Chip Seal)</b> (32 12 36 13-0001) Note: 16 to 25 Pounds Per SY of 5/16" No. 8 with 0.25 to 0.35 gallons asphalt emulsion per SY.		
32 12 36 13-0012	SY	Up To 200 SY, Medium Fine Screenings - PMCRS-2h, Asphalt Emulsion Seal Coat (Chip Seal) .....	5.54	
		For Each Additional 0.5% Latex Additive, Add .....	0.56	
32 12 36 13-0013	SY	>200 To 500 SY, Medium Fine Screenings - PMCRS-2h, Asphalt Emulsion Seal Coat (Chip Seal) .....	5.00	
		For Each Additional 0.5% Latex Additive, Add .....	0.56	
32 12 36 13-0014	SY	>500 To 1,000 SY, Medium Fine Screenings - PMCRS-2h, Asphalt Emulsion Seal Coat (Chip Seal) .....	4.74	
		For Each Additional 0.5% Latex Additive, Add .....	0.56	
32 12 36 13-0015	SY	>1,000 To 5,000 SY, Medium Fine Screenings - PMCRS-2h, Asphalt Emulsion Seal Coat (Chip Seal) .....	4.60	
		For Each Additional 0.5% Latex Additive, Add .....	0.56	
32 12 36 13-0016	SY	>5,000 To 10,000 SY, Medium Fine Screenings - PMCRS-2h, Asphalt Emulsion Seal Coat (Chip Seal) .....	4.28	
		For Each Additional 0.5% Latex Additive, Add .....	0.56	
32 12 36 13-0017	SY	>10,000 To 20,000 SY, Medium Fine Screenings - PMCRS-2h, Asphalt Emulsion Seal Coat (Chip Seal) .....	4.10	
		For Each Additional 0.5% Latex Additive, Add .....	0.56	
32 12 36 13-0018	SY	>20,000 To 50,000 SY, Medium Fine Screenings - PMCRS-2h, Asphalt Emulsion Seal Coat (Chip Seal) .....	3.94	
		For Each Additional 0.5% Latex Additive, Add .....	0.56	
32 12 36 13-0019	SY	>50,000 SY, Medium Fine Screenings - PMCRS-2h, Asphalt Emulsion Seal Coat (Chip Seal) .....	3.86	
		For Each Additional 0.5% Latex Additive, Add .....	0.56	
32 12 36 13-0020		<b>Medium Screenings - PMCRS-2h, Asphalt Emulsion Seal Coat (Chip Seal)</b> (32 12 36 13-0001) Note: 20 to 30 Pounds Per SY of 3/8" No. 6 with 0.25 to 0.40 gallons asphalt emulsion per SY.		
32 12 36 13-0021	SY	Up To 200 SY, Medium Screenings - PMCRS-2h, Asphalt Emulsion Seal Coat (Chip Seal) .....	6.22	
		For Each Additional 0.5% Latex Additive, Add .....	0.67	
32 12 36 13-0022	SY	>200 To 500 SY, Medium Screenings - PMCRS-2h, Asphalt Emulsion Seal Coat (Chip Seal) .....	5.63	
		For Each Additional 0.5% Latex Additive, Add .....	0.67	
32 12 36 13-0023	SY	>500 To 1,000 SY, Medium Screenings - PMCRS-2h, Asphalt Emulsion Seal Coat (Chip Seal) .....	5.31	
		For Each Additional 0.5% Latex Additive, Add .....	0.67	
32 12 36 13-0024	SY	>1,000 To 5,000 SY, Medium Screenings - PMCRS-2h, Asphalt Emulsion Seal Coat (Chip Seal) .....	4.95	
		For Each Additional 0.5% Latex Additive, Add .....	0.67	
32 12 36 13-0025	SY	>5,000 To 10,000 SY, Medium Screenings - PMCRS-2h, Asphalt Emulsion Seal Coat (Chip Seal) .....	4.77	
		For Each Additional 0.5% Latex Additive, Add .....	0.67	
32 12 36 13-0026	SY	>10,000 To 20,000 SY, Medium Screenings - PMCRS-2h, Asphalt Emulsion Seal Coat (Chip Seal) .....	4.50	
		For Each Additional 0.5% Latex Additive, Add .....	0.67	
32 12 36 13-0027	SY	>20,000 To 50,000 SY, Medium Screenings - PMCRS-2h, Asphalt Emulsion Seal Coat (Chip Seal) .....	4.32	
		For Each Additional 0.5% Latex Additive, Add .....	0.67	
32 12 36 13-0028	SY	>50,000 SY, Medium Screenings - PMCRS-2h, Asphalt Emulsion Seal Coat (Chip Seal) .....	4.22	
		For Each Additional 0.5% Latex Additive, Add .....	0.67	
32 12 36 13-0029		<b>Course Screenings - PMCRS-2h, Asphalt Emulsion Seal Coat (Chip Seal)</b> (32 12 36 13-0001) Note: 23 to 35 Pounds Per SY of 1/2" No. 4 with 0.30 to 0.40 gallons asphalt emulsion per SY.		
32 12 36 13-0030	SY	Up To 200 SY, Coarse Screenings - PMCRS-2h, Asphalt Emulsion Seal Coat (Chip Seal) .....	6.31	
		For Each Additional 0.5% Latex Additive, Add .....	0.77	
32 12 36 13-0031	SY	>200 To 500 SY, Coarse Screenings - PMCRS-2h, Asphalt Emulsion Seal Coat (Chip Seal) .....	5.70	
		For Each Additional 0.5% Latex Additive, Add .....	0.77	
32 12 36 13-0032	SY	>500 To 1,000 SY, Coarse Screenings - PMCRS-2h, Asphalt Emulsion Seal Coat (Chip Seal) .....	5.39	
		For Each Additional 0.5% Latex Additive, Add .....	0.77	
32 12 36 13-0033	SY	>1,000 To 5,000 SY, Coarse Screenings - PMCRS-2h, Asphalt Emulsion Seal Coat (Chip Seal) .....	5.04	
		For Each Additional 0.5% Latex Additive, Add .....	0.77	
32 12 36 13-0034	SY	>5,000 To 10,000 SY, Coarse Screenings - PMCRS-2h, Asphalt Emulsion Seal Coat (Chip Seal) .....	4.86	
		For Each Additional 0.5% Latex Additive, Add .....	0.77	
32 12 36 13-0035	SY	>10,000 To 20,000 SY, Coarse Screenings - PMCRS-2h, Asphalt Emulsion Seal Coat (Chip Seal) .....	4.68	
		For Each Additional 0.5% Latex Additive, Add .....	0.77	
32 12 36 13-0036	SY	>20,000 To 50,000 SY, Coarse Screenings - PMCRS-2h, Asphalt Emulsion Seal Coat (Chip Seal) .....	4.41	
		For Each Additional 0.5% Latex Additive, Add .....	0.77	
32 12 36 13-0037	SY	>50,000 SY, Coarse Screenings - PMCRS-2h, Asphalt Emulsion Seal Coat (Chip Seal) .....	4.31	
		For Each Additional 0.5% Latex Additive, Add .....	0.77	



Exterior Improvements			32
Bases, Ballasts, and Paving			32 10
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MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
32 12 36 13-0038 Double Screenings - PMCRS-2h, Asphalt Emulsion Seal Coat (Chip Seal) <sup>(32 12 36 13-0001)</sup> Note: First coat 23 to 30 Pounds Per SY of 1/2" No. 4 with 0.20 to 0.35 gallons asphalt emulsion per SY, Second coat 12 to 20 Pounds Per SY of 1/4" No. 10 with 0.20 to 0.30 gallons asphalt emulsion per SY.		
32 12 36 13-0039 SY Up To 200 SY, Double Screenings - PMCRS-2h, Asphalt Emulsion Seal Coat (Chip Seal).....	9.48	
For Each Additional 0.5% Latex Additive, Add	1.11	
32 12 36 13-0040 SY >200 To 500 SY, Double Screenings - PMCRS-2h, Asphalt Emulsion Seal Coat (Chip Seal).....	8.68	
For Each Additional 0.5% Latex Additive, Add	1.11	
32 12 36 13-0041 SY >500 To 1,000 SY, Double Screenings - PMCRS-2h, Asphalt Emulsion Seal Coat (Chip Seal).....	8.21	
For Each Additional 0.5% Latex Additive, Add	1.11	
32 12 36 13-0042 SY >1,000 To 5,000 SY, Double Screenings - PMCRS-2h, Asphalt Emulsion Seal Coat (Chip Seal).....	7.69	
For Each Additional 0.5% Latex Additive, Add	1.11	
32 12 36 13-0043 SY >5,000 To 10,000 SY, Double Screenings - PMCRS-2h, Asphalt Emulsion Seal Coat (Chip Seal).....	7.40	
For Each Additional 0.5% Latex Additive, Add	1.11	
32 12 36 13-0044 SY >10,000 To 20,000 SY, Double Screenings - PMCRS-2h, Asphalt Emulsion Seal Coat (Chip Seal).....	7.06	
For Each Additional 0.5% Latex Additive, Add	1.11	
32 12 36 13-0045 SY >20,000 To 50,000 SY, Double Screenings - PMCRS-2h, Asphalt Emulsion Seal Coat (Chip Seal).....	6.79	
For Each Additional 0.5% Latex Additive, Add	1.11	
32 12 36 13-0046 SY >50,000 SY, Double Screenings - PMCRS-2h, Asphalt Emulsion Seal Coat (Chip Seal).....	6.66	
For Each Additional 0.5% Latex Additive, Add	1.11	
32 12 36 13-0047 Asphalt Emulsion Seal Coat (Scrub Seal) <sup>(32 12 36 13)</sup> Note: Includes initial sweeping prior to placement, cleaning of area, towed broom sled of scrub brush and final sweeping. Excludes crack repair, fog sealer, and any additional consecutive days sweeping following final sweeping. See CSI section 32 12 36 13-0084 for fog seal.		
32 12 36 13-0048 Fine Screenings - PMCRS-2h, Asphalt Emulsion Seal Coat (Scrub Seal) <sup>(32 12 36 13-0047)</sup> Note: 12 to 20 Pounds Per SY of 1/4" No. 10 with 0.15 to 0.30 gallons asphalt emulsion per SY.		
32 12 36 13-0049 SY Up To 200 SY, Fine Screenings - PMCRS-2h, Asphalt Emulsion Seal Coat (Scrub Seal).....	4.33	
For Each Additional 0.5% Latex Additive, Add	0.45	
32 12 36 13-0050 SY >200 To 500 SY, Fine Screenings - PMCRS-2h, Asphalt Emulsion Seal Coat (Scrub Seal).....	4.05	
For Each Additional 0.5% Latex Additive, Add	0.45	
32 12 36 13-0051 SY >500 To 1,000 SY, Fine Screenings - PMCRS-2h, Asphalt Emulsion Seal Coat (Scrub Seal).....	3.84	
For Each Additional 0.5% Latex Additive, Add	0.45	
32 12 36 13-0052 SY >1,000 To 5,000 SY, Fine Screenings - PMCRS-2h, Asphalt Emulsion Seal Coat (Scrub Seal).....	3.63	
For Each Additional 0.5% Latex Additive, Add	0.45	
32 12 36 13-0053 SY >5,000 To 10,000 SY, Fine Screenings - PMCRS-2h, Asphalt Emulsion Seal Coat (Scrub Seal).....	3.52	
For Each Additional 0.5% Latex Additive, Add	0.45	
32 12 36 13-0054 SY >10,000 To 20,000 SY, Fine Screenings - PMCRS-2h, Asphalt Emulsion Seal Coat (Scrub Seal).....	3.42	
For Each Additional 0.5% Latex Additive, Add	0.45	
32 12 36 13-0055 SY >20,000 To 50,000 SY, Fine Screenings - PMCRS-2h, Asphalt Emulsion Seal Coat (Scrub Seal).....	3.31	
For Each Additional 0.5% Latex Additive, Add	0.45	
32 12 36 13-0056 SY >50,000 SY, Fine Screenings - PMCRS-2h, Asphalt Emulsion Seal Coat (Scrub Seal).....	3.27	
For Each Additional 0.5% Latex Additive, Add	0.45	
32 12 36 13-0057 Medium Fine Screenings - PMCRS-2h, Asphalt Emulsion Seal Coat (Scrub Seal) <sup>(32 12 36 13-0047)</sup> Note: 16 to 25 Pounds Per SY of 5/16" No. 8 with 0.25 to 0.35 gallons asphalt emulsion per SY.		
32 12 36 13-0058 SY Up To 200 SY, Medium Fine Screenings - PMCRS-2h, Asphalt Emulsion Seal Coat (Scrub Seal).....	5.15	
For Each Additional 0.5% Latex Additive, Add	0.56	
32 12 36 13-0059 SY >200 To 500 SY, Medium Fine Screenings - PMCRS-2h, Asphalt Emulsion Seal Coat (Scrub Seal).....	4.81	
For Each Additional 0.5% Latex Additive, Add	0.56	
32 12 36 13-0060 SY >500 To 1,000 SY, Medium Fine Screenings - PMCRS-2h, Asphalt Emulsion Seal Coat (Scrub Seal).....	4.59	
For Each Additional 0.5% Latex Additive, Add	0.56	
32 12 36 13-0061 SY >1,000 To 5,000 SY, Medium Fine Screenings - PMCRS-2h, Asphalt Emulsion Seal Coat (Scrub Seal).....	4.44	
For Each Additional 0.5% Latex Additive, Add	0.56	
32 12 36 13-0062 SY >5,000 To 10,000 SY, Medium Fine Screenings - PMCRS-2h, Asphalt Emulsion Seal Coat (Scrub Seal).....	4.13	
For Each Additional 0.5% Latex Additive, Add	0.56	
32 12 36 13-0063 SY >10,000 To 20,000 SY, Medium Fine Screenings - PMCRS-2h, Asphalt Emulsion Seal Coat (Scrub Seal).....	3.94	
For Each Additional 0.5% Latex Additive, Add	0.56	
32 12 36 13-0064 SY >20,000 To 50,000 SY, Medium Fine Screenings - PMCRS-2h, Asphalt Emulsion Seal Coat (Scrub Seal).....	3.80	
For Each Additional 0.5% Latex Additive, Add	0.56	
32 12 36 13-0065 SY >50,000 SY, Medium Fine Screenings - PMCRS-2h, Asphalt Emulsion Seal Coat (Scrub Seal).....	3.75	
For Each Additional 0.5% Latex Additive, Add	0.56	
32 12 36 13-0066 Medium Screenings - PMCRS-2h, Asphalt Emulsion Seal Coat (Scrub Seal) <sup>(32 12 36 13-0047)</sup> Note: 20 to 30 Pounds Per SY of 3/8" No. 6 with 0.25 to 0.40 gallons asphalt emulsion per SY.		
32 12 36 13-0067 SY Up To 200 SY, Medium Screenings - PMCRS-2h, Asphalt Emulsion Seal Coat (Scrub Seal).....	5.89	
For Each Additional 0.5% Latex Additive, Add	0.67	
32 12 36 13-0068 SY >200 To 500 SY, Medium Screenings - PMCRS-2h, Asphalt Emulsion Seal Coat (Scrub Seal).....	5.46	
For Each Additional 0.5% Latex Additive, Add	0.67	
32 12 36 13-0069 SY >500 To 1,000 SY, Medium Screenings - PMCRS-2h, Asphalt Emulsion Seal Coat (Scrub Seal).....	5.15	
For Each Additional 0.5% Latex Additive, Add	0.67	
32 12 36 13-0070 SY >1,000 To 5,000 SY, Medium Screenings - PMCRS-2h, Asphalt Emulsion Seal Coat (Scrub Seal).....	4.81	
For Each Additional 0.5% Latex Additive, Add	0.67	
32 12 36 13-0071 SY >5,000 To 10,000 SY, Medium Screenings - PMCRS-2h, Asphalt Emulsion Seal Coat (Scrub Seal).....	4.62	
For Each Additional 0.5% Latex Additive, Add	0.67	
32 12 36 13-0072 SY >10,000 To 20,000 SY, Medium Screenings - PMCRS-2h, Asphalt Emulsion Seal Coat (Scrub Seal).....	4.34	
For Each Additional 0.5% Latex Additive, Add	0.67	

**32 Exterior Improvements****32 10 Bases, Ballasts, and Paving****32 12 Flexible Paving**

MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
32 12 36 13-0073 SY >20,000 To 50,000 SY, Medium Screenings - PMCRS-2h, Asphalt Emulsion Seal Coat (Scrub Seal) .....	4.17	
For Each Additional 0.5% Latex Additive, Add .....	0.67	
32 12 36 13-0074 SY >50,000 SY, Medium Screenings - PMCRS-2h, Asphalt Emulsion Seal Coat (Scrub Seal) .....	4.11	
For Each Additional 0.5% Latex Additive, Add .....	0.67	
<b>32 12 36 13-0075 Course Screenings - PMCRS-2h, Asphalt Emulsion Seal Coat (Scrub Seal)</b> (32 12 36 13-0047) Note: 23 to 35 Pounds Per SY of 1/2" No. 4 with 0.30 to 0.40 gallons asphalt emulsion per SY.		
32 12 36 13-0076 SY Up To 200 SY, Coarse Screenings - PMCRS-2h, Asphalt Emulsion Seal Coat (Scrub Seal) .....	5.98	
For Each Additional 0.5% Latex Additive, Add .....	0.77	
32 12 36 13-0077 SY >200 To 500 SY, Coarse Screenings - PMCRS-2h, Asphalt Emulsion Seal Coat (Scrub Seal) .....	5.56	
For Each Additional 0.5% Latex Additive, Add .....	0.77	
32 12 36 13-0078 SY >500 To 1,000 SY, Coarse Screenings - PMCRS-2h, Asphalt Emulsion Seal Coat (Scrub Seal) .....	5.23	
For Each Additional 0.5% Latex Additive, Add .....	0.77	
32 12 36 13-0079 SY >1,000 To 5,000 SY, Coarse Screenings - PMCRS-2h, Asphalt Emulsion Seal Coat (Scrub Seal) .....	4.88	
For Each Additional 0.5% Latex Additive, Add .....	0.77	
32 12 36 13-0080 SY >5,000 To 10,000 SY, Coarse Screenings - PMCRS-2h, Asphalt Emulsion Seal Coat (Scrub Seal) .....	4.69	
For Each Additional 0.5% Latex Additive, Add .....	0.77	
32 12 36 13-0081 SY >10,000 To 20,000 SY, Coarse Screenings - PMCRS-2h, Asphalt Emulsion Seal Coat (Scrub Seal) .....	4.52	
For Each Additional 0.5% Latex Additive, Add .....	0.77	
32 12 36 13-0082 SY >20,000 To 50,000 SY, Coarse Screenings - PMCRS-2h, Asphalt Emulsion Seal Coat (Scrub Seal) .....	4.27	
For Each Additional 0.5% Latex Additive, Add .....	0.77	
32 12 36 13-0083 SY >50,000 SY, Coarse Screenings - PMCRS-2h, Asphalt Emulsion Seal Coat (Scrub Seal) .....	4.20	
For Each Additional 0.5% Latex Additive, Add .....	0.77	
<b>32 12 36 13-0084 Fog Seal, CQS-1h</b> (32 12 36 13) Note: A fog seal is a light application of diluted, slow-setting asphalt emulsion without aggregate cover. Includes sweeping and cleaning of area.		
32 12 36 13-0085 SY Up To 200 SY, CQS-1h, Fog Seal .....	1.79	
32 12 36 13-0086 SY >200 To 500 SY, CQS-1h, Fog Seal .....	1.29	
32 12 36 13-0087 SY >500 To 1,000 SY, CQS-1h, Fog Seal .....	1.08	
32 12 36 13-0088 SY >1,000 To 5,000 SY, CQS-1h, Fog Seal .....	0.91	
32 12 36 13-0089 SY >5,000 To 10,000 SY, CQS-1h, Fog Seal .....	0.83	
32 12 36 13-0090 SY >10,000 To 20,000 SY, CQS-1h, Fog Seal .....	0.76	
32 12 36 13-0091 SY >20,000 To 50,000 SY, CQS-1h, Fog Seal .....	0.70	
32 12 36 13-0092 SY >50,000 SY, CQS-1h, Fog Seal .....	0.67	
<b>32 12 36 13-0093 Sand Sealer</b> (32 12 36 13) Note: A sand seal is an application of asphalt binder followed by placement of a layer of sand or fine aggregate, and then rolled to embed the sand or fine aggregate into the binder. Includes sweeping and cleaning of area.		
32 12 36 13-0094 SY Up To 200 SY, Sand Seal .....	2.80	
32 12 36 13-0095 SY >200 To 500 SY, Sand Seal .....	1.83	
32 12 36 13-0096 SY >500 To 1,000 SY, Sand Seal .....	1.82	
32 12 36 13-0097 SY >1,000 To 5,000 SY, Sand Seal .....	1.59	
32 12 36 13-0098 SY >5,000 To 10,000 SY, Sand Seal .....	1.48	
32 12 36 13-0099 SY >10,000 To 20,000 SY, Sand Seal .....	1.37	
32 12 36 13-0100 SY >20,000 To 50,000 SY, Sand Seal .....	1.29	
32 12 36 13-0101 SY >50,000 SY, Sand Seal .....	1.27	
<b>32 12 36 16 Coal Tar Seal Coats</b> (32 12 36)		
<b>32 12 36 16-0001 Thermoplastic Coal-Tar Asphalt Seal</b> (32 12 36 16) Note: Includes sweeping and cleaning of area.		
32 12 36 16-0002 SY Up To 500 SY, Type I Thermoplastic Coal-Tar Asphalt Seal .....	13.32	
32 12 36 16-0003 SY >500 To 1,000 SY, Type I Thermoplastic Coal-Tar Asphalt Seal .....	12.47	
32 12 36 16-0004 SY >1,000 To 5,000 SY, Type I Thermoplastic Coal-Tar Asphalt Seal .....	10.98	
32 12 36 16-0005 SY >5,000 To 20,000 SY, Type I Thermoplastic Coal-Tar Asphalt Seal .....	9.82	
32 12 36 16-0006 SY >20,000 To 50,000 SY, Type I Thermoplastic Coal-Tar Asphalt Seal .....	8.32	
32 12 36 16-0007 SY >50,000 SY, Type I Thermoplastic Coal-Tar Asphalt Seal .....	6.82	
32 12 36 16-0008 SY Up To 500 SY, Type II Thermoplastic Coal-Tar Asphalt Seal .....	16.07	
32 12 36 16-0009 SY >500 To 1,000 SY, Type II Thermoplastic Coal-Tar Asphalt Seal .....	15.13	
32 12 36 16-0010 SY >1,000 To 5,000 SY, Type II Thermoplastic Coal-Tar Asphalt Seal .....	13.36	
32 12 36 16-0011 SY >5,000 To 20,000 SY, Type II Thermoplastic Coal-Tar Asphalt Seal .....	12.00	
32 12 36 16-0012 SY >20,000 To 50,000 SY, Type II Thermoplastic Coal-Tar Asphalt Seal .....	10.22	
32 12 36 16-0013 SY >50,000 SY, Type II Thermoplastic Coal-Tar Asphalt Seal .....	8.44	
<b>32 12 73 Asphalt Paving Joint Sealants</b> (32 12)		
<b>32 12 73 00-0001 Expansion Joint In Sidewalk</b> (32 12 73)		
32 12 73 00-0002 LF For Hot Asphalt Poured Over Expansion Joint In Sidewalk .....	3.77	
<b>32 13 Rigid Paving</b> (32 10)		
<b>32 13 16 Decorative Concrete Paving</b> (32 13)		
<b>32 13 16 13 Patterned Concrete Paving</b> (32 13 16) See CSI section 32 17 26 00-0000 for tactile warning surfaces.		





<b>Exterior Improvements</b>		<b>32</b>
<b>Bases, Ballasts, and Paving</b>		<b>32 10</b>
<b>Rigid Paving</b>		<b>32 13</b>

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MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
32 13 16 13-0001 SF For Patterned (Tactile) Finish In Concrete Sidewalk..... Note: Stamped into concrete surface	4.80	
<b>32 13 43 Pervious Concrete Paving (32 13)</b>		
<b>32 13 43 00-0001 Pervious Concrete Assembly (32 13 43)</b> Note: Pervious concrete is a special concrete mix with high porosity that allows water to pass through it. For paving and sidewalks.		
32 13 43 00-0002 SF 6" Thick Pervious Concrete Paving..... Note: Includes filter fabric, concrete, curing, finish, and control joints. Excludes excavation, base, forms and expansion joints along existing.	16.75	
For >5,000 To 30,000, Deduct	-1.77	
For >30,000 To 100,000, Deduct	-3.23	
For >100,000, Deduct	-4.01	
32 13 43 00-0003 SF 9" Thick Pervious Concrete Paving..... Note: Includes filter fabric, concrete, curing, finish, and control joints. Excludes excavation, base, forms and expansion joints along existing.	21.34	
For >5,000 To 30,000, Deduct	-2.20	
For >30,000 To 100,000, Deduct	-3.92	
For >100,000, Deduct	-4.87	
<b>32 13 73 Concrete Paving Joint Sealants (32 13)</b>		
<b>32 13 73 13 Fuel-Resistant Concrete Paving Joint Sealants (32 13 73)</b>		
<b>32 13 73 13-0001 Concrete Pavement Joint And Crack Repair (32 13 73 13)</b> Note: Includes cutting joint, removal of existing material, sweeping and cleaning area.		
32 13 73 13-0002 LF Pavement Sealing, Roads Resealing Joints In Concrete Pavements For Roads .....	7.98	
<b>32 13 73 16 Field-Molded Concrete Paving Joint Sealants (32 13 73)</b>		
<b>32 13 73 16-0001 Preformed Elastomeric Concrete Pavement Joint And Crack Repair (32 13 73 16)</b> Note: Includes cutting joint, removal of existing material, sweeping and cleaning area.		
32 13 73 16-0002 LF Joint Sealing, Concrete Pavement Preformed Elastomeric .....	14.16	
<b>32 13 73 19 Compression Concrete Paving Joint Sealants (32 13 73)</b>		
<b>32 13 73 19-0001 Silicone Joint Sealant For Concrete Pavement (32 13 73 19)</b> Note: Installation includes high pressure water wash, sand blast, sweeping, cleaning area, backer rod and Dow Corning 888 silicone sealant. Demolition includes removal of existing material where saw cutting is not required. Excludes saw cutting.		
32 13 73 19-0002 LF 1/4" x 1/4" Expansion And Contraction Silicone Joint Sealant For Concrete Pavement .....	10.10	2.38
32 13 73 19-0003 LF 3/8" x 1/4" Expansion And Contraction Silicone Joint Sealant For Concrete Pavement .....	10.57	2.43
32 13 73 19-0004 LF 1/2" x 1/4" Expansion And Contraction Silicone Joint Sealant For Concrete Pavement .....	11.08	2.47
32 13 73 19-0005 LF 3/4" x 3/8" Expansion And Contraction Silicone Joint Sealant For Concrete Pavement .....	12.78	2.53
32 13 73 19-0006 LF 1" x 1/2" Expansion And Contraction Silicone Joint Sealant For Concrete Pavement .....	14.90	2.59
32 13 73 19-0007 LF 1-1/2" x 1/2" Expansion And Contraction Silicone Joint Sealant For Concrete Pavement .....	17.70	2.63
32 13 73 19-0008 LF 2" x 1/2" Expansion And Contraction Silicone Joint Sealant For Concrete Pavement .....	21.78	2.69
<b>32 14 Unit Paving (32 10)</b>		
<b>32 14 40 Stone Paving (32 14)</b>		
<b>32 14 40 00-0001 Cobble Stone (32 14 40)</b> Note: Includes 6" thick 2,500 psi concrete mix with various colors of rounded 4" to 8" diameter cobble stones, half embedded in concrete.		
32 14 40 00-0002 SF 4" to 8" diameter cobble stones, various colors, Up To 500 SF .....	32.84	
32 14 40 00-0003 SF 4" to 8" diameter cobble stones, various colors, > 500 SF..... Note: Half embedded in minimum 6" thick 2500 psi concrete mix.	25.85	
<b>32 15 Aggregate Surfacing (32 10)</b>		
<b>32 15 40 Crushed Stone Surfacing (32 15)</b> Note: Includes delivery up to 15 miles from supplier, placement, rolling and compaction water. See CSI section 01 74 19 00-0015 for hauling greater than 15 miles.		
<b>32 15 40 00-0001 Gravel Surfacing And Spreading (32 15 40)</b> Note: Includes delivered material, placement, rolling and compaction water.		
32 15 40 00-0002 CY Gravel Surfacing And Spreading .....	89.37	
<b>32 15 40 00-0003 Decomposed Granite (32 15 40)</b> Note: Includes delivered material, placement, rolling and compaction water.		

**32 Exterior Improvements****32 10 Bases, Ballasts, and Paving****32 15 Aggregate Surfacing**

MINOR	CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
32 15 40 00-0004	SY		3" To 4" Thick Decomposed Granite Screenings With Stabilizer Pathway .....	18.61	
			Note: Placed in 2 lifts.		
			For Additional 2" Lift	9.31	
			For >45 To 180, Deduct	-1.24	
			For >180 To 450, Deduct	-1.56	
			For >450, Deduct	-1.87	

**32 16 Curbs, Gutters, Sidewalks, and Driveways** (32 10)**32 16 13 Curbs and Gutters** (32 16)

Note: Includes transitions. Demolition Includes two saw cuts (each end) of curbs and gutters for lengths up to 100'. See CSI section 02 41 19 13-0001 for additional saw cuts within the 100'.

**32 16 13 13 Cast-In-Place Concrete Curbs and Gutters** (32 16 13)

Note: Includes concrete, forms, rebar (where required), rebar chairs (where necessary), expansion joints, finish and curing.

**32 16 13 13-0001 Cast In Place Concrete Curb And Gutter** (32 16 13 13)

Note: Includes concrete, forms, rebar, chairs (where necessary), transitions, expansion joints, finish and curing.

32 16 13 13-0002	LF	"A2-6 Modified" Concrete Curb And Gutter - Straight .....	33.46	12.70
		For Up To 20, Add	22.30	
		For >20 To 50, Add	12.26	
		For >50 To 100, Add	5.02	
		For >500 To 1,000, Deduct	-3.90	
		For >1,000, Deduct	-6.68	
		For Mountable Or Rolled Curb And Gutter, Add	1.61	
32 16 13 13-0003	LF	"A2-6 Modified" Concrete Curb And Gutter - Radius .....	37.19	12.70
		For Up To 20, Add	24.75	
		For >20 To 50, Add	13.59	
		For >50 To 100, Add	5.58	
		For >500 To 1,000, Deduct	-4.29	
		For >1,000, Deduct	-7.37	
		For Mountable Or Rolled Curb And Gutter, Add	1.73	
32 16 13 13-0004	LF	"A2-6" Concrete Curb And Gutter - Straight .....	42.25	16.94
		For Up To 20, Add	28.74	
		For >20 To 50, Add	16.06	
		For >50 To 100, Add	6.34	
		For >500 To 1,000, Deduct	-5.50	
		For >1,000, Deduct	-9.31	
		For Mountable Or Rolled Curb And Gutter, Add	2.93	
32 16 13 13-0005	LF	"A2-6" Concrete Curb And Gutter - Radius .....	57.16	19.05
		For Up To 20, Add	38.11	
		For >20 To 50, Add	20.96	
		For >50 To 100, Add	8.57	
		For >500 To 1,000, Deduct	-6.67	
		For >1,000, Deduct	-11.43	
		For Mountable Or Rolled Curb And Gutter, Add	2.76	
32 16 13 13-0006	LF	"B-2" Concrete Curb And Gutter - Straight .....	54.41	18.52
		For Up To 20, Add	36.35	
		For >20 To 50, Add	20.03	
		For >50 To 100, Add	8.16	
		For >500 To 1,000, Deduct	-6.42	
		For >1,000, Deduct	-11.00	
		For Mountable Or Rolled Curb And Gutter, Add	2.75	
32 16 13 13-0007	LF	"B-2" Concrete Curb And Gutter - Radius .....	57.03	18.52
		For Up To 20, Add	37.92	
		For >20 To 50, Add	20.81	
		For >50 To 100, Add	8.55	
		For >500 To 1,000, Deduct	-6.56	
		For >1,000, Deduct	-11.26	
		For Mountable Or Rolled Curb And Gutter, Add	2.60	
32 16 13 13-0008	LF	6" x 12" Cast In Place Concrete Gutter With 6" Curb And Face - Straight .....	31.03	12.70
		For Up To 20, Add	20.84	
		For >20 To 50, Add	11.53	
		For >50 To 100, Add	4.65	
		For >500 To 1,000, Deduct	-3.77	
		For >1,000, Deduct	-6.44	
		For Mountable Or Rolled Curb And Gutter, Add	1.74	
32 16 13 13-0009	LF	6" x 12" Cast In Place Concrete Gutter With 6" Curb And Face - Radius .....	33.81	16.94
		For Up To 20, Add	22.72	
		For >20 To 50, Add	12.58	
		For >50 To 100, Add	5.07	
		For >500 To 1,000, Deduct	-4.12	
		For >1,000, Deduct	-7.03	
		For Mountable Or Rolled Curb And Gutter, Add	1.91	
32 16 13 13-0010	LF	6" x 18" Cast In Place Concrete Gutter With 6" Curb And Face - Straight .....	39.65	14.08
		For Up To 20, Add	26.60	
		For >20 To 50, Add	14.70	
		For >50 To 100, Add	5.95	
		For >500 To 1,000, Deduct	-4.79	
		For >1,000, Deduct	-8.17	
		For Mountable Or Rolled Curb And Gutter, Add	2.17	



Exterior Improvements			32
Bases, Ballasts, and Paving			32 10
Curbs, Gutters, Sidewalks, and Driveways			32 16

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MINOR	CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
32 16 13 13-0011	LF	6" x 18" Cast In Place Concrete Gutter With 6" Curb And Face - Radius	.....	43.71	15.67
		For Up To 20, Add		29.35	
		For >20 To 50, Add		16.24	
		For >50 To 100, Add		6.56	
		For >500 To 1,000, Deduct		-5.31	
		For >1,000, Deduct		-9.05	
		For Mountable Or Rolled Curb And Gutter, Add		2.44	
32 16 13 13-0012	LF	6" x 24" Cast In Place Concrete Gutter With 6" Curb And Face - Straight (Type A3-6)	.....	48.26	16.94
		For Up To 20, Add		32.34	
		For >20 To 50, Add		17.86	
		For >50 To 100, Add		7.24	
		For >500 To 1,000, Deduct		-5.80	
		For >1,000, Deduct		-9.91	
		For Mountable Or Rolled Curb And Gutter, Add		2.59	
32 16 13 13-0013	LF	6" x 24" Cast In Place Concrete Gutter With 6" Curb And Face - Radius (Type A3-6)	.....	53.61	19.05
		For Up To 20, Add		35.98	
		For >20 To 50, Add		19.89	
		For >50 To 100, Add		8.04	
		For >500 To 1,000, Deduct		-6.49	
		For >1,000, Deduct		-11.07	
		For Mountable Or Rolled Curb And Gutter, Add		2.96	
32 16 13 13-0014	LF	6" x 30" Cast In Place Concrete Gutter With 6" Curb And Face - Straight	.....	57.42	20.11
		For Up To 20, Add		38.47	
		For >20 To 50, Add		21.25	
		For >50 To 100, Add		8.61	
		For >500 To 1,000, Deduct		-6.89	
		For >1,000, Deduct		-11.78	
		For Mountable Or Rolled Curb And Gutter, Add		3.08	
32 16 13 13-0015	LF	6" x 30" Cast In Place Concrete Gutter With 6" Curb And Face - Radius	.....	62.99	22.23
		For Up To 20, Add		42.24	
		For >20 To 50, Add		23.34	
		For >50 To 100, Add		9.45	
		For >500 To 1,000, Deduct		-7.59	
		For >1,000, Deduct		-12.97	
		For Mountable Or Rolled Curb And Gutter, Add		3.43	
32 16 13 13-0016	LF	6" x 36" Cast In Place Concrete Gutter With 6" Curb And Face - Straight	.....	66.57	23.28
		For Up To 20, Add		44.60	
		For >20 To 50, Add		24.63	
		For >50 To 100, Add		9.99	
		For >500 To 1,000, Deduct		-7.99	
		For >1,000, Deduct		-13.64	
		For Mountable Or Rolled Curb And Gutter, Add		3.56	
32 16 13 13-0017	LF	6" x 36" Cast In Place Concrete Gutter With 6" Curb And Face - Radius	.....	72.38	25.40
		For Up To 20, Add		48.51	
		For >20 To 50, Add		26.80	
		For >50 To 100, Add		10.86	
		For >500 To 1,000, Deduct		-8.70	
		For >1,000, Deduct		-14.86	
		For Mountable Or Rolled Curb And Gutter, Add		3.89	
32 16 13 13-0018	LF	6" x 42" Cast In Place Concrete Gutter With 6" Curb And Face - Straight	.....	75.72	26.46
		For Up To 20, Add		50.72	
		For >20 To 50, Add		28.01	
		For >50 To 100, Add		11.36	
		For >500 To 1,000, Deduct		-9.08	
		For >1,000, Deduct		-15.51	
		For Mountable Or Rolled Curb And Gutter, Add		4.04	
32 16 13 13-0019	LF	6" x 42" Cast In Place Concrete Gutter With 6" Curb And Face - Radius	.....	83.86	29.63
		For Up To 20, Add		56.24	
		For >20 To 50, Add		31.09	
		For >50 To 100, Add		12.58	
		For >500 To 1,000, Deduct		-10.12	
		For >1,000, Deduct		-17.28	
		For Mountable Or Rolled Curb And Gutter, Add		4.57	
32 16 13 13-0020		Cast In Place Concrete Curbs (32 16 13 13)			
		Note: Includes delivered concrete, forms, rebar, chairs (where necessary), expansion joints, finish and curing.			
32 16 13 13-0021	LF	"B3" Cast In Place Concrete Curb	.....	13.06	10.74
32 16 13 13-0022	LF	"B3" Cast In Place Concrete Curb - Radius	.....	14.85	12.35
32 16 13 13-0023	LF	"B1" Cast In Place Concrete Curb	.....	30.23	10.74
32 16 13 13-0024	LF	"B1" Cast In Place Concrete Curb - Radius	.....	34.55	11.82
32 16 13 13-0025	LF	"A1-150" Cast In Place Concrete Curb	.....	29.21	10.74
32 16 13 13-0026	LF	"A1-150" Cast In Place Concrete Curb - Radius	.....	33.39	11.82
32 16 13 13-0027	LF	"A1-200" Cast In Place Concrete Curb	.....	30.67	10.74
32 16 13 13-0028	LF	"A1-200" Cast In Place Concrete Curb - Radius	.....	35.04	11.82
32 16 13 13-0029	LF	6" x 12" Cast In Place Concrete Curb (Type A1-6)	.....	22.61	10.74
		For Mountable Curb, Add		1.42	
		For Up To 20, Add		13.11	
		For >20 To 50, Add		7.41	
		For >50 To 100, Add		2.85	
		For >500 To 1,000, Deduct		-2.85	
		For >1,000, Deduct		-4.84	

**32 Exterior Improvements****32 10 Bases, Ballasts, and Paving****32 16 Curbs, Gutters, Sidewalks, and Driveways**

MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
32 16 13 13-0030 LF 6" x 12" Cast In Place Concrete Curb - Radius (Type A1-6).....	25.84	12.35
For Mountable Curb, Add	1.66	
For Up To 20, Add	15.10	
For >20 To 50, Add	8.54	
For >50 To 100, Add	3.28	
For >500 To 1,000, Deduct	-3.28	
For >1,000, Deduct	-5.56	
32 16 13 13-0031 LF 6" x 14" Cast In Place Concrete Curb (Type A1-8).....	24.95	10.74
For Mountable Curb, Add	1.54	
For Up To 20, Add	14.39	
For >20 To 50, Add	8.13	
For >50 To 100, Add	3.13	
For >500 To 1,000, Deduct	-3.13	
For >1,000, Deduct	-5.31	
32 16 13 13-0032 LF 6" x 14" Cast In Place Concrete Curb - Radius (Type A1-8).....	28.52	12.35
For Mountable Curb, Add	1.80	
For Up To 20, Add	16.57	
For >20 To 50, Add	9.37	
For >50 To 100, Add	3.60	
For >500 To 1,000, Deduct	-3.60	
For >1,000, Deduct	-6.11	
32 16 13 13-0033 LF 6" x 16" Cast In Place Concrete Curb.....	27.60	10.74
For Mountable Curb, Add	1.64	
For Up To 20, Add	15.72	
For >20 To 50, Add	8.88	
For >50 To 100, Add	3.42	
For >500 To 1,000, Deduct	-3.42	
For >1,000, Deduct	-5.82	
32 16 13 13-0034 LF 6" x 16" Cast In Place Concrete Curb - Radius.....	31.47	16.11
For Mountable Curb, Add	1.93	
For Up To 20, Add	18.10	
For >20 To 50, Add	10.23	
For >50 To 100, Add	3.94	
For >500 To 1,000, Deduct	-3.94	
For >1,000, Deduct	-6.69	
32 16 13 13-0035 LF 6" x 18" Cast In Place Concrete Curb.....	29.75	10.74
For Mountable Curb, Add	1.73	
For Up To 20, Add	16.80	
For >20 To 50, Add	9.49	
For >50 To 100, Add	3.66	
For >500 To 1,000, Deduct	-3.66	
For >1,000, Deduct	-6.23	
32 16 13 13-0036 LF 6" x 18" Cast In Place Concrete Curb - Radius.....	33.55	12.35
For Mountable Curb, Add	1.98	
For Up To 20, Add	19.06	
For >20 To 50, Add	10.77	
For >50 To 100, Add	4.15	
For >500 To 1,000, Deduct	-4.15	
For >1,000, Deduct	-7.06	
32 16 13 13-0037 LF 6" x 24" Cast In Place Concrete Curb.....	34.67	11.82
For Mountable Curb, Add	1.79	
For Up To 20, Add	18.87	
For >20 To 50, Add	10.63	
For >50 To 100, Add	4.12	
For >500 To 1,000, Deduct	-4.12	
For >1,000, Deduct	-7.05	
32 16 13 13-0038 LF 6" x 24" Cast In Place Concrete Curb - Radius.....	38.72	13.42
For Mountable Curb, Add	2.03	
For Up To 20, Add	21.16	
For >20 To 50, Add	11.92	
For >50 To 100, Add	4.62	
For >500 To 1,000, Deduct	-4.62	
For >1,000, Deduct	-7.90	
32 16 13 13-0039 LF 12" x 24" Cast In Place Concrete Curb.....	47.84	13.42
For Mountable Curb, Add	1.53	
For Up To 20, Add	22.99	
For >20 To 50, Add	12.84	
For >50 To 100, Add	5.08	
For >500 To 1,000, Deduct	-5.08	
For >1,000, Deduct	-8.81	
32 16 13 13-0040 LF 12" x 24" Cast In Place Concrete Curb - Radius.....	53.16	15.03
For Mountable Curb, Add	1.74	
For Up To 20, Add	25.67	
For >20 To 50, Add	14.34	
For >50 To 100, Add	5.67	
For >500 To 1,000, Deduct	-5.67	
For >1,000, Deduct	-9.83	
32 16 13 13-0041 EA Additional Finish For Handicap Drop Section In Curb.....	80.52	

**32 16 13 14 Machine Formed, Slip Form Curbs (32 16 13)**

Note: Includes delivered concrete, steel, expansion joints and finish.

**32 16 13 14-0001 Curbs, Machine Formed, Slip Form (32 16 13 14)**

Note: Includes delivered concrete, steel, expansion joints and finish.



<b>Exterior Improvements</b>		<b>32</b>
<b>Bases, Ballasts, and Paving</b>		<b>32 10</b>
<b>Curbs, Gutters, Sidewalks, and Driveways</b>		<b>32 16</b>

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MINOR	CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
32 16 13 14-0002	EA		Machine Formed Concrete Curb Minimum Set-Up Charge (One Time Per Job).....	1,427.51	
Note: For projects where the total curbing charge is less than the minimum set-up charge, use this task exclusively. This task shall not be used in conjunction with any other tasks in this section.					
32 16 13 14-0003	LF		6" x 12" Straight Concrete Curb, Machine Formed.....	19.40	
32 16 13 14-0004	LF		6" x 12" Curved Concrete Curb, Machine Formed.....	24.65	
32 16 13 14-0005	LF		6" x 18" Straight Concrete Curb, Machine Formed.....	25.90	
32 16 13 14-0006	LF		6" x 18" Curved Concrete Curb, Machine Formed.....	31.48	
<b>32 16 13 16 Steel Faced Curbs (32 16 13)</b>					
Note: Fabrication includes handicap and other curb access cuts.					
<b>32 16 13 16-0001 Sidewalk/Curb Facing (32 16 13 16)</b>					
Note: Fabrication includes handicap and other curb access cuts.					
32 16 13 16-0002	LF		3" Steel Sidewalk/Curb Facing, With Steel Anchor, 12" On Center.....	16.23	5.16
For Curved Section, Add				3.55	
32 16 13 16-0003	LF		4" Steel Sidewalk/Curb Facing, With Steel Anchor, 12" On Center.....	17.85	5.85
For Curved Section, Add				3.98	
32 16 13 16-0004	LF		6" Steel Sidewalk/Curb Facing, With Steel Anchor, 12" On Center.....	24.07	6.56
For Curved Section, Add				4.88	
32 16 13 16-0005	LF		8" Steel Sidewalk/Curb Facing, With Steel Anchor, 12" On Center.....	29.55	7.38
For Curved Section, Add				5.70	
32 16 13 16-0006	LF		10" Steel Sidewalk/Curb Facing, With Steel Anchor, 12" On Center.....	36.15	8.08
For Curved Section, Add				6.64	
32 16 13 16-0007	LF		12" Steel Sidewalk/Curb Facing, With Steel Anchor, 12" On Center.....	47.26	10.31
For Curved Section, Add				8.57	
32 16 13 16-0008	LF		13" Steel Sidewalk/Curb Facing, With Steel Anchor, 12" On Center.....	54.50	13.35
For Curved Section, Add				10.44	
32 16 13 16-0009	EA		Sidewalk/Curb Steel Facing, Pedestrian Ramps, Two Drops Per Section.....	170.43	
<b>32 16 13 19 Cast-In-Place Concrete Drainage Ditches (32 16 13)</b>					
Note: Includes concrete, forms, rebar (where required), rebar chairs (where necessary), expansion joints, finish and curing.					
<b>32 16 13 19-0001 Valley Gutter, Cast In Place (32 16 13 19)</b>					
Note: Includes concrete, forms, rebar, expansion joints, finish and curing.					
32 16 13 19-0002	LF		2' Wide Cast In Place Concrete Valley Gutter, 6" Thick.....	28.76	
For Up To 20, Add				11.27	
For >20 To 50, Add				6.19	
For >50 To 100, Add				2.54	
For >500 To 1,000, Deduct				-2.54	
For >1,000, Deduct				-4.53	
32 16 13 19-0003	LF		2-1/2' Wide Cast In Place Concrete Valley Gutter, 6" Thick.....	35.44	
For Up To 20, Add				13.73	
For >20 To 50, Add				7.53	
For >50 To 100, Add				3.10	
For >500 To 1,000, Deduct				-3.10	
For >1,000, Deduct				-5.54	
32 16 13 19-0004	LF		3' Wide Cast In Place Concrete Valley Gutter, 6" Thick.....	42.08	
For Up To 20, Add				16.16	
For >20 To 50, Add				8.86	
For >50 To 100, Add				3.65	
For >500 To 1,000, Deduct				-3.65	
For >1,000, Deduct				-6.53	
32 16 13 19-0005	LF		3-1/2' Wide Cast In Place Concrete Valley Gutter, 6" Thick.....	48.68	
For Up To 20, Add				18.57	
For >20 To 50, Add				10.17	
For >50 To 100, Add				4.20	
For >500 To 1,000, Deduct				-4.20	
For >1,000, Deduct				-7.52	
32 16 13 19-0006	LF		4' Wide Cast In Place Concrete Valley Gutter, 6" Thick.....	55.30	
For Up To 20, Add				20.99	
For >20 To 50, Add				11.49	
For >50 To 100, Add				4.75	
For >500 To 1,000, Deduct				-4.75	
For >1,000, Deduct				-8.51	
32 16 13 19-0007	LF		5' Wide Cast In Place Concrete Valley Gutter, 6" Thick.....	66.64	
For Up To 20, Add				24.49	
For >20 To 50, Add				13.36	
For >50 To 100, Add				5.57	
For >500 To 1,000, Deduct				-5.57	
For >1,000, Deduct				-10.01	
32 16 13 19-0008	LF		6' Wide Cast In Place Concrete Valley Gutter, 6" Thick.....	77.69	
For Up To 20, Add				27.80	
For >20 To 50, Add				15.13	
For >50 To 100, Add				6.34	
For >500 To 1,000, Deduct				-6.34	
For >1,000, Deduct				-11.45	
32 16 13 19-0009	SF		>6' Wide Cast In Place Concrete Valley Gutter, 6" Thick.....	12.94	
For Up To 100, Add				4.63	
For >100 To 250, Add				2.52	
For >250 To 500, Add				1.06	
For >2,500 To 5,000, Deduct				-1.06	
For >5,000, Deduct				-1.91	

**32 Exterior Improvements****32 10 Bases, Ballasts, and Paving****32 16 Curbs, Gutters, Sidewalks, and Driveways**

MINOR	CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
32 16 13 19-0010	LF	2'	Wide Cast In Place Concrete Valley Gutter, 7" Thick.....	32.01	
			For Up To 20, Add	12.21	
			For >20 To 50, Add	6.69	
			For >50 To 100, Add	2.76	
			For >500 To 1,000, Deduct	-2.76	
			For >1,000, Deduct	-4.94	
32 16 13 19-0011	LF	2-1/2'	Wide Cast In Place Concrete Valley Gutter, 7" Thick.....	39.67	
			For Up To 20, Add	15.02	
			For >20 To 50, Add	8.22	
			For >50 To 100, Add	3.40	
			For >500 To 1,000, Deduct	-3.40	
			For >1,000, Deduct	-6.09	
32 16 13 19-0012	LF	3'	Wide Cast In Place Concrete Valley Gutter, 7" Thick.....	46.92	
			For Up To 20, Add	17.55	
			For >20 To 50, Add	9.59	
			For >50 To 100, Add	3.98	
			For >500 To 1,000, Deduct	-3.98	
			For >1,000, Deduct	-7.14	
32 16 13 19-0013	LF	3-1/2'	Wide Cast In Place Concrete Valley Gutter, 7" Thick.....	54.34	
			For Up To 20, Add	20.19	
			For >20 To 50, Add	11.03	
			For >50 To 100, Add	4.58	
			For >500 To 1,000, Deduct	-4.58	
			For >1,000, Deduct	-8.23	
32 16 13 19-0014	LF	4'	Wide Cast In Place Concrete Valley Gutter, 7" Thick.....	61.74	
			For Up To 20, Add	22.82	
			For >20 To 50, Add	12.46	
			For >50 To 100, Add	5.18	
			For >500 To 1,000, Deduct	-5.18	
			For >1,000, Deduct	-9.32	
32 16 13 19-0015	LF	5'	Wide Cast In Place Concrete Valley Gutter, 7" Thick.....	74.55	
			For Up To 20, Add	26.69	
			For >20 To 50, Add	14.52	
			For >50 To 100, Add	6.08	
			For >500 To 1,000, Deduct	-6.08	
			For >1,000, Deduct	-10.99	
32 16 13 19-0016	LF	6'	Wide Cast In Place Concrete Valley Gutter, 7" Thick.....	87.06	
			For Up To 20, Add	30.35	
			For >20 To 50, Add	16.47	
			For >50 To 100, Add	6.94	
			For >500 To 1,000, Deduct	-6.94	
			For >1,000, Deduct	-12.59	
32 16 13 19-0017	SF	>6'	Wide Cast In Place Concrete Valley Gutter, 7" Thick.....	14.52	
			For Up To 100, Add	5.06	
			For >100 To 250, Add	2.75	
			For >250 To 500, Add	1.16	
			For >2,500 To 5,000, Deduct	-1.16	
			For >5,000, Deduct	-2.10	
32 16 13 19-0018	LF	2'	Wide Cast In Place Concrete Valley Gutter, 8" Thick.....	31.82	
			For Up To 20, Add	12.48	
			For >20 To 50, Add	6.85	
			For >50 To 100, Add	2.81	
			For >500 To 1,000, Deduct	-2.81	
			For >1,000, Deduct	-5.02	
32 16 13 19-0019	LF	2-1/2'	Wide Cast In Place Concrete Valley Gutter, 8" Thick.....	39.23	
			For Up To 20, Add	15.22	
			For >20 To 50, Add	8.35	
			For >50 To 100, Add	3.44	
			For >500 To 1,000, Deduct	-3.44	
			For >1,000, Deduct	-6.14	
32 16 13 19-0020	LF	3'	Wide Cast In Place Concrete Valley Gutter, 8" Thick.....	46.56	
			For Up To 20, Add	17.90	
			For >20 To 50, Add	9.81	
			For >50 To 100, Add	4.05	
			For >500 To 1,000, Deduct	-4.05	
			For >1,000, Deduct	-7.23	
32 16 13 19-0021	LF	3-1/2'	Wide Cast In Place Concrete Valley Gutter, 8" Thick.....	53.89	
			For Up To 20, Add	20.59	
			For >20 To 50, Add	11.28	
			For >50 To 100, Add	4.66	
			For >500 To 1,000, Deduct	-4.66	
			For >1,000, Deduct	-8.33	
32 16 13 19-0022	LF	4'	Wide Cast In Place Concrete Valley Gutter, 8" Thick.....	61.23	
			For Up To 20, Add	23.28	
			For >20 To 50, Add	12.74	
			For >50 To 100, Add	5.27	
			For >500 To 1,000, Deduct	-5.27	
			For >1,000, Deduct	-9.43	
32 16 13 19-0023	LF	5'	Wide Cast In Place Concrete Valley Gutter, 8" Thick.....	73.77	
32 16 13 19-0024	LF	6'	Wide Cast In Place Concrete Valley Gutter, 8" Thick.....	86.00	
32 16 13 19-0025	SF	>6'	Wide Cast In Place Concrete Valley Gutter, 8" Thick.....	14.33	
			For Up To 100, Add	5.14	
			For >100 To 250, Add	2.80	
			For >250 To 500, Add	1.17	
			For >2,500 To 5,000, Deduct	-1.17	
			For >5,000, Deduct	-2.11	



Exterior Improvements			32
Bases, Ballasts, and Paving			32 10
Curbs, Gutters, Sidewalks, and Driveways			32 16

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MINOR CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
<b>32 16 13 33 Asphalt Curbs</b> (32 16 13)				
<b>32 16 13 33-0001 Asphalt Curbs</b> (32 16 13 33)				
32 16 13 33-0002	LF	6" Wide x 6" High Asphalt Curb 64 LF/TON, Bituminous, Plain	13.49	5.27
32 16 13 33-0003	LF	8" Wide x 6" High Asphalt Curb 50 LF/TON, Bituminous, Plain	15.22	5.85
32 16 13 33-0004	LF	8" Wide x 8" High Asphalt Curb 44 LF/TON, Bituminous, Plain	16.80	6.45
<b>32 16 13 43 Stone Curbs</b> (32 16 13)				
<b>32 16 13 43-0001 Remove And Reset Stone And Precast Curbing</b> (32 16 13 43)				
Note: Includes storage and cleaning.				
32 16 13 43-0002	LF	Removal And Resetting Of Stone Or Precast Curbing	36.28	
Note: Includes storage and cleaning.				
<b>32 16 23 Sidewalks</b> (32 16)				
<b>32 16 23 00-0001 Cast In Place Concrete Sidewalk</b> (32 16 23)				
Note: Includes finish grading, delivered concrete (up to 3500 PSI) by chute, formwork, 1/4" radius joints and edges, polyethylene sheeting, control joints, expansion joints, screed, broom finish, and curing. Excludes excavation, base, base compaction and welded wire reinforcement. For bar or fiber reinforcing, add bar or fiber reinforcing tasks. See CSI section 03 21 00 00-0000 for reinforcing steel, 03 31 13 00-0029 for small quantity purchases, 03 31 13 00-0031 for delivery fee, 31 00 00 00-0000 for excavation, 31 23 16 00-0000 for excavation, 32 11 23 16-0001 for base course.				
32 16 23 00-0002	SF	4" Cast In Place Concrete Sidewalk	11.02	
For Up To 100, Add			4.44	
For >100 To 500, Add			1.22	
For >1,000 To 5,000, Deduct			-0.67	
For >5,000, Deduct			-1.56	
For Welded Wire Reinforcement, Add			0.97	
32 16 23 00-0003	SF	5" Cast In Place Concrete Sidewalk	12.21	
For Up To 100, Add			4.80	
For >100 To 500, Add			1.31	
For >1,000 To 5,000, Deduct			-0.70	
For >5,000, Deduct			-1.66	
For Welded Wire Reinforcement, Add			0.97	
32 16 23 00-0004	SF	6" Cast In Place Concrete Sidewalk	13.40	
For Up To 100, Add			5.16	
For >100 To 500, Add			1.39	
For >1,000 To 5,000, Deduct			-0.72	
For >5,000, Deduct			-1.75	
For Welded Wire Reinforcement, Add			0.97	
32 16 23 00-0005	SF	7" Cast In Place Concrete Sidewalk	15.69	
For Up To 100, Add			5.97	
For >100 To 500, Add			1.60	
For >1,000 To 5,000, Deduct			-0.82	
For >5,000, Deduct			-2.01	
For Welded Wire Reinforcement, Add			0.97	
32 16 23 00-0006	SF	8" Cast In Place Concrete Sidewalk	16.77	
For Up To 100, Add			6.28	
For >100 To 500, Add			1.67	
For >1,000 To 5,000, Deduct			-0.83	
For >5,000, Deduct			-2.09	
For Welded Wire Reinforcement, Add			0.97	
32 16 23 00-0007	SF	For Exposed Aggregate Finish In Sidewalk	2.40	
32 16 23 00-0008	EA	Finish Concrete Handicap Drop Section In Sidewalk	143.96	
Note: Excludes patterned (tactile) finish.				
<b>32 16 23 00-0009 Bituminous Sidewalk</b> (32 16 23)				
Note: Includes finish grading, delivered asphalt, formwork, control joints, expansion joints, and compaction. Excludes excavation, base, and base compaction. See CSI section 31 00 00 00-0000 for excavation, 31 23 16 00-0000 for excavation, 32 11 23 16-0001 for base course.				
32 16 23 00-0010	SY	1" Bituminous Sidewalk	10.38	
For Up To 100, Add			3.70	
For >100 To 500, Add			0.96	
For >1,000 To 5,000, Deduct			-0.44	
For >5,000, Deduct			-0.96	
32 16 23 00-0011	SY	1-1/2" Bituminous Sidewalk	13.11	
For Up To 100, Add			4.60	
For >100 To 500, Add			1.18	
For >1,000 To 5,000, Deduct			-0.53	
For >5,000, Deduct			-1.18	
32 16 23 00-0012	SY	2" Bituminous Sidewalk	18.47	
For Up To 100, Add			6.25	
For >100 To 500, Add			1.58	
For >1,000 To 5,000, Deduct			-0.65	
For >5,000, Deduct			-1.58	
32 16 23 00-0013	SY	2-1/2" Bituminous Sidewalk	23.11	
For Up To 100, Add			7.81	
For >100 To 500, Add			1.97	
For >1,000 To 5,000, Deduct			-0.81	
For >5,000, Deduct			-1.97	

**32 Exterior Improvements****32 10 Bases, Ballasts, and Paving****32 16 Curbs, Gutters, Sidewalks, and Driveways**

MINOR CSI UOM DESCRIPTION				TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
32 16 23 00-0014	SY	3"	Bituminous Sidewalk.....	26.80	
			For Up To 100, Add	8.90	
			For >100 To 500, Add	2.22	
			For >1,000 To 5,000, Deduct	-0.88	
			For >5,000, Deduct	-2.22	
32 16 23 00-0015	SY	3-1/2"	Bituminous Sidewalk .....	31.13	
			For Up To 100, Add	10.20	
			For >100 To 500, Add	2.52	
			For >1,000 To 5,000, Deduct	-0.97	
			For >5,000, Deduct	-2.52	
32 16 43 Asphalt Dike (32 16)					
32 16 43 00-0001 Asphalt Dike (32 16 43)					
32 16 43 00-0002	LF		Type A, Asphalt Dike, 11" Base, 5" Top, 6" Height.....	7.61	
32 16 43 00-0003	LF		Type B, Asphalt Dike, 13" Base, 5" Top, 8" Height.....	10.53	
32 16 43 00-0004	LF		Type C-6, Asphalt Dike, 18" Base, 6" Top, 6" Height.....	10.53	
32 16 43 00-0005	LF		Type C-8, Asphalt Dike, 22" Base, 6" Top, 8" Height.....	15.21	
32 16 43 00-0006	LF		Type C-9, Asphalt Dike, 24" Base, 6" Top, 9" Height.....	18.04	
32 16 43 00-0007	LF		Type D, Asphalt Dike, 8" Base, 4" Top, 2" Height.....	3.80	
32 16 43 00-0008	LF		Type E, Mountable Asphalt Dike, 16" Base, 12" Top, 2" Height Front, 6" Height Back.....	10.98	
32 16 43 00-0009	LF		Type F, Mountable Asphalt Dike, 26" Base, 20" Top, 2" Height Front, 8" Height Back.....	16.93	
32 16 43 00-0010	LF		CALTRANS Type A, Asphalt Dike, 11" Base, 5" Top, 6" Height.....	7.61	
32 16 43 00-0011	LF		CALTRANS Type C, Asphalt Dike, 8" Base, 4" Top, 2" Height.....	3.80	
32 16 43 00-0012	LF		CALTRANS Type D, Mountable Asphalt Dike, 26" Base, 20" Top, 2" Height Front, 8" Height Back.....	16.93	
32 16 43 00-0013	LF		CALTRANS Type E, Mountable Asphalt Dike, 16" Base, 12" Top, 2" Height Front, 6" Height Back.....	10.98	
32 16 43 00-0014	LF		CALTRANS Type F, Asphalt Dike, 8" Base, 4" Top, 4" Height.....	5.61	
32 17 Paving Specialties (32 10)					
32 17 13 Parking Bumpers (32 17)					
Note: Includes dowels set.					
32 17 13 16 Plastic Parking Bumpers (32 17 13)					
32 17 13 16-0001	EA	4" x 6" x 4'	Recycled Plastic Wheel Stop .....	166.00	6.73
32 17 13 16-0002	EA	4" x 6" x 6'	Recycled Plastic Wheel Stop .....	188.05	6.73
32 17 13 19 Precast Concrete Parking Bumpers (32 17 13)					
32 17 13 19-0001	EA	6" x 8" x 4'	Precast Concrete Wheel Stop With Dowels .....	41.04	20.25
32 17 13 19-0002	EA	6" x 6" x 6'	Precast Concrete Wheel Stop With Dowels .....	47.15	20.25
32 17 13 19-0003	EA	6" x 8" x 6'	Precast Concrete Wheel Stop With Dowels .....	47.93	20.25
32 17 13 19-0004	EA	6" x 10" x 6'	Precast Concrete Wheel Stop With Dowels .....	49.53	20.25
32 17 13 19-0005	EA	7.625" x 7.625" x 6'	Precast Concrete Wheel Stop .....	115.53	20.25
32 17 13 19-0006	EA	8" x 4-1/2" x 6'	Precast Concrete Wheel Stop With Dowels.....	47.15	20.25
32 17 13 19-0007	EA	8" x 13" x 6'	Precast Concrete Wheel Stop With Dowels .....	55.96	20.25
32 17 13 19-0008	EA	8" x 12" x 8'	Precast Concrete Wheel Stop With Dowels .....	172.14	21.87
32 17 13 19-0009	EA		Removal And Relocation Of Precast Concrete Wheel Stop.....	32.41	
32 17 13 19-0010	EA		Removal And Relocation Of Plastic Or Wood Wheel Stop .....	21.07	
32 17 13 19-0011	EA	7.625" x 7.625" x 8'	Precast Concrete Wheel Stop .....	172.64	20.25
32 17 13 23 Rubber Parking Bumpers (32 17 13)					
32 17 13 23-0001	EA	3'	Recycled Rubber Wheel Stop .....	27.60	6.73
32 17 13 23-0002	EA	4'	Recycled Rubber Wheel Stop .....	31.98	6.73
32 17 13 23-0003	EA	5'	Recycled Rubber Wheel Stop .....	33.74	6.73
32 17 13 23-0004	EA	6'	Recycled Rubber Wheel Stop .....	36.37	6.73
32 17 13 26 Wood Parking Bumpers (32 17 13)					
32 17 13 26-0001	LF	4" x 4"	Timber Barrier With Saddles For Cars, Pressure Treated .....	13.36	1.62
32 17 13 26-0002	LF	6" x 6"	Timber Barriers With Saddle For Trucks, Pressure Treated.....	19.85	1.62
32 17 16 Manufactured Traffic-Calming Devices (32 17)					
32 17 16 00-0001 Speed Bumps (32 17 16)					
Note: Excludes pavement markings or reflectors.					
32 17 16 00-0002	LF	2-1/4" High x 10-1/2" Wide, Asphalt Speed Bump .....	43.23	1.85	
32 17 16 00-0003	LF	2-1/4" High x 12" Wide, Recycled Rubber Speed Bump .....	27.31	1.24	
32 17 16 00-0004	LF	2-5/8" High x 12" Wide, Recycled Plastic Speed Bump .....	121.90	1.24	
32 17 16 00-0005 Modular Rubber Speed Tables (32 17 16)					
Note: 3" high flat topped speed humps, 18" x 42" modular rubber construction. Trafficlogix.					
32 17 16 00-0006	SF	Up To 24' Road Width x 7' Run Modular Rubber Speed Table.....	63.83		
Note: Includes drilling in pavement, lag bolts and 3" x 18" x 42" compression molded recycled synthetic and natural rubber composite modular panels.					





<b>Exterior Improvements</b>		<b>32</b>
<b>Bases, Ballasts, and Paving</b>		<b>32 10</b>
<b>Paving Specialties</b>		<b>32 17</b>

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MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
32 17 16 00-0007 SF Up To 24' Road Width x 14' Run Modular Rubber Speed Table.....	55.76	
Note: Includes drilling in pavement, lag bolts and 3" x 18" x 42" compression molded recycled synthetic and natural rubber composite modular panels.		
32 17 16 00-0008 SF Up To 24' Road Width x 21' Run Modular Rubber Speed Table.....	52.36	
Note: Includes drilling in pavement, lag bolts and 3" x 18" x 42" compression molded recycled synthetic and natural rubber composite modular panels.		
32 17 16 00-0009 SF >24' To 30' Road Width x 7' Run Modular Rubber Speed Table.....	61.08	
Note: Includes drilling in pavement, lag bolts and 3" x 18" x 42" compression molded recycled synthetic and natural rubber composite modular panels.		
32 17 16 00-0010 SF >24' To 30' Road Width x 14' Run Modular Rubber Speed Table.....	53.75	
Note: Includes drilling in pavement, lag bolts and 3" x 18" x 42" compression molded recycled synthetic and natural rubber composite modular panels.		
32 17 16 00-0011 SF >24' To 30' Road Width x 21' Run Modular Rubber Speed Table.....	50.73	
Note: Includes drilling in pavement, lag bolts and 3" x 18" x 42" compression molded recycled synthetic and natural rubber composite modular panels.		
32 17 16 00-0012 SF >30' To 40' Road Width x 7' Run Modular Rubber Speed Table.....	58.36	
Note: Includes drilling in pavement, lag bolts and 3" x 18" x 42" compression molded recycled synthetic and natural rubber composite modular panels.		
32 17 16 00-0013 SF >30' To 40' Road Width x 14' Run Modular Rubber Speed Table.....	52.15	
Note: Includes drilling in pavement, lag bolts and 3" x 18" x 42" compression molded recycled synthetic and natural rubber composite modular panels.		
32 17 16 00-0014 SF >30' To 40' Road Width x 21' Run Modular Rubber Speed Table.....	49.39	
Note: Includes drilling in pavement, lag bolts and 3" x 18" x 42" compression molded recycled synthetic and natural rubber composite modular panels.		
<b>32 17 16 00-0015 Asphalt Speed Table</b> (32 17 16)		
Note: Excludes pavement markings or reflectors.		
32 17 16 00-0016 LF Up to 36" Wide Asphalt Speed Table With 3" Center Crown .....	35.32	
Note: Tapered on edges to roadway.		
32 17 16 00-0017 LF >36" To 48" Wide Asphalt Speed Table With 3" Center Crown .....	41.81	
Note: Tapered on edges to roadway.		
32 17 16 00-0018 LF Up to 36" Wide Asphalt Speed Table With 4" Center Crown .....	44.44	
Note: Tapered on edges to roadway.		
32 17 16 00-0019 LF >36" To 48" Wide Asphalt Speed Table With 4" Center Crown .....	52.66	
Note: Tapered on edges to roadway.		
32 17 16 00-0020 LF Up to 36" Wide Asphalt Speed Table With 6" Center Crown .....	53.77	
Note: Tapered on edges to roadway.		
32 17 16 00-0021 LF >36" To 48" Wide Asphalt Speed Table With 6" Center Crown .....	60.26	
Note: Tapered on edges to roadway.		
<b>32 17 23 Pavement Markings</b> (32 17)		
See CSI section 01 55 26 00-0000 for temporary markings and removable line mask tape.		
<b>32 17 23 13 Painted Pavement Markings</b> (32 17 23)		
<b>32 17 23 13-0001 Minimum Charge For Pavement Striping</b> (32 17 23 13)		
32 17 23 13-0002 EA Pavement Striping Minimum Charge .....	381.24	
<b>32 17 23 13-0003 Painted Pavement Striping, Letters, Symbols And Markers For Roads</b> (32 17 23)		
Note: Includes primers, adhesive and glass beads where required. For broken line quantities use total lane length. Per Coat.		
<b>32 17 23 13-0004 Alkyd/Solvent Based/Latex Reflective Pavement Marking</b> (32 17 23 13-0003)		
Note: 15 mil thickness.		
32 17 23 13-0005 LF Single 4" Wide Solid Line, Painted Reflective Pavement Striping.....	0.32	
For Up To 5,000 LF, Add	0.06	
For >25,000 LF, Deduct	-0.05	
For Broken Line, Deduct	-0.06	
32 17 23 13-0006 LF Single 6" Wide Solid Line, Painted Reflective Pavement Striping.....	0.41	
For Up To 5,000 LF, Add	0.08	
For >25,000 LF, Deduct	-0.06	
For Broken Line, Deduct	-0.08	
32 17 23 13-0007 LF Single 8" Wide Solid Line, Painted Reflective Pavement Striping.....	0.52	
For Up To 5,000 LF, Add	0.10	
For >25,000 LF, Deduct	-0.08	
For Broken Line, Deduct	-0.11	
32 17 23 13-0008 LF Single 12" Wide Solid Line, Painted Reflective Pavement Striping.....	0.70	
For Up To 5,000 LF, Add	0.14	
For >25,000 LF, Deduct	-0.11	
For Broken Line, Deduct	-0.16	
32 17 23 13-0009 LF Double 4" Wide Solid Lines, Painted Reflective Pavement Striping.....	0.47	
For Up To 5,000 LF, Add	0.09	
For >25,000 LF, Deduct	-0.07	
For Broken Line On One Side, Deduct	-0.05	
For Double Broken Line, Deduct	-0.11	
32 17 23 13-0010 LF Double 6" Wide Solid Lines, Painted Reflective Pavement Striping.....	0.70	
For Up To 5,000 LF, Add	0.14	
For >25,000 LF, Deduct	-0.11	
For Broken Line On One Side, Deduct	-0.08	
For Double Broken Line, Deduct	-0.16	
32 17 23 13-0011 SF Solid Area, Painted Reflective Pavement Striping .....	5.92	
Note: Use this task for: lines >12" wide, stop bars, transverse lines, diagonal lines, crossing lanes, etc.		

**32 Exterior Improvements****32 10 Bases, Ballasts, and Paving****32 17 Paving Specialties**

MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
32 17 23 13-0012 EA 6" High, Letter/Number, Alkyd Reflective Pavement Striping.....	4.26	
For <10, Add	0.59	
For >50 To 100, Deduct	-0.29	
For >100 To 200, Deduct	-0.39	
For >200, Deduct	-0.78	
32 17 23 13-0013 EA 12" High, Letter/Number, Alkyd Reflective Pavement Striping.....	7.19	
For <10, Add	0.89	
For >50 To 100, Deduct	-0.44	
For >100 To 200, Deduct	-0.59	
For >200, Deduct	-1.18	
32 17 23 13-0014 EA 24" High, Letter/Number, Alkyd Reflective Pavement Striping.....	12.06	
For <10, Add	1.47	
For >50 To 100, Deduct	-0.74	
For >100 To 200, Deduct	-0.98	
For >200, Deduct	-1.96	
32 17 23 13-0015 EA 36" High, Letter/Number, Alkyd Reflective Pavement Striping.....	23.56	
For <10, Add	2.94	
For >50 To 100, Deduct	-1.47	
For >100 To 200, Deduct	-1.96	
For >200, Deduct	-3.92	
32 17 23 13-0016 EA 48" High, Letter/Number, Alkyd Reflective Pavement Striping.....	27.14	
For <10, Add	3.30	
For >50 To 100, Deduct	-1.65	
For >100 To 200, Deduct	-2.20	
For >200, Deduct	-4.40	
32 17 23 13-0017 EA 72" High, Letter/Number, Alkyd Reflective Pavement Striping.....	48.53	
For <10, Add	5.88	
For >50 To 100, Deduct	-2.94	
For >100 To 200, Deduct	-3.92	
For >200, Deduct	-7.83	
32 17 23 13-0018 EA 96" High, Letter/Number, Alkyd Reflective Pavement Striping.....	64.92	
For <10, Add	7.89	
For >50 To 100, Deduct	-3.95	
For >100 To 200, Deduct	-5.26	
For >200, Deduct	-10.52	
32 17 23 13-0019 EA 120" High, Letter/Number, Alkyd Reflective Pavement Striping.....	92.66	
For <10, Add	9.78	
For >50 To 100, Deduct	-4.89	
For >100 To 200, Deduct	-6.52	
For >200, Deduct	-13.03	
32 17 23 13-0020 SF Letter/Number, Painted Reflective Pavement Marking .....	6.80	
32 17 23 13-0021 SF Symbols, Painted Reflective Pavement Marking .....	8.13	
Note: Handicap, railroad, diamond, arrows, etc.		
<b>32 17 23 13-0022 Painted Reflective Pavement Marking (CALTRANS) (32 17 23 13-0003)</b>		
Note: Per LF of detail.		
32 17 23 13-0023 LF CALTRANS Detail 1 Centerline, Painted Reflective Pavement Striping .....	0.26	
For Up To 5,000 LF, Add	0.05	
For >25,000 LF, Deduct	-0.04	
32 17 23 13-0024 LF CALTRANS Detail 2 Centerline, Painted Reflective Pavement Striping .....	0.39	
For Up To 5,000 LF, Add	0.08	
For >25,000 LF, Deduct	-0.06	
32 17 23 13-0025 LF CALTRANS Detail 4 Centerline .....	0.68	
For Up To 5,000 LF, Add	0.14	
For >25,000 LF, Deduct	-0.10	
32 17 23 13-0026 LF CALTRANS Detail 5 Centerline, Painted Reflective Pavement Striping .....	0.26	
For Up To 5,000 LF, Add	0.05	
For >25,000 LF, Deduct	-0.04	
32 17 23 13-0027 LF CALTRANS Detail 6 Centerline, Painted Reflective Pavement Striping .....	0.40	
For Up To 5,000 LF, Add	0.08	
For >25,000 LF, Deduct	-0.06	
32 17 23 13-0028 LF CALTRANS Detail 7 Centerline .....	0.50	
For Up To 5,000 LF, Add	0.10	
For >25,000 LF, Deduct	-0.08	
32 17 23 13-0029 LF CALTRANS Detail 8 Lanelines, Painted Reflective Pavement Striping .....	0.26	
For Up To 5,000 LF, Add	0.05	
For >25,000 LF, Deduct	-0.04	
32 17 23 13-0030 LF CALTRANS Detail 9 Lanelines, Painted Reflective Pavement Striping .....	0.39	
For Up To 5,000 LF, Add	0.08	
For >25,000 LF, Deduct	-0.06	
32 17 23 13-0031 LF CALTRANS Detail 10 Lanelines .....	0.68	
For Up To 5,000 LF, Add	0.14	
For >25,000 LF, Deduct	-0.10	
32 17 23 13-0032 LF CALTRANS Detail 11 Lanelines, Painted Reflective Pavement Striping .....	0.26	
For Up To 5,000 LF, Add	0.05	
For >25,000 LF, Deduct	-0.04	
32 17 23 13-0033 LF CALTRANS Detail 12 Lanelines, Painted Reflective Pavement Striping .....	0.39	
For Up To 5,000 LF, Add	0.08	
For >25,000 LF, Deduct	-0.06	
32 17 23 13-0034 LF CALTRANS Detail 13 Lanelines .....	0.50	
For Up To 5,000 LF, Add	0.10	
For >25,000 LF, Deduct	-0.08	
32 17 23 13-0035 LF CALTRANS Detail 14 Lanelines .....	0.50	
For Up To 5,000 LF, Add	0.10	
For >25,000 LF, Deduct	-0.08	



Exterior Improvements		32
Bases, Ballasts, and Paving		32 10
Paving Specialties		32 17

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MINOR CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
32 17 23 13-0036	LF	CALTRANS Detail 14A Lanelines, Painted Reflective Pavement Striping.....	0.39	
		For Up To 5,000 LF, Add	0.08	
		For >25,000 LF, Deduct	-0.06	
32 17 23 13-0037	LF	CALTRANS Detail 15 No Passing Zones-One Direction Lanelines, Painted Reflective Pavement Striping.....	0.35	
		For Up To 5,000 LF, Add	0.07	
		For >25,000 LF, Deduct	-0.05	
		For Broken Line On One Side, Deduct	-0.04	
		For Double Broken Line, Deduct	-0.08	
32 17 23 13-0038	LF	CALTRANS Detail 16 No Passing Zones-One Direction Lanelines, Painted Reflective Pavement Striping.....	0.85	
		For Up To 5,000 LF, Add	0.17	
		For >25,000 LF, Deduct	-0.13	
32 17 23 13-0039	LF	CALTRANS Detail 17 No Passing Zones-One Direction Lanelines.....	1.97	
		For Up To 5,000 LF, Add	0.39	
		For >25,000 LF, Deduct	-0.30	
32 17 23 13-0040	LF	CALTRANS Detail 18 No Passing Zones-One Direction Lanelines, Painted Reflective Pavement Striping.....	0.35	
		For Up To 5,000 LF, Add	0.07	
		For >25,000 LF, Deduct	-0.05	
		For Broken Line On One Side, Deduct	-0.04	
		For Double Broken Line, Deduct	-0.08	
32 17 23 13-0041	LF	CALTRANS Detail 19 No Passing Zones-One Direction Lanelines, Painted Reflective Pavement Striping.....	0.72	
		For Up To 5,000 LF, Add	0.14	
		For >25,000 LF, Deduct	-0.11	
32 17 23 13-0042	LF	CALTRANS Detail 20 No Passing Zones-One Direction Lanelines.....	1.67	
		For Up To 5,000 LF, Add	0.33	
		For >25,000 LF, Deduct	-0.25	
32 17 23 13-0043	LF	CALTRANS Detail 21 No Passing Zones-Two Direction Lanelines, Painted Reflective Pavement Striping.....	0.41	
		For Up To 5,000 LF, Add	0.08	
		For >25,000 LF, Deduct	-0.06	
		For Broken Line On One Side, Deduct	-0.06	
		For Double Broken Line, Deduct	-0.13	
32 17 23 13-0044	LF	CALTRANS Detail 22 No Passing Zones-Two Direction Lanelines, Painted Reflective Pavement Striping.....	0.91	
		For Up To 5,000 LF, Add	0.18	
		For >25,000 LF, Deduct	-0.14	
32 17 23 13-0045	LF	CALTRANS Detail 23 No Passing Zones-Two Direction Lanelines.....	2.35	
		For Up To 5,000 LF, Add	0.47	
		For >25,000 LF, Deduct	-0.35	
32 17 23 13-0046	LF	CALTRANS Detail 24 Left Edgelines, Painted Reflective Pavement Striping.....	0.32	
		For Up To 5,000 LF, Add	0.06	
		For >25,000 LF, Deduct	-0.05	
32 17 23 13-0047	LF	CALTRANS Detail 25 Left Edgelines, Painted Reflective Pavement Striping.....	0.45	
		For Up To 5,000 LF, Add	0.09	
		For >25,000 LF, Deduct	-0.07	
32 17 23 13-0048	LF	CALTRANS Detail 25A Left Edgelines, Painted Reflective Pavement Striping .....	0.57	
		For Up To 5,000 LF, Add	0.11	
		For >25,000 LF, Deduct	-0.09	
32 17 23 13-0049	LF	CALTRANS Detail 26 Left Edgelines.....	0.13	
		For Up To 5,000 LF, Add	0.03	
		For >25,000 LF, Deduct	-0.02	
32 17 23 13-0050	LF	CALTRANS Detail 27 Left Edgelines, Painted Reflective Pavement Striping.....	0.54	
		For Up To 5,000 LF, Add	0.11	
		For >25,000 LF, Deduct	-0.08	
32 17 23 13-0051	LF	CALTRANS Detail 27B Right Edgelines, Painted Reflective Pavement Striping .....	0.32	
		For Up To 5,000 LF, Add	0.06	
		For >25,000 LF, Deduct	-0.05	
32 17 23 13-0052	LF	CALTRANS Detail 27C Right Edgeline Extension Through Intersections, Painted Reflective Pavement Striping .....	0.26	
		For Up To 5,000 LF, Add	0.05	
		For >25,000 LF, Deduct	-0.04	
32 17 23 13-0053	LF	CALTRANS Detail 28 Median Islands, Painted Reflective Pavement Striping .....	0.83	
		For Up To 5,000 LF, Add	0.17	
		For >25,000 LF, Deduct	-0.12	
		For Broken Line On One Side, Deduct	-0.13	
		For Double Broken Line, Deduct	-0.26	
32 17 23 13-0054	LF	CALTRANS Detail 29 Median Islands, Painted Reflective Pavement Striping .....	1.34	
		For Up To 5,000 LF, Add	0.27	
		For >25,000 LF, Deduct	-0.20	
32 17 23 13-0055	LF	CALTRANS Detail 30 Median Islands .....	4.70	
		For Up To 5,000 LF, Add	0.94	
		For >25,000 LF, Deduct	-0.71	
32 17 23 13-0056	LF	CALTRANS Detail 31 Two-Way Left Turn Lanes, Painted Reflective Pavement Striping .....	0.70	
		For Up To 5,000 LF, Add	0.14	
		For >25,000 LF, Deduct	-0.11	
		For Broken Line On One Side, Deduct	-0.08	
		For Double Broken Line, Deduct	-0.16	
32 17 23 13-0057	LF	CALTRANS Detail 32 Two-Way Left Turn Lanes, Painted Reflective Pavement Striping .....	1.33	
		For Up To 5,000 LF, Add	0.27	
		For >25,000 LF, Deduct	-0.20	
32 17 23 13-0058	LF	CALTRANS Detail 33 Two-Way Left Turn Lanes .....	3.21	
		For Up To 5,000 LF, Add	0.64	
		For >25,000 LF, Deduct	-0.48	
32 17 23 13-0059	LF	CALTRANS Detail 34 Intersection Treatments, Painted Reflective Pavement Striping .....	0.72	
		For Up To 5,000 LF, Add	0.14	
		For >25,000 LF, Deduct	-0.11	
32 17 23 13-0060	LF	CALTRANS Detail 34A Intersection Treatments, Painted Reflective Pavement Striping.....	0.35	
		For Up To 5,000 LF, Add	0.07	
		For >25,000 LF, Deduct	-0.05	

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MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
32 17 23 13-0061 LF CALTRANS Detail 35 Intersection Treatments, Painted Reflective Pavement Striping.....	0.85	
For Up To 5,000 LF, Add	0.17	
For >25,000 LF, Deduct	-0.13	
32 17 23 13-0062 LF CALTRANS Detail 35A Intersection Treatments, Painted Reflective Pavement Striping.....	0.35	
For Up To 5,000 LF, Add	0.07	
For >25,000 LF, Deduct	-0.05	
32 17 23 13-0063 LF CALTRANS Detail 36 Exit Ramp Neutral Area (Gore) Treatment, Painted Reflective Pavement Striping.....	1.54	
For Up To 5,000 LF, Add	0.31	
For >25,000 LF, Deduct	-0.23	
32 17 23 13-0064 LF CALTRANS Detail 36A Entrance Ramp Neutral Area (Merge) Treatment, Painted Reflective Pavement Striping.....	1.02	
For Up To 5,000 LF, Add	0.20	
For >25,000 LF, Deduct	-0.15	
32 17 23 13-0065 LF CALTRANS Detail 36B Entrance Ramp Neutral Area (Acceleration Lane) Treatment, Painted Reflective Pavement Striping.....	1.09	
For Up To 5,000 LF, Add	0.22	
For >25,000 LF, Deduct	-0.16	
32 17 23 13-0066 LF CALTRANS Detail 37 Lane Drop At Exit Ramps, Painted Reflective Pavement Striping.....	0.96	
For Up To 5,000 LF, Add	0.19	
For >25,000 LF, Deduct	-0.14	
32 17 23 13-0067 LF CALTRANS Detail 37A Lane Drop At Exit Ramps.....	1.58	
For Up To 5,000 LF, Add	0.32	
For >25,000 LF, Deduct	-0.24	
32 17 23 13-0068 LF CALTRANS Detail 37B Lane Drop At Intersections, Painted Reflective Pavement Striping.....	0.96	
For Up To 5,000 LF, Add	0.19	
For >25,000 LF, Deduct	-0.14	
32 17 23 13-0069 LF CALTRANS Detail 37C Lane Drop At Intersections.....	1.58	
For Up To 5,000 LF, Add	0.32	
For >25,000 LF, Deduct	-0.24	
32 17 23 13-0070 LF CALTRANS Detail 38 Channelizing Line, Painted Reflective Pavement Striping.....	0.92	
For Up To 5,000 LF, Add	0.18	
For >25,000 LF, Deduct	-0.14	
32 17 23 13-0071 LF CALTRANS Detail 38A Channelizing Line, Painted Reflective Pavement Striping.....	0.67	
For Up To 5,000 LF, Add	0.13	
For >25,000 LF, Deduct	-0.10	
32 17 23 13-0072 LF CALTRANS Detail 38B Channelizing Line, Painted Reflective Pavement Striping.....	1.17	
For Up To 5,000 LF, Add	0.23	
For >25,000 LF, Deduct	-0.18	
32 17 23 13-0073 LF CALTRANS Detail 38C Channelizing Line.....	2.35	
For Up To 5,000 LF, Add	0.47	
For >25,000 LF, Deduct	-0.35	
32 17 23 13-0074 LF CALTRANS Detail 39 Bike Lane Line, Painted Reflective Pavement Striping.....	0.41	
For Up To 5,000 LF, Add	0.08	
For >25,000 LF, Deduct	-0.06	
32 17 23 13-0075 LF CALTRANS Detail 39A Intersection Line Bike Lane, Painted Reflective Pavement Striping.....	0.34	
For Up To 5,000 LF, Add	0.07	
For >25,000 LF, Deduct	-0.05	
32 17 23 13-0076 LF CALTRANS Detail 40 Lane Line Extensions Through Intersections, Painted Reflective Pavement Striping.....	0.25	
For Up To 5,000 LF, Add	0.05	
For >25,000 LF, Deduct	-0.04	
32 17 23 13-0077 LF CALTRANS Detail 40A Lane Line Extensions Through Intersections.....	1.11	
For Up To 5,000 LF, Add	0.22	
For >25,000 LF, Deduct	-0.17	
32 17 23 13-0078 LF CALTRANS Detail 41 Center Line Extensions Through Intersections, Painted Reflective Pavement Striping.....	0.25	
For Up To 5,000 LF, Add	0.05	
For >25,000 LF, Deduct	-0.04	
32 17 23 13-0079 LF CALTRANS Detail 41A Center Line Extensions Through Intersections.....	1.11	
For Up To 5,000 LF, Add	0.22	
For >25,000 LF, Deduct	-0.17	
32 17 23 13-0080 EA CALTRANS 10' Arrow, Type I, Painted Reflective Pavement Marking.....	108.23	
For <10, Add	14.29	
For >50 To 100, Deduct	-7.15	
For >100 To 200, Deduct	-9.53	
For >200, Deduct	-19.06	
32 17 23 13-0081 EA CALTRANS 18' Arrow, Type I, Painted Reflective Pavement Marking.....	189.87	
For <10, Add	25.01	
For >50 To 100, Deduct	-12.51	
For >100 To 200, Deduct	-16.68	
For >200, Deduct	-33.35	
32 17 23 13-0082 EA CALTRANS 24' Arrow, Type I, Painted Reflective Pavement Marking.....	238.30	
For <10, Add	31.44	
For >50 To 100, Deduct	-15.72	
For >100 To 200, Deduct	-20.96	
For >200, Deduct	-41.93	
32 17 23 13-0083 EA CALTRANS 24' Arrow With Single (L or R) Turn Arrow, Type II, Painted Reflective Pavement Marking.....	346.54	
For <10, Add	45.74	
For >50 To 100, Deduct	-22.87	
For >100 To 200, Deduct	-30.49	
For >200, Deduct	-60.98	
32 17 23 13-0084 EA CALTRANS 24' Arrow With Both (L and R) Turn Arrows, Type II, Painted Reflective Pavement Marking.....	454.78	
For <10, Add	60.03	
For >50 To 100, Deduct	-30.02	
For >100 To 200, Deduct	-40.02	
For >200, Deduct	-80.04	



Exterior Improvements			32
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MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
32 17 23 13-0085 EA CALTRANS 24' Arrow Single (L or R) Turn Arrow, Type III, Painted Reflective Pavement Marking.....	319.94	
For <10, Add	42.16	
For >50 To 100, Deduct	-21.08	
For >100 To 200, Deduct	-28.11	
For >200, Deduct	-56.22	
32 17 23 13-0086 EA CALTRANS 24' Arrow Both (L and R) Turn Arrows, Type III, Painted Reflective Pavement Marking .....	558.25	
For <10, Add	73.61	
For >50 To 100, Deduct	-36.80	
For >100 To 200, Deduct	-49.07	
For >200, Deduct	-98.15	
32 17 23 13-0087 EA CALTRANS 8' Turn Arrow (L or R), Type IV, Painted Reflective Pavement Marking .....	113.92	
For <10, Add	15.01	
For >50 To 100, Deduct	-7.50	
For >100 To 200, Deduct	-10.01	
For >200, Deduct	-20.01	
32 17 23 13-0088 EA CALTRANS 24' Arrow, Type V, Painted Reflective Pavement Marking.....	249.68	
For <10, Add	32.87	
For >50 To 100, Deduct	-16.44	
For >100 To 200, Deduct	-21.92	
For >200, Deduct	-43.83	
32 17 23 13-0089 EA CALTRANS 18' Arrow, Type VI, Painted Reflective Pavement Marking.....	319.94	
For <10, Add	42.16	
For >50 To 100, Deduct	-21.08	
For >100 To 200, Deduct	-28.11	
For >200, Deduct	-56.22	
32 17 23 13-0090 EA CALTRANS 13' Arrow With Single (L or R) Turn Arrow, Type VII, Painted Reflective Pavement Marking .....	206.20	
For <10, Add	27.16	
For >50 To 100, Deduct	-13.58	
For >100 To 200, Deduct	-18.11	
For >200, Deduct	-36.21	
32 17 23 13-0091 EA CALTRANS 15' Arrow With Both (L and R) Turn Arrows, Type VIII, Painted Reflective Pavement Marking .....	271.52	
For <10, Add	35.73	
For >50 To 100, Deduct	-17.87	
For >100 To 200, Deduct	-23.82	
For >200, Deduct	-47.64	
32 17 23 13-0092 EA CALTRANS 5' Arrow, Bike Lane, Painted Reflective Pavement Marking .....	54.12	
For <10, Add	7.15	
For >50 To 100, Deduct	-3.57	
For >100 To 200, Deduct	-4.77	
For >200, Deduct	-9.53	
32 17 23 13-0093 EA CALTRANS Railroad Crossing Symbol, Painted Reflective Pavement Marking.....	517.36	
Note: Excludes variable width transverse lines.		
For <10, Add	67.89	
For >50 To 100, Deduct	-33.95	
For >100 To 200, Deduct	-45.26	
For >200, Deduct	-90.52	
32 17 23 13-0094 SF CALTRANS Solid Area, Painted Reflective Pavement Marking.....	6.74	
32 17 23 13-0095 EA CALTRANS Bike Lane Symbol Without Person, Painted Reflective Pavement Marking.....	49.52	
Note: Approximate overall dimensions: 4' width x 8' height.		
For <10, Add	5.15	
For >50 To 100, Deduct	-2.57	
For >100 To 200, Deduct	-3.43	
For >200, Deduct	-6.86	
32 17 23 13-0096 EA CALTRANS Bike Lane Symbol With Person, Painted Reflective Pavement Marking.....	52.43	
Note: Approximate overall dimensions: 4' width x 8' height.		
For <10, Add	5.43	
For >50 To 100, Deduct	-2.72	
For >100 To 200, Deduct	-3.62	
For >200, Deduct	-7.24	
32 17 23 13-0097 EA CALTRANS Diamond Symbol, Painted Reflective Pavement Marking.....	86.40	
For <10, Add	11.43	
For >50 To 100, Deduct	-5.72	
For >100 To 200, Deduct	-7.62	
For >200, Deduct	-15.25	
32 17 23 13-0098 EA CALTRANS International Symbol Of Accessibility (ISA) Marking, Painted Reflective Pavement Marking .....	175.63	
For <10, Add	23.15	
For >50 To 100, Deduct	-11.58	
For >100 To 200, Deduct	-15.44	
For >200, Deduct	-30.87	
32 17 23 13-0099 EA CALTRANS Bike Loop Detector Symbol, Painted Reflective Pavement Marking.....	37.98	
Note: Approximate overall dimensions: 4' width x 8' height.		
For <10, Add	5.43	
For >50 To 100, Deduct	-2.72	
For >100 To 200, Deduct	-3.62	
For >200, Deduct	-7.24	
32 17 23 13-0100 SF CALTRANS Letter/Number, Painted Reflective Pavement Marking .....	6.83	
32 17 23 13-0101 SF CALTRANS Symbols, Painted Reflective Pavement Marking .....	7.59	
Note: Handicap, railroad, diamond, arrows, etc.		

32 17 23 13-0102 Epoxy Reflective Pavement Marking (32 17 23 13-0003)  
Note: 15 mil thickness.

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MINOR	CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
32 17 23 13-0103	LF		Single 4" Wide Solid Line, Epoxy Reflective Pavement Striping.....	0.53	
			For Broken Line, Deduct	-0.22	
			For 20 Mil Thickness, Add	0.11	
			For Up To 5,000 LF, Add	0.11	
			For >25,000 LF, Deduct	-0.08	
32 17 23 13-0104	LF		Single 6" Wide Solid Line, Epoxy Reflective Pavement Striping.....	0.74	
			For Broken Line, Deduct	-0.33	
			For 20 Mil Thickness, Add	0.16	
			For Up To 5,000 LF, Add	0.15	
			For >25,000 LF, Deduct	-0.11	
32 17 23 13-0105	LF		Single 8" Wide Solid Line, Epoxy Reflective Pavement Striping.....	0.90	
			For Broken Line, Deduct	-0.39	
			For 20 Mil Thickness, Add	0.19	
			For Up To 5,000 LF, Add	0.18	
			For >25,000 LF, Deduct	-0.14	
32 17 23 13-0106	LF		Single 12" Wide Solid Line, Epoxy Reflective Pavement Striping.....	1.34	
			For Broken Line, Deduct	-0.64	
			For 20 Mil Thickness, Add	0.31	
			For Up To 5,000 LF, Add	0.27	
			For >25,000 LF, Deduct	-0.20	
32 17 23 13-0107	LF		Double 4" Wide Solid Lines, Epoxy Reflective Pavement Striping.....	0.81	
			For Broken Line On One Side, Deduct	-0.21	
			For Double Broken Line, Deduct	-0.43	
			For 20 Mil Thickness, Add	0.20	
			For Up To 5,000 LF, Add	0.16	
			For >25,000 LF, Deduct	-0.12	
32 17 23 13-0108	LF		Double 6" Wide Solid Lines, Epoxy Reflective Pavement Striping.....	1.15	
			For Broken Line On One Side, Deduct	-0.32	
			For Double Broken Line, Deduct	-0.64	
			For 20 Mil Thickness, Add	0.30	
			For Up To 5,000 LF, Add	0.23	
			For >25,000 LF, Deduct	-0.17	
32 17 23 13-0109	SF		Solid Area, Epoxy Reflective Pavement Marking.....	7.24	
			Note: Use this task for: lines >12" wide, stop bars, transverse lines, diagonal lines, crossing lanes, etc.		
			For 20 Mil Thickness, Add	0.80	
32 17 23 13-0110	EA		6" High, Letter/Number, Epoxy Reflective Pavement Marking.....	4.52	
			For 20 Mil Thickness, Add	0.40	
			For <10, Add	0.59	
			For >50 To 100, Deduct	-0.29	
			For >100 To 200, Deduct	-0.39	
			For >200, Deduct	-0.78	
32 17 23 13-0111	EA		12" High, Letter/Number, Epoxy Reflective Pavement Marking.....	8.11	
			For 20 Mil Thickness, Add	1.03	
			For <10, Add	0.89	
			For >50 To 100, Deduct	-0.44	
			For >100 To 200, Deduct	-0.59	
			For >200, Deduct	-1.18	
32 17 23 13-0112	EA		24" High, Letter/Number, Epoxy Reflective Pavement Marking.....	13.68	
			For 20 Mil Thickness, Add	1.78	
			For <10, Add	1.47	
			For >50 To 100, Deduct	-0.74	
			For >100 To 200, Deduct	-0.98	
			For >200, Deduct	-1.96	
32 17 23 13-0113	EA		36" High, Letter/Number, Epoxy Reflective Pavement Marking.....	26.40	
			For 20 Mil Thickness, Add	3.24	
			For <10, Add	2.94	
			For >50 To 100, Deduct	-1.47	
			For >100 To 200, Deduct	-1.96	
			For >200, Deduct	-3.92	
32 17 23 13-0114	EA		48" High, Letter/Number, Epoxy Reflective Pavement Marking.....	30.84	
			For 20 Mil Thickness, Add	4.04	
			For <10, Add	3.30	
			For >50 To 100, Deduct	-1.65	
			For >100 To 200, Deduct	-2.20	
			For >200, Deduct	-4.40	
32 17 23 13-0115	EA		72" High, Letter/Number, Epoxy Reflective Pavement Marking.....	55.28	
			For 20 Mil Thickness, Add	7.33	
			For <10, Add	5.88	
			For >50 To 100, Deduct	-2.94	
			For >100 To 200, Deduct	-3.92	
			For >200, Deduct	-7.83	
32 17 23 13-0116	EA		96" High, Letter/Number, Epoxy Reflective Pavement Marking.....	73.79	
			For 20 Mil Thickness, Add	9.69	
			For <10, Add	7.89	
			For >50 To 100, Deduct	-3.95	
			For >100 To 200, Deduct	-5.26	
			For >200, Deduct	-10.52	
32 17 23 13-0117	EA		120" High, Letter/Number, Epoxy Reflective Pavement Marking.....	112.48	
			For 20 Mil Thickness, Add	19.03	
			For <10, Add	9.78	
			For >50 To 100, Deduct	-4.89	
			For >100 To 200, Deduct	-6.52	
			For >200, Deduct	-13.03	
32 17 23 13-0118	SF		Letter/Number, Epoxy Reflective Pavement Marking.....	7.44	
			For 20 Mil Thickness, Add	0.81	



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Bases, Ballasts, and Paving			32 10
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MINOR CSI UOM DESCRIPTION			TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
32 17 23 13-0119	SF	Symbols, Epoxy Reflective Pavement Marking..... Note: Handicap, railroad, diamond, arrows, etc. For 20 Mil Thickness, Add	9.44  0.91	
32 17 23 13-0120		<b>Painted Pavement Striping, Letters And Symbols For Parking Areas</b> (32 17 23 13)		
		Note: Includes primers. Per Coat.		
32 17 23 13-0121		<b>Painted Pavement Marking For Parking Areas</b> (32 17 23 13-0120)		
		Note: 15 mil thickness.		
32 17 23 13-0122	LF	Single 4" Wide Solid Line, Painted Pavement Striping For Parking Areas.....	1.24	
32 17 23 13-0123	LF	Single 6" Wide Solid Line, Painted Pavement Striping For Parking Areas.....	1.34	
32 17 23 13-0124	LF	Single 8" Wide Solid Line, Painted Pavement Striping For Parking Areas.....	1.43	
32 17 23 13-0125	LF	Single 12" Wide Solid Line, Painted Pavement Striping For Parking Areas.....	1.60	
32 17 23 13-0126	SF	Solid Area, Painted Pavement Marking For Parking Areas .....	5.89	
		Note: Use task for lines >12" wide, stop bars, transverse lines, diagonal lines, crossing lanes, etc.		
32 17 23 13-0127	EA	6" High, Letter/Number, Painted Pavement Marking For Parking Areas.....	4.15	
		For Up To 10, Add	0.57	
		For >50 To 100, Deduct	-0.29	
		For >100 To 200, Deduct	-0.38	
		For >200, Deduct	-0.76	
32 17 23 13-0128	EA	12" High, Letter/Number, Painted Pavement Marking For Parking Areas.....	6.94	
		For Up To 10, Add	0.86	
		For >50 To 100, Deduct	-0.43	
		For >100 To 200, Deduct	-0.57	
		For >200, Deduct	-1.14	
32 17 23 13-0129	EA	24" High, Letter/Number, Painted Pavement Marking For Parking Areas.....	11.69	
		For Up To 10, Add	1.43	
		For >50 To 100, Deduct	-0.71	
		For >100 To 200, Deduct	-0.95	
		For >200, Deduct	-1.91	
32 17 23 13-0130	EA	36" High, Letter/Number, Painted Pavement Marking For Parking Areas.....	21.89	
		For Up To 10, Add	2.72	
		For >50 To 100, Deduct	-1.36	
		For >100 To 200, Deduct	-1.81	
		For >200, Deduct	-3.62	
32 17 23 13-0131	EA	42" High, Letter/Number, Painted Pavement Marking For Parking Areas.....	29.13	
		For Up To 10, Add	3.72	
		For >50 To 100, Deduct	-1.86	
		For >100 To 200, Deduct	-2.48	
		For >200, Deduct	-4.95	
32 17 23 13-0132	EA	48" High, Letter/Number/Arrow, Painted Pavement Marking For Parking Areas .....	35.43	
		For Up To 10, Add	4.58	
		For >50 To 100, Deduct	-2.29	
		For >100 To 200, Deduct	-3.05	
		For >200, Deduct	-6.10	
32 17 23 13-0133	EA	72" High, Letter/Number/Arrow, Painted Pavement Marking For Parking Areas .....	47.11	
		For Up To 10, Add	5.72	
		For >50 To 100, Deduct	-2.86	
		For >100 To 200, Deduct	-3.81	
		For >200, Deduct	-7.62	
32 17 23 13-0134	EA	Through Lane Arrow, Painted Pavement Marking For Parking Areas .....	82.45	
		Note: Approximate overall dimensions: 3-1/2' width x 10' height.		
32 17 23 13-0135	EA	Turn Lane Arrow, Painted Pavement Marking For Parking Areas .....	93.54	
		Note: Approximate overall dimensions: 6' width x 8' height.		
32 17 23 13-0136	EA	Dual Turn Lane Arrow, Painted Pavement Marking For Parking Areas .....	131.27	
		Note: Approximate overall dimensions: 11' width x 8' height.		
32 17 23 13-0137	EA	Turn And Through Lane Arrow, Painted Pavement Marking For Parking Areas.....	133.83	
		Note: Approximate overall dimensions: 7' width x 13' height.		
32 17 23 13-0138	EA	Dual Turn And Through Lane Arrow, Painted Pavement Marking For Parking Areas .....	173.25	
		Note: Approximate overall dimensions: 9' width x 15' height.		
32 17 23 13-0139	EA	Handicap Symbol For Standard Parking Stalls, Painted Pavement Marking For Parking Areas .....	34.27	
		Note: Approximate overall dimensions: 2-2/3' width x 3' height. White or blue symbol. Excludes striping.		
		For Blue Background With White Symbol, Add	24.48	
		For Blue Background With White Symbol And Border, Add	30.60	
32 17 23 13-0140	EA	Handicap Symbol For Van Parking Stalls, Painted Pavement Marking For Parking Areas .....	49.25	
		Note: Approximate overall dimensions: 4-1/3' width x 5' height. White or blue symbol. Excludes striping.		
		For Blue Background With White Symbol, Add	49.09	
		For Blue Background With White Symbol And Border, Add	61.37	
32 17 23 13-0141		<b>Painted Curbs</b> (32 17 23 13)		
		Note: All colors.		
32 17 23 13-0142	LF	Reflective Painted Curb .....	3.24	
32 17 23 13-0143	LF	Reflective Painted Curb And Gutter.....	6.16	
32 17 23 13-0144	LF	Painted Curb.....	2.62	
32 17 23 13-0145	LF	Painted Curb And Gutter .....	5.61	
32 17 23 13-0146		<b>Markings For Outdoor Play Areas, Courts</b> (32 17 23 13)		
32 17 23 13-0147	LF	2" Wide Marking For Outdoor Play Areas.....	0.90	
32 17 23 13-0148	LF	3" Wide Marking For Outdoor Play Areas.....	1.02	
32 17 23 13-0149	LF	4" Wide Marking For Outdoor Play Areas.....	1.14	
32 17 23 13-0150	LF	6" Wide Marking For Outdoor Play Areas.....	1.34	

**32 Exterior Improvements****32 10 Bases, Ballasts, and Paving****32 17 Paving Specialties**

MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
32 17 23 13-0151 EA Paint Playground Game Lines And Background On Asphalt Or Concrete (Hop Scotch, 4 Square, Numbers Games, Etcetera).....	267.67	
<b>32 17 23 23 Raised Pavement Markings (32 17 23)</b>		
<b>32 17 23 23-0001 Raised Pavement Markers (RPMs) (32 17 23 23)</b>		
32 17 23 23-0002 EA One-Way Reflective, Raised Pavement Marker (RPM) ..... Note: Type G, H or R	5.69	2.45
For >100, Deduct	-0.57	
32 17 23 23-0003 EA Two-Way Reflective, Raised Pavement Marker (RPM) ..... Note: Type B, C, D, AC, RA or RR	6.02	2.45
For >100, Deduct	-0.60	
32 17 23 23-0004 EA 4" Diameter, Round Reflective, Raised Pavement Marker (RPM) ..... For >100, Deduct	6.72	2.45
32 17 23 23-0005 EA 4" Diameter, Non-Reflective, Raised Pavement Marker (RPM) ..... Note: Type A or AY	5.27	2.45
For >100, Deduct	-0.53	
<b>32 17 23 23-0006 Snowplowable Pavement Markers (32 17 23 23)</b>		
32 17 23 23-0007 EA One-Way Reflective, Snowplowable Pavement Marker With Center Rail ..... Note: Type G, H or R	69.90	29.67
32 17 23 23-0008 EA Two-Way Reflective, Snowplowable Pavement Marker With Center Rail ..... Note: Type B, C, D, AC, RA or RR	70.19	29.67
32 17 23 23-0009 EA Removal And Replacement Of Reflector For One-Way Reflective, Recessed (Plowable) Pavement Marker .....	19.01	
32 17 23 23-0010 EA Removal And Replacement Of Reflectors For Two-Way Reflective, Recessed (Plowable) Pavement Marker .....	24.24	
<b>32 17 23 33 Plastic Pavement Markings (32 17 23)</b>		
<b>32 17 23 33-0001 Thermoplastic Pavement Striping, Letters, Symbols And Markers For Roads (32 17 23 33)</b>		
Note: Includes primers, adhesive and glass beads where required. For broken line modifier quantity use total lane length.		
<b>32 17 23 33-0002 Thermoplastic Reflective Pavement Marking (32 17 23 33-0001)</b>		
Note: 90 mil thickness.		
32 17 23 33-0003 LF Single 4" Wide Solid Line, 90 Mil Thick, Thermoplastic Reflective Pavement Striping ..... For Up To 5,000 LF, Add For >25,000 LF, Deduct For 60 mils Thick, Deduct For 125 mils Thick, Add For Broken Line, Deduct	1.35 0.27 -0.20 -0.18 0.23 -0.77	
32 17 23 33-0004 LF Single 6" Wide Solid Line, 90 Mil Thick, Thermoplastic Reflective Pavement Striping ..... Note: Includes yellow or white. For Up To 5,000 LF, Add For >25,000 LF, Deduct For 60 mils Thick, Deduct For 125 mils Thick, Add For Broken Line, Deduct	1.93 0.39 -0.29 -0.27 0.34 -1.15	
32 17 23 33-0005 LF Single 8" Wide Solid Line, 90 Mil Thick, Thermoplastic Reflective Pavement Striping ..... Note: Includes yellow or white. For Up To 5,000 LF, Add For >25,000 LF, Deduct For 60 mils Thick, Deduct For 125 mils Thick, Add For Broken Line, Deduct	2.55 0.51 -0.38 -0.36 0.46 -1.53	
32 17 23 33-0006 LF Single 12" Wide Solid Line, 90 Mil Thick, Thermoplastic Reflective Pavement Striping ..... Note: Includes yellow or white. For Up To 5,000 LF, Add For >25,000 LF, Deduct For 60 mils Thick, Deduct For 125 mils Thick, Add For Broken Line, Deduct	3.72 0.74 -0.56 -0.54 0.69 -2.30	
32 17 23 33-0007 LF Double 4" Wide Solid Lines, 90 Mil Thick, Thermoplastic Reflective Pavement Striping ..... Note: Includes yellow or white. For Up To 5,000 LF, Add For >25,000 LF, Deduct For 60 mils Thick, Deduct For 125 mils Thick, Add For Broken Line On One Side, Deduct For Double Broken Line, Deduct	2.53 0.51 -0.38 -0.36 0.46 -0.77 -1.53	
32 17 23 33-0008 LF Double 6" Wide Solid Lines, 90 Mil Thick, Thermoplastic Reflective Pavement Striping ..... Note: Includes yellow or white. For Up To 5,000 LF, Add For >25,000 LF, Deduct For 60 mils Thick, Deduct For 125 mils Thick, Add For Broken Line On One Side, Deduct For Double Broken Line, Deduct	3.72 0.74 -0.56 -0.54 0.69 -1.15 -2.30	
32 17 23 33-0009 SF Solid Area, 90 Mil Thick, Thermoplastic Reflective Pavement Marking ..... Note: Includes yellow or white. For 60 mils Thick, Deduct For 125 mils Thick, Add	8.75 -0.53 0.68	





Exterior Improvements			32
Bases, Ballasts, and Paving			32 10
Paving Specialties			32 17

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MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
32 17 23 33-0010 EA 6" High, Letter/Number, 90 Mil Thick, Thermoplastic Reflective Pavement Marking .....	5.77	
For 60 mils Thick, Deduct	-0.26	
For 125 mils Thick, Add	0.33	
For Up To 10, Add	0.64	
For >50 To 100, Deduct	-0.32	
For >100 To 200, Deduct	-0.43	
For >200, Deduct	-0.86	
32 17 23 33-0011 EA 12" High, Letter/Number, 90 Mil Thick, Thermoplastic Reflective Pavement Marking .....	11.84	
For 60 mils Thick, Deduct	-0.94	
For 125 mils Thick, Add	1.21	
For Up To 10, Add	0.97	
For >50 To 100, Deduct	-0.49	
For >100 To 200, Deduct	-0.65	
For >200, Deduct	-1.30	
32 17 23 33-0012 EA 24" High, Letter/Number, 90 Mil Thick, Thermoplastic Reflective Pavement Marking .....	20.15	
For 60 mils Thick, Deduct	-1.64	
For 125 mils Thick, Add	2.11	
For Up To 10, Add	1.62	
For >50 To 100, Deduct	-0.81	
For >100 To 200, Deduct	-1.08	
For >200, Deduct	-2.15	
32 17 23 33-0013 EA 36" High, Letter/Number, 90 Mil Thick, Thermoplastic Reflective Pavement Marking .....	38.12	
For 60 mils Thick, Deduct	-2.89	
For 125 mils Thick, Add	3.71	
For Up To 10, Add	3.24	
For >50 To 100, Deduct	-1.62	
For >100 To 200, Deduct	-2.16	
For >200, Deduct	-4.33	
32 17 23 33-0014 EA 48" High, Letter/Number, 90 Mil Thick, Thermoplastic Reflective Pavement Marking .....	45.64	
For 60 mils Thick, Deduct	-3.75	
For 125 mils Thick, Add	4.82	
For Up To 10, Add	3.63	
For >50 To 100, Deduct	-1.82	
For >100 To 200, Deduct	-2.42	
For >200, Deduct	-4.84	
32 17 23 33-0015 EA 72" High, Letter/Number, 90 Mil Thick, Thermoplastic Reflective Pavement Marking .....	82.24	
For 60 mils Thick, Deduct	-6.85	
For 125 mils Thick, Add	8.81	
For Up To 10, Add	6.46	
For >50 To 100, Deduct	-3.23	
For >100 To 200, Deduct	-4.31	
For >200, Deduct	-8.61	
32 17 23 33-0016 EA 96" High, Letter/Number, 90 Mil Thick, Thermoplastic Reflective Pavement Marking .....	109.38	
For 60 mils Thick, Deduct	-9.02	
For 125 mils Thick, Add	11.60	
For Up To 10, Add	8.68	
For >50 To 100, Deduct	-4.34	
For >100 To 200, Deduct	-5.78	
For >200, Deduct	-11.57	
32 17 23 33-0017 EA 120" High, Letter/Number, 90 Mil Thick, Thermoplastic Reflective Pavement Marking .....	186.70	
For 60 mils Thick, Deduct	-20.13	
For 125 mils Thick, Add	25.88	
For Up To 10, Add	10.75	
For >50 To 100, Deduct	-5.37	
For >100 To 200, Deduct	-7.17	
For >200, Deduct	-14.33	
32 17 23 33-0018 SF Letter/Number, 90 Mil Thick, Thermoplastic Reflective Pavement Marking .....	10.19	
For 60 mils Thick, Deduct	-0.65	
For 125 mils Thick, Add	0.83	
32 17 23 33-0019 SY Cross Hatch, 90 Mil Thick, Thermoplastic Reflective Pavement Marking .....	30.66	
Note: Per SY of area.		
For 60 mils Thick, Deduct	-1.20	
For 125 mils Thick, Add	1.54	
32 17 23 33-0020 EA Handicap Symbol, 90 Mil Thick, Thermoplastic Reflective Pavement Marking .....	267.25	
For 60 mils Thick, Deduct	-14.94	
For 125 mils Thick, Add	19.20	
32 17 23 33-0021 EA Railroad Symbol, 90 Mil Thick, Thermoplastic Reflective Pavement Marking .....	793.37	
For 60 mils Thick, Deduct	-45.46	
For 125 mils Thick, Add	58.45	
32 17 23 33-0022 EA Bike Lane Symbol, 90 Mil Thick, Thermoplastic Reflective Pavement Marking .....	155.65	
Note: Approximate overall dimensions: 4' width x 8' height.		
For 60 mils Thick, Deduct	-20.57	
For 125 mils Thick, Add	26.45	
32 17 23 33-0023 EA Diamond Symbol, 90 Mil Thick, Thermoplastic Reflective Pavement Marking .....	127.82	
For 60 mils Thick, Deduct	-7.14	
For 125 mils Thick, Add	9.18	
32 17 23 33-0024 SF Symbols, 90 Mil Thick, Thermoplastic Reflective Pavement Marking .....	11.62	
Note: Handicap, railroad, diamond, arrows, etc.		
For 60 mils Thick, Deduct	-0.65	
For 125 mils Thick, Add	0.83	
32 17 23 33-0025 EA 10' Arrow, Type I, 90 Mil Thick, Thermoplastic Reflective Pavement Marking .....	162.67	
For 60 mils Thick, Deduct	-9.09	
For 125 mils Thick, Add	11.69	
32 17 23 33-0026 EA 18' Arrow, Type I, 90 Mil Thick, Thermoplastic Reflective Pavement Marking .....	290.50	
For 60 mils Thick, Deduct	-16.24	
For 125 mils Thick, Add	20.88	

**32 Exterior Improvements****32 10 Bases, Ballasts, and Paving****32 17 Paving Specialties**

MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
32 17 23 33-0027 EA 24' Arrow, Type I, 90 Mil Thick, Thermoplastic Reflective Pavement Marking.....	360.22	
For 60 mils Thick, Deduct	-20.13	
For 125 mils Thick, Add	25.88	
32 17 23 33-0028 EA 24' Arrow With Single (L or R) Turn Arrow, Type II, 90 Mil Thick, Thermoplastic Reflective Pavement Marking.....	522.89	
For 60 mils Thick, Deduct	-29.23	
For 125 mils Thick, Add	37.58	
32 17 23 33-0029 EA 24' Arrow With Both (L and R) Turn Arrows, Type II, 90 Mil Thick, Thermoplastic Reflective Pavement Marking.....	685.57	
For 60 mils Thick, Deduct	-38.32	
For 125 mils Thick, Add	49.26	
32 17 23 33-0030 EA 24' Arrow Single (L or R) Turn Arrow, Type III, 90 Mil Thick, Thermoplastic Reflective Pavement Marking.....	488.02	
For 60 mils Thick, Deduct	-27.28	
For 125 mils Thick, Add	35.07	
32 17 23 33-0031 EA 24' Arrow Both (L and R) Turn Arrows, Type III, 90 Mil Thick, Thermoplastic Reflective Pavement Marking.....	848.25	
For 60 mils Thick, Deduct	-47.41	
For 125 mils Thick, Add	60.95	
32 17 23 33-0032 EA 8' Turn Arrow (L or R), Type IV, 90 Mil Thick, Thermoplastic Reflective Pavement Marking.....	174.30	
For 60 mils Thick, Deduct	-9.74	
For 125 mils Thick, Add	12.53	
32 17 23 33-0033 EA 24' Arrow, Type V, 90 Mil Thick, Thermoplastic Reflective Pavement Marking.....	383.45	
For 60 mils Thick, Deduct	-21.43	
For 125 mils Thick, Add	27.55	
32 17 23 33-0034 EA 18' Arrow, Type VI, 90 Mil Thick, Thermoplastic Reflective Pavement Marking.....	488.02	
For 60 mils Thick, Deduct	-27.28	
For 125 mils Thick, Add	35.07	
32 17 23 33-0035 EA 13' Arrow With Single (L or R) Turn Arrow, Type VII, 90 Mil Thick, Thermoplastic Reflective Pavement Marking.....	313.74	
For 60 mils Thick, Deduct	-17.54	
For 125 mils Thick, Add	22.55	
32 17 23 33-0036 EA 15' Arrow With Both (L and R) Turn Arrows, Type VIII, 90 Mil Thick, Thermoplastic Reflective Pavement Marking.....	418.32	
For 60 mils Thick, Deduct	-23.38	
For 125 mils Thick, Add	30.06	
32 17 23 33-0037 EA 5' Arrow, Bike Lane, 90 Mil Thick, Thermoplastic Reflective Pavement Marking.....	81.34	
For 60 mils Thick, Deduct	-4.55	
For 125 mils Thick, Add	5.85	
<b>32 17 23 33-0038 Thermoplastic Reflective Pavement Striping By Hand For Repairs (32 17 23 33-0001)</b>		
32 17 23 33-0039 LF Single 4" Wide Solid Line, 90 Mil Thick, Thermoplastic Reflective Pavement Striping By Hand For Repairs.....	3.03	
For 60 mils Thick, Deduct	-0.18	
For 125 mils Thick, Add	0.23	
32 17 23 33-0040 LF Single 6" Wide Solid Line, 90 Mil Thick, Thermoplastic Reflective Pavement Striping By Hand For Repairs.....	3.83	
For 60 mils Thick, Deduct	-0.27	
For 125 mils Thick, Add	0.34	
32 17 23 33-0041 LF Single 8" Wide Solid Line, 90 Mil Thick, Thermoplastic Reflective Pavement Striping By Hand For Repairs.....	4.71	
For 60 mils Thick, Deduct	-0.36	
For 125 mils Thick, Add	0.46	
32 17 23 33-0042 LF Single 12" Wide Solid Line, 90 Mil Thick, Thermoplastic Reflective Pavement Striping By Hand For Repairs.....	6.77	
For 60 mils Thick, Deduct	-0.54	
For 125 mils Thick, Add	0.69	
32 17 23 33-0043 LF Single 24" Wide Solid Line, 90 Mil Thick, Thermoplastic Reflective Pavement Striping By Hand For Repairs.....	12.13	
For 60 mils Thick, Deduct	-1.07	
For 125 mils Thick, Add	1.37	
<b>32 17 23 33-0044 Preformed, Patterned Reflective Pavement Marking Tape (32 17 23 33-0001)</b>		
Note: Applied with pressure sensitive adhesive. Includes adhesive. 60 mil thickness. (3M Stamark 380 Series).		
32 17 23 33-0045 LF Single 4" Wide Solid Line, 60 Mil Thick, Preformed Patterned Thermoplastic Reflective Pavement Striping.....	2.84	
Note: Includes yellow or white.		
For Up To 5,000 LF, Add	0.57	
For >25,000 LF, Deduct	-0.43	
32 17 23 33-0046 LF Single 6" Wide Solid Line, 60 Mil Thick, Preformed Patterned Thermoplastic Reflective Pavement Striping.....	4.19	
Note: Includes yellow or white.		
For Up To 5,000 LF, Add	0.84	
For >25,000 LF, Deduct	-0.63	
32 17 23 33-0047 LF Single 8" Wide Solid Line, 60 Mil Thick, Preformed Patterned Thermoplastic Reflective Pavement Striping.....	5.56	
Note: Includes yellow or white.		
For Up To 5,000 LF, Add	1.11	
For >25,000 LF, Deduct	-0.83	
32 17 23 33-0048 LF Single 12" Wide Solid Line, 60 Mil Thick, Preformed Patterned Thermoplastic Reflective Pavement Striping.....	8.24	
Note: Includes yellow or white.		
For Up To 5,000 LF, Add	1.65	
For >25,000 LF, Deduct	-1.24	
32 17 23 33-0049 SF Solid Area, 60 Mil Thick, Preformed Patterned Thermoplastic Reflective Pavement Marking Tape.....	23.10	
Note: Includes yellow or white.		
32 17 23 33-0050 EA 6" High, Preformed Letter/Number, 60 Mil Thick, Patterned Thermoplastic Reflective Pavement Marking Tape.....	34.26	
For <10, Add	1.17	
For >50 To 100, Deduct	-0.59	
For >100 To 200, Deduct	-0.78	
For >200, Deduct	-1.56	
32 17 23 33-0051 EA 12" High, Preformed Letter/Number, 60 Mil Thick, Patterned Thermoplastic Reflective Pavement Marking Tape.....	60.25	
For <10, Add	1.49	
For >50 To 100, Deduct	-0.74	
For >100 To 200, Deduct	-0.99	
For >200, Deduct	-1.98	



Exterior Improvements			32
Bases, Ballasts, and Paving			32 10
Paving Specialties			32 17

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MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
32 17 23 33-0052 EA 24" High, Preformed Letter/Number, 60 Mil Thick, Patterned Thermoplastic Reflective Pavement Marking Tape ..... 103.66 For <10, Add 2.94 For >50 To 100, Deduct -1.47 For >100 To 200, Deduct -1.96 For >200, Deduct -3.92		
32 17 23 33-0053 EA 36" High, Preformed Letter/Number, 60 Mil Thick, Patterned Thermoplastic Reflective Pavement Marking Tape ..... 150.34 For <10, Add 5.89 For >50 To 100, Deduct -2.94 For >100 To 200, Deduct -3.93 For >200, Deduct -7.85		
32 17 23 33-0054 EA 48" High, Preformed Letter/Number, 60 Mil Thick, Patterned Thermoplastic Reflective Pavement Marking Tape ..... 176.09 For <10, Add 6.60 For >50 To 100, Deduct -3.30 For >100 To 200, Deduct -4.40 For >200, Deduct -8.80		
32 17 23 33-0055 EA 72" High, Preformed Letter/Number, 60 Mil Thick, Patterned Thermoplastic Reflective Pavement Marking Tape ..... 226.78 For <10, Add 11.75 For >50 To 100, Deduct -5.87 For >100 To 200, Deduct -7.83 For >200, Deduct -15.67		
32 17 23 33-0056 EA 96" High, Preformed Letter/Number, 60 Mil Thick, Patterned Thermoplastic Reflective Pavement Marking Tape ..... 289.47 For <10, Add 15.78 For >50 To 100, Deduct -7.89 For >100 To 200, Deduct -10.52 For >200, Deduct -21.04		
32 17 23 33-0057 EA 120" High, Preformed Letter/Number, 60 Mil Thick, Patterned Thermoplastic Reflective Pavement Marking Tape ..... 362.75 For <10, Add 19.55 For >50 To 100, Deduct -9.78 For >100 To 200, Deduct -13.04 For >200, Deduct -26.07		
32 17 23 33-0058 SF Preformed Arrow, 60 Mil Thick, Patterned Thermoplastic Reflective Pavement Marking Tape ..... 23.87		
32 17 23 33-0059 SF Preformed Symbol, 60 Mil Thick, Patterned Thermoplastic Reflective Pavement Marking Tape ..... 25.30 Note: Handicap, railroad, diamond symbol, etc.		
32 17 23 33-0060 Preformed, Thermoplastic Reflective Pavement Marking (32 17 23 33-0001) Note: Heat applied. (Flint PreMark or HotTape Series).		
32 17 23 33-0061 EA Preformed Bike Lane Symbol, 90 Mil Thick, Thermoplastic Reflective Pavement Marking Tape ..... 327.11 Note: Approximate overall dimensions: 4' width x 8' height.		
32 17 23 33-0062 EA Preformed Railroad Crossing Symbol, 125 Mil Thick, Thermoplastic Reflective Pavement Marking Tape ..... 866.85 Note: Approximate overall dimensions: 8' width x 20' height. Excludes transverse lines.		
32 17 23 33-0063 EA Preformed Preferential Lane Symbol (Diamond), 125 Mil Thick, Thermoplastic Reflective Pavement Marking Tape ..... 176.17 Note: Approximate overall dimensions: 3-1/4' width x 13' height.		
32 17 23 33-0064 EA 6' Height, Preformed Through Lane Arrow, 90 Mil Thick, Thermoplastic Reflective Pavement Marking Tape ..... 150.20 Note: Approximate overall dimensions: 2' width x 6' height.		
32 17 23 33-0065 EA 9-1/2' Height, Preformed Through Lane Arrow, 90 Mil Thick, Thermoplastic Reflective Pavement Marking Tape ..... 286.60 Note: Approximate overall dimensions: 3-1/4' width x 9-1/2' height.		
32 17 23 33-0066 EA 4' Height, Preformed Turn Lane Arrow, 90 Mil Thick, Thermoplastic Reflective Pavement Marking Tape ..... 173.03 Note: Approximate overall dimensions: 3' width x 4' height.		
32 17 23 33-0067 EA 8' Height, Preformed Turn Lane Arrow, 90 Mil Thick, Thermoplastic Reflective Pavement Marking Tape ..... 318.38 Note: Approximate overall dimensions: 6' width x 8' height.		
32 17 23 33-0068 EA Preformed Turn And Through Lane Arrow, 90 Mil Thick, Thermoplastic Reflective Pavement Marking Tape ..... 540.23 Note: Approximate overall dimensions: 7-1/4' width x 12-3/4' height.		
32 17 23 33-0069 EA Preformed Dual Turn And Through Lane Arrow, 90 Mil Thick, Thermoplastic Reflective Pavement Marking Tape ..... 810.32 Note: Approximate overall dimensions: 11-1/4' width x 13-1/4' height.		
32 17 23 33-0070 EA Preformed Elongated Through Lane Arrow, 90 Mil Thick, Thermoplastic Reflective Pavement Marking Tape ..... 295.93 Note: Approximate overall dimensions: 1-2/3' width x 12' height.		
32 17 23 33-0071 EA Preformed Elongated Turn Lane Arrow, 90 Mil Thick, Thermoplastic Reflective Pavement Marking Tape ..... 327.71 Note: Approximate overall dimensions: 3' width x 12' height.		
32 17 23 33-0072 EA Preformed Elongated Dual Turn Lane Arrow, 90 Mil Thick, Thermoplastic Reflective Pavement Marking Tape ..... 598.27 Note: Approximate overall dimensions: 5-1/2' width x 12' height.		
32 17 23 33-0073 EA Preformed Elongated Turn And Through Lane Arrow, 90 Mil Thick, Thermoplastic Reflective Pavement Marking Tape ..... 550.71 Note: Approximate overall dimensions: 3-1/2' width x 20' height.		
32 17 23 33-0074 EA Preformed Elongated Dual Turn And Through Lane Arrow, 90 Mil Thick, Thermoplastic Reflective Pavement Marking Tape ..... 553.57 Note: Approximate overall dimensions: 5-1/2' width x 20' height.		
32 17 23 33-0075 EA Preformed Lane-Reduction Arrow, 90 Mil Thick, Thermoplastic Reflective Pavement Marking Tape ..... 757.13 Note: Approximate overall dimensions: 5-1/2' width x 18' height.		
32 17 23 33-0076 Thermoplastic Pavement Striping, Letters And Symbols For Parking Areas (32 17 23 33) Note: Heat applied. (Flint PreMark Series).		
32 17 23 33-0077 Thermoplastic Pavement Marking Symbols For Parking Areas (32 17 23 33-0076) Note: Heat applied. (Flint PreMark Series).		
32 17 23 33-0078 EA 28" Handicap Symbol For Standard Parking Stalls, 90 Mil Thick, Thermoplastic Pavement Marking Tape For Parking Areas ..... 112.97 Note: White or blue symbol. Excludes striping.		
32 17 23 33-0079 EA 39" Handicap Symbol For Standard Parking Stalls, 90 Mil Thick, Thermoplastic Pavement Marking Tape For Parking Areas ..... 415.70 Note: Approximate overall dimensions: 2-2/3' width x 3' height. White or blue symbol. Excludes striping.		
32 17 23 33-0080 EA 40" x 40" Handicap Symbol For Van Parking Stalls, 90 Mil Thick, Thermoplastic Pavement Marking Tape For Parking Areas ..... 237.18 Note: White symbol on blue background. Excludes striping.		

**32 Exterior Improvements****32 10 Bases, Ballasts, and Paving****32 17 Paving Specialties**

MINOR CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
32 17 23 33-0081	EA	45" x 45" Handicap Symbol For Van Parking Stalls, 90 Mil Thick, Thermoplastic Pavement Marking Tape For Parking Areas..... Note: White symbol on blue background. Excludes striping.	284.35	
32 17 23 33-0082	EA	48" x 48" Handicap Symbol For Van Parking Stalls, 90 Mil Thick, Thermoplastic Pavement Marking Tape For Parking Areas..... Note: White symbol on blue background. Excludes striping.	297.92	
<b>32 17 26 Tactile Warning Surfaces</b> (32 17)				
32 17 26 00-0001		Vitrified Polymer Composite (VPC); (Armor Tile) (32 17 26) Note: Truncated dome, raised strips or directional bars. All colors.		
32 17 26 00-0002	SF	Surface Applied VPC Truncated Dome Detectable Warning Surface..... Note: Includes adhesive, fasteners and sealant at perimeter. Also raised strips or directional bars. All colors.	66.89	9.41
32 17 26 00-0003	SF	Embedded, VPC Truncated Dome Detectable Warning Surface..... Note: Also raised strips or directional bars. All colors.	54.66	9.41
32 17 26 00-0004		Fiber-Reinforced, Polymermodified Cement And Coated With Acrylic Resin Emulsion (SatyStep TD) (32 17 26) Note: Pre-molded tactile dome sheet. All colors.		
32 17 26 00-0005	SF	Up To 15 SF, Surface Applied Pre-Molded Tactile Warning Mat (SSTD-MAT) ..... Note: Includes surface preparation, SSTD-589 adhesive, SSTD-100 top coat sealer and SSTD-1250 finish . All colors. 2' or 3' width.	76.10	9.41
32 17 26 00-0006	SF	>15 To 36 SF, Surface Applied Pre-Molded Tactile Warning Mat (SSTD-MAT) ..... Note: Includes surface preparation, SSTD-589 adhesive, SSTD-100 top coat sealer and SSTD-1250 finish . All colors. 2' or 3' width.	67.64	9.41
<b>32 30 Site Improvements</b> (32)				
<b>32 31 Fences and Gates</b> (32 30)				
<b>32 31 11 Gate Operators</b> (32 31)				
32 31 11 00-0001		Gate Operators (32 31 11) Note: Excludes gates, electrical connections, access controls and concrete foundation.		
32 31 11 00-0002		Swing Gate Actuator (DKS™ DoorKing®) (32 31 11 00-0001)		
32 31 11 00-0003		Single Gate, Swing Gate Actuator (32 31 11 00-0002)		
32 31 11 00-0004	EA	Up To 10' Wide Gate, 1/2 HP Motor, 115 Volt AC, Single Gate, Swing Gate Actuator (DKS™ DoorKing® 6003) ..... Note: Includes one primary operator with a 10' wide gate capacity.	1,949.13	202.20
32 31 11 00-0005	EA	Up To 14' Wide Gate, 1/2 HP Motor, 115 Volt AC, Single Gate, Swing Gate Actuator (DKS™ DoorKing® 6002) ..... Note: Includes one primary operator with a 14' wide gate capacity.	2,618.51	202.20
32 31 11 00-0006		Dual Gate, Swing Gate Actuator (32 31 11 00-0002)		
32 31 11 00-0007	EA	Up To 10' Wide Gates, 1/2 HP Motor, 115 Volt AC, Dual Gate, Swing Gate Actuator (DKS™ DoorKing® 6003) ..... Note: Includes one primary and one secondary operator each with a 10' wide gate capacity.	3,898.28	404.39
32 31 11 00-0008	EA	Up To 14' Wide Gates, 1/2 HP Motor, 115 Volt AC, Dual Gate, Swing Gate Actuator (DKS™ DoorKing® 6002) ..... Note: Includes one primary and one secondary operator each with a 14' wide gate capacity.	5,237.05	404.39
32 31 11 00-0009		Swing Gate Operators (DKS™ DoorKing®) (32 31 11 00-0001)		
32 31 11 00-0010		Single Gate, Swing Gate Operators (32 31 11 00-0009)		
32 31 11 00-0011	EA	400 LB Capacity, Up To 10' Wide Gate, 1/2 HP Motor, 115 Volt AC, Single Gate, Swing Gate Operator (DKS™ DoorKing® 6050) ..... Note: Includes one primary operator with a 10' wide and 400 LB gate capacity.	4,043.11	202.20
32 31 11 00-0012	EA	500 LB Capacity, Up To 14' Wide Gate, 1/2 HP Motor, 115 Volt AC, Single Gate, Swing Gate Operator (DKS™ DoorKing® 6100) ..... Note: Includes one primary operator with a 14' wide and 500 LB gate capacity.	4,403.54	202.20
32 31 11 00-0013	EA	700 LB Capacity, Up To 18' Wide Gate, 1/2 HP Motor, 115 Volt AC, Single Gate, Swing Gate Operator (DKS™ DoorKing® 6500) ..... Note: Includes one primary operator with an 18' wide and 700 LB gate capacity.	5,999.77	202.20
32 31 11 00-0014	EA	For 208/230/460 Volt AC, Add 800 LB Capacity, Up To 22' Wide Gate, 1 HP Motor, 115 Volt AC, Single Gate, Swing Gate Operator (DKS™ DoorKing® 6500) ..... Note: Includes one primary operator with a 22' wide and 800 LB gate capacity.	322.50 6,806.47	202.20
		For 208/230/460 Volt AC, Add	322.50	
32 31 11 00-0015		Dual Gate, Swing Gate Operators (32 31 11 00-0009)		
32 31 11 00-0016	EA	400 LB Capacity, Up To 10' Wide Gates, 1/2 HP Motor, 115 Volt AC, Dual Gate, Swing Gate Operator (DKS™ DoorKing® 6050) ..... Note: Includes one primary and one secondary operator each with a 10' wide and 400 LB gate capacity.	7,142.22	404.39
32 31 11 00-0017	EA	500 LB Capacity, Up To 14' Wide Gates, 1/2 HP Motor, 115 Volt AC, Dual Gate, Swing Gate Operator (DKS™ DoorKing® 6100) ..... Note: Includes one primary and one secondary operator each with a 14' wide and 500 LB gate capacity.	7,863.10	404.39
32 31 11 00-0018	EA	700 LB Capacity, Up To 14' Wide Gates, 1/2 HP Motor, 115 Volt AC, Dual Gate, Swing Gate Operator (DKS™ DoorKing® 6500) ..... Note: Includes one primary and one secondary operator each with an 18' wide and 700 LB gate capacity.	11,038.40	404.39
		For 208/230/460 Volt AC, Add	322.50	



Exterior Improvements		32	32
Site Improvements		32 30	
Fences and Gates		32 31	

MINOR CSI UOM DESCRIPTION			TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
32 31 11 00-0019	EA	800 LB Capacity, Up To 22' Wide Gates, 1 HP Motor, 115 Volt AC, Dual Gate, Swing Gate Operator (DKS™ DoorKing® 6500)..... Note: Includes one primary and one secondary operator each with a 22' wide and 800 LB gate capacity. For 208/230/460 Volt AC, Add	12,806.26  322.50	404.39
32 31 11 00-0020		Sliding Gate Operators (DKS™ DoorKing®) (32 31 11 00-0001) Note: Includes 20' of chain. See CSI section 32 31 11 00-0029 for additional chain over 20'.		
32 31 11 00-0021	EA	300 LB Capacity, Up To 16' Wide Gate, 1/2 HP Motor, 115 Volt AC, Sliding Gate Operator (DKS™ DoorKing® 9050)..... Note: Includes operator, chain brackets, hardware and 20' of #41 chain.	1,785.32	202.20
32 31 11 00-0022	EA	1,000 LB Capacity, Up To 30' Wide Gate, 1/2 HP Motor, 115 Volt AC, Sliding Gate Operator (DKS™ DoorKing® 9100)..... Note: Includes operator, chain brackets, hardware and 20' of #41 chain.	2,493.90	242.63
32 31 11 00-0023	EA	1,500 LB Capacity, Up To 45' Wide Gate, 1 HP Motor, 115 Volt AC, Sliding Gate Operator (DKS™ DoorKing® 9150)..... Note: Includes operator, chain brackets, hardware and 20' of #40 chain.	3,079.75	242.63
32 31 11 00-0024	EA	3,000 LB Capacity, Up To 100' Wide Gate, 1 HP Motor, 115 Volt AC, Sliding Gate Operator (DKS™ DoorKing® 9210)..... Note: Includes operator, chain brackets, hardware and 20' of #50 chain.	4,018.47	283.08
32 31 11 00-0025	EA	2,000 LB Capacity, Up To 100' Wide Gate, 1 HP Motor, 208/230 Volt AC, Variable Speed, Sliding Gate Operator (DKS™ DoorKing® 9220)..... Note: Includes operator, chain brackets, hardware and 20' of #50 chain.	4,922.34	283.08
32 31 11 00-0026	EA	5,000 LB Capacity, Up To 100' Wide Gate, 3 HP Motor, 208/230 Volt AC, Variable Speed, Sliding Gate Operator (DKS™ DoorKing® 9230)..... Note: Includes operator, chain brackets, hardware and 20' of #60 chain.	6,710.56	323.52
32 31 11 00-0027	EA	5,000 LB Capacity, Up To 100' Wide Gate, 3 HP Motor, 208/230 Volt AC, High Speed, Sliding Gate Operator (DKS™ DoorKing® 9530)..... Note: Includes operator, chain brackets, hardware and 20' of #60 chain.	11,192.30	323.52
32 31 11 00-0028	EA	10,000 LB Capacity, Up To 160' Wide Gate, 5 HP Motor, 208/230 Volt AC, High Speed, Sliding Gate Operator (DKS™ DoorKing® 9550)..... Note: Includes operator, chain brackets, hardware and 20' of #60 chain.	18,956.14	363.96
32 31 11 00-0029		Accessories For Gate Actuators And Operators (DKS™ DoorKing®) (32 31 11 00-0001)		
32 31 11 00-0030	EA	Single Channel Detector Loop For Gate Actuators And Operators (DKS™ DoorKing® 9410).....	625.50	
32 31 11 00-0031	EA	Two Channel Detector Loop For Gate Actuators And Operators (DKS™ DoorKing® 9409).....	1,214.94	
32 31 11 00-0032	EA	Heater Kit For Gate Actuators And Operators (DKS™ DoorKing® 1601).....	848.31	
32 31 11 00-0033	EA	Photoelectric Eye For Gate Actuators And Operators (DKS™ DoorKing® 8080-031).....	912.02	
32 31 11 00-0034	EA	Reversing Edge Sensor For Gate Actuators And Operators (DKS™ DoorKing® 8080-020).....	809.03	
32 31 11 00-0035	EA	Post Mount Base Plate For Gate Actuators And Operators (DKS™ DoorKing® 9310).....	560.16	
32 31 11 00-0036	LF	#40 Chain For Sliding Gate Operators.....	5.61	
32 31 11 00-0037	LF	#41 Chain For Sliding Gate Operators.....	5.86	
32 31 11 00-0038	LF	#50 Chain For Sliding Gate Operators.....	7.48	
32 31 11 00-0039	LF	#60 Chain For Sliding Gate Operators.....	11.50	
32 31 11 00-0040	EA	Exterior Keypad Gate Operator (Linear AK-11).....	778.89	188.26
32 31 13		Chain Link Fences and Gates (32 31)		
32 31 13 13		Chain Link Fences and Gates (32 31 13)		
32 31 13 13-0001		Post Holes (32 31 13 13) Note: Excludes spreading of excess material on site or loading and removal of excavated material from site. See CSI section 02 41 19 13-0025 for core drilling in concrete, 02 41 19 13-0163 for core drilling in asphalt.		
32 31 13 13-0002		Auger By Machine Fence Post Hole In Soil (32 31 13 13-0001)		
32 31 13 13-0003	VLF	Up To 2-1/2" Diameter Hole, Auger By Machine Fence Post Hole In Soil.....	9.57	
32 31 13 13-0004	VLF	2-1/2" Diameter Hole, Auger By Machine Fence Post Hole In Soil.....	10.77	
32 31 13 13-0005	VLF	3" Diameter Hole, Auger By Machine Fence Post Hole In Soil.....	12.76	
32 31 13 13-0006	VLF	4" Diameter Hole, Auger By Machine Fence Post Hole In Soil.....	14.36	
32 31 13 13-0007	VLF	6" Diameter Hole, Auger By Machine Fence Post Hole In Soil.....	15.66	
32 31 13 13-0008	VLF	8" Diameter Hole, Auger By Machine Fence Post Hole In Soil.....	17.22	
32 31 13 13-0009	VLF	10" Diameter Hole, Auger By Machine Fence Post Hole In Soil.....	19.14	
32 31 13 13-0010	VLF	12" Diameter Hole, Auger By Machine Fence Post Hole In Soil.....	21.53	
32 31 13 13-0011	VLF	18" Diameter Hole, Auger By Machine Fence Post Hole In Soil.....	24.62	
32 31 13 13-0012	VLF	24" Diameter Hole, Auger By Machine Fence Post Hole In Soil.....	28.71	
32 31 13 13-0013	VLF	30" Diameter Hole, Auger By Machine Fence Post Hole In Soil.....	34.46	
32 31 13 13-0014	VLF	36" Diameter Hole, Auger By Machine Fence Post Hole In Soil.....	43.08	
32 31 13 13-0015		Post Hole In Rock (32 31 13 13-0001)		
32 31 13 13-0016	CF	Jackhammer Post Hole In Rock.....	67.98	
32 31 13 13-0017	CF	Rock Drill Post Hole In Rock.....	21.18	
32 31 13 13-0018		Fill For Post Holes (32 31 13 13-0001) See CSI section 03 21 00 00-0000 for reinforcing bars.		
32 31 13 13-0019		Concrete Fill For Post Holes (32 31 13 13-0018)		
32 31 13 13-0020	VLF	Up To 2-1/2" Diameter, Concrete Fill For Post Hole.....	7.04	
32 31 13 13-0021	VLF	2-1/2" Diameter, Concrete Fill For Post Hole.....	8.98	
32 31 13 13-0022	VLF	3" Diameter, Concrete Fill For Post Hole.....	10.10	

**32 Exterior Improvements****32 30 Site Improvements****32 31 Fences and Gates**

MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
32 31 13 13-0023 VLF 4" Diameter, Concrete Fill For Post Hole .....	12.06	
32 31 13 13-0024 VLF 6" Diameter, Concrete Fill For Post Hole .....	17.31	
32 31 13 13-0025 VLF 8" Diameter, Concrete Fill For Post Hole .....	23.12	
32 31 13 13-0026 VLF 10" Diameter, Concrete Fill For Post Hole .....	28.44	
32 31 13 13-0027 VLF 12" Diameter, Concrete Fill For Post Hole .....	33.45	
32 31 13 13-0028 VLF 18" Diameter, Concrete Fill For Post Hole .....	46.96	
32 31 13 13-0029 VLF 24" Diameter, Concrete Fill For Post Hole .....	59.67	
32 31 13 13-0030 VLF 30" Diameter, Concrete Fill For Post Hole .....	72.18	
32 31 13 13-0031 VLF 36" Diameter, Concrete Fill For Post Hole .....	85.37	
<b>32 31 13 13-0032 Grout Fill For Post Holes (32 31 13 13-0018)</b>		
32 31 13 13-0033 VLF Up To 2-1/2" Diameter, Grout Fill For Post Hole .....	7.92	
32 31 13 13-0034 VLF 2-1/2" Diameter, Grout Fill For Post Hole .....	10.13	
32 31 13 13-0035 VLF 3" Diameter, Grout Fill For Post Hole .....	11.25	
32 31 13 13-0036 VLF 4" Diameter, Grout Fill For Post Hole .....	13.13	
32 31 13 13-0037 VLF 6" Diameter, Grout Fill For Post Hole .....	18.67	
32 31 13 13-0038 VLF 8" Diameter, Grout Fill For Post Hole .....	24.93	
32 31 13 13-0039 VLF 10" Diameter, Grout Fill For Post Hole .....	30.57	
32 31 13 13-0040 VLF 12" Diameter, Grout Fill For Post Hole .....	35.78	
32 31 13 13-0041 VLF 18" Diameter, Grout Fill For Post Hole .....	49.38	
32 31 13 13-0042 VLF 24" Diameter, Grout Fill For Post Hole .....	61.90	
32 31 13 13-0043 VLF 30" Diameter, Grout Fill For Post Hole .....	74.18	
32 31 13 13-0044 VLF 36" Diameter, Grout Fill For Post Hole .....	86.99	
<b>32 31 13 13-0045 Compacted Earth Fill For Post Holes (32 31 13 13-0018)</b>		
32 31 13 13-0046 VLF Up To 2-1/2" Diameter, Compacted Earth Fill For Post Hole .....	4.50	
32 31 13 13-0047 VLF 2-1/2" Diameter, Compacted Earth Fill For Post Hole .....	5.86	
32 31 13 13-0048 VLF 3" Diameter, Compacted Earth Fill For Post Hole .....	6.12	
32 31 13 13-0049 VLF 4" Diameter, Compacted Earth Fill For Post Hole .....	6.30	
32 31 13 13-0050 VLF 6" Diameter, Compacted Earth Fill For Post Hole .....	8.42	
32 31 13 13-0051 VLF 8" Diameter, Compacted Earth Fill For Post Hole .....	11.23	
32 31 13 13-0052 VLF 10" Diameter, Compacted Earth Fill For Post Hole .....	13.48	
32 31 13 13-0053 VLF 12" Diameter, Compacted Earth Fill For Post Hole .....	15.28	
32 31 13 13-0054 VLF 18" Diameter, Compacted Earth Fill For Post Hole .....	18.62	
32 31 13 13-0055 VLF 24" Diameter, Compacted Earth Fill For Post Hole .....	20.90	
32 31 13 13-0056 VLF 30" Diameter, Compacted Earth Fill For Post Hole .....	22.92	
32 31 13 13-0057 VLF 36" Diameter, Compacted Earth Fill For Post Hole .....	24.71	
<b>32 31 13 13-0058 Fence Posts (32 31 13 13)</b>		
Note: Demolition excludes concrete footing removal on posts and excavation. See CSI section 31 23 16 36-0009 for hand excavation for footing removal (where required), 32 31 13 13-0001 for drilling for augering holes and backfill.		
<b>32 31 13 13-0059 Fence Posts (32 31 13 13-0058)</b>		
<b>32 31 13 13-0060 1-7/8" H-Beam Post Without Top Rail Fitting, Galvanized Steel (32 31 13 13-0059)</b>		
Note: Includes cap and accessories.		
32 31 13 13-0061 LF 1-7/8" Galvanized H-beam Post, Up To 6' In Length .....	20.20	3.26
For Each Top Rail Fitting, Add .....	0.85	
32 31 13 13-0062 LF 1-7/8" Galvanized H-beam Post, 7' To 10' In Length .....	19.28	2.78
For Each Top Rail Fitting, Add .....	0.85	
32 31 13 13-0063 LF 1-7/8" Galvanized H-beam Post, 11' To 15' In Length .....	18.14	2.30
For Each Top Rail Fitting, Add .....	0.85	
32 31 13 13-0064 LF 1-7/8" Galvanized H-beam Post, 16' To 20' In Length .....	17.23	1.81
For Each Top Rail Fitting, Add .....	0.85	
32 31 13 13-0065 LF 1-7/8" Galvanized H-beam Post, 21' To 24' In Length .....	16.63	1.57
For Each Top Rail Fitting, Add .....	0.85	
32 31 13 13-0066 LF 1-7/8" Galvanized H-beam Post, >24' In Length .....	15.68	1.09
For Each Top Rail Fitting, Add .....	0.85	
<b>32 31 13 13-0067 Post Without Top Rail Fitting, Galvanized Steel (1.66" Nominal) (32 31 13 13-0059)</b>		
Note: 1-5/8" outside diameter, Schedule 40. Includes cap and accessories.		
32 31 13 13-0068 LF Up To 6' In Length, 1-5/8" Outside Diameter Galvanized Steel Post .....	13.85	3.02
For Each Top Rail Fitting, Add .....	0.85	
For Each Single Barbed Wire Arm, Add .....	1.90	
For Each Double Barbed Wire Arm, Add .....	3.40	
For SS40 (Hot-Dip Galvanized And Chromated), Add .....	1.95	
For Vinyl Coated, Add .....	4.69	
For Powder Coated, Add .....	6.25	
For Aluminum Coated, Add .....	9.76	
For Schedule 20, Deduct .....	-1.56	
For Schedule 80, Add .....	4.35	
For "Candy Cane" Bend, Add Per Total Length Of Post .....	6.59	



Exterior Improvements			32
Site Improvements			32 30
Fences and Gates			32 31

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MINOR	CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
32 31 13 13-0069	LF	7' To 10' In Length, 1-5/8" Outside Diameter Galvanized Steel Post.....	12.83	2.54	
		For Each Top Rail Fitting, Add	0.85		
		For Each Single Barbed Wire Arm, Add	1.90		
		For Each Double Barbed Wire Arm, Add	3.40		
		For SS40 (Hot-Dip Galvanized And Chromated), Add	1.93		
		For Vinyl Coated, Add	4.64		
		For Powder Coated, Add	6.18		
		For Aluminum Coated, Add	9.66		
		For Schedule 20, Deduct	-1.55		
		For Schedule 80, Add	4.22		
		For "Candy Cane" Bend, Add Per Total Length Of Post	6.30		
32 31 13 13-0070	LF	11' To 15' In Length, 1-5/8" Outside Diameter Galvanized Steel Post.....	11.76	2.06	
		For Each Top Rail Fitting, Add	0.85		
		For Each Single Barbed Wire Arm, Add	1.90		
		For Each Double Barbed Wire Arm, Add	3.40		
		For SS40 (Hot-Dip Galvanized And Chromated), Add	1.92		
		For Vinyl Coated, Add	4.61		
		For Powder Coated, Add	6.15		
		For Aluminum Coated, Add	9.61		
		For Schedule 20, Deduct	-1.54		
		For Schedule 80, Add	4.10		
		For "Candy Cane" Bend, Add Per Total Length Of Post	6.02		
32 31 13 13-0071	LF	16' To 20' In Length, 1-5/8" Outside Diameter Galvanized Steel Post.....	10.94	1.57	
		For Each Top Rail Fitting, Add	0.85		
		For Each Single Barbed Wire Arm, Add	1.90		
		For Each Double Barbed Wire Arm, Add	3.40		
		For SS40 (Hot-Dip Galvanized And Chromated), Add	1.92		
		For Vinyl Coated, Add	4.60		
		For Powder Coated, Add	6.14		
		For Aluminum Coated, Add	9.59		
		For Schedule 20, Deduct	-1.53		
		For Schedule 80, Add	4.01		
		For "Candy Cane" Bend, Add Per Total Length Of Post	5.80		
32 31 13 13-0072	LF	21' To 24' In Length, 1-5/8" Outside Diameter Galvanized Steel Post.....	10.39	1.32	
		For Each Top Rail Fitting, Add	0.85		
		For Each Single Barbed Wire Arm, Add	1.90		
		For Each Double Barbed Wire Arm, Add	3.40		
		For SS40 (Hot-Dip Galvanized And Chromated), Add	1.92		
		For Vinyl Coated, Add	4.60		
		For Powder Coated, Add	6.13		
		For Aluminum Coated, Add	9.58		
		For Schedule 20, Deduct	-1.53		
		For Schedule 80, Add	3.95		
		For "Candy Cane" Bend, Add Per Total Length Of Post	5.66		
32 31 13 13-0073	LF	>24' In Length, 1-5/8" Outside Diameter Galvanized Steel Post.....	9.79	1.09	
		For Each Top Rail Fitting, Add	0.85		
		For Each Single Barbed Wire Arm, Add	1.90		
		For Each Double Barbed Wire Arm, Add	3.40		
		For SS40 (Hot-Dip Galvanized And Chromated), Add	1.92		
		For Vinyl Coated, Add	4.60		
		For Powder Coated, Add	6.13		
		For Aluminum Coated, Add	9.58		
		For Schedule 20, Deduct	-1.53		
		For Schedule 80, Add	3.89		
		For "Candy Cane" Bend, Add Per Total Length Of Post	5.51		
32 31 13 13-0074		Post Without Top Rail Fitting, Galvanized Steel (1.90" Nominal) (32 31 13 13-0059)			
		Note: 2" outside diameter, Schedule 40. Includes cap and accessories.			
32 31 13 13-0075	LF	2" Outside Diameter Galvanized Steel Post, Up To 6' In Length.....	15.80	3.15	
		For Each Top Rail Fitting, Add	1.35		
		For Each Single Barbed Wire Arm, Add	2.65		
		For Each Double Barbed Wire Arm, Add	4.88		
		For SS40 (Hot-Dip Galvanized And Chromated), Add	2.39		
		For Vinyl Coated, Add	5.73		
		For Powder Coated, Add	7.64		
		For Aluminum Coated, Add	11.94		
		For Schedule 20, Deduct	-1.91		
		For Schedule 80, Add	5.21		
		For "Candy Cane" Bend, Add Per Total Length Of Post	7.77		
32 31 13 13-0076	LF	2" Outside Diameter Galvanized Steel Post, 7' To 10' In Length.....	14.86	2.66	
		For Each Top Rail Fitting, Add	1.35		
		For Each Single Barbed Wire Arm, Add	2.65		
		For Each Double Barbed Wire Arm, Add	4.88		
		For SS40 (Hot-Dip Galvanized And Chromated), Add	2.36		
		For Vinyl Coated, Add	5.67		
		For Powder Coated, Add	7.56		
		For Aluminum Coated, Add	11.81		
		For Schedule 20, Deduct	-1.89		
		For Schedule 80, Add	5.08		
		For "Candy Cane" Bend, Add Per Total Length Of Post	7.50		

**32 Exterior Improvements****32 30 Site Improvements****32 31 Fences and Gates**

MINOR	CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
32 31 13 13-0077	LF	2"	Outside Diameter Galvanized Steel Post, 11' To 15' In Length .....	13.71	2.17
			For Each Top Rail Fitting, Add	1.35	
			For Each Single Barbed Wire Arm, Add	2.65	
			For Each Double Barbed Wire Arm, Add	4.88	
			For SS40 (Hot-Dip Galvanized And Chromated), Add	2.35	
			For Vinyl Coated, Add	5.64	
			For Powder Coated, Add	7.52	
			For Aluminum Coated, Add	11.75	
			For Schedule 20, Deduct	-1.88	
			For Schedule 80, Add	4.94	
			For "Candy Cane" Bend, Add Per Total Length Of Post	7.19	
32 31 13 13-0078	LF	2"	Outside Diameter Galvanized Steel Post, 16' To 20' In Length .....	12.83	1.69
			For Each Top Rail Fitting, Add	1.35	
			For Each Single Barbed Wire Arm, Add	2.65	
			For Each Double Barbed Wire Arm, Add	4.88	
			For SS40 (Hot-Dip Galvanized And Chromated), Add	2.35	
			For Vinyl Coated, Add	5.63	
			For Powder Coated, Add	7.50	
			For Aluminum Coated, Add	11.73	
			For Schedule 20, Deduct	-1.88	
			For Schedule 80, Add	4.85	
			For "Candy Cane" Bend, Add Per Total Length Of Post	6.96	
32 31 13 13-0079	LF	2"	Outside Diameter Galvanized Steel Post, 21' To 24' In Length .....	12.23	1.45
			For Each Top Rail Fitting, Add	1.35	
			For Each Single Barbed Wire Arm, Add	2.65	
			For Each Double Barbed Wire Arm, Add	4.88	
			For SS40 (Hot-Dip Galvanized And Chromated), Add	2.34	
			For Vinyl Coated, Add	5.62	
			For Powder Coated, Add	7.49	
			For Aluminum Coated, Add	11.70	
			For Schedule 20, Deduct	-1.87	
			For Schedule 80, Add	4.78	
			For "Candy Cane" Bend, Add Per Total Length Of Post	6.80	
32 31 13 13-0080	LF	2"	Outside Diameter Galvanized Steel Post, >24' In Length .....	11.70	1.21
			For Each Top Rail Fitting, Add	1.35	
			For Each Single Barbed Wire Arm, Add	2.65	
			For Each Double Barbed Wire Arm, Add	4.88	
			For SS40 (Hot-Dip Galvanized And Chromated), Add	2.34	
			For Vinyl Coated, Add	5.62	
			For Powder Coated, Add	7.49	
			For Aluminum Coated, Add	11.70	
			For Schedule 20, Deduct	-1.87	
			For Schedule 80, Add	4.73	
			For "Candy Cane" Bend, Add Per Total Length Of Post	6.67	
32 31 13 13-0081			<b>Post Without Top Rail Fitting, Galvanized Steel (2.375" Nominal)</b> (32 31 13 13-0059)		
			Note: 2-1/2" outside diameter, Schedule 40. Includes cap and accessories.		
32 31 13 13-0082	LF	2-1/2"	Outside Diameter Galvanized Steel Post, Up To 6' In Length .....	19.23	3.38
			For Each Top Rail Fitting, Add	1.35	
			For Each Single Barbed Wire Arm, Add	2.65	
			For Each Double Barbed Wire Arm, Add	4.88	
			For SS40 (Hot-Dip Galvanized And Chromated), Add	3.16	
			For Vinyl Coated, Add	7.58	
			For Powder Coated, Add	10.11	
			For Aluminum Coated, Add	15.80	
			For Schedule 20, Deduct	-2.53	
			For Schedule 80, Add	6.73	
			For "Candy Cane" Bend, Add Per Total Length Of Post	9.86	
32 31 13 13-0083	LF	2-1/2"	Outside Diameter Galvanized Steel Post, 7' To 10' In Length .....	18.20	2.90
			For Each Top Rail Fitting, Add	1.35	
			For Each Single Barbed Wire Arm, Add	2.65	
			For Each Double Barbed Wire Arm, Add	4.88	
			For SS40 (Hot-Dip Galvanized And Chromated), Add	3.13	
			For Vinyl Coated, Add	7.52	
			For Powder Coated, Add	10.02	
			For Aluminum Coated, Add	15.66	
			For Schedule 20, Deduct	-2.51	
			For Schedule 80, Add	6.58	
			For "Candy Cane" Bend, Add Per Total Length Of Post	9.56	
32 31 13 13-0084	LF	2-1/2"	Outside Diameter Galvanized Steel Post, 11' To 15' In Length .....	17.00	2.30
			For Each Top Rail Fitting, Add	1.35	
			For Each Single Barbed Wire Arm, Add	2.65	
			For Each Double Barbed Wire Arm, Add	4.88	
			For SS40 (Hot-Dip Galvanized And Chromated), Add	3.12	
			For Vinyl Coated, Add	7.48	
			For Powder Coated, Add	9.98	
			For Aluminum Coated, Add	15.59	
			For Schedule 20, Deduct	-2.49	
			For Schedule 80, Add	6.44	
			For "Candy Cane" Bend, Add Per Total Length Of Post	9.24	





Exterior Improvements			32
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MINOR	CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
32 31 13 13-0085	LF	2-1/2"	Outside Diameter Galvanized Steel Post, 16' To 20' In Length.....	16.06	1.81
			For Each Top Rail Fitting, Add	1.35	
			For Each Single Barbed Wire Arm, Add	2.65	
			For Each Double Barbed Wire Arm, Add	4.88	
			For SS40 (Hot-Dip Galvanized And Chromated), Add	3.11	
			For Vinyl Coated, Add	7.46	
			For Powder Coated, Add	9.95	
			For Aluminum Coated, Add	15.55	
			For Schedule 20, Deduct	-2.49	
			For Schedule 80, Add	6.33	
			For "Candy Cane" Bend, Add Per Total Length Of Post	8.99	
32 31 13 13-0086	LF	2-1/2"	Outside Diameter Galvanized Steel Post, 21 To 24' In Length.....	15.45	1.57
			For Each Top Rail Fitting, Add	1.35	
			For Each Single Barbed Wire Arm, Add	2.65	
			For Each Double Barbed Wire Arm, Add	4.88	
			For SS40 (Hot-Dip Galvanized And Chromated), Add	3.11	
			For Vinyl Coated, Add	7.46	
			For Powder Coated, Add	9.94	
			For Aluminum Coated, Add	15.54	
			For Schedule 20, Deduct	-2.49	
			For Schedule 80, Add	6.27	
			For "Candy Cane" Bend, Add Per Total Length Of Post	8.83	
32 31 13 13-0087	LF	2-1/2"	Outside Diameter Galvanized Steel Post, >24' In Length.....	14.87	1.21
			For Each Top Rail Fitting, Add	1.35	
			For Each Single Barbed Wire Arm, Add	2.65	
			For Each Double Barbed Wire Arm, Add	4.88	
			For SS40 (Hot-Dip Galvanized And Chromated), Add	3.11	
			For Vinyl Coated, Add	7.46	
			For Powder Coated, Add	9.94	
			For Aluminum Coated, Add	15.54	
			For Schedule 20, Deduct	-2.49	
			For Schedule 80, Add	6.21	
			For "Candy Cane" Bend, Add Per Total Length Of Post	8.69	
32 31 13 13-0088			Post Without Top Rail Fitting, Galvanized Steel (2.875" Nominal) (32 31 13 13-0089)		
			Note: 3" outside diameter, Schedule 40. Includes cap and accessories.		
32 31 13 13-0089	LF	3"	Outside Diameter Galvanized Steel Post, Up To 6' In Length.....	26.31	3.62
			For Each Top Rail Fitting, Add	1.85	
			For Each Single Barbed Wire Arm, Add	3.85	
			For Each Double Barbed Wire Arm, Add	7.05	
			For SS40 (Hot-Dip Galvanized And Chromated), Add	4.77	
			For Vinyl Coated, Add	11.44	
			For Powder Coated, Add	15.25	
			For Aluminum Coated, Add	23.83	
			For Schedule 20, Deduct	-3.81	
			For Schedule 80, Add	9.87	
			For "Candy Cane" Bend, Add Per Total Length Of Post	14.20	
32 31 13 13-0090	LF	3"	Outside Diameter Galvanized Steel Post, 7' To 10' In Length.....	25.08	3.15
			For Each Top Rail Fitting, Add	1.85	
			For Each Single Barbed Wire Arm, Add	3.85	
			For Each Double Barbed Wire Arm, Add	7.05	
			For SS40 (Hot-Dip Galvanized And Chromated), Add	4.71	
			For Vinyl Coated, Add	11.30	
			For Powder Coated, Add	15.06	
			For Aluminum Coated, Add	23.54	
			For Schedule 20, Deduct	-3.77	
			For Schedule 80, Add	9.66	
			For "Candy Cane" Bend, Add Per Total Length Of Post	13.80	
32 31 13 13-0091	LF	3"	Outside Diameter Galvanized Steel Post, 11' To 15' In Length.....	23.75	2.54
			For Each Top Rail Fitting, Add	1.85	
			For Each Single Barbed Wire Arm, Add	3.85	
			For Each Double Barbed Wire Arm, Add	7.05	
			For SS40 (Hot-Dip Galvanized And Chromated), Add	4.68	
			For Vinyl Coated, Add	11.23	
			For Powder Coated, Add	14.97	
			For Aluminum Coated, Add	23.39	
			For Schedule 20, Deduct	-3.74	
			For Schedule 80, Add	9.48	
			For "Candy Cane" Bend, Add Per Total Length Of Post	13.42	
32 31 13 13-0092	LF	3"	Outside Diameter Galvanized Steel Post, 16' To 20' In Length.....	22.68	2.06
			For Each Top Rail Fitting, Add	1.85	
			For Each Single Barbed Wire Arm, Add	3.85	
			For Each Double Barbed Wire Arm, Add	7.05	
			For SS40 (Hot-Dip Galvanized And Chromated), Add	4.66	
			For Vinyl Coated, Add	11.19	
			For Powder Coated, Add	14.92	
			For Aluminum Coated, Add	23.31	
			For Schedule 20, Deduct	-3.73	
			For Schedule 80, Add	9.36	
			For "Candy Cane" Bend, Add Per Total Length Of Post	13.13	

**32 Exterior Improvements****32 30 Site Improvements****32 31 Fences and Gates**

MINOR	CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
32 31 13 13-0093	LF		3" Outside Diameter Galvanized Steel Post, 21' To 24' In Length .....	21.98	1.69
			For Each Top Rail Fitting, Add	1.85	
			For Each Single Barbed Wire Arm, Add	3.85	
			For Each Double Barbed Wire Arm, Add	7.05	
			For SS40 (Hot-Dip Galvanized And Chromated), Add	4.66	
			For Vinyl Coated, Add	11.17	
			For Powder Coated, Add	14.90	
			For Aluminum Coated, Add	23.28	
			For Schedule 20, Deduct	-3.72	
			For Schedule 80, Add	9.27	
			For "Candy Cane" Bend, Add Per Total Length Of Post	12.94	
32 31 13 13-0094	LF		3" Outside Diameter Galvanized Steel Post, >24' In Length .....	21.35	1.32
			For Each Top Rail Fitting, Add	1.85	
			For Each Single Barbed Wire Arm, Add	3.85	
			For Each Double Barbed Wire Arm, Add	7.05	
			For SS40 (Hot-Dip Galvanized And Chromated), Add	4.66	
			For Vinyl Coated, Add	11.17	
			For Powder Coated, Add	14.90	
			For Aluminum Coated, Add	23.28	
			For Schedule 20, Deduct	-3.72	
			For Schedule 80, Add	9.21	
			For "Candy Cane" Bend, Add Per Total Length Of Post	12.79	
32 31 13 13-0095			<b>Post Without Top Rail Fitting, Galvanized Steel, (4.00" Nominal)</b> (32 31 13 13-0059)		
			Note: 4" outside diameter, Schedule 40. Includes cap and accessories.		
32 31 13 13-0096	LF		4" Outside Diameter Galvanized Steel Post, Up To 6' In Length .....	38.72	3.87
			For Each Top Rail Fitting, Add	2.60	
			For Each Single Barbed Wire Arm, Add	5.10	
			For Each Double Barbed Wire Arm, Add	11.25	
			For SS40 (Hot-Dip Galvanized And Chromated), Add	7.77	
			For Vinyl Coated, Add	18.65	
			For Powder Coated, Add	24.87	
			For Aluminum Coated, Add	38.86	
			For Schedule 20, Deduct	-6.22	
			For Schedule 80, Add	15.69	
			For "Candy Cane" Bend, Add Per Total Length Of Post	22.12	
32 31 13 13-0097	LF		4" Outside Diameter Galvanized Steel Post, 7' To 10' In Length .....	37.02	3.15
			For Each Top Rail Fitting, Add	2.60	
			For Each Single Barbed Wire Arm, Add	5.10	
			For Each Double Barbed Wire Arm, Add	11.25	
			For SS40 (Hot-Dip Galvanized And Chromated), Add	7.67	
			For Vinyl Coated, Add	18.40	
			For Powder Coated, Add	24.53	
			For Aluminum Coated, Add	38.33	
			For Schedule 20, Deduct	-6.13	
			For Schedule 80, Add	15.35	
			For "Candy Cane" Bend, Add Per Total Length Of Post	21.52	
32 31 13 13-0098	LF		4" Outside Diameter Galvanized Steel Post, 11' To 15' In Length .....	35.75	2.66
			For Each Top Rail Fitting, Add	2.60	
			For Each Single Barbed Wire Arm, Add	5.10	
			For Each Double Barbed Wire Arm, Add	11.25	
			For SS40 (Hot-Dip Galvanized And Chromated), Add	7.61	
			For Vinyl Coated, Add	18.27	
			For Powder Coated, Add	24.36	
			For Aluminum Coated, Add	38.06	
			For Schedule 20, Deduct	-6.09	
			For Schedule 80, Add	15.15	
			For "Candy Cane" Bend, Add Per Total Length Of Post	21.12	
32 31 13 13-0099	LF		4" Outside Diameter Galvanized Steel Post, 16' To 20' In Length .....	34.58	2.17
			For Each Top Rail Fitting, Add	2.60	
			For Each Single Barbed Wire Arm, Add	5.10	
			For Each Double Barbed Wire Arm, Add	11.25	
			For SS40 (Hot-Dip Galvanized And Chromated), Add	7.59	
			For Vinyl Coated, Add	18.20	
			For Powder Coated, Add	24.27	
			For Aluminum Coated, Add	37.93	
			For Schedule 20, Deduct	-6.07	
			For Schedule 80, Add	14.99	
			For "Candy Cane" Bend, Add Per Total Length Of Post	20.78	
32 31 13 13-0100	LF		4" Outside Diameter Galvanized Steel Post, 21' To 24' In Length .....	34.53	2.17
			For Each Top Rail Fitting, Add	2.60	
			For Each Single Barbed Wire Arm, Add	5.10	
			For Each Double Barbed Wire Arm, Add	11.25	
			For SS40 (Hot-Dip Galvanized And Chromated), Add	7.57	
			For Vinyl Coated, Add	18.17	
			For Powder Coated, Add	24.23	
			For Aluminum Coated, Add	37.86	
			For Schedule 20, Deduct	-6.06	
			For Schedule 80, Add	14.96	
			For "Candy Cane" Bend, Add Per Total Length Of Post	20.75	



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MINOR	CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
32 31 13 13-0101	LF		4" Outside Diameter Galvanized Steel Post, >24' In Length.....	33.30	1.57
			For Each Top Rail Fitting, Add	2.60	
			For Each Single Barbed Wire Arm, Add	5.10	
			For Each Double Barbed Wire Arm, Add	11.25	
			For SS40 (Hot-Dip Galvanized And Chromated), Add	7.57	
			For Vinyl Coated, Add	18.17	
			For Powder Coated, Add	24.22	
			For Aluminum Coated, Add	37.85	
			For Schedule 20, Deduct	-6.06	
			For Schedule 80, Add	14.84	
			For "Candy Cane" Bend, Add Per Total Length Of Post	20.44	
<b>32 31 13 13-0102 Post Without Top Rail Fitting, Galvanized Steel (6.625" Nominal)</b> (32 31 13 13-0059)					
Note: 6-5/8" outside diameter, Schedule 40. Includes cap and accessories.					
32 31 13 13-0103	LF		6-5/8" Outside Diameter Galvanized Steel Post, Up To 6' In Length.....	76.18	4.23
			For Each Top Rail Fitting, Add	4.55	
			For Each Single Barbed Wire Arm, Add	7.15	
			For Each Double Barbed Wire Arm, Add	14.95	
			For SS40 (Hot-Dip Galvanized And Chromated), Add	16.93	
			For Vinyl Coated, Add	40.62	
			For Powder Coated, Add	54.16	
			For Aluminum Coated, Add	84.63	
			For Schedule 20, Deduct	-13.54	
			For Schedule 80, Add	33.34	
			For "Candy Cane" Bend, Add Per Total Length Of Post	46.13	
32 31 13 13-0104	LF		6-5/8" Outside Diameter Galvanized Steel Post, 7' To 10' In Length.....	73.19	3.51
			For Each Top Rail Fitting, Add	4.55	
			For Each Single Barbed Wire Arm, Add	7.15	
			For Each Double Barbed Wire Arm, Add	14.95	
			For SS40 (Hot-Dip Galvanized And Chromated), Add	16.52	
			For Vinyl Coated, Add	39.65	
			For Powder Coated, Add	52.86	
			For Aluminum Coated, Add	82.60	
			For Schedule 20, Deduct	-13.22	
			For Schedule 80, Add	32.43	
			For "Candy Cane" Bend, Add Per Total Length Of Post	44.73	
32 31 13 13-0105	LF		6-5/8" Outside Diameter Galvanized Steel Post, 11' To 15' In Length.....	71.18	2.90
			For Each Top Rail Fitting, Add	4.55	
			For Each Single Barbed Wire Arm, Add	7.15	
			For Each Double Barbed Wire Arm, Add	14.95	
			For SS40 (Hot-Dip Galvanized And Chromated), Add	16.32	
			For Vinyl Coated, Add	39.17	
			For Powder Coated, Add	52.22	
			For Aluminum Coated, Add	81.60	
			For Schedule 20, Deduct	-13.06	
			For Schedule 80, Add	31.92	
			For "Candy Cane" Bend, Add Per Total Length Of Post	43.91	
32 31 13 13-0106	LF		6-5/8" Outside Diameter Galvanized Steel Post, 16' To 20' In Length.....	69.58	2.30
			For Each Top Rail Fitting, Add	4.55	
			For Each Single Barbed Wire Arm, Add	7.15	
			For Each Double Barbed Wire Arm, Add	14.95	
			For SS40 (Hot-Dip Galvanized And Chromated), Add	16.22	
			For Vinyl Coated, Add	38.92	
			For Powder Coated, Add	51.90	
			For Aluminum Coated, Add	81.09	
			For Schedule 20, Deduct	-12.97	
			For Schedule 80, Add	31.61	
			For "Candy Cane" Bend, Add Per Total Length Of Post	43.34	
32 31 13 13-0107	LF		6-5/8" Outside Diameter Galvanized Steel Post, 21' To 24' In Length.....	68.70	2.06
			For Each Top Rail Fitting, Add	4.55	
			For Each Single Barbed Wire Arm, Add	7.15	
			For Each Double Barbed Wire Arm, Add	14.95	
			For SS40 (Hot-Dip Galvanized And Chromated), Add	16.17	
			For Vinyl Coated, Add	38.80	
			For Powder Coated, Add	51.74	
			For Aluminum Coated, Add	80.84	
			For Schedule 20, Deduct	-12.93	
			For Schedule 80, Add	31.44	
			For "Candy Cane" Bend, Add Per Total Length Of Post	43.04	
32 31 13 13-0108	LF		6-5/8" Outside Diameter Galvanized Steel Post, >24' In Length.....	67.99	1.69
			For Each Top Rail Fitting, Add	4.55	
			For Each Single Barbed Wire Arm, Add	7.15	
			For Each Double Barbed Wire Arm, Add	14.95	
			For SS40 (Hot-Dip Galvanized And Chromated), Add	16.16	
			For Vinyl Coated, Add	38.78	
			For Powder Coated, Add	51.70	
			For Aluminum Coated, Add	80.79	
			For Schedule 20, Deduct	-12.93	
			For Schedule 80, Add	31.36	
			For "Candy Cane" Bend, Add Per Total Length Of Post	42.85	
<b>32 31 13 13-0109 Post Without Top Rail Fitting, Galvanized Steel (8.625" Nominal)</b> (32 31 13 13-0059)					
Note: 8-5/8" outside diameter, Schedule 40. Includes cap and accessories.					

**32 Exterior Improvements****32 30 Site Improvements****32 31 Fences and Gates**

MINOR	CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
32 31 13 13-0110	LF		8-5/8" Outside Diameter Galvanized Steel Post, Up To 6' In Length.....	147.88	4.71
			For Each Top Rail Fitting, Add	7.50	
			For Each Single Barbed Wire Arm, Add	9.15	
			For Each Double Barbed Wire Arm, Add	18.95	
			For SS40 (Hot-Dip Galvanized And Chromated), Add	34.62	
			For Vinyl Coated, Add	83.08	
			For Powder Coated, Add	110.78	
			For Aluminum Coated, Add	173.09	
			For Schedule 20, Deduct	-27.69	
			For Schedule 80, Add	67.41	
			For "Candy Cane" Bend, Add Per Total Length Of Post	92.36	
32 31 13 13-0111	LF		8-5/8" Outside Diameter Galvanized Steel Post, 7' To 10' In Length.....	143.14	3.98
			For Each Top Rail Fitting, Add	7.50	
			For Each Single Barbed Wire Arm, Add	9.15	
			For Each Double Barbed Wire Arm, Add	18.95	
			For SS40 (Hot-Dip Galvanized And Chromated), Add	33.82	
			For Vinyl Coated, Add	81.16	
			For Powder Coated, Add	108.21	
			For Aluminum Coated, Add	169.08	
			For Schedule 20, Deduct	-27.05	
			For Schedule 80, Add	65.71	
			For "Candy Cane" Bend, Add Per Total Length Of Post	89.89	
32 31 13 13-0112	LF		8-5/8" Outside Diameter Galvanized Steel Post, 11' To 15' In Length.....	140.19	3.26
			For Each Top Rail Fitting, Add	7.50	
			For Each Single Barbed Wire Arm, Add	9.15	
			For Each Double Barbed Wire Arm, Add	18.95	
			For SS40 (Hot-Dip Galvanized And Chromated), Add	33.42	
			For Vinyl Coated, Add	80.20	
			For Powder Coated, Add	106.93	
			For Aluminum Coated, Add	167.08	
			For Schedule 20, Deduct	-26.73	
			For Schedule 80, Add	64.81	
			For "Candy Cane" Bend, Add Per Total Length Of Post	88.51	
32 31 13 13-0113	LF		8-5/8" Outside Diameter Galvanized Steel Post, 16' To 20' In Length.....	138.03	2.54
			For Each Top Rail Fitting, Add	7.50	
			For Each Single Barbed Wire Arm, Add	9.15	
			For Each Double Barbed Wire Arm, Add	18.95	
			For SS40 (Hot-Dip Galvanized And Chromated), Add	33.21	
			For Vinyl Coated, Add	79.71	
			For Powder Coated, Add	106.28	
			For Aluminum Coated, Add	166.06	
			For Schedule 20, Deduct	-26.57	
			For Schedule 80, Add	64.29	
			For "Candy Cane" Bend, Add Per Total Length Of Post	87.65	
32 31 13 13-0114	LF		8-5/8" Outside Diameter Galvanized Steel Post, 21' To 24' In Length.....	136.92	2.17
			For Each Top Rail Fitting, Add	7.50	
			For Each Single Barbed Wire Arm, Add	9.15	
			For Each Double Barbed Wire Arm, Add	18.95	
			For SS40 (Hot-Dip Galvanized And Chromated), Add	33.11	
			For Vinyl Coated, Add	79.47	
			For Powder Coated, Add	105.96	
			For Aluminum Coated, Add	165.56	
			For Schedule 20, Deduct	-26.49	
			For Schedule 80, Add	64.02	
			For "Candy Cane" Bend, Add Per Total Length Of Post	87.21	
32 31 13 13-0115	LF		8-5/8" Outside Diameter Galvanized Steel Post, >24' In Length.....	136.10	1.81
			For Each Top Rail Fitting, Add	7.50	
			For Each Single Barbed Wire Arm, Add	9.15	
			For Each Double Barbed Wire Arm, Add	18.95	
			For SS40 (Hot-Dip Galvanized And Chromated), Add	33.09	
			For Vinyl Coated, Add	79.42	
			For Powder Coated, Add	105.90	
			For Aluminum Coated, Add	165.46	
			For Schedule 20, Deduct	-26.47	
			For Schedule 80, Add	63.91	
			For "Candy Cane" Bend, Add Per Total Length Of Post	86.97	
32 31 13 13-0116			Driven Post Supports (32 31 13 13)		
			Note: OZ-Post.		
32 31 13 13-0117			Driven Post Support For Round Chain Link Fence Posts (32 31 13 13-0116)		
32 31 13 13-0118	EA		26" Driven Post Support For 1-5/8" Round Chain Link Fence Post.....	73.77	
			Note: OZ-Post GB-700.		
32 31 13 13-0119	EA		26" Driven Post Support For 1-7/8" To 2" Round Chain Link Fence Post.....	73.77	
			Note: OZ-Post HB-700.		
32 31 13 13-0120	EA		26" Driven Post Support For 2-3/8" To 2-1/2" Round Chain Link Fence Post.....	75.62	
			Note: OZ-Post IS-600.		
32 31 13 13-0121	EA		32" Driven Post Support For 2-3/8" To 2-1/2" Round Chain Link Fence Post.....	90.99	
			Note: OZ-Post ISW-850.		
32 31 13 13-0122			Driven Post Support For Square Ornamental Fence Posts (32 31 13 13-0116)		
32 31 13 13-0123	EA		34" Driven Post Support For 1-3/4" Square Ornamental Fence Post.....	85.44	
			Note: OZ-Post C175-850.		



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Fences and Gates		32 31	

MINOR CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
32 31 13 13-0124	EA	24" Driven Post Support For 2" Square Ornamental Fence Post..... Note: OZ-Post I2-600.	82.67	
32 31 13 13-0125	EA	34" Driven Post Support For 2" Square Ornamental Fence Post..... Note: OZ-Post I2-850.	86.00	
32 31 13 13-0126	EA	34" Driven Post Support For 2-1/2" Square Ornamental Fence Post ..... Note: OZ-Post I25-850.	90.99	
32 31 13 13-0127	EA	34" Driven Post Support For 3" Square Ornamental Fence Post..... Note: OZ-Post I3-850.	90.99	
32 31 13 13-0128		Driven Post Support For Wooden Fence Posts (32 31 13 13-0116)		
32 31 13 13-0129	EA	24" Driven Post Support For 3-1/2" Square Wooden Fence Post..... Note: OZ-Post T4-600.	83.62	
32 31 13 13-0130	EA	34" Driven Post Support For 3-1/2" Square Wooden Fence Post..... Note: OZ-Post T4-850.	88.21	
32 31 13 13-0131	EA	34" Driven Post Support For 3-3/4" Square Wooden Fence Post..... Note: OZ-Post C4-850.	94.68	
32 31 13 13-0132	EA	34" Driven Post Support For 4" Square Wooden Fence Post..... Note: OZ-Post P4-850.	94.68	
32 31 13 13-0133	EA	36" Driven Post Support For 4" x 6" Wooden Fence Post ..... Note: OZ-Post T46-850.	106.69	
32 31 13 13-0134	EA	36" Driven Post Support For 6" Square Wooden Fence Post..... Note: OZ-Post T6-850.	115.19	
32 31 13 13-0135		Driven Post Support For Vinyl Fence Posts (32 31 13 13-0116)		
32 31 13 13-0136	EA	24" Driven Post Support For 3-1/2" Square Vinyl Fence Post ..... Note: OZ-Post T4-600.	83.62	
32 31 13 13-0137	EA	34" Driven Post Support For 3-1/2" Square Vinyl Fence Post ..... Note: OZ-Post T4-850.	88.21	
32 31 13 13-0138	EA	34" Driven Post Support For 4" Square Vinyl Fence Post..... Note: OZ-Post P4-850.	94.68	
32 31 13 13-0139	EA	34" Driven Post Support For 5" Square Vinyl Fence Post..... Note: OZ-Post P4-850.	96.16	
32 31 13 13-0140		Chain Link Fence Assemblies (32 31 13 13)		
32 31 13 13-0141		Chain Link Fence Assembly With 2-1/2" Line Post And 3" Corner Posts (32 31 13 13-0140) Note: Includes 2" 9 gauge coiled spring mesh (knuckled selvage), tension bars, post tension bands, wire ties, truss rod (at corners or posts), 1-5/8" top rail, 1-5/8" bottom rail, 2-1/2" line post and 3" corner posts. Posts exclude drilling or augering in soil or rock, concrete or soil fill. Heights indicated are from ground to top of installed pole. Minimum 2' bury with up to one third of exposed post height to be buried in ground. Excludes grounding. Demolition excludes concrete footing removal on posts and excavation. See CSI section 26 05 26 00-0000 for grounding, 32 31 13 13-0492 for barb wire attachments.		
32 31 13 13-0142		Galvanized (32 31 13 13-0141)		
32 31 13 13-0143	LF	3' Galvanized Chain Link Fence, 9 Gauge Coiled Spring Mesh, Top And Bottom Rails, 2-1/2" Line Post At 10' On Center, 3" Corner Post ..... For Surface Mount On Concrete (Excludes Drilling And Anchors), Add For 13 Gauge Fabric, Deduct For 11 Gauge Fabric, Deduct For 6 Gauge Fabric, Add For 1" Mesh Fabric, Add For 1-3/4" Mesh Fabric, Add For 2-1/8" Mesh Fabric, Deduct For 2-3/8" Mesh Fabric, Deduct For Posts 8' On Centers, Add For Posts 5' On Centers, Add For Up To 100, Add For >100 To 250, Add For >2,500 To 5,000, Deduct For >5,000, Deduct	39.63 2.79 -8.18 -4.78 7.51 10.24 4.10 -2.05 -2.73 2.17 8.18 7.55 2.79 -1.39 -2.79	4.11
32 31 13 13-0144	LF	3'-6" Galvanized Chain Link Fence, 9 Gauge Coiled Spring Mesh, Top And Bottom Rails, 2-1/2" Line Post At 10' On Center, 3" Corner Post..... For Surface Mount On Concrete (Excludes Drilling And Anchors), Add For 13 Gauge Fabric, Deduct For 11 Gauge Fabric, Deduct For 6 Gauge Fabric, Add For 1" Mesh Fabric, Add For 1-3/4" Mesh Fabric, Add For 2-1/8" Mesh Fabric, Deduct For 2-3/8" Mesh Fabric, Deduct For Posts 8' On Centers, Add For Posts 5' On Centers, Add For Up To 100, Add For >100 To 250, Add For >2,500 To 5,000, Deduct For >5,000, Deduct	41.22 2.88 -8.64 -5.05 7.93 10.82 4.33 -2.16 -2.88 2.26 8.48 7.82 2.88 -1.44 -2.88	4.11

**32 Exterior Improvements****32 30 Site Improvements****32 31 Fences and Gates**

MINOR	CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
32 31 13 13-0145	LF		4' Galvanized Chain Link Fence, 9 Gauge Coiled Spring Mesh, Top And Bottom Rails, 2-1/2" Line Post At 10' On Center, 3" Corner Post.....	42.60	4.11
			For Surface Mount On Concrete (Excludes Drilling And Anchors), Add	2.96	
			For 13 Gauge Fabric, Deduct	-9.04	
			For 11 Gauge Fabric, Deduct	-5.28	
			For 6 Gauge Fabric, Add	8.29	
			For 1" Mesh Fabric, Add	11.31	
			For 1-3/4" Mesh Fabric, Add	4.52	
			For 2-1/8" Mesh Fabric, Deduct	-2.26	
			For 2-3/8" Mesh Fabric, Deduct	-3.02	
			For Posts 8' On Centers, Add	2.33	
			For Posts 5' On Centers, Add	8.75	
			For Up To 100, Add	8.05	
			For >100 To 250, Add	2.96	
			For >2,500 To 5,000, Deduct	-1.48	
			For >5,000, Deduct	-2.96	
32 31 13 13-0146	LF		5' Galvanized Chain Link Fence, 9 Gauge Coiled Spring Mesh, Top And Bottom Rails, 2-1/2" Line Post At 10' On Center, 3" Corner Post.....	45.85	4.11
			For Surface Mount On Concrete (Excludes Drilling And Anchors), Add	3.15	
			For 13 Gauge Fabric, Deduct	-9.98	
			For 11 Gauge Fabric, Deduct	-5.83	
			For 6 Gauge Fabric, Add	9.16	
			For 1" Mesh Fabric, Add	12.49	
			For 1-3/4" Mesh Fabric, Add	5.00	
			For 2-1/8" Mesh Fabric, Deduct	-2.50	
			For 2-3/8" Mesh Fabric, Deduct	-3.33	
			For Posts 8' On Centers, Add	2.50	
			For Posts 5' On Centers, Add	9.37	
			For Up To 100, Add	8.59	
			For >100 To 250, Add	3.15	
			For >2,500 To 5,000, Deduct	-1.57	
			For >5,000, Deduct	-3.15	
32 31 13 13-0147	LF		6' Galvanized Chain Link Fence, 9 Gauge Coiled Spring Mesh, Top And Bottom Rails, 2-1/2" Line Post At 10' On Center, 3" Corner Post.....	49.71	4.11
			For Surface Mount On Concrete (Excludes Drilling And Anchors), Add	3.40	
			For 13 Gauge Fabric, Deduct	-10.94	
			For 11 Gauge Fabric, Deduct	-6.39	
			For 6 Gauge Fabric, Add	10.04	
			For 1" Mesh Fabric, Add	13.69	
			For 1-3/4" Mesh Fabric, Add	5.48	
			For 2-1/8" Mesh Fabric, Deduct	-2.74	
			For 2-3/8" Mesh Fabric, Deduct	-3.65	
			For Posts 8' On Centers, Add	2.70	
			For Posts 5' On Centers, Add	10.13	
			For Up To 100, Add	9.28	
			For >100 To 250, Add	3.40	
			For >2,500 To 5,000, Deduct	-1.70	
			For >5,000, Deduct	-3.40	
32 31 13 13-0148	LF		7' Galvanized Chain Link Fence, 9 Gauge Coiled Spring Mesh, Top And Bottom Rails, 2-1/2" Line Post At 10' On Center, 3" Corner Post.....	51.64	6.17
			For Surface Mount On Concrete (Excludes Drilling And Anchors), Add	3.53	
			For 13 Gauge Fabric, Deduct	-11.37	
			For 11 Gauge Fabric, Deduct	-6.64	
			For 6 Gauge Fabric, Add	10.43	
			For 1" Mesh Fabric, Add	14.23	
			For 1-3/4" Mesh Fabric, Add	5.69	
			For 2-1/8" Mesh Fabric, Deduct	-2.85	
			For 2-3/8" Mesh Fabric, Deduct	-3.79	
			For Posts 8' On Centers, Add	2.81	
			For Posts 5' On Centers, Add	10.53	
			For Up To 100, Add	9.64	
			For >100 To 250, Add	3.53	
			For >2,500 To 5,000, Deduct	-1.76	
			For >5,000, Deduct	-3.53	
32 31 13 13-0149	LF		8' Galvanized Chain Link Fence, 9 Gauge Coiled Spring Mesh, Top And Bottom Rails, 2-1/2" Line Post At 10' On Center, 3" Corner Post.....	58.57	7.19
			For Surface Mount On Concrete (Excludes Drilling And Anchors), Add	3.94	
			For 13 Gauge Fabric, Deduct	-13.35	
			For 11 Gauge Fabric, Deduct	-7.80	
			For 6 Gauge Fabric, Add	12.25	
			For 1" Mesh Fabric, Add	16.71	
			For 1-3/4" Mesh Fabric, Add	6.68	
			For 2-1/8" Mesh Fabric, Deduct	-3.34	
			For 2-3/8" Mesh Fabric, Deduct	-4.46	
			For Posts 8' On Centers, Add	3.17	
			For Posts 5' On Centers, Add	11.85	
			For Up To 100, Add	10.80	
			For >100 To 250, Add	3.94	
			For >2,500 To 5,000, Deduct	-1.97	
			For >5,000, Deduct	-3.94	



Exterior Improvements		32	32
Site Improvements		32 30	
Fences and Gates		32 31	

MINOR	CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
32 31	13 13-0150	LF	9' Galvanized Chain Link Fence, 9 Gauge Coiled Spring Mesh, Top And Bottom Rails, 2-1/2" Line Post At 10' On Center, 3" Corner Post.....	62.51	9.24
			For Surface Mount On Concrete (Excludes Drilling And Anchors), Add	4.18	
			For 13 Gauge Fabric, Deduct	-14.38	
			For 11 Gauge Fabric, Deduct	-8.40	
			For 6 Gauge Fabric, Add	13.20	
			For 1" Mesh Fabric, Add	18.00	
			For 1-3/4" Mesh Fabric, Add	7.20	
			For 2-1/8" Mesh Fabric, Deduct	-3.60	
			For 2-3/8" Mesh Fabric, Deduct	-4.80	
			For Posts 8' On Centers, Add	3.38	
			For Posts 5' On Centers, Add	12.62	
			For Up To 100, Add	11.49	
			For >100 To 250, Add	4.18	
			For >2,500 To 5,000, Deduct	-2.09	
			For >5,000, Deduct	-4.18	
32 31	13 13-0151	LF	10' Galvanized Chain Link Fence, 9 Gauge Coiled Spring Mesh, Top And Bottom Rails, 2-1/2" Line Post At 10' On Center, 3" Corner Post.....	66.46	10.27
			For Surface Mount On Concrete (Excludes Drilling And Anchors), Add	4.43	
			For 13 Gauge Fabric, Deduct	-15.42	
			For 11 Gauge Fabric, Deduct	-9.01	
			For 6 Gauge Fabric, Add	14.15	
			For 1" Mesh Fabric, Add	19.30	
			For 1-3/4" Mesh Fabric, Add	7.72	
			For 2-1/8" Mesh Fabric, Deduct	-3.86	
			For 2-3/8" Mesh Fabric, Deduct	-5.15	
			For Posts 8' On Centers, Add	3.59	
			For Posts 5' On Centers, Add	13.40	
			For Up To 100, Add	12.18	
			For >100 To 250, Add	4.43	
			For >2,500 To 5,000, Deduct	-2.21	
			For >5,000, Deduct	-4.43	
32 31	13 13-0152	LF	12' Galvanized Chain Link Fence, 9 Gauge Coiled Spring Mesh, Top And Bottom Rails, 2-1/2" Line Post At 10' On Center, 3" Corner Post.....	73.84	12.32
			For Each Additional Foot >12, Add	4.14	
			For Surface Mount On Concrete (Excludes Drilling And Anchors), Add	4.89	
			For 13 Gauge Fabric, Deduct	-17.34	
			For 11 Gauge Fabric, Deduct	-10.13	
			For 6 Gauge Fabric, Add	15.92	
			For 1" Mesh Fabric, Add	21.71	
			For 1-3/4" Mesh Fabric, Add	8.68	
			For 2-1/8" Mesh Fabric, Deduct	-4.34	
			For 2-3/8" Mesh Fabric, Deduct	-5.79	
			For Posts 8' On Centers, Add	3.98	
			For Posts 5' On Centers, Add	14.85	
			For Up To 100, Add	13.47	
			For >100 To 250, Add	4.89	
			For >2,500 To 5,000, Deduct	-2.44	
			For >5,000, Deduct	-4.89	
32 31	13 13-0153		Vinyl Coated (32 31 13 13-0141)		
32 31	13 13-0154	LF	4' Vinyl Cover Chain Link Fence, 9 Gauge Coiled Spring Mesh, Top And Bottom Rails, 2-1/2" Line Post At 10' On Center, 3" Corner Post.....	44.19	4.11
			For Powder Coated Framework (Posts, Rails, Hardware), Add	4.14	
			For Surface Mount On Concrete (Excludes Drilling And Anchors), Add	3.04	
			For 13 Gauge Fabric, Deduct	-9.59	
			For 11 Gauge Fabric, Deduct	-5.60	
			For 6 Gauge Fabric, Add	8.80	
			For 1" Mesh Fabric, Add	12.00	
			For 1-3/4" Mesh Fabric, Add	4.80	
			For 2-1/8" Mesh Fabric, Deduct	-2.40	
			For 2-3/8" Mesh Fabric, Deduct	-3.20	
			For Posts 8' On Centers, Add	2.41	
			For Posts 5' On Centers, Add	9.03	
			For Up To 100, Add	8.29	
			For >100 To 250, Add	3.04	
			For >2,500 To 5,000, Deduct	-1.52	
			For >5,000, Deduct	-3.04	
32 31	13 13-0155	LF	5' Vinyl Cover Chain Link Fence, 9 Gauge Coiled Spring Mesh, Top And Bottom Rails, 2-1/2" Line Post At 10' On Center, 3" Corner Post.....	47.86	4.11
			For Powder Coated Framework (Posts, Rails, Hardware), Add	4.61	
			For Surface Mount On Concrete (Excludes Drilling And Anchors), Add	3.25	
			For 13 Gauge Fabric, Deduct	-10.68	
			For 11 Gauge Fabric, Deduct	-6.24	
			For 6 Gauge Fabric, Add	9.80	
			For 1" Mesh Fabric, Add	13.37	
			For 1-3/4" Mesh Fabric, Add	5.35	
			For 2-1/8" Mesh Fabric, Deduct	-2.67	
			For 2-3/8" Mesh Fabric, Deduct	-3.56	
			For Posts 8' On Centers, Add	2.60	
			For Posts 5' On Centers, Add	9.73	
			For Up To 100, Add	8.89	
			For >100 To 250, Add	3.25	
			For >2,500 To 5,000, Deduct	-1.62	
			For >5,000, Deduct	-3.25	

**32 Exterior Improvements****32 30 Site Improvements****32 31 Fences and Gates**

MINOR  
CSI UOM DESCRIPTION

TOTAL DIRECT DEMOLITION  
UNIT COST UNIT COST

32 31 13 13-0156	LF	6' Vinyl Cover Chain Link Fence, 9 Gauge Coiled Spring Mesh, Top And Bottom Rails, 2-1/2" Line Post At 10' On Center, 3" Corner Post.....	53.77	4.11
		For Powder Coated Framework (Posts, Rails, Hardware), Add	5.33	
		For Surface Mount On Concrete (Excludes Drilling And Anchors), Add	3.60	
		For 13 Gauge Fabric, Deduct	-12.35	
		For 11 Gauge Fabric, Deduct	-7.21	
		For 6 Gauge Fabric, Add	11.33	
		For 1" Mesh Fabric, Add	15.46	
		For 1-3/4" Mesh Fabric, Add	6.18	
		For 2-1/8" Mesh Fabric, Deduct	-3.09	
		For 2-3/8" Mesh Fabric, Deduct	-4.12	
		For Posts 8' On Centers, Add	2.91	
		For Posts 5' On Centers, Add	10.86	
		For Up To 100, Add	9.89	
		For >100 To 250, Add	3.60	
		For >2,500 To 5,000, Deduct	-1.80	
		For >5,000, Deduct	-3.60	
32 31 13 13-0157	LF	7' Vinyl Cover Chain Link Fence, 9 Gauge Coiled Spring Mesh, Top And Bottom Rails, 2-1/2" Line Post At 10' On Center, 3" Corner Post.....	56.37	6.17
		For Powder Coated Framework (Posts, Rails, Hardware), Add	5.62	
		For Surface Mount On Concrete (Excludes Drilling And Anchors), Add	3.77	
		For 13 Gauge Fabric, Deduct	-13.01	
		For 11 Gauge Fabric, Deduct	-7.60	
		For 6 Gauge Fabric, Add	11.94	
		For 1" Mesh Fabric, Add	16.29	
		For 1-3/4" Mesh Fabric, Add	6.51	
		For 2-1/8" Mesh Fabric, Deduct	-3.26	
		For 2-3/8" Mesh Fabric, Deduct	-4.34	
		For Posts 8' On Centers, Add	3.05	
		For Posts 5' On Centers, Add	11.38	
		For Up To 100, Add	10.35	
		For >100 To 250, Add	3.77	
		For >2,500 To 5,000, Deduct	-1.88	
		For >5,000, Deduct	-3.77	
32 31 13 13-0158	LF	8' Vinyl Cover Chain Link Fence, 9 Gauge Coiled Spring Mesh, Top And Bottom Rails, 2-1/2" Line Post At 10' On Center, 3" Corner Post.....	64.09	7.19
		For Powder Coated Framework (Posts, Rails, Hardware), Add	6.59	
		For Surface Mount On Concrete (Excludes Drilling And Anchors), Add	4.21	
		For 13 Gauge Fabric, Deduct	-15.27	
		For 11 Gauge Fabric, Deduct	-8.92	
		For 6 Gauge Fabric, Add	14.01	
		For 1" Mesh Fabric, Add	19.11	
		For 1-3/4" Mesh Fabric, Add	7.64	
		For 2-1/8" Mesh Fabric, Deduct	-3.82	
		For 2-3/8" Mesh Fabric, Deduct	-5.10	
		For Posts 8' On Centers, Add	3.45	
		For Posts 5' On Centers, Add	12.85	
		For Up To 100, Add	11.63	
		For >100 To 250, Add	4.21	
		For >2,500 To 5,000, Deduct	-2.11	
		For >5,000, Deduct	-4.21	
32 31 13 13-0159	LF	9' Vinyl Cover Chain Link Fence, 9 Gauge Coiled Spring Mesh, Top And Bottom Rails, 2-1/2" Line Post At 10' On Center, 3" Corner Post.....	68.43	9.24
		For Powder Coated Framework (Posts, Rails, Hardware), Add	7.10	
		For Surface Mount On Concrete (Excludes Drilling And Anchors), Add	4.48	
		For 13 Gauge Fabric, Deduct	-16.44	
		For 11 Gauge Fabric, Deduct	-9.60	
		For 6 Gauge Fabric, Add	15.09	
		For 1" Mesh Fabric, Add	20.58	
		For 1-3/4" Mesh Fabric, Add	8.23	
		For 2-1/8" Mesh Fabric, Deduct	-4.12	
		For 2-3/8" Mesh Fabric, Deduct	-5.49	
		For Posts 8' On Centers, Add	3.67	
		For Posts 5' On Centers, Add	13.69	
		For Up To 100, Add	12.38	
		For >100 To 250, Add	4.48	
		For >2,500 To 5,000, Deduct	-2.24	
		For >5,000, Deduct	-4.48	
32 31 13 13-0160	LF	10' Vinyl Cover Chain Link Fence, 9 Gauge Coiled Spring Mesh, Top And Bottom Rails, 2-1/2" Line Post At 10' On Center, 3" Corner Post.....	72.78	10.27
		For Powder Coated Framework (Posts, Rails, Hardware), Add	7.60	
		For Surface Mount On Concrete (Excludes Drilling And Anchors), Add	4.74	
		For 13 Gauge Fabric, Deduct	-17.61	
		For 11 Gauge Fabric, Deduct	-10.29	
		For 6 Gauge Fabric, Add	16.17	
		For 1" Mesh Fabric, Add	22.05	
		For 1-3/4" Mesh Fabric, Add	8.82	
		For 2-1/8" Mesh Fabric, Deduct	-4.41	
		For 2-3/8" Mesh Fabric, Deduct	-5.88	
		For Posts 8' On Centers, Add	3.90	
		For Posts 5' On Centers, Add	14.54	
		For Up To 100, Add	13.13	
		For >100 To 250, Add	4.74	
		For >2,500 To 5,000, Deduct	-2.37	
		For >5,000, Deduct	-4.74	





Exterior Improvements		32	32
Site Improvements		32 30	
Fences and Gates		32 31	

MINOR	CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
32 31 13 13-0161	LF		12' Vinyl Cover Chain Link Fence, 9 Gauge Coiled Spring Mesh, Top And Bottom Rails, 2-1/2" Line Post At 10' On Center, 3" Corner Post.....	79.40	12.32
			For Each Additional Foot >12, Add	4.39	
			For Powder Coated Framework (Posts, Rails, Hardware), Add	8.32	
			For Surface Mount On Concrete (Excludes Drilling And Anchors), Add	5.17	
			For 13 Gauge Fabric, Deduct	-19.28	
			For 11 Gauge Fabric, Deduct	-11.26	
			For 6 Gauge Fabric, Add	17.69	
			For 1" Mesh Fabric, Add	24.13	
			For 1-3/4" Mesh Fabric, Add	9.65	
			For 2-1/8" Mesh Fabric, Deduct	-4.83	
			For 2-3/8" Mesh Fabric, Deduct	-6.43	
			For Posts 8' On Centers, Add	4.26	
			For Posts 5' On Centers, Add	15.85	
			For Up To 100, Add	14.30	
			For >100 To 250, Add	5.17	
			For >2,500 To 5,000, Deduct	-2.58	
			For >5,000, Deduct	-5.17	
32 31 13 13-0162			<b>Rails</b> (32 31 13 13)		
			Note: Includes rail end fittings.		
32 31 13 13-0163			<b>SS-20 Chain Link Fence Rails</b> (32 31 13 13-0162)		
			Note: Includes tie wires.		
32 31 13 13-0164	LF		1-3/8" Galvanized Steel Rail, 0.08" Wall Thickness, Tie Wires And Fittings.....	7.14	1.32
			For SS15, Deduct	-0.44	
			For SS40, Add	1.09	
32 31 13 13-0165	LF		1-3/8" Vinyl Coated Rail, 0.08" Wall Thickness, Tie Wires And Fittings.....	8.61	1.32
			For SS40, Add	0.58	
			For Powder Coated, Add	1.17	
			For Aluminum Coated, Add	2.33	
32 31 13 13-0166	LF		1-5/8" Galvanized Steel Rail, 0.085" Wall Thickness, Tie Wires And Fittings.....	8.83	1.51
			For SS15, Deduct	-0.58	
			For SS40, Add	1.45	
32 31 13 13-0167	LF		1-5/8" Vinyl Coated Rail, 0.085" Wall Thickness, Tie Wires And Fittings.....	10.79	1.51
			For SS40, Add	0.78	
			For Powder Coated, Add	1.55	
			For Aluminum Coated, Add	3.11	
32 31 13 13-0168	LF		2" Galvanized Steel Rail, 0.09" Wall Thickness, Tie Wires And Fittings.....	10.35	1.69
			For SS40, Add	1.74	
32 31 13 13-0169	LF		2" Vinyl Coated Rail, 0.09" Wall Thickness, Tie Wires And Fittings.....	12.70	1.69
			For SS40, Add	0.93	
			For Powder Coated, Add	1.86	
			For Aluminum Coated, Add	3.73	
32 31 13 13-0170			<b>Fabric</b> (32 31 13 13)		
32 31 13 13-0171			<b>Fabric, Galvanized Chain Link</b> (32 31 13 13-0170)		
32 31 13 13-0172	LF		3' Full Height Fabric Galvanized Chain Link #9 Gauge, 1.2 Oz Coating, 2" Mesh.....	11.76	2.42
			For 1-1/4" Mesh Fabric, Add	1.09	
			For 2 Oz Galvanized Or Zinc Coating, Add	0.98	
			For 13 Gauge Fabric, Deduct	-1.76	
			For 11 Gauge Fabric, Deduct	-0.98	
			For 6 Gauge Fabric, Add	3.13	
			For 1" Mesh Fabric, Add	2.93	
			For 1-1/4" Mesh Fabric, Add	1.96	
			For 1-3/4" Mesh Fabric, Add	1.17	
			For 2-1/8" Mesh Fabric, Deduct	-0.59	
			For 2-3/8" Mesh Fabric, Deduct	-0.78	
32 31 13 13-0173	LF		3'-6" Full Height Fabric Galvanized Chain Link #9 Gauge, 1.2 Oz Coating, 2" Mesh.....	13.01	2.72
			For 1-1/4" Mesh Fabric, Add	1.28	
			For 2 Oz Galvanized Or Zinc Coating, Add	1.14	
			For 13 Gauge Fabric, Deduct	-2.05	
			For 11 Gauge Fabric, Deduct	-1.14	
			For 6 Gauge Fabric, Add	3.65	
			For 1" Mesh Fabric, Add	3.42	
			For 1-1/4" Mesh Fabric, Add	2.28	
			For 1-3/4" Mesh Fabric, Add	1.37	
			For 2-1/8" Mesh Fabric, Deduct	-0.68	
			For 2-3/8" Mesh Fabric, Deduct	-0.91	
32 31 13 13-0174	LF		4' Full Height Fabric Galvanized Chain Link #9 Gauge, 1.2 Oz Coating, 2" Mesh.....	14.08	3.02
			For 1-1/4" Mesh Fabric, Add	1.41	
			For 2 Oz Galvanized Or Zinc Coating, Add	1.26	
			For 13 Gauge Fabric, Deduct	-2.26	
			For 11 Gauge Fabric, Deduct	-1.26	
			For 6 Gauge Fabric, Add	4.02	
			For 1" Mesh Fabric, Add	3.77	
			For 1-1/4" Mesh Fabric, Add	2.51	
			For 1-3/4" Mesh Fabric, Add	1.51	
			For 2-1/8" Mesh Fabric, Deduct	-0.75	
			For 2-3/8" Mesh Fabric, Deduct	-1.00	

**32 Exterior Improvements****32 30 Site Improvements****32 31 Fences and Gates**

MINOR	CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
32 31 13 13-0175	LF	5'	Full Height Fabric Galvanized Chain Link #9 Gauge, 1.2 Oz Coating, 2" Mesh.....	15.92	3.62
			For 1-1/4" Mesh Fabric, Add	1.75	
			For 2 Oz Galvanized Or Zinc Coating, Add	1.57	
			For 13 Gauge Fabric, Deduct	-2.82	
			For 11 Gauge Fabric, Deduct	-1.57	
			For 6 Gauge Fabric, Add	5.01	
			For 1" Mesh Fabric, Add	4.70	
			For 1-1/4" Mesh Fabric, Add	3.13	
			For 1-3/4" Mesh Fabric, Add	1.88	
			For 2-1/8" Mesh Fabric, Deduct	-0.94	
			For 2-3/8" Mesh Fabric, Deduct	-1.25	
32 31 13 13-0176	LF	6'	Full Height Fabric Galvanized Chain Link #9 Gauge, 1.2 Oz Coating, 2" Mesh.....	17.87	4.23
			For 1-1/4" Mesh Fabric, Add	2.11	
			For 2 Oz Galvanized Or Zinc Coating, Add	1.88	
			For 13 Gauge Fabric, Deduct	-3.38	
			For 11 Gauge Fabric, Deduct	-1.88	
			For 6 Gauge Fabric, Add	6.02	
			For 1" Mesh Fabric, Add	5.64	
			For 1-1/4" Mesh Fabric, Add	3.76	
			For 1-3/4" Mesh Fabric, Add	2.26	
			For 2-1/8" Mesh Fabric, Deduct	-1.13	
			For 2-3/8" Mesh Fabric, Deduct	-1.50	
32 31 13 13-0177	LF	7'	Full Height Fabric Galvanized Chain Link #9 Gauge, 1.2 Oz Coating, 2" Mesh.....	19.92	4.83
			For 1-1/4" Mesh Fabric, Add	2.45	
			For 2 Oz Galvanized Or Zinc Coating, Add	2.19	
			For 13 Gauge Fabric, Deduct	-3.94	
			For 11 Gauge Fabric, Deduct	-2.19	
			For 6 Gauge Fabric, Add	7.01	
			For 1" Mesh Fabric, Add	6.57	
			For 1-1/4" Mesh Fabric, Add	4.38	
			For 1-3/4" Mesh Fabric, Add	2.63	
			For 2-1/8" Mesh Fabric, Deduct	-1.31	
			For 2-3/8" Mesh Fabric, Deduct	-1.75	
32 31 13 13-0178	LF	8'	Full Height Fabric Galvanized Chain Link #9 Gauge, 1.2 Oz Coating, 2" Mesh.....	22.10	6.04
			For 1-1/4" Mesh Fabric, Add	2.81	
			For 2 Oz Galvanized Or Zinc Coating, Add	2.51	
			For 13 Gauge Fabric, Deduct	-4.51	
			For 11 Gauge Fabric, Deduct	-2.51	
			For 6 Gauge Fabric, Add	8.02	
			For 1" Mesh Fabric, Add	7.52	
			For 1-1/4" Mesh Fabric, Add	5.01	
			For 1-3/4" Mesh Fabric, Add	3.01	
			For 2-1/8" Mesh Fabric, Deduct	-1.50	
			For 2-3/8" Mesh Fabric, Deduct	-2.00	
32 31 13 13-0179	LF	10'	Full Height Fabric Galvanized Chain Link #9 Gauge, 1.2 Oz Coating, 2" Mesh.....	26.34	6.64
			For 1-1/4" Mesh Fabric, Add	3.64	
			For 2 Oz Galvanized Or Zinc Coating, Add	3.25	
			For 13 Gauge Fabric, Deduct	-5.85	
			For 11 Gauge Fabric, Deduct	-3.25	
			For 6 Gauge Fabric, Add	10.41	
			For 1" Mesh Fabric, Add	9.76	
			For 1-1/4" Mesh Fabric, Add	6.51	
			For 1-3/4" Mesh Fabric, Add	3.90	
			For 2-1/8" Mesh Fabric, Deduct	-1.95	
			For 2-3/8" Mesh Fabric, Deduct	-2.60	
32 31 13 13-0180	LF	12'	Full Height Fabric Galvanized Chain Link #9 Gauge, 1.2 Oz Coating, 2" Mesh.....	30.09	7.25
			For 1-1/4" Mesh Fabric, Add	4.37	
			For 2 Oz Galvanized Or Zinc Coating, Add	3.90	
			For 13 Gauge Fabric, Deduct	-7.02	
			For 11 Gauge Fabric, Deduct	-3.90	
			For 6 Gauge Fabric, Add	12.47	
			For 1" Mesh Fabric, Add	11.69	
			For 1-1/4" Mesh Fabric, Add	7.80	
			For 1-3/4" Mesh Fabric, Add	4.68	
			For 2-1/8" Mesh Fabric, Deduct	-2.34	
			For 2-3/8" Mesh Fabric, Deduct	-3.12	
32 31 13 13-0181	LF	14'	Full Height Fabric Galvanized Chain Link #9 Gauge, 1.2 Oz Coating, 2" Mesh.....	33.67	8.45
			For 1-1/4" Mesh Fabric, Add	4.69	
			For 2 Oz Galvanized Or Zinc Coating, Add	4.19	
			For 13 Gauge Fabric, Deduct	-7.54	
			For 11 Gauge Fabric, Deduct	-4.19	
			For 6 Gauge Fabric, Add	13.40	
			For 1" Mesh Fabric, Add	12.56	
			For 1-1/4" Mesh Fabric, Add	8.38	
			For 1-3/4" Mesh Fabric, Add	5.03	
			For 2-1/8" Mesh Fabric, Deduct	-2.51	
			For 2-3/8" Mesh Fabric, Deduct	-3.35	



Exterior Improvements			32
Site Improvements			32 30
Fences and Gates			32 31

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MINOR	CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
32 31 13 13-0182	LF	16'	Full Height Fabric Galvanized Chain Link #9 Gauge, 1.2 Oz Coating, 2" Mesh.....	37.24	9.66
			For 1-1/4" Mesh Fabric, Add	5.01	
			For 2 Oz Galvanized Or Zinc Coating, Add	4.48	
			For 13 Gauge Fabric, Deduct	-8.06	
			For 11 Gauge Fabric, Deduct	-4.48	
			For 6 Gauge Fabric, Add	14.33	
			For 1" Mesh Fabric, Add	13.43	
			For 1-1/4" Mesh Fabric, Add	8.96	
			For 1-3/4" Mesh Fabric, Add	5.37	
			For 2-1/8" Mesh Fabric, Deduct	-2.69	
			For 2-3/8" Mesh Fabric, Deduct	-3.58	
32 31 13 13-0183	SF	>16'	Full Height Fabric Galvanized Chain Link #9 Gauge, 1.2 Oz Coating, 2" Mesh.....	2.33	0.57
			For 1-1/4" Mesh Fabric, Add	0.31	
			For 2 Oz Galvanized Or Zinc Coating, Add	0.28	
			For 13 Gauge Fabric, Deduct	-0.50	
			For 11 Gauge Fabric, Deduct	-0.28	
			For 6 Gauge Fabric, Add	0.90	
			For 1" Mesh Fabric, Add	0.84	
			For 1-1/4" Mesh Fabric, Add	0.56	
			For 1-3/4" Mesh Fabric, Add	0.34	
			For 2-1/8" Mesh Fabric, Deduct	-0.17	
			For 2-3/8" Mesh Fabric, Deduct	-0.22	
32 31 13 13-0184 Fabric, Vinyl Coated Chain Link (32 31 13 13-0170)					
32 31 13 13-0185	LF	4'	Full Height Vinyl Coated Fabric Chain Link #9 Gauge Fused, 2" Mesh .....	15.67	2.42
			For 1-1/4" Mesh Fabric, Add	1.85	
			For 13 Gauge Fabric, Deduct	-2.97	
			For 11 Gauge Fabric, Deduct	-1.65	
			For 6 Gauge Fabric, Add	5.29	
			For 1" Mesh Fabric, Add	4.96	
			For 1-1/4" Mesh Fabric, Add	3.31	
			For 1-3/4" Mesh Fabric, Add	1.98	
			For 2-1/8" Mesh Fabric, Deduct	-0.99	
			For 2-3/8" Mesh Fabric, Deduct	-1.32	
			For Aluminum Coated, Add	2.64	
32 31 13 13-0186	LF	5'	Full Height Vinyl Coated Fabric Chain Link #9 Gauge Fused, 2" Mesh .....	17.92	3.62
			For 1-1/4" Mesh Fabric, Add	2.31	
			For 13 Gauge Fabric, Deduct	-3.72	
			For 11 Gauge Fabric, Deduct	-2.07	
			For 6 Gauge Fabric, Add	6.61	
			For 1" Mesh Fabric, Add	6.20	
			For 1-1/4" Mesh Fabric, Add	4.13	
			For 1-3/4" Mesh Fabric, Add	2.48	
			For 2-1/8" Mesh Fabric, Deduct	-1.24	
			For 2-3/8" Mesh Fabric, Deduct	-1.65	
			For Aluminum Coated, Add	3.30	
32 31 13 13-0187	LF	6'	Full Height Vinyl Coated Fabric Chain Link #9 Gauge Fused, 2" Mesh .....	21.94	4.23
			For 1-1/4" Mesh Fabric, Add	3.25	
			For 13 Gauge Fabric, Deduct	-5.22	
			For 11 Gauge Fabric, Deduct	-2.90	
			For 6 Gauge Fabric, Add	9.27	
			For 1" Mesh Fabric, Add	8.69	
			For 1-1/4" Mesh Fabric, Add	5.80	
			For 1-3/4" Mesh Fabric, Add	3.48	
			For 2-1/8" Mesh Fabric, Deduct	-1.74	
			For 2-3/8" Mesh Fabric, Deduct	-2.32	
			For Aluminum Coated, Add	4.64	
32 31 13 13-0188	LF	7'	Full Height Vinyl Coated Fabric Chain Link #9 Gauge Fused, 2" Mesh .....	24.65	4.83
			For 1-1/4" Mesh Fabric, Add	3.78	
			For 13 Gauge Fabric, Deduct	-6.07	
			For 11 Gauge Fabric, Deduct	-3.37	
			For 6 Gauge Fabric, Add	10.79	
			For 1" Mesh Fabric, Add	10.12	
			For 1-1/4" Mesh Fabric, Add	6.75	
			For 1-3/4" Mesh Fabric, Add	4.05	
			For 2-1/8" Mesh Fabric, Deduct	-2.02	
			For 2-3/8" Mesh Fabric, Deduct	-2.70	
			For Aluminum Coated, Add	5.40	
32 31 13 13-0189	LF	8'	Full Height Vinyl Coated Fabric Chain Link #9 Gauge Fused, 2" Mesh .....	27.61	6.04
			For 1-1/4" Mesh Fabric, Add	4.35	
			For 13 Gauge Fabric, Deduct	-6.99	
			For 11 Gauge Fabric, Deduct	-3.88	
			For 6 Gauge Fabric, Add	12.42	
			For 1" Mesh Fabric, Add	11.65	
			For 1-1/4" Mesh Fabric, Add	7.77	
			For 1-3/4" Mesh Fabric, Add	4.66	
			For 2-1/8" Mesh Fabric, Deduct	-2.33	
			For 2-3/8" Mesh Fabric, Deduct	-3.11	
			For Aluminum Coated, Add	6.21	

**32 Exterior Improvements****32 30 Site Improvements****32 31 Fences and Gates**

MINOR CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
32 31 13 13-0190	LF	10' Full Height Vinyl Coated Fabric Chain Link #9 Gauge Fused, 2" Mesh .....	32.66	6.64
		For 1-1/4" Mesh Fabric, Add	5.41	
		For 13 Gauge Fabric, Deduct	-8.70	
		For 11 Gauge Fabric, Deduct	-4.83	
		For 6 Gauge Fabric, Add	15.46	
		For 1" Mesh Fabric, Add	14.50	
		For 1-1/4" Mesh Fabric, Add	9.67	
		For 1-3/4" Mesh Fabric, Add	5.80	
		For 2-1/8" Mesh Fabric, Deduct	-2.90	
		For 2-3/8" Mesh Fabric, Deduct	-3.87	
		For Aluminum Coated, Add	7.73	
32 31 13 13-0191	LF	12' Full Height Vinyl Coated Fabric Chain Link #9 Gauge Fused, 2" Mesh .....	35.65	7.25
		For 1-1/4" Mesh Fabric, Add	5.92	
		For 13 Gauge Fabric, Deduct	-9.52	
		For 11 Gauge Fabric, Deduct	-5.29	
		For 6 Gauge Fabric, Add	16.92	
		For 1" Mesh Fabric, Add	15.86	
		For 1-1/4" Mesh Fabric, Add	10.58	
		For 1-3/4" Mesh Fabric, Add	6.35	
		For 2-1/8" Mesh Fabric, Deduct	-3.17	
		For 2-3/8" Mesh Fabric, Deduct	-4.23	
		For Aluminum Coated, Add	8.46	
32 31 13 13-0192	LF	14' Full Height Vinyl Coated Fabric Chain Link #9 Gauge Fused, 2" Mesh .....	40.20	8.45
		For 1-1/4" Mesh Fabric, Add	6.52	
		For 13 Gauge Fabric, Deduct	-10.48	
		For 11 Gauge Fabric, Deduct	-5.82	
		For 6 Gauge Fabric, Add	18.62	
		For 1" Mesh Fabric, Add	17.46	
		For 1-1/4" Mesh Fabric, Add	11.64	
		For 1-3/4" Mesh Fabric, Add	6.98	
		For 2-1/8" Mesh Fabric, Deduct	-3.49	
		For 2-3/8" Mesh Fabric, Deduct	-4.66	
		For Aluminum Coated, Add	9.31	
32 31 13 13-0193	LF	16' Full Height Vinyl Coated Fabric Chain Link #9 Gauge Fused, 2" Mesh .....	44.84	9.66
		For 1-1/4" Mesh Fabric, Add	7.14	
		For 13 Gauge Fabric, Deduct	-11.48	
		For 11 Gauge Fabric, Deduct	-6.38	
		For 6 Gauge Fabric, Add	20.41	
		For 1" Mesh Fabric, Add	19.13	
		For 1-1/4" Mesh Fabric, Add	12.76	
		For 1-3/4" Mesh Fabric, Add	7.65	
		For 2-1/8" Mesh Fabric, Deduct	-3.83	
		For 2-3/8" Mesh Fabric, Deduct	-5.10	
		For Aluminum Coated, Add	10.20	
32 31 13 13-0194	SF	>16' Full Height Vinyl Coated Fabric Chain Link #9 Gauge Fused, 2" Mesh .....	2.80	0.57
		For 1-1/4" Mesh Fabric, Add	0.45	
		For 13 Gauge Fabric, Deduct	-0.72	
		For 11 Gauge Fabric, Deduct	-0.40	
		For 6 Gauge Fabric, Add	1.27	
		For 1" Mesh Fabric, Add	1.19	
		For 1-1/4" Mesh Fabric, Add	0.80	
		For 1-3/4" Mesh Fabric, Add	0.48	
		For 2-1/8" Mesh Fabric, Deduct	-0.24	
		For 2-3/8" Mesh Fabric, Deduct	-0.32	
		For Aluminum Coated, Add	0.64	
<b>32 31 13 13-0195 Fabric, Aluminized Steel Chain Link (32 31 13 13-0170)</b>				
32 31 13 13-0196	LF	3' Full Height Fabric Chain Link #9 Gauge, Aluminized Steel, 2" Mesh .....	11.23	2.42
		For 6 Gauge Fabric, Add	2.70	
		For 1" Mesh Fabric, Add	3.55	
32 31 13 13-0197	LF	3'-6" Full Height Fabric Chain Link #9 Gauge, Aluminized Steel, 2" Mesh .....	12.37	2.72
		For 6 Gauge Fabric, Add	3.14	
		For 1" Mesh Fabric, Add	4.12	
32 31 13 13-0198	LF	4' Full Height Fabric Chain Link #9 Gauge, Aluminized Steel, 2" Mesh .....	13.55	3.02
		For 6 Gauge Fabric, Add	3.59	
		For 1" Mesh Fabric, Add	4.71	
32 31 13 13-0199	LF	5' Full Height Fabric Chain Link #9 Gauge, Aluminized Steel, 2" Mesh .....	15.27	3.62
		For 6 Gauge Fabric, Add	4.49	
		For 1" Mesh Fabric, Add	5.89	
32 31 13 13-0200	LF	6' Full Height Fabric Chain Link #9 Gauge, Aluminized Steel, 2" Mesh .....	17.06	4.23
		For 6 Gauge Fabric, Add	5.37	
		For 1" Mesh Fabric, Add	7.05	
32 31 13 13-0201	LF	7' Full Height Fabric Chain Link #9 Gauge, Aluminized Steel, 2" Mesh .....	19.01	4.83
		For 6 Gauge Fabric, Add	6.28	
		For 1" Mesh Fabric, Add	8.24	
32 31 13 13-0202	LF	8' Full Height Fabric Chain Link #9 Gauge, Aluminized Steel, 2" Mesh .....	21.04	6.04
		For 6 Gauge Fabric, Add	7.17	
		For 1" Mesh Fabric, Add	9.41	
32 31 13 13-0203	LF	10' Full Height Fabric Chain Link #9 Gauge, Aluminized Steel, 2" Mesh .....	24.53	6.64
		For 6 Gauge Fabric, Add	8.96	
		For 1" Mesh Fabric, Add	11.76	
32 31 13 13-0204	LF	12' Full Height Fabric Chain Link #9 Gauge, Aluminized Steel, 2" Mesh .....	27.94	7.25
		For 6 Gauge Fabric, Add	10.75	
		For 1" Mesh Fabric, Add	14.11	



Exterior Improvements			32
Site Improvements			32 30
Fences and Gates			32 31

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MINOR CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
32 31 13 13-0205		Fabric, All Aluminum Chain Link (32 31 13 13-0170)		
32 31 13 13-0206	LF	3' Full Height Fabric Chain Link #9 Gauge, All Aluminum, 2" Mesh..... For 6 Gauge Fabric, Add For 1" Mesh Fabric, Add	16.68 7.06 9.27	2.42
32 31 13 13-0207	LF	3'-6" Full Height Fabric Chain Link #9 Gauge, All Aluminum, 2" Mesh..... For 6 Gauge Fabric, Add For 1" Mesh Fabric, Add	18.75 8.24 10.82	2.72
32 31 13 13-0208	LF	4' Full Height Fabric Chain Link #9 Gauge, All Aluminum, 2" Mesh..... For 6 Gauge Fabric, Add For 1" Mesh Fabric, Add	20.83 9.42 12.36	3.02
32 31 13 13-0209	LF	5' Full Height Fabric Chain Link #9 Gauge, All Aluminum, 2" Mesh..... For 6 Gauge Fabric, Add For 1" Mesh Fabric, Add	24.37 11.77 15.45	3.62
32 31 13 13-0210	LF	6' Full Height Fabric Chain Link #9 Gauge, All Aluminum, 2" Mesh..... For 6 Gauge Fabric, Add For 1" Mesh Fabric, Add	28.01 14.13 18.54	4.23
32 31 13 13-0211	LF	7' Full Height Fabric Chain Link #9 Gauge, All Aluminum, 2" Mesh..... For 6 Gauge Fabric, Add For 1" Mesh Fabric, Add	31.76 16.48 21.63	4.83
32 31 13 13-0212	LF	8' Full Height Fabric Chain Link #9 Gauge, All Aluminum, 2" Mesh..... For 6 Gauge Fabric, Add For 1" Mesh Fabric, Add	35.62 18.83 24.72	6.04
32 31 13 13-0213	LF	10' Full Height Fabric Chain Link #9 Gauge, All Aluminum, 2" Mesh..... For 6 Gauge Fabric, Add For 1" Mesh Fabric, Add	42.76 23.54 30.90	6.64
32 31 13 13-0214	LF	12' Full Height Fabric Chain Link #9 Gauge, All Aluminum, 2" Mesh..... For 6 Gauge Fabric, Add For 1" Mesh Fabric, Add	49.81 28.25 37.08	7.25
32 31 13 13-0215		Fence Inserts (32 31 13 13-0170) Note: For use with new or existing chain link fence, per lf of fence.		
32 31 13 13-0216		Vinyl Plastic Fence Inserts (32 31 13 13-0215) Note: Assorted colors.		
32 31 13 13-0217	LF	3' High Fence, Vinyl Plastic Fence Insert.....	8.87	
32 31 13 13-0218	LF	3-1/2' High Fence, Vinyl Plastic Fence Insert.....	10.12	
32 31 13 13-0219	LF	4' High Fence, Vinyl Plastic Fence Insert.....	11.15	
32 31 13 13-0220	LF	5' High Fence, Vinyl Plastic Fence Insert.....	13.99	
32 31 13 13-0221	LF	6' High Fence, Vinyl Plastic Fence Insert.....	16.73	
32 31 13 13-0222	LF	7' High Fence, Vinyl Plastic Fence Insert.....	19.57	
32 31 13 13-0223	LF	8' High Fence, Vinyl Plastic Fence Insert.....	22.31	
32 31 13 13-0224	LF	10' High Fence, Vinyl Plastic Fence Insert.....	27.28	
32 31 13 13-0225		Aluminum Fence Inserts (32 31 13 13-0215) Note: Assorted colors.		
32 31 13 13-0226	LF	3' High Fence, Aluminum Fence Insert.....	24.85	
32 31 13 13-0227	LF	3-1/2' High Fence, Aluminum Fence Insert.....	27.29	
32 31 13 13-0228	LF	4' High Fence, Aluminum Fence Insert.....	31.18	
32 31 13 13-0229	LF	5' High Fence, Aluminum Fence Insert.....	39.02	
32 31 13 13-0230	LF	6' High Fence, Aluminum Fence Insert.....	46.83	
32 31 13 13-0231	LF	7' High Fence, Aluminum Fence Insert.....	51.08	
32 31 13 13-0232	LF	8' High Fence, Aluminum Fence Insert.....	62.41	
32 31 13 13-0233	LF	10' High Fence, Aluminum Fence Insert.....	77.40	
32 31 13 13-0234		Redwood Fence Inserts (32 31 13 13-0215)		
32 31 13 13-0235	LF	4' High Fence, Redwood Fence Insert.....	13.00	
32 31 13 13-0236	LF	5' High Fence, Redwood Fence Insert.....	16.43	
32 31 13 13-0237	LF	6' High Fence, Redwood Fence Insert.....	19.73	
32 31 13 13-0238	LF	7' High Fence, Redwood Fence Insert.....	22.97	
32 31 13 13-0239	LF	8' High Fence, Redwood Fence Insert.....	26.29	
32 31 13 13-0240		Diagonal Flexible Polyethylene Inserts (32 31 13 13-0215)		
32 31 13 13-0241	SF	Diagonal Polyethylene Fence Weave.....	3.54	
32 31 13 13-0242		Hedge Link Fence Inserts (32 31 13 13-0215)		
32 31 13 13-0243	LF	3' High Fence, Hedge Link Fence Insert.....	19.18	
32 31 13 13-0244	LF	3-1/2' High Fence, Hedge Link Fence Insert.....	21.84	
32 31 13 13-0245	LF	4' High Fence, Hedge Link Fence Insert.....	25.54	
32 31 13 13-0246	LF	5' High Fence, Hedge Link Fence Insert.....	31.48	
32 31 13 13-0247	LF	6' High Fence, Hedge Link Fence Insert.....	35.96	
32 31 13 13-0248	LF	7' High Fence, Hedge Link Fence Insert.....	45.54	
32 31 13 13-0249	LF	8' High Fence, Hedge Link Fence Insert.....	51.71	
32 31 13 13-0250	LF	10' High Fence, Hedge Link Fence Insert.....	61.86	
32 31 13 13-0251	LF	12' High Fence, Hedge Link Fence Insert.....	70.97	

**32 Exterior Improvements****32 30 Site Improvements****32 31 Fences and Gates**

MINOR	CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
32 31 13 13-0252			<b>Fence Windscreen Fabric</b> <small>(32 31 13 13-0170)</small>		
			Note: Includes plastic wire clips.		
32 31 13 13-0253	SF		Vinyl Coated Polyester Windscreen For Fence, 7 Oz Per SY.....	1.18	0.51
			For Sewn Boxed Vent (Each), Add	26.73	
			For Welded Boxed Vent (Each), Add	13.37	
			For 4' x 4' One Color Logo (Each), Add	556.98	
32 31 13 13-0254			<b>Non-Climbable Fabric, Galvanized Chain Link</b> <small>(32 31 13 13-0170)</small>		
32 31 13 13-0255	LF		3' Non-Climbable Fabric Galvanized Chain Link #9 Gauge, 3/8" Mesh.....	31.49	2.42
			For 11 Gauge, Deduct	-4.73	
			For 10 Gauge, Deduct	-1.89	
			For 7 Gauge, Add	2.84	
			For 6 Gauge, Add	6.62	
			For 1/2" Mesh Fabric, Deduct	-1.18	
			For 5/8" Mesh Fabric, Deduct	-2.60	
			For 3/4" Mesh Fabric, Deduct	-3.78	
32 31 13 13-0256	LF		3'-6" Non-Climbable Fabric Galvanized Chain Link #9 Gauge, 3/8" Mesh.....	36.02	2.72
			For 11 Gauge, Deduct	-5.51	
			For 10 Gauge, Deduct	-2.21	
			For 7 Gauge, Add	3.31	
			For 6 Gauge, Add	7.72	
			For 1/2" Mesh Fabric, Deduct	-1.38	
			For 5/8" Mesh Fabric, Deduct	-3.03	
			For 3/4" Mesh Fabric, Deduct	-4.41	
32 31 13 13-0257	LF		4' Non-Climbable Fabric Galvanized Chain Link #9 Gauge, 3/8" Mesh.....	40.61	3.02
			For 11 Gauge, Deduct	-6.31	
			For 10 Gauge, Deduct	-2.52	
			For 7 Gauge, Add	3.79	
			For 6 Gauge, Add	8.83	
			For 1/2" Mesh Fabric, Deduct	-1.58	
			For 5/8" Mesh Fabric, Deduct	-3.47	
			For 3/4" Mesh Fabric, Deduct	-5.05	
32 31 13 13-0258	LF		5' Non-Climbable Fabric Galvanized Chain Link #9 Gauge, 3/8" Mesh.....	49.08	3.62
			For 11 Gauge, Deduct	-7.88	
			For 10 Gauge, Deduct	-3.15	
			For 7 Gauge, Add	4.73	
			For 6 Gauge, Add	11.04	
			For 1/2" Mesh Fabric, Deduct	-1.97	
			For 5/8" Mesh Fabric, Deduct	-4.34	
			For 3/4" Mesh Fabric, Deduct	-6.31	
32 31 13 13-0259	LF		6' Non-Climbable Fabric Galvanized Chain Link #9 Gauge, 3/8" Mesh.....	57.63	4.23
			For 11 Gauge, Deduct	-9.46	
			For 10 Gauge, Deduct	-3.78	
			For 7 Gauge, Add	5.67	
			For 6 Gauge, Add	13.24	
			For 1/2" Mesh Fabric, Deduct	-2.36	
			For 5/8" Mesh Fabric, Deduct	-5.20	
			For 3/4" Mesh Fabric, Deduct	-7.56	
32 31 13 13-0260	LF		7' Non-Climbable Fabric Galvanized Chain Link #9 Gauge, 3/8" Mesh.....	66.33	4.83
			For 11 Gauge, Deduct	-11.03	
			For 10 Gauge, Deduct	-4.41	
			For 7 Gauge, Add	6.62	
			For 6 Gauge, Add	15.45	
			For 1/2" Mesh Fabric, Deduct	-2.76	
			For 5/8" Mesh Fabric, Deduct	-6.07	
			For 3/4" Mesh Fabric, Deduct	-8.83	
32 31 13 13-0261	LF		8' Non-Climbable Fabric Galvanized Chain Link #9 Gauge, 3/8" Mesh.....	75.14	6.04
			For 11 Gauge, Deduct	-12.61	
			For 10 Gauge, Deduct	-5.04	
			For 7 Gauge, Add	7.57	
			For 6 Gauge, Add	17.66	
			For 1/2" Mesh Fabric, Deduct	-3.15	
			For 5/8" Mesh Fabric, Deduct	-6.94	
			For 3/4" Mesh Fabric, Deduct	-10.09	
32 31 13 13-0262	LF		9' Non-Climbable Fabric Galvanized Chain Link #9 Gauge, 3/8" Mesh.....	82.87	6.35
			For 11 Gauge, Deduct	-14.04	
			For 10 Gauge, Deduct	-5.62	
			For 7 Gauge, Add	8.42	
			For 6 Gauge, Add	19.65	
			For 1/2" Mesh Fabric, Deduct	-3.51	
			For 5/8" Mesh Fabric, Deduct	-7.72	
			For 3/4" Mesh Fabric, Deduct	-11.23	
32 31 13 13-0263	LF		10' Non-Climbable Fabric Galvanized Chain Link #9 Gauge, 3/8" Mesh.....	90.65	6.64
			For 11 Gauge, Deduct	-15.46	
			For 10 Gauge, Deduct	-6.19	
			For 7 Gauge, Add	9.28	
			For 6 Gauge, Add	21.65	
			For 1/2" Mesh Fabric, Deduct	-3.87	
			For 5/8" Mesh Fabric, Deduct	-8.51	
			For 3/4" Mesh Fabric, Deduct	-12.37	



Exterior Improvements	32	
Site Improvements	32	30
Fences and Gates	32	31

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MINOR CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
32 31 13 13-0264	LF	12' Non-Climbable Fabric Galvanized Chain Link #9 Gauge, 3/8" Mesh.....	98.32	7.25
		For 11 Gauge, Deduct	-16.76	
		For 10 Gauge, Deduct	-6.71	
		For 7 Gauge, Add	10.06	
		For 6 Gauge, Add	23.47	
		For 1/2" Mesh Fabric, Deduct	-4.19	
		For 5/8" Mesh Fabric, Deduct	-9.22	
		For 3/4" Mesh Fabric, Deduct	-13.41	
32 31 13 13-0265		<b>Gates</b> (32 31 13 13)		
		Note: Posts exclude drilling or augering in soil or rock. For barbed wire attached directly to posts and gates, select gates and posts sizes for full finished height of gate above grade (top rail to be at lower height, includes barb wire at top area where mesh would be). See CSI section 32 31 13 13-0001 for drilling for augering holes and backfill.		
32 31 13 13-0266		<b>Galvanized Steel Without Barbed Wire</b> (32 31 13 13-0265)		
		Note: Industrial swing gate. Includes posts (3" diameter posts for up to 6' wide gate, 4" diameter for > 6' To 12' wide, 6-5/8" diameter for >12' To 18' wide, 8-5/8" diameter for over 18' wide), 2" diameter schedule pipe frame, offset hinges, cap and hardware (drop rod, center locking device, gate keeper, catch bolt and tension bands). Fabric: galvanized chain link 2" mesh # 9 gauge, galvanized 1.2 ounce coating.		
32 31 13 13-0267		<b>4' Fence Height</b> (32 31 13 13-0266)		
32 31 13 13-0268	EA	3' Wide x 4' High Single Gate Galvanized Steel Without Barbed Wire .....	344.82	22.75
		For Gate With Single Barb Wire Arm, Add	30.11	
		For Gate With Double Barb Wire Arm, Add	43.79	
		For 1-5/8" Schedule 40 Pipe Frame, Deduct	-51.32	
		For Aluminized Steel Gate And Post, Add	131.38	
		For Powder Coated Gate And Post, Add	71.16	
		For 1" Mesh Fabric, Add	119.06	
		For 1-1/4" Mesh Fabric, Add	76.64	
		For 1-3/4" Mesh Fabric, Add	47.63	
		For 2-1/8" Mesh Fabric, Deduct	-23.81	
32 31 13 13-0269	EA	4' Wide x 4' High Single Gate Galvanized Steel Without Barbed Wire .....	436.06	23.70
		For Gate With Single Barb Wire Arm, Add	40.14	
		For Gate With Double Barb Wire Arm, Add	58.39	
		For 1-5/8" Schedule 40 Pipe Frame, Deduct	-68.43	
		For Aluminized Steel Gate And Post, Add	175.18	
		For Powder Coated Gate And Post, Add	94.89	
		For 1" Mesh Fabric, Add	158.75	
		For 1-1/4" Mesh Fabric, Add	102.19	
		For 1-3/4" Mesh Fabric, Add	63.50	
		For 2-1/8" Mesh Fabric, Deduct	-31.75	
32 31 13 13-0270	EA	5' Wide x 4' High Single Gate Galvanized Steel Without Barbed Wire .....	516.46	25.22
		For Gate With Single Barb Wire Arm, Add	48.47	
		For Gate With Double Barb Wire Arm, Add	70.50	
		For 1-5/8" Schedule 40 Pipe Frame, Deduct	-82.61	
		For Aluminized Steel Gate And Post, Add	211.49	
		For Powder Coated Gate And Post, Add	114.56	
		For 1" Mesh Fabric, Add	191.67	
		For 1-1/4" Mesh Fabric, Add	123.37	
		For 1-3/4" Mesh Fabric, Add	76.67	
		For 2-1/8" Mesh Fabric, Deduct	-38.33	
32 31 13 13-0271	EA	6' Wide x 4' High Single Gate Galvanized Steel Without Barbed Wire .....	607.31	30.33
		For Gate With Single Barb Wire Arm, Add	56.79	
		For Gate With Double Barb Wire Arm, Add	82.60	
		For 1-5/8" Schedule 40 Pipe Frame, Deduct	-96.80	
		For Aluminized Steel Gate And Post, Add	247.81	
		For Powder Coated Gate And Post, Add	134.23	
		For 1" Mesh Fabric, Add	224.58	
		For 1-1/4" Mesh Fabric, Add	144.56	
		For 1-3/4" Mesh Fabric, Add	89.83	
		For 2-1/8" Mesh Fabric, Deduct	-44.92	
32 31 13 13-0272	EA	7' Wide x 4' High Single Gate Galvanized Steel Without Barbed Wire .....	698.13	35.37
		For Gate With Single Barb Wire Arm, Add	65.11	
		For Gate With Double Barb Wire Arm, Add	94.71	
		For 1-5/8" Schedule 40 Pipe Frame, Deduct	-110.99	
		For Aluminized Steel Gate And Post, Add	284.13	
		For Powder Coated Gate And Post, Add	153.90	
		For 1" Mesh Fabric, Add	257.49	
		For 1-1/4" Mesh Fabric, Add	165.74	
		For 1-3/4" Mesh Fabric, Add	103.00	
		For 2-1/8" Mesh Fabric, Deduct	-51.50	
32 31 13 13-0273	EA	8' Wide x 4' High Single Gate Galvanized Steel Without Barbed Wire .....	792.07	40.39
		For Gate With Single Barb Wire Arm, Add	73.78	
		For Gate With Double Barb Wire Arm, Add	107.31	
		For 1-5/8" Schedule 40 Pipe Frame, Deduct	-125.76	
		For Aluminized Steel Gate And Post, Add	321.94	
		For Powder Coated Gate And Post, Add	174.38	
		For 1" Mesh Fabric, Add	291.76	
		For 1-1/4" Mesh Fabric, Add	187.80	
		For 1-3/4" Mesh Fabric, Add	116.70	
		For 2-1/8" Mesh Fabric, Deduct	-58.35	

**32 Exterior Improvements****32 30 Site Improvements****32 31 Fences and Gates**

MINOR	CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
32 31 13 13-0274	EA		9' Wide x 4' High Single Gate Galvanized Steel Without Barbed Wire.....	882.90	45.51
			For Gate With Single Barb Wire Arm, Add	82.10	
			For Gate With Double Barb Wire Arm, Add	119.42	
			For 1-5/8" Schedule 40 Pipe Frame, Deduct	-139.94	
			For Aluminized Steel Gate And Post, Add	358.26	
			For Powder Coated Gate And Post, Add	194.06	
			For 1" Mesh Fabric, Add	324.67	
			For 1-1/4" Mesh Fabric, Add	208.98	
			For 1-3/4" Mesh Fabric, Add	129.87	
			For 2-1/8" Mesh Fabric, Deduct	-64.93	
32 31 13 13-0275	EA		10' Wide x 4' High Single Gate Galvanized Steel Without Barbed Wire.....	975.05	50.54
			For Gate With Single Barb Wire Arm, Add	90.57	
			For Gate With Double Barb Wire Arm, Add	131.74	
			For 1-5/8" Schedule 40 Pipe Frame, Deduct	-154.38	
			For Aluminized Steel Gate And Post, Add	395.21	
			For Powder Coated Gate And Post, Add	214.07	
			For 1" Mesh Fabric, Add	358.16	
			For 1-1/4" Mesh Fabric, Add	230.54	
			For 1-3/4" Mesh Fabric, Add	143.26	
			For 2-1/8" Mesh Fabric, Deduct	-71.63	
32 31 13 13-0276	EA		10' Wide x 4' High Double Gate Galvanized Steel Without Barbed Wire .....	1,246.54	50.54
			For Gate With Single Barb Wire Arm, Add	120.43	
			For Gate With Double Barb Wire Arm, Add	175.18	
			For 1-5/8" Schedule 40 Pipe Frame, Deduct	-205.28	
			For Aluminized Steel Gate And Post, Add	525.53	
			For Powder Coated Gate And Post, Add	284.66	
			For 1" Mesh Fabric, Add	476.26	
			For 1-1/4" Mesh Fabric, Add	306.56	
			For 1-3/4" Mesh Fabric, Add	190.50	
			For 2-1/8" Mesh Fabric, Deduct	-95.25	
32 31 13 13-0277	EA		12' Wide x 4' High Double Gate Galvanized Steel Without Barbed Wire .....	1,476.35	54.14
			For Gate With Single Barb Wire Arm, Add	144.52	
			For Gate With Double Barb Wire Arm, Add	210.21	
			For 1-5/8" Schedule 40 Pipe Frame, Deduct	-246.34	
			For Aluminized Steel Gate And Post, Add	630.63	
			For Powder Coated Gate And Post, Add	341.59	
			For 1" Mesh Fabric, Add	571.51	
			For 1-1/4" Mesh Fabric, Add	367.87	
			For 1-3/4" Mesh Fabric, Add	228.60	
			For 2-1/8" Mesh Fabric, Deduct	-114.30	
32 31 13 13-0278	EA		14' Wide x 4' High Double Gate Galvanized Steel Without Barbed Wire .....	1,707.82	58.31
			For Gate With Single Barb Wire Arm, Add	168.61	
			For Gate With Double Barb Wire Arm, Add	245.25	
			For 1-5/8" Schedule 40 Pipe Frame, Deduct	-287.40	
			For Aluminized Steel Gate And Post, Add	735.74	
			For Powder Coated Gate And Post, Add	398.53	
			For 1" Mesh Fabric, Add	666.76	
			For 1-1/4" Mesh Fabric, Add	429.18	
			For 1-3/4" Mesh Fabric, Add	266.71	
			For 2-1/8" Mesh Fabric, Deduct	-133.35	
32 31 13 13-0279	EA		16' Wide x 4' High Double Gate Galvanized Steel Without Barbed Wire .....	1,941.38	63.15
			For Gate With Single Barb Wire Arm, Add	192.69	
			For Gate With Double Barb Wire Arm, Add	280.28	
			For 1-5/8" Schedule 40 Pipe Frame, Deduct	-328.46	
			For Aluminized Steel Gate And Post, Add	840.84	
			For Powder Coated Gate And Post, Add	455.46	
			For 1" Mesh Fabric, Add	762.02	
			For 1-1/4" Mesh Fabric, Add	490.49	
			For 1-3/4" Mesh Fabric, Add	304.81	
			For 2-1/8" Mesh Fabric, Deduct	-152.40	
32 31 13 13-0280	EA		18' Wide x 4' High Double Gate Galvanized Steel Without Barbed Wire .....	2,211.69	80.19
			For Gate With Single Barb Wire Arm, Add	216.78	
			For Gate With Double Barb Wire Arm, Add	315.32	
			For 1-5/8" Schedule 40 Pipe Frame, Deduct	-369.51	
			For Aluminized Steel Gate And Post, Add	945.95	
			For Powder Coated Gate And Post, Add	512.39	
			For 1" Mesh Fabric, Add	857.27	
			For 1-1/4" Mesh Fabric, Add	551.80	
			For 1-3/4" Mesh Fabric, Add	342.91	
			For 2-1/8" Mesh Fabric, Deduct	-171.45	
32 31 13 13-0281	EA		20' Wide x 4' High Double Gate Galvanized Steel Without Barbed Wire .....	2,447.87	85.95
			For Gate With Single Barb Wire Arm, Add	240.87	
			For Gate With Double Barb Wire Arm, Add	350.35	
			For 1-5/8" Schedule 40 Pipe Frame, Deduct	-410.57	
			For Aluminized Steel Gate And Post, Add	1,051.06	
			For Powder Coated Gate And Post, Add	569.32	
			For 1" Mesh Fabric, Add	952.52	
			For 1-1/4" Mesh Fabric, Add	613.12	
			For 1-3/4" Mesh Fabric, Add	381.01	
			For 2-1/8" Mesh Fabric, Deduct	-190.50	





Exterior Improvements		32	32
Site Improvements		32 30	
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MINOR	CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
32 31 13 13-0282	EA	22'	Wide x 4' High Double Gate Galvanized Steel Without Barbed Wire .....	2,681.34	92.61
			For Gate With Single Barb Wire Arm, Add	264.37	
			For Gate With Double Barb Wire Arm, Add	384.53	
			For 1-5/8" Schedule 40 Pipe Frame, Deduct	-450.62	
			For Aluminized Steel Gate And Post, Add	1,153.59	
			For Powder Coated Gate And Post, Add	624.86	
			For 1" Mesh Fabric, Add	1,045.44	
			For 1-1/4" Mesh Fabric, Add	672.93	
			For 1-3/4" Mesh Fabric, Add	418.18	
			For 2-1/8" Mesh Fabric, Deduct	-209.09	
32 31 13 13-0283	EA	24'	Wide x 4' High Double Gate Galvanized Steel Without Barbed Wire .....	2,918.15	100.30
			For Gate With Single Barb Wire Arm, Add	287.86	
			For Gate With Double Barb Wire Arm, Add	418.71	
			For 1-5/8" Schedule 40 Pipe Frame, Deduct	-490.68	
			For Aluminized Steel Gate And Post, Add	1,256.14	
			For Powder Coated Gate And Post, Add	680.41	
			For 1" Mesh Fabric, Add	1,138.37	
			For 1-1/4" Mesh Fabric, Add	732.75	
			For 1-3/4" Mesh Fabric, Add	455.35	
			For 2-1/8" Mesh Fabric, Deduct	-227.67	
32 31 13 13-0284	EA	26'	Wide x 4' High Double Gate Galvanized Steel Without Barbed Wire .....	3,159.16	109.44
			For Gate With Single Barb Wire Arm, Add	311.36	
			For Gate With Double Barb Wire Arm, Add	452.89	
			For 1-5/8" Schedule 40 Pipe Frame, Deduct	-530.73	
			For Aluminized Steel Gate And Post, Add	1,358.68	
			For Powder Coated Gate And Post, Add	735.95	
			For 1" Mesh Fabric, Add	1,231.30	
			For 1-1/4" Mesh Fabric, Add	792.56	
			For 1-3/4" Mesh Fabric, Add	492.52	
			For 2-1/8" Mesh Fabric, Deduct	-246.26	
32 31 13 13-0285	EA	28'	Wide x 4' High Double Gate Galvanized Steel Without Barbed Wire .....	3,325.54	120.40
			For Gate With Single Barb Wire Arm, Add	326.05	
			For Gate With Double Barb Wire Arm, Add	474.26	
			For 1-5/8" Schedule 40 Pipe Frame, Deduct	-555.77	
			For Aluminized Steel Gate And Post, Add	1,422.77	
			For Powder Coated Gate And Post, Add	770.67	
			For 1" Mesh Fabric, Add	1,289.38	
			For 1-1/4" Mesh Fabric, Add	829.95	
			For 1-3/4" Mesh Fabric, Add	515.75	
			For 2-1/8" Mesh Fabric, Deduct	-257.88	
32 31 13 13-0286	EA	30'	Wide x 4' High Double Gate Galvanized Steel Without Barbed Wire .....	3,686.14	133.73
			For Gate With Single Barb Wire Arm, Add	361.30	
			For Gate With Double Barb Wire Arm, Add	525.53	
			For 1-5/8" Schedule 40 Pipe Frame, Deduct	-615.85	
			For Aluminized Steel Gate And Post, Add	1,576.58	
			For Powder Coated Gate And Post, Add	853.98	
			For 1" Mesh Fabric, Add	1,428.77	
			For 1-1/4" Mesh Fabric, Add	919.67	
			For 1-3/4" Mesh Fabric, Add	571.51	
			For 2-1/8" Mesh Fabric, Deduct	-285.75	
32 31 13 13-0287	5' Fence Height (32 31 13 13-0266)				
32 31 13 13-0288	EA	3'	Wide x 5' High Single Gate Galvanized Steel Without Barbed Wire .....	414.10	25.22
			For Gate With Single Barb Wire Arm, Add	37.21	
			For Gate With Double Barb Wire Arm, Add	54.12	
			For 1-5/8" Schedule 40 Pipe Frame, Deduct	-63.42	
			For Aluminized Steel Gate And Post, Add	162.36	
			For Powder Coated Gate And Post, Add	87.95	
			For 1" Mesh Fabric, Add	147.14	
			For 1-1/4" Mesh Fabric, Add	94.71	
			For 1-3/4" Mesh Fabric, Add	58.86	
			For 2-1/8" Mesh Fabric, Deduct	-29.43	
32 31 13 13-0289	EA	4'	Wide x 5' High Single Gate Galvanized Steel Without Barbed Wire .....	525.36	25.22
			For Gate With Single Barb Wire Arm, Add	49.45	
			For Gate With Double Barb Wire Arm, Add	71.92	
			For 1-5/8" Schedule 40 Pipe Frame, Deduct	-84.28	
			For Aluminized Steel Gate And Post, Add	215.76	
			For Powder Coated Gate And Post, Add	116.87	
			For 1" Mesh Fabric, Add	195.54	
			For 1-1/4" Mesh Fabric, Add	125.86	
			For 1-3/4" Mesh Fabric, Add	78.21	
			For 2-1/8" Mesh Fabric, Deduct	-39.11	
32 31 13 13-0290	EA	5'	Wide x 5' High Single Gate Galvanized Steel Without Barbed Wire .....	614.67	26.84
			For Gate With Single Barb Wire Arm, Add	58.75	
			For Gate With Double Barb Wire Arm, Add	85.45	
			For 1-5/8" Schedule 40 Pipe Frame, Deduct	-100.14	
			For Aluminized Steel Gate And Post, Add	256.35	
			For Powder Coated Gate And Post, Add	138.86	
			For 1" Mesh Fabric, Add	232.32	
			For 1-1/4" Mesh Fabric, Add	149.54	
			For 1-3/4" Mesh Fabric, Add	92.93	
			For 2-1/8" Mesh Fabric, Deduct	-46.46	

**32 Exterior Improvements****32 30 Site Improvements****32 31 Fences and Gates**

MINOR	CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
32 31 13 13-0291	EA		6' Wide x 5' High Single Gate Galvanized Steel Without Barbed Wire.....	719.80	32.24
			For Gate With Single Barb Wire Arm, Add	68.54	
			For Gate With Double Barb Wire Arm, Add	99.69	
			For 1-5/8" Schedule 40 Pipe Frame, Deduct	-116.83	
			For Aluminized Steel Gate And Post, Add	299.08	
			For Powder Coated Gate And Post, Add	162.00	
			For 1" Mesh Fabric, Add	271.04	
			For 1-1/4" Mesh Fabric, Add	174.46	
			For 1-3/4" Mesh Fabric, Add	108.42	
			For 2-1/8" Mesh Fabric, Deduct	-54.21	
32 31 13 13-0292	EA		7' Wide x 5' High Single Gate Galvanized Steel Without Barbed Wire.....	816.02	37.54
			For Gate With Single Barb Wire Arm, Add	77.35	
			For Gate With Double Barb Wire Arm, Add	112.51	
			For 1-5/8" Schedule 40 Pipe Frame, Deduct	-131.85	
			For Aluminized Steel Gate And Post, Add	337.53	
			For Powder Coated Gate And Post, Add	182.83	
			For 1" Mesh Fabric, Add	305.89	
			For 1-1/4" Mesh Fabric, Add	196.89	
			For 1-3/4" Mesh Fabric, Add	122.36	
			For 2-1/8" Mesh Fabric, Deduct	-61.18	
32 31 13 13-0293	EA		8' Wide x 5' High Single Gate Galvanized Steel Without Barbed Wire.....	922.10	43.24
			For Gate With Single Barb Wire Arm, Add	87.14	
			For Gate With Double Barb Wire Arm, Add	126.75	
			For 1-5/8" Schedule 40 Pipe Frame, Deduct	-148.54	
			For Aluminized Steel Gate And Post, Add	380.26	
			For Powder Coated Gate And Post, Add	205.97	
			For 1" Mesh Fabric, Add	344.61	
			For 1-1/4" Mesh Fabric, Add	221.82	
			For 1-3/4" Mesh Fabric, Add	137.84	
			For 2-1/8" Mesh Fabric, Deduct	-68.92	
32 31 13 13-0294	EA		9' Wide x 5' High Single Gate Galvanized Steel Without Barbed Wire.....	1,022.77	48.64
			For Gate With Single Barb Wire Arm, Add	96.44	
			For Gate With Double Barb Wire Arm, Add	140.28	
			For 1-5/8" Schedule 40 Pipe Frame, Deduct	-164.39	
			For Aluminized Steel Gate And Post, Add	420.85	
			For Powder Coated Gate And Post, Add	227.96	
			For 1" Mesh Fabric, Add	381.39	
			For 1-1/4" Mesh Fabric, Add	245.50	
			For 1-3/4" Mesh Fabric, Add	152.56	
			For 2-1/8" Mesh Fabric, Deduct	-76.28	
32 31 13 13-0295	EA		10' Wide x 5' High Single Gate Galvanized Steel Without Barbed Wire.....	1,123.46	53.95
			For Gate With Single Barb Wire Arm, Add	105.75	
			For Gate With Double Barb Wire Arm, Add	153.81	
			For 1-5/8" Schedule 40 Pipe Frame, Deduct	-180.25	
			For Aluminized Steel Gate And Post, Add	461.44	
			For Powder Coated Gate And Post, Add	249.95	
			For 1" Mesh Fabric, Add	418.18	
			For 1-1/4" Mesh Fabric, Add	269.17	
			For 1-3/4" Mesh Fabric, Add	167.27	
			For 2-1/8" Mesh Fabric, Deduct	-83.64	
32 31 13 13-0296	EA		10' Wide x 5' High Double Gate Galvanized Steel Without Barbed Wire.....	1,519.07	54.14
			For Gate With Single Barb Wire Arm, Add	149.22	
			For Gate With Double Barb Wire Arm, Add	217.05	
			For 1-5/8" Schedule 40 Pipe Frame, Deduct	-254.35	
			For Aluminized Steel Gate And Post, Add	651.14	
			For Powder Coated Gate And Post, Add	352.70	
			For 1" Mesh Fabric, Add	590.09	
			For 1-1/4" Mesh Fabric, Add	379.83	
			For 1-3/4" Mesh Fabric, Add	236.04	
			For 2-1/8" Mesh Fabric, Deduct	-118.02	
32 31 13 13-0297	EA		12' Wide x 5' High Double Gate Galvanized Steel Without Barbed Wire.....	1,803.95	58.31
			For Gate With Single Barb Wire Arm, Add	179.18	
			For Gate With Double Barb Wire Arm, Add	260.63	
			For 1-5/8" Schedule 40 Pipe Frame, Deduct	-305.42	
			For Aluminized Steel Gate And Post, Add	781.88	
			For Powder Coated Gate And Post, Add	423.52	
			For 1" Mesh Fabric, Add	708.58	
			For 1-1/4" Mesh Fabric, Add	456.10	
			For 1-3/4" Mesh Fabric, Add	283.43	
			For 2-1/8" Mesh Fabric, Deduct	-141.72	
32 31 13 13-0298	EA		14' Wide x 5' High Double Gate Galvanized Steel Without Barbed Wire.....	2,090.92	63.15
			For Gate With Single Barb Wire Arm, Add	209.14	
			For Gate With Double Barb Wire Arm, Add	304.21	
			For 1-5/8" Schedule 40 Pipe Frame, Deduct	-356.49	
			For Aluminized Steel Gate And Post, Add	912.62	
			For Powder Coated Gate And Post, Add	494.34	
			For 1" Mesh Fabric, Add	827.07	
			For 1-1/4" Mesh Fabric, Add	532.36	
			For 1-3/4" Mesh Fabric, Add	330.83	
			For 2-1/8" Mesh Fabric, Deduct	-165.41	



Exterior Improvements			32	32
Site Improvements			32 30	
Fences and Gates			32 31	

MINOR	CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
32 31	13 13-0299	EA	16' Wide x 5' High Double Gate Galvanized Steel Without Barbed Wire .....	2,414.63	80.19
			For Gate With Single Barb Wire Arm, Add	239.10	
			For Gate With Double Barb Wire Arm, Add	347.79	
			For 1-5/8" Schedule 40 Pipe Frame, Deduct	-407.56	
			For Aluminized Steel Gate And Post, Add	1,043.36	
			For Powder Coated Gate And Post, Add	565.15	
			For 1" Mesh Fabric, Add	945.55	
			For 1-1/4" Mesh Fabric, Add	608.63	
			For 1-3/4" Mesh Fabric, Add	378.22	
			For 2-1/8" Mesh Fabric, Deduct	-189.11	
32 31	13 13-0300	EA	18' Wide x 5' High Double Gate Galvanized Steel Without Barbed Wire .....	2,698.88	85.95
			For Gate With Single Barb Wire Arm, Add	268.48	
			For Gate With Double Barb Wire Arm, Add	390.51	
			For 1-5/8" Schedule 40 Pipe Frame, Deduct	-457.63	
			For Aluminized Steel Gate And Post, Add	1,171.54	
			For Powder Coated Gate And Post, Add	634.58	
			For 1" Mesh Fabric, Add	1,061.71	
			For 1-1/4" Mesh Fabric, Add	683.40	
			For 1-3/4" Mesh Fabric, Add	424.68	
			For 2-1/8" Mesh Fabric, Deduct	-212.34	
32 31	13 13-0301	EA	20' Wide x 5' High Double Gate Galvanized Steel Without Barbed Wire .....	2,996.45	92.61
			For Gate With Single Barb Wire Arm, Add	299.03	
			For Gate With Double Barb Wire Arm, Add	434.95	
			For 1-5/8" Schedule 40 Pipe Frame, Deduct	-509.71	
			For Aluminized Steel Gate And Post, Add	1,304.85	
			For Powder Coated Gate And Post, Add	706.79	
			For 1" Mesh Fabric, Add	1,182.52	
			For 1-1/4" Mesh Fabric, Add	761.16	
			For 1-3/4" Mesh Fabric, Add	473.01	
			For 2-1/8" Mesh Fabric, Deduct	-236.50	
32 31	13 13-0302	EA	22' Wide x 5' High Double Gate Galvanized Steel Without Barbed Wire .....	3,292.00	100.30
			For Gate With Single Barb Wire Arm, Add	328.99	
			For Gate With Double Barb Wire Arm, Add	478.53	
			For 1-5/8" Schedule 40 Pipe Frame, Deduct	-560.78	
			For Aluminized Steel Gate And Post, Add	1,435.58	
			For Powder Coated Gate And Post, Add	777.61	
			For 1" Mesh Fabric, Add	1,301.00	
			For 1-1/4" Mesh Fabric, Add	837.42	
			For 1-3/4" Mesh Fabric, Add	520.40	
			For 2-1/8" Mesh Fabric, Deduct	-260.20	
32 31	13 13-0303	EA	24' Wide x 5' High Double Gate Galvanized Steel Without Barbed Wire .....	3,586.42	109.44
			For Gate With Single Barb Wire Arm, Add	358.36	
			For Gate With Double Barb Wire Arm, Add	521.25	
			For 1-5/8" Schedule 40 Pipe Frame, Deduct	-610.85	
			For Aluminized Steel Gate And Post, Add	1,563.76	
			For Powder Coated Gate And Post, Add	847.04	
			For 1" Mesh Fabric, Add	1,417.16	
			For 1-1/4" Mesh Fabric, Add	912.20	
			For 1-3/4" Mesh Fabric, Add	566.86	
			For 2-1/8" Mesh Fabric, Deduct	-283.43	
32 31	13 13-0304	EA	26' Wide x 5' High Double Gate Galvanized Steel Without Barbed Wire .....	3,897.00	120.40
			For Gate With Single Barb Wire Arm, Add	388.91	
			For Gate With Double Barb Wire Arm, Add	565.69	
			For 1-5/8" Schedule 40 Pipe Frame, Deduct	-662.92	
			For Aluminized Steel Gate And Post, Add	1,697.07	
			For Powder Coated Gate And Post, Add	919.25	
			For 1" Mesh Fabric, Add	1,537.97	
			For 1-1/4" Mesh Fabric, Add	989.96	
			For 1-3/4" Mesh Fabric, Add	615.19	
			For 2-1/8" Mesh Fabric, Deduct	-307.59	
32 31	13 13-0305	EA	28' Wide x 5' High Double Gate Galvanized Steel Without Barbed Wire .....	4,206.17	133.73
			For Gate With Single Barb Wire Arm, Add	418.50	
			For Gate With Double Barb Wire Arm, Add	608.73	
			For 1-5/8" Schedule 40 Pipe Frame, Deduct	-713.36	
			For Aluminized Steel Gate And Post, Add	1,826.19	
			For Powder Coated Gate And Post, Add	989.19	
			For 1" Mesh Fabric, Add	1,654.99	
			For 1-1/4" Mesh Fabric, Add	1,065.28	
			For 1-3/4" Mesh Fabric, Add	662.00	
			For 2-1/8" Mesh Fabric, Deduct	-331.00	
32 31	13 13-0306	EA	30' Wide x 5' High Double Gate Galvanized Steel Without Barbed Wire .....	4,521.42	150.45
			For Gate With Single Barb Wire Arm, Add	447.66	
			For Gate With Double Barb Wire Arm, Add	651.14	
			For 1-5/8" Schedule 40 Pipe Frame, Deduct	-763.06	
			For Aluminized Steel Gate And Post, Add	1,953.42	
			For Powder Coated Gate And Post, Add	1,058.10	
			For 1" Mesh Fabric, Add	1,770.29	
			For 1-1/4" Mesh Fabric, Add	1,139.50	
			For 1-3/4" Mesh Fabric, Add	708.12	
			For 2-1/8" Mesh Fabric, Deduct	-354.06	

32 31 13 13-0307 6' Fence Height (32 31 13 13-0266)

**32 Exterior Improvements****32 30 Site Improvements****32 31 Fences and Gates**

MINOR	CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
32 31 13 13-0308	EA		3' Wide x 6' High Single Gate Galvanized Steel Without Barbed Wire.....	443.99	27.02
			For Gate With Single Barb Wire Arm, Add	39.90	
			For Gate With Double Barb Wire Arm, Add	58.04	
			For 1-5/8" Schedule 40 Pipe Frame, Deduct	-68.01	
			For Aluminized Steel Gate And Post, Add	174.11	
			For Powder Coated Gate And Post, Add	94.31	
			For 1" Mesh Fabric, Add	157.78	
			For 1-1/4" Mesh Fabric, Add	101.56	
			For 1-3/4" Mesh Fabric, Add	63.11	
			For 2-1/8" Mesh Fabric, Deduct	-31.56	
32 31 13 13-0309	EA		4' Wide x 6' High Single Gate Galvanized Steel Without Barbed Wire.....	564.16	27.02
			For Gate With Single Barb Wire Arm, Add	53.12	
			For Gate With Double Barb Wire Arm, Add	77.26	
			For 1-5/8" Schedule 40 Pipe Frame, Deduct	-90.54	
			For Aluminized Steel Gate And Post, Add	231.79	
			For Powder Coated Gate And Post, Add	125.55	
			For 1" Mesh Fabric, Add	210.06	
			For 1-1/4" Mesh Fabric, Add	135.21	
			For 1-3/4" Mesh Fabric, Add	84.02	
			For 2-1/8" Mesh Fabric, Deduct	-42.01	
32 31 13 13-0310	EA		5' Wide x 6' High Single Gate Galvanized Steel Without Barbed Wire.....	661.08	28.73
			For Gate With Single Barb Wire Arm, Add	63.23	
			For Gate With Double Barb Wire Arm, Add	91.97	
			For 1-5/8" Schedule 40 Pipe Frame, Deduct	-107.78	
			For Aluminized Steel Gate And Post, Add	275.90	
			For Powder Coated Gate And Post, Add	149.45	
			For 1" Mesh Fabric, Add	250.04	
			For 1-1/4" Mesh Fabric, Add	160.94	
			For 1-3/4" Mesh Fabric, Add	100.02	
			For 2-1/8" Mesh Fabric, Deduct	-50.01	
32 31 13 13-0311	EA		6' Wide x 6' High Single Gate Galvanized Steel Without Barbed Wire.....	767.43	34.70
			For Gate With Single Barb Wire Arm, Add	72.95	
			For Gate With Double Barb Wire Arm, Add	106.10	
			For 1-5/8" Schedule 40 Pipe Frame, Deduct	-124.34	
			For Aluminized Steel Gate And Post, Add	318.31	
			For Powder Coated Gate And Post, Add	172.42	
			For 1" Mesh Fabric, Add	288.47	
			For 1-1/4" Mesh Fabric, Add	185.68	
			For 1-3/4" Mesh Fabric, Add	115.39	
			For 2-1/8" Mesh Fabric, Deduct	-57.69	
32 31 13 13-0312	EA		7' Wide x 6' High Single Gate Galvanized Steel Without Barbed Wire.....	878.90	40.77
			For Gate With Single Barb Wire Arm, Add	83.23	
			For Gate With Double Barb Wire Arm, Add	121.06	
			For 1-5/8" Schedule 40 Pipe Frame, Deduct	-141.86	
			For Aluminized Steel Gate And Post, Add	363.17	
			For Powder Coated Gate And Post, Add	196.72	
			For 1" Mesh Fabric, Add	329.12	
			For 1-1/4" Mesh Fabric, Add	211.85	
			For 1-3/4" Mesh Fabric, Add	131.65	
			For 2-1/8" Mesh Fabric, Deduct	-65.82	
32 31 13 13-0313	EA		8' Wide x 6' High Single Gate Galvanized Steel Without Barbed Wire.....	984.98	46.45
			For Gate With Single Barb Wire Arm, Add	93.02	
			For Gate With Double Barb Wire Arm, Add	135.30	
			For 1-5/8" Schedule 40 Pipe Frame, Deduct	-158.55	
			For Aluminized Steel Gate And Post, Add	405.89	
			For Powder Coated Gate And Post, Add	219.86	
			For 1" Mesh Fabric, Add	367.84	
			For 1-1/4" Mesh Fabric, Add	236.77	
			For 1-3/4" Mesh Fabric, Add	147.14	
			For 2-1/8" Mesh Fabric, Deduct	-73.57	
32 31 13 13-0314	EA		9' Wide x 6' High Single Gate Galvanized Steel Without Barbed Wire.....	1,092.02	52.43
			For Gate With Single Barb Wire Arm, Add	102.81	
			For Gate With Double Barb Wire Arm, Add	149.54	
			For 1-5/8" Schedule 40 Pipe Frame, Deduct	-175.24	
			For Aluminized Steel Gate And Post, Add	448.62	
			For Powder Coated Gate And Post, Add	243.00	
			For 1" Mesh Fabric, Add	406.56	
			For 1-1/4" Mesh Fabric, Add	261.70	
			For 1-3/4" Mesh Fabric, Add	162.63	
			For 2-1/8" Mesh Fabric, Deduct	-81.31	
32 31 13 13-0315	EA		10' Wide x 6' High Single Gate Galvanized Steel Without Barbed Wire.....	1,158.97	58.40
			For Gate With Single Barb Wire Arm, Add	108.19	
			For Gate With Double Barb Wire Arm, Add	157.37	
			For 1-5/8" Schedule 40 Pipe Frame, Deduct	-184.42	
			For Aluminized Steel Gate And Post, Add	472.12	
			For Powder Coated Gate And Post, Add	255.73	
			For 1" Mesh Fabric, Add	427.86	
			For 1-1/4" Mesh Fabric, Add	275.40	
			For 1-3/4" Mesh Fabric, Add	171.14	
			For 2-1/8" Mesh Fabric, Deduct	-85.57	



Exterior Improvements		32	32
Site Improvements		32 30	
Fences and Gates		32 31	

MINOR	CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
32 31	13	13-0316	EA 10' Wide x 6' High Double Gate Galvanized Steel Without Barbed Wire .....	1,622.37	58.31
			For Gate With Single Barb Wire Arm, Add	159.21	
			For Gate With Double Barb Wire Arm, Add	231.57	
			For 1-5/8" Schedule 40 Pipe Frame, Deduct	-271.38	
			For Aluminized Steel Gate And Post, Add	694.72	
			For Powder Coated Gate And Post, Add	376.31	
			For 1" Mesh Fabric, Add	629.59	
			For 1-1/4" Mesh Fabric, Add	405.26	
			For 1-3/4" Mesh Fabric, Add	251.84	
			For 2-1/8" Mesh Fabric, Deduct	-125.92	
32 31	13	13-0317	EA 12' Wide x 6' High Double Gate Galvanized Steel Without Barbed Wire .....	1,925.35	63.15
			For Gate With Single Barb Wire Arm, Add	190.93	
			For Gate With Double Barb Wire Arm, Add	277.72	
			For 1-5/8" Schedule 40 Pipe Frame, Deduct	-325.45	
			For Aluminized Steel Gate And Post, Add	833.15	
			For Powder Coated Gate And Post, Add	451.29	
			For 1" Mesh Fabric, Add	755.04	
			For 1-1/4" Mesh Fabric, Add	486.00	
			For 1-3/4" Mesh Fabric, Add	302.02	
			For 2-1/8" Mesh Fabric, Deduct	-151.01	
32 31	13	13-0318	EA 14' Wide x 6' High Double Gate Galvanized Steel Without Barbed Wire .....	2,287.64	85.95
			For Gate With Single Barb Wire Arm, Add	223.24	
			For Gate With Double Barb Wire Arm, Add	324.72	
			For 1-5/8" Schedule 40 Pipe Frame, Deduct	-380.53	
			For Aluminized Steel Gate And Post, Add	974.15	
			For Powder Coated Gate And Post, Add	527.66	
			For 1" Mesh Fabric, Add	882.82	
			For 1-1/4" Mesh Fabric, Add	568.25	
			For 1-3/4" Mesh Fabric, Add	353.13	
			For 2-1/8" Mesh Fabric, Deduct	-176.56	
32 31	13	13-0319	EA 16' Wide x 6' High Double Gate Galvanized Steel Without Barbed Wire .....	2,595.89	92.61
			For Gate With Single Barb Wire Arm, Add	254.97	
			For Gate With Double Barb Wire Arm, Add	370.86	
			For 1-5/8" Schedule 40 Pipe Frame, Deduct	-434.60	
			For Aluminized Steel Gate And Post, Add	1,112.58	
			For Powder Coated Gate And Post, Add	602.65	
			For 1" Mesh Fabric, Add	1,008.27	
			For 1-1/4" Mesh Fabric, Add	649.00	
			For 1-3/4" Mesh Fabric, Add	403.31	
			For 2-1/8" Mesh Fabric, Deduct	-201.65	
32 31	13	13-0320	EA 18' Wide x 6' High Double Gate Galvanized Steel Without Barbed Wire .....	2,912.81	100.30
			For Gate With Single Barb Wire Arm, Add	287.28	
			For Gate With Double Barb Wire Arm, Add	417.86	
			For 1-5/8" Schedule 40 Pipe Frame, Deduct	-489.68	
			For Aluminized Steel Gate And Post, Add	1,253.57	
			For Powder Coated Gate And Post, Add	679.02	
			For 1" Mesh Fabric, Add	1,136.05	
			For 1-1/4" Mesh Fabric, Add	731.25	
			For 1-3/4" Mesh Fabric, Add	454.42	
			For 2-1/8" Mesh Fabric, Deduct	-227.21	
32 31	13	13-0321	EA 20' Wide x 6' High Double Gate Galvanized Steel Without Barbed Wire .....	3,233.93	109.44
			For Gate With Single Barb Wire Arm, Add	319.59	
			For Gate With Double Barb Wire Arm, Add	464.86	
			For 1-5/8" Schedule 40 Pipe Frame, Deduct	-544.75	
			For Aluminized Steel Gate And Post, Add	1,394.57	
			For Powder Coated Gate And Post, Add	755.39	
			For 1" Mesh Fabric, Add	1,263.83	
			For 1-1/4" Mesh Fabric, Add	813.50	
			For 1-3/4" Mesh Fabric, Add	505.53	
			For 2-1/8" Mesh Fabric, Deduct	-252.77	
32 31	13	13-0322	EA 22' Wide x 6' High Double Gate Galvanized Steel Without Barbed Wire .....	3,555.19	120.40
			For Gate With Single Barb Wire Arm, Add	351.31	
			For Gate With Double Barb Wire Arm, Add	511.00	
			For 1-5/8" Schedule 40 Pipe Frame, Deduct	-598.83	
			For Aluminized Steel Gate And Post, Add	1,533.00	
			For Powder Coated Gate And Post, Add	830.38	
			For 1" Mesh Fabric, Add	1,389.28	
			For 1-1/4" Mesh Fabric, Add	894.25	
			For 1-3/4" Mesh Fabric, Add	555.71	
			For 2-1/8" Mesh Fabric, Deduct	-277.86	
32 31	13	13-0323	EA 24' Wide x 6' High Double Gate Galvanized Steel Without Barbed Wire .....	3,886.42	133.73
			For Gate With Single Barb Wire Arm, Add	383.33	
			For Gate With Double Barb Wire Arm, Add	557.57	
			For 1-5/8" Schedule 40 Pipe Frame, Deduct	-653.40	
			For Aluminized Steel Gate And Post, Add	1,672.71	
			For Powder Coated Gate And Post, Add	906.05	
			For 1" Mesh Fabric, Add	1,515.90	
			For 1-1/4" Mesh Fabric, Add	975.75	
			For 1-3/4" Mesh Fabric, Add	606.36	
			For 2-1/8" Mesh Fabric, Deduct	-303.18	

**32 Exterior Improvements****32 30 Site Improvements****32 31 Fences and Gates**

MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
32 31 13 13-0324 EA 26' Wide x 6' High Double Gate Galvanized Steel Without Barbed Wire .....	4,224.47	150.45
For Gate With Single Barb Wire Arm, Add	414.99	
For Gate With Double Barb Wire Arm, Add	603.63	
For 1-5/8" Schedule 40 Pipe Frame, Deduct	-707.38	
For Aluminized Steel Gate And Post, Add	1,810.89	
For Powder Coated Gate And Post, Add	980.90	
For 1" Mesh Fabric, Add	1,641.12	
For 1-1/4" Mesh Fabric, Add	1,056.35	
For 1-3/4" Mesh Fabric, Add	656.45	
For 2-1/8" Mesh Fabric, Deduct	-328.22	
32 31 13 13-0325 EA 28' Wide x 6' High Double Gate Galvanized Steel Without Barbed Wire .....	4,580.63	171.91
For Gate With Single Barb Wire Arm, Add	447.07	
For Gate With Double Barb Wire Arm, Add	650.29	
For 1-5/8" Schedule 40 Pipe Frame, Deduct	-762.05	
For Aluminized Steel Gate And Post, Add	1,950.86	
For Powder Coated Gate And Post, Add	1,056.72	
For 1" Mesh Fabric, Add	1,767.97	
For 1-1/4" Mesh Fabric, Add	1,138.00	
For 1-3/4" Mesh Fabric, Add	707.19	
For 2-1/8" Mesh Fabric, Deduct	-353.59	
32 31 13 13-0326 EA 30' Wide x 6' High Double Gate Galvanized Steel Without Barbed Wire .....	4,958.82	200.59
For Gate With Single Barb Wire Arm, Add	479.21	
For Gate With Double Barb Wire Arm, Add	697.03	
For 1-5/8" Schedule 40 Pipe Frame, Deduct	-816.83	
For Aluminized Steel Gate And Post, Add	2,091.09	
For Powder Coated Gate And Post, Add	1,132.67	
For 1" Mesh Fabric, Add	1,895.05	
For 1-1/4" Mesh Fabric, Add	1,219.80	
For 1-3/4" Mesh Fabric, Add	758.02	
For 2-1/8" Mesh Fabric, Deduct	-379.01	
<b>32 31 13 13-0327 7' Fence Height (32 31 13 13-0266)</b>		
32 31 13 13-0328 EA 3' Wide x 7' High Single Gate Galvanized Steel Without Barbed Wire .....	465.82	29.10
For Gate With Single Barb Wire Arm, Add	41.61	
For Gate With Double Barb Wire Arm, Add	60.53	
For 1-5/8" Schedule 40 Pipe Frame, Deduct	-70.93	
For Aluminized Steel Gate And Post, Add	181.58	
For Powder Coated Gate And Post, Add	98.36	
For 1" Mesh Fabric, Add	164.56	
For 1-1/4" Mesh Fabric, Add	105.92	
For 1-3/4" Mesh Fabric, Add	65.82	
For 2-1/8" Mesh Fabric, Deduct	-32.91	
32 31 13 13-0329 EA 4' Wide x 7' High Single Gate Galvanized Steel Without Barbed Wire .....	590.44	29.10
For Gate With Single Barb Wire Arm, Add	55.32	
For Gate With Double Barb Wire Arm, Add	80.47	
For 1-5/8" Schedule 40 Pipe Frame, Deduct	-94.30	
For Aluminized Steel Gate And Post, Add	241.40	
For Powder Coated Gate And Post, Add	130.76	
For 1" Mesh Fabric, Add	218.77	
For 1-1/4" Mesh Fabric, Add	140.82	
For 1-3/4" Mesh Fabric, Add	87.51	
For 2-1/8" Mesh Fabric, Deduct	-43.75	
32 31 13 13-0330 EA 5' Wide x 7' High Single Gate Galvanized Steel Without Barbed Wire .....	695.83	30.63
For Gate With Single Barb Wire Arm, Add	66.42	
For Gate With Double Barb Wire Arm, Add	96.62	
For 1-5/8" Schedule 40 Pipe Frame, Deduct	-113.22	
For Aluminized Steel Gate And Post, Add	289.85	
For Powder Coated Gate And Post, Add	157.00	
For 1" Mesh Fabric, Add	262.68	
For 1-1/4" Mesh Fabric, Add	169.08	
For 1-3/4" Mesh Fabric, Add	105.07	
For 2-1/8" Mesh Fabric, Deduct	-52.54	
32 31 13 13-0331 EA 6' Wide x 7' High Single Gate Galvanized Steel Without Barbed Wire .....	852.81	37.26
For Gate With Single Barb Wire Arm, Add	81.50	
For Gate With Double Barb Wire Arm, Add	118.55	
For 1-5/8" Schedule 40 Pipe Frame, Deduct	-138.93	
For Aluminized Steel Gate And Post, Add	355.65	
For Powder Coated Gate And Post, Add	192.64	
For 1" Mesh Fabric, Add	322.31	
For 1-1/4" Mesh Fabric, Add	207.46	
For 1-3/4" Mesh Fabric, Add	128.92	
For 2-1/8" Mesh Fabric, Deduct	-64.46	
32 31 13 13-0332 EA 7' Wide x 7' High Single Gate Galvanized Steel Without Barbed Wire .....	1,008.89	43.61
For Gate With Single Barb Wire Arm, Add	96.59	
For Gate With Double Barb Wire Arm, Add	140.49	
For 1-5/8" Schedule 40 Pipe Frame, Deduct	-164.64	
For Aluminized Steel Gate And Post, Add	421.47	
For Powder Coated Gate And Post, Add	228.30	
For 1" Mesh Fabric, Add	381.96	
For 1-1/4" Mesh Fabric, Add	245.86	
For 1-3/4" Mesh Fabric, Add	152.78	
For 2-1/8" Mesh Fabric, Deduct	-76.39	



Exterior Improvements	32	
Site Improvements	32 30	32
Fences and Gates	32 31	

MINOR CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
32 31 13 13-0333	EA	8' Wide x 7' High Single Gate Galvanized Steel Without Barbed Wire .....	1,165.89	50.15
		For Gate With Single Barb Wire Arm, Add	111.67	
		For Gate With Double Barb Wire Arm, Add	162.42	
		For 1-5/8" Schedule 40 Pipe Frame, Deduct	-190.34	
		For Aluminized Steel Gate And Post, Add	487.27	
		For Powder Coated Gate And Post, Add	263.94	
		For 1" Mesh Fabric, Add	441.59	
		For 1-1/4" Mesh Fabric, Add	284.24	
		For 1-3/4" Mesh Fabric, Add	176.63	
		For 2-1/8" Mesh Fabric, Deduct	-88.32	
32 31 13 13-0334	EA	9' Wide x 7' High Single Gate Galvanized Steel Without Barbed Wire .....	1,321.97	56.51
		For Gate With Single Barb Wire Arm, Add	126.75	
		For Gate With Double Barb Wire Arm, Add	184.36	
		For 1-5/8" Schedule 40 Pipe Frame, Deduct	-216.05	
		For Aluminized Steel Gate And Post, Add	553.08	
		For Powder Coated Gate And Post, Add	299.59	
		For 1" Mesh Fabric, Add	501.23	
		For 1-1/4" Mesh Fabric, Add	322.63	
		For 1-3/4" Mesh Fabric, Add	200.49	
		For 2-1/8" Mesh Fabric, Deduct	-100.25	
32 31 13 13-0335	EA	10' Wide x 7' High Single Gate Galvanized Steel Without Barbed Wire .....	1,454.26	63.15
		For Gate With Single Barb Wire Arm, Add	139.11	
		For Gate With Double Barb Wire Arm, Add	202.34	
		For 1-5/8" Schedule 40 Pipe Frame, Deduct	-237.12	
		For Aluminized Steel Gate And Post, Add	607.03	
		For Powder Coated Gate And Post, Add	328.81	
		For 1" Mesh Fabric, Add	550.12	
		For 1-1/4" Mesh Fabric, Add	354.10	
		For 1-3/4" Mesh Fabric, Add	220.05	
		For 2-1/8" Mesh Fabric, Deduct	-110.02	
32 31 13 13-0336	EA	10' Wide x 7' High Double Gate Galvanized Steel Without Barbed Wire .....	1,849.62	63.15
		For Gate With Single Barb Wire Arm, Add	182.60	
		For Gate With Double Barb Wire Arm, Add	265.60	
		For 1-5/8" Schedule 40 Pipe Frame, Deduct	-311.25	
		For Aluminized Steel Gate And Post, Add	796.80	
		For Powder Coated Gate And Post, Add	431.60	
		For 1" Mesh Fabric, Add	722.10	
		For 1-1/4" Mesh Fabric, Add	464.80	
		For 1-3/4" Mesh Fabric, Add	288.84	
		For 2-1/8" Mesh Fabric, Deduct	-144.42	
32 31 13 13-0337	EA	12' Wide x 7' High Double Gate Galvanized Steel Without Barbed Wire .....	2,103.95	85.95
		For Gate With Single Barb Wire Arm, Add	203.04	
		For Gate With Double Barb Wire Arm, Add	295.32	
		For 1-5/8" Schedule 40 Pipe Frame, Deduct	-346.08	
		For Aluminized Steel Gate And Post, Add	885.97	
		For Powder Coated Gate And Post, Add	479.90	
		For 1" Mesh Fabric, Add	802.91	
		For 1-1/4" Mesh Fabric, Add	516.82	
		For 1-3/4" Mesh Fabric, Add	321.17	
		For 2-1/8" Mesh Fabric, Deduct	-160.58	
32 31 13 13-0338	EA	14' Wide x 7' High Double Gate Galvanized Steel Without Barbed Wire .....	2,431.43	92.61
		For Gate With Single Barb Wire Arm, Add	236.88	
		For Gate With Double Barb Wire Arm, Add	344.55	
		For 1-5/8" Schedule 40 Pipe Frame, Deduct	-403.76	
		For Aluminized Steel Gate And Post, Add	1,033.64	
		For Powder Coated Gate And Post, Add	559.89	
		For 1" Mesh Fabric, Add	936.73	
		For 1-1/4" Mesh Fabric, Add	602.95	
		For 1-3/4" Mesh Fabric, Add	374.69	
		For 2-1/8" Mesh Fabric, Deduct	-187.35	
32 31 13 13-0339	EA	16' Wide x 7' High Double Gate Galvanized Steel Without Barbed Wire .....	2,736.57	100.30
		For Gate With Single Barb Wire Arm, Add	267.89	
		For Gate With Double Barb Wire Arm, Add	389.66	
		For 1-5/8" Schedule 40 Pipe Frame, Deduct	-456.63	
		For Aluminized Steel Gate And Post, Add	1,168.98	
		For Powder Coated Gate And Post, Add	633.20	
		For 1" Mesh Fabric, Add	1,059.39	
		For 1-1/4" Mesh Fabric, Add	681.90	
		For 1-3/4" Mesh Fabric, Add	423.75	
		For 2-1/8" Mesh Fabric, Deduct	-211.88	
32 31 13 13-0340	EA	18' Wide x 7' High Double Gate Galvanized Steel Without Barbed Wire .....	3,073.71	109.44
		For Gate With Single Barb Wire Arm, Add	301.96	
		For Gate With Double Barb Wire Arm, Add	439.22	
		For 1-5/8" Schedule 40 Pipe Frame, Deduct	-514.71	
		For Aluminized Steel Gate And Post, Add	1,317.66	
		For Powder Coated Gate And Post, Add	713.73	
		For 1" Mesh Fabric, Add	1,194.13	
		For 1-1/4" Mesh Fabric, Add	768.64	
		For 1-3/4" Mesh Fabric, Add	477.65	
		For 2-1/8" Mesh Fabric, Deduct	-238.83	

**32 Exterior Improvements****32 30 Site Improvements****32 31 Fences and Gates**

MINOR	CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
32 31 13 13-0341	EA	20' Wide x 7' High Double Gate Galvanized Steel Without Barbed Wire	.....	3,410.99	120.40
		For Gate With Single Barb Wire Arm, Add	.....	335.45	
		For Gate With Double Barb Wire Arm, Add	.....	487.93	
		For 1-5/8" Schedule 40 Pipe Frame, Deduct	.....	-571.79	
		For Aluminized Steel Gate And Post, Add	.....	1,463.78	
		For Powder Coated Gate And Post, Add	.....	792.88	
		For 1" Mesh Fabric, Add	.....	1,326.55	
		For 1-1/4" Mesh Fabric, Add	.....	853.87	
		For 1-3/4" Mesh Fabric, Add	.....	530.62	
		For 2-1/8" Mesh Fabric, Deduct	.....	-265.31	
32 31 13 13-0342	EA	22' Wide x 7' High Double Gate Galvanized Steel Without Barbed Wire	.....	3,755.57	133.73
		For Gate With Single Barb Wire Arm, Add	.....	368.94	
		For Gate With Double Barb Wire Arm, Add	.....	536.64	
		For 1-5/8" Schedule 40 Pipe Frame, Deduct	.....	-628.87	
		For Aluminized Steel Gate And Post, Add	.....	1,609.91	
		For Powder Coated Gate And Post, Add	.....	872.03	
		For 1" Mesh Fabric, Add	.....	1,458.98	
		For 1-1/4" Mesh Fabric, Add	.....	939.11	
		For 1-3/4" Mesh Fabric, Add	.....	583.59	
		For 2-1/8" Mesh Fabric, Deduct	.....	-291.80	
32 31 13 13-0343	EA	24' Wide x 7' High Double Gate Galvanized Steel Without Barbed Wire	.....	4,110.18	150.45
		For Gate With Single Barb Wire Arm, Add	.....	402.42	
		For Gate With Double Barb Wire Arm, Add	.....	585.34	
		For 1-5/8" Schedule 40 Pipe Frame, Deduct	.....	-685.95	
		For Aluminized Steel Gate And Post, Add	.....	1,756.03	
		For Powder Coated Gate And Post, Add	.....	951.18	
		For 1" Mesh Fabric, Add	.....	1,591.40	
		For 1-1/4" Mesh Fabric, Add	.....	1,024.35	
		For 1-3/4" Mesh Fabric, Add	.....	636.56	
		For 2-1/8" Mesh Fabric, Deduct	.....	-318.28	
32 31 13 13-0344	EA	26' Wide x 7' High Double Gate Galvanized Steel Without Barbed Wire	.....	4,479.15	171.91
		For Gate With Single Barb Wire Arm, Add	.....	435.91	
		For Gate With Double Barb Wire Arm, Add	.....	634.05	
		For 1-5/8" Schedule 40 Pipe Frame, Deduct	.....	-743.03	
		For Aluminized Steel Gate And Post, Add	.....	1,902.15	
		For Powder Coated Gate And Post, Add	.....	1,030.33	
		For 1" Mesh Fabric, Add	.....	1,723.82	
		For 1-1/4" Mesh Fabric, Add	.....	1,109.59	
		For 1-3/4" Mesh Fabric, Add	.....	689.53	
		For 2-1/8" Mesh Fabric, Deduct	.....	-344.76	
32 31 13 13-0345	EA	28' Wide x 7' High Double Gate Galvanized Steel Without Barbed Wire	.....	4,869.63	200.59
		For Gate With Single Barb Wire Arm, Add	.....	469.40	
		For Gate With Double Barb Wire Arm, Add	.....	682.76	
		For 1-5/8" Schedule 40 Pipe Frame, Deduct	.....	-800.11	
		For Aluminized Steel Gate And Post, Add	.....	2,048.28	
		For Powder Coated Gate And Post, Add	.....	1,109.48	
		For 1" Mesh Fabric, Add	.....	1,856.25	
		For 1-1/4" Mesh Fabric, Add	.....	1,194.83	
		For 1-3/4" Mesh Fabric, Add	.....	742.50	
		For 2-1/8" Mesh Fabric, Deduct	.....	-371.25	
32 31 13 13-0346	EA	30' Wide x 7' High Double Gate Galvanized Steel Without Barbed Wire	.....	5,294.54	240.69
		For Gate With Single Barb Wire Arm, Add	.....	502.88	
		For Gate With Double Barb Wire Arm, Add	.....	731.47	
		For 1-5/8" Schedule 40 Pipe Frame, Deduct	.....	-857.19	
		For Aluminized Steel Gate And Post, Add	.....	2,194.40	
		For Powder Coated Gate And Post, Add	.....	1,188.63	
		For 1" Mesh Fabric, Add	.....	1,988.67	
		For 1-1/4" Mesh Fabric, Add	.....	1,280.06	
		For 1-3/4" Mesh Fabric, Add	.....	795.47	
		For 2-1/8" Mesh Fabric, Deduct	.....	-397.73	
32 31 13 13-0347		<b>8' Fence Height</b> (32 31 13 13-0266)			
32 31 13 13-0348	EA	3' Wide x 8' High Single Gate Galvanized Steel Without Barbed Wire	.....	546.61	31.57
		For Gate With Single Barb Wire Arm, Add	.....	49.70	
		For Gate With Double Barb Wire Arm, Add	.....	72.29	
		For 1-5/8" Schedule 40 Pipe Frame, Deduct	.....	-84.71	
		For Aluminized Steel Gate And Post, Add	.....	216.86	
		For Powder Coated Gate And Post, Add	.....	117.47	
		For 1" Mesh Fabric, Add	.....	196.53	
		For 1-1/4" Mesh Fabric, Add	.....	126.50	
		For 1-3/4" Mesh Fabric, Add	.....	78.61	
		For 2-1/8" Mesh Fabric, Deduct	.....	-39.31	
32 31 13 13-0349	EA	4' Wide x 8' High Single Gate Galvanized Steel Without Barbed Wire	.....	697.22	31.57
		For Gate With Single Barb Wire Arm, Add	.....	66.27	
		For Gate With Double Barb Wire Arm, Add	.....	96.39	
		For 1-5/8" Schedule 40 Pipe Frame, Deduct	.....	-112.95	
		For Aluminized Steel Gate And Post, Add	.....	289.16	
		For Powder Coated Gate And Post, Add	.....	156.63	
		For 1" Mesh Fabric, Add	.....	262.05	
		For 1-1/4" Mesh Fabric, Add	.....	168.67	
		For 1-3/4" Mesh Fabric, Add	.....	104.82	
		For 2-1/8" Mesh Fabric, Deduct	.....	-52.41	



**Exterior Improvements 32**

Site Improvements 32 30

Fences and Gates 32 31

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MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
32 31 13 13-0350 EA 5' Wide x 8' High Single Gate Galvanized Steel Without Barbed Wire .....	814.21	35.17
For Gate With Single Barb Wire Arm, Add	77.93	
For Gate With Double Barb Wire Arm, Add	113.36	
For 1-5/8" Schedule 40 Pipe Frame, Deduct	-132.84	
For Aluminized Steel Gate And Post, Add	340.08	
For Powder Coated Gate And Post, Add	184.21	
For 1" Mesh Fabric, Add	308.19	
For 1-1/4" Mesh Fabric, Add	198.38	
For 1-3/4" Mesh Fabric, Add	123.28	
For 2-1/8" Mesh Fabric, Deduct	-61.64	
32 31 13 13-0351 EA 6' Wide x 8' High Single Gate Galvanized Steel Without Barbed Wire .....	934.05	39.82
For Gate With Single Barb Wire Arm, Add	89.60	
For Gate With Double Barb Wire Arm, Add	130.33	
For 1-5/8" Schedule 40 Pipe Frame, Deduct	-152.74	
For Aluminized Steel Gate And Post, Add	391.00	
For Powder Coated Gate And Post, Add	211.79	
For 1" Mesh Fabric, Add	354.35	
For 1-1/4" Mesh Fabric, Add	228.09	
For 1-3/4" Mesh Fabric, Add	141.74	
For 2-1/8" Mesh Fabric, Deduct	-70.87	
32 31 13 13-0352 EA 7' Wide x 8' High Single Gate Galvanized Steel Without Barbed Wire .....	1,064.81	47.98
For Gate With Single Barb Wire Arm, Add	101.28	
For Gate With Double Barb Wire Arm, Add	147.31	
For 1-5/8" Schedule 40 Pipe Frame, Deduct	-172.63	
For Aluminized Steel Gate And Post, Add	441.94	
For Powder Coated Gate And Post, Add	239.38	
For 1" Mesh Fabric, Add	400.50	
For 1-1/4" Mesh Fabric, Add	257.80	
For 1-3/4" Mesh Fabric, Add	160.20	
For 2-1/8" Mesh Fabric, Deduct	-80.10	
32 31 13 13-0353 EA 8' Wide x 8' High Single Gate Galvanized Steel Without Barbed Wire .....	1,194.62	55.84
For Gate With Single Barb Wire Arm, Add	112.95	
For Gate With Double Barb Wire Arm, Add	164.29	
For 1-5/8" Schedule 40 Pipe Frame, Deduct	-192.53	
For Aluminized Steel Gate And Post, Add	492.86	
For Powder Coated Gate And Post, Add	266.97	
For 1" Mesh Fabric, Add	446.66	
For 1-1/4" Mesh Fabric, Add	287.50	
For 1-3/4" Mesh Fabric, Add	178.66	
For 2-1/8" Mesh Fabric, Deduct	-89.33	
32 31 13 13-0354 EA 9' Wide x 8' High Single Gate Galvanized Steel Without Barbed Wire .....	1,325.38	64.10
For Gate With Single Barb Wire Arm, Add	124.62	
For Gate With Double Barb Wire Arm, Add	181.26	
For 1-5/8" Schedule 40 Pipe Frame, Deduct	-212.42	
For Aluminized Steel Gate And Post, Add	543.79	
For Powder Coated Gate And Post, Add	294.55	
For 1" Mesh Fabric, Add	492.81	
For 1-1/4" Mesh Fabric, Add	317.21	
For 1-3/4" Mesh Fabric, Add	197.12	
For 2-1/8" Mesh Fabric, Deduct	-98.56	
32 31 13 13-0355 EA 10' Wide x 8' High Single Gate Galvanized Steel Without Barbed Wire .....	1,456.11	72.34
For Gate With Single Barb Wire Arm, Add	136.29	
For Gate With Double Barb Wire Arm, Add	198.24	
For 1-5/8" Schedule 40 Pipe Frame, Deduct	-232.31	
For Aluminized Steel Gate And Post, Add	594.72	
For Powder Coated Gate And Post, Add	322.14	
For 1" Mesh Fabric, Add	538.97	
For 1-1/4" Mesh Fabric, Add	346.92	
For 1-3/4" Mesh Fabric, Add	215.59	
For 2-1/8" Mesh Fabric, Deduct	-107.79	
32 31 13 13-0356 EA 10' Wide x 8' High Double Gate Galvanized Steel Without Barbed Wire .....	2,116.70	85.95
For Gate With Single Barb Wire Arm, Add	204.44	
For Gate With Double Barb Wire Arm, Add	297.36	
For 1-5/8" Schedule 40 Pipe Frame, Deduct	-348.47	
For Aluminized Steel Gate And Post, Add	892.09	
For Powder Coated Gate And Post, Add	483.22	
For 1" Mesh Fabric, Add	808.46	
For 1-1/4" Mesh Fabric, Add	520.39	
For 1-3/4" Mesh Fabric, Add	323.38	
For 2-1/8" Mesh Fabric, Deduct	-161.69	
32 31 13 13-0357 EA 12' Wide x 8' High Double Gate Galvanized Steel Without Barbed Wire .....	2,494.42	92.61
For Gate With Single Barb Wire Arm, Add	243.80	
For Gate With Double Barb Wire Arm, Add	354.62	
For 1-5/8" Schedule 40 Pipe Frame, Deduct	-415.58	
For Aluminized Steel Gate And Post, Add	1,063.87	
For Powder Coated Gate And Post, Add	576.26	
For 1" Mesh Fabric, Add	964.13	
For 1-1/4" Mesh Fabric, Add	620.59	
For 1-3/4" Mesh Fabric, Add	385.65	
For 2-1/8" Mesh Fabric, Deduct	-192.83	

**32 Exterior Improvements****32 30 Site Improvements****32 31 Fences and Gates**

MINOR	CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
32 31 13 13-0358	EA		14' Wide x 8' High Double Gate Galvanized Steel Without Barbed Wire .....	2,880.77	100.30
			For Gate With Single Barb Wire Arm, Add	283.75	
			For Gate With Double Barb Wire Arm, Add	412.73	
			For 1-5/8" Schedule 40 Pipe Frame, Deduct	-483.67	
			For Aluminized Steel Gate And Post, Add	1,238.19	
			For Powder Coated Gate And Post, Add	670.69	
			For 1" Mesh Fabric, Add	1,122.11	
			For 1-1/4" Mesh Fabric, Add	722.28	
			For 1-3/4" Mesh Fabric, Add	448.85	
			For 2-1/8" Mesh Fabric, Deduct	-224.42	
32 31 13 13-0359	EA		16' Wide x 8' High Double Gate Galvanized Steel Without Barbed Wire .....	3,282.00	109.44
			For Gate With Single Barb Wire Arm, Add	324.88	
			For Gate With Double Barb Wire Arm, Add	472.55	
			For 1-5/8" Schedule 40 Pipe Frame, Deduct	-553.77	
			For Aluminized Steel Gate And Post, Add	1,417.64	
			For Powder Coated Gate And Post, Add	767.89	
			For 1" Mesh Fabric, Add	1,284.74	
			For 1-1/4" Mesh Fabric, Add	826.96	
			For 1-3/4" Mesh Fabric, Add	513.90	
			For 2-1/8" Mesh Fabric, Deduct	-256.95	
32 31 13 13-0360	EA		18 Wide x 8' High Double Gate Galvanized Steel Without Barbed Wire .....	3,688.71	120.40
			For Gate With Single Barb Wire Arm, Add	366.00	
			For Gate With Double Barb Wire Arm, Add	532.36	
			For 1-5/8" Schedule 40 Pipe Frame, Deduct	-623.86	
			For Aluminized Steel Gate And Post, Add	1,597.09	
			For Powder Coated Gate And Post, Add	865.09	
			For 1" Mesh Fabric, Add	1,447.36	
			For 1-1/4" Mesh Fabric, Add	931.64	
			For 1-3/4" Mesh Fabric, Add	578.94	
			For 2-1/8" Mesh Fabric, Deduct	-289.47	
32 31 13 13-0361	EA		20' Wide x 8' High Double Gate Galvanized Steel Without Barbed Wire .....	4,097.38	133.73
			For Gate With Single Barb Wire Arm, Add	406.54	
			For Gate With Double Barb Wire Arm, Add	591.32	
			For 1-5/8" Schedule 40 Pipe Frame, Deduct	-692.96	
			For Aluminized Steel Gate And Post, Add	1,773.97	
			For Powder Coated Gate And Post, Add	960.90	
			For 1" Mesh Fabric, Add	1,607.66	
			For 1-1/4" Mesh Fabric, Add	1,034.82	
			For 1-3/4" Mesh Fabric, Add	643.07	
			For 2-1/8" Mesh Fabric, Deduct	-321.53	
32 31 13 13-0362	EA		22' Wide x 8' High Double Gate Galvanized Steel Without Barbed Wire .....	4,510.74	150.45
			For Gate With Single Barb Wire Arm, Add	446.48	
			For Gate With Double Barb Wire Arm, Add	649.43	
			For 1-5/8" Schedule 40 Pipe Frame, Deduct	-761.05	
			For Aluminized Steel Gate And Post, Add	1,948.30	
			For Powder Coated Gate And Post, Add	1,055.33	
			For 1" Mesh Fabric, Add	1,765.64	
			For 1-1/4" Mesh Fabric, Add	1,136.51	
			For 1-3/4" Mesh Fabric, Add	706.26	
			For 2-1/8" Mesh Fabric, Deduct	-353.13	
32 31 13 13-0363	EA		24' Wide x 8' High Double Gate Galvanized Steel Without Barbed Wire .....	4,949.14	171.91
			For Gate With Single Barb Wire Arm, Add	487.61	
			For Gate With Double Barb Wire Arm, Add	709.25	
			For 1-5/8" Schedule 40 Pipe Frame, Deduct	-831.15	
			For Aluminized Steel Gate And Post, Add	2,127.74	
			For Powder Coated Gate And Post, Add	1,152.53	
			For 1" Mesh Fabric, Add	1,928.27	
			For 1-1/4" Mesh Fabric, Add	1,241.18	
			For 1-3/4" Mesh Fabric, Add	771.31	
			For 2-1/8" Mesh Fabric, Deduct	-385.65	
32 31 13 13-0364	EA		26' Wide x 8' High Double Gate Galvanized Steel Without Barbed Wire .....	5,409.04	200.59
			For Gate With Single Barb Wire Arm, Add	528.73	
			For Gate With Double Barb Wire Arm, Add	769.06	
			For 1-5/8" Schedule 40 Pipe Frame, Deduct	-901.25	
			For Aluminized Steel Gate And Post, Add	2,307.19	
			For Powder Coated Gate And Post, Add	1,249.73	
			For 1" Mesh Fabric, Add	2,090.89	
			For 1-1/4" Mesh Fabric, Add	1,345.86	
			For 1-3/4" Mesh Fabric, Add	836.36	
			For 2-1/8" Mesh Fabric, Deduct	-418.18	
32 31 13 13-0365	EA		28' Wide x 8' High Double Gate Galvanized Steel Without Barbed Wire .....	5,898.04	240.69
			For Gate With Single Barb Wire Arm, Add	569.27	
			For Gate With Double Barb Wire Arm, Add	828.03	
			For 1-5/8" Schedule 40 Pipe Frame, Deduct	-970.34	
			For Aluminized Steel Gate And Post, Add	2,484.08	
			For Powder Coated Gate And Post, Add	1,345.54	
			For 1" Mesh Fabric, Add	2,251.19	
			For 1-1/4" Mesh Fabric, Add	1,449.04	
			For 1-3/4" Mesh Fabric, Add	900.48	
			For 2-1/8" Mesh Fabric, Deduct	-450.24	



Exterior Improvements		32	32
Site Improvements		32 30	
Fences and Gates		32 31	

MINOR CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
32 31 13 13-0366	EA	30' Wide x 8' High Double Gate Galvanized Steel Without Barbed Wire .....	6,447.26	300.89
		For Gate With Single Barb Wire Arm, Add	609.80	
		For Gate With Double Barb Wire Arm, Add	886.99	
		For 1-5/8" Schedule 40 Pipe Frame, Deduct	-1,039.44	
		For Aluminized Steel Gate And Post, Add	2,660.96	
		For Powder Coated Gate And Post, Add	1,441.35	
		For 1" Mesh Fabric, Add	2,411.50	
		For 1-1/4" Mesh Fabric, Add	1,552.23	
		For 1-3/4" Mesh Fabric, Add	964.60	
		For 2-1/8" Mesh Fabric, Deduct	-482.30	
32 31 13 13-0367 10' Fence Height (32 31 13 13-0266)				
32 31 13 13-0368	EA	3' Wide x 10' High Single Gate Galvanized Steel Without Barbed Wire .....	689.59	35.08
		For Gate With Single Barb Wire Arm, Add	64.27	
		For Gate With Double Barb Wire Arm, Add	93.48	
		For 1-5/8" Schedule 40 Pipe Frame, Deduct	-109.55	
		For Aluminized Steel Gate And Post, Add	280.44	
		For Powder Coated Gate And Post, Add	151.90	
		For 1" Mesh Fabric, Add	254.14	
		For 1-1/4" Mesh Fabric, Add	163.59	
		For 1-3/4" Mesh Fabric, Add	101.66	
		For 2-1/8" Mesh Fabric, Deduct	-50.83	
32 31 13 13-0369	EA	4' Wide x 10' High Single Gate Galvanized Steel Without Barbed Wire .....	884.33	35.08
		For Gate With Single Barb Wire Arm, Add	85.69	
		For Gate With Double Barb Wire Arm, Add	124.64	
		For 1-5/8" Schedule 40 Pipe Frame, Deduct	-146.06	
		For Aluminized Steel Gate And Post, Add	373.91	
		For Powder Coated Gate And Post, Add	202.53	
		For 1" Mesh Fabric, Add	338.86	
		For 1-1/4" Mesh Fabric, Add	218.11	
		For 1-3/4" Mesh Fabric, Add	135.54	
		For 2-1/8" Mesh Fabric, Deduct	-67.77	
32 31 13 13-0370	EA	5' Wide x 10' High Single Gate Galvanized Steel Without Barbed Wire .....	1,026.17	36.60
		For Gate With Single Barb Wire Arm, Add	100.78	
		For Gate With Double Barb Wire Arm, Add	146.59	
		For 1-5/8" Schedule 40 Pipe Frame, Deduct	-171.79	
		For Aluminized Steel Gate And Post, Add	439.78	
		For Powder Coated Gate And Post, Add	238.21	
		For 1" Mesh Fabric, Add	398.55	
		For 1-1/4" Mesh Fabric, Add	256.54	
		For 1-3/4" Mesh Fabric, Add	159.42	
		For 2-1/8" Mesh Fabric, Deduct	-79.71	
32 31 13 13-0371	EA	6' Wide x 10' High Single Gate Galvanized Steel Without Barbed Wire .....	1,189.94	45.51
		For Gate With Single Barb Wire Arm, Add	115.88	
		For Gate With Double Barb Wire Arm, Add	168.55	
		For 1-5/8" Schedule 40 Pipe Frame, Deduct	-197.51	
		For Aluminized Steel Gate And Post, Add	505.64	
		For Powder Coated Gate And Post, Add	273.89	
		For 1" Mesh Fabric, Add	458.23	
		For 1-1/4" Mesh Fabric, Add	294.95	
		For 1-3/4" Mesh Fabric, Add	183.29	
		For 2-1/8" Mesh Fabric, Deduct	-91.65	
32 31 13 13-0372	EA	7' Wide x 10' High Single Gate Galvanized Steel Without Barbed Wire .....	1,353.11	53.95
		For Gate With Single Barb Wire Arm, Add	130.96	
		For Gate With Double Barb Wire Arm, Add	190.49	
		For 1-5/8" Schedule 40 Pipe Frame, Deduct	-223.23	
		For Aluminized Steel Gate And Post, Add	571.48	
		For Powder Coated Gate And Post, Add	309.55	
		For 1" Mesh Fabric, Add	517.90	
		For 1-1/4" Mesh Fabric, Add	333.36	
		For 1-3/4" Mesh Fabric, Add	207.16	
		For 2-1/8" Mesh Fabric, Deduct	-103.58	
32 31 13 13-0373	EA	8' Wide x 10' High Single Gate Galvanized Steel Without Barbed Wire .....	1,516.46	62.86
		For Gate With Single Barb Wire Arm, Add	146.06	
		For Gate With Double Barb Wire Arm, Add	212.45	
		For 1-5/8" Schedule 40 Pipe Frame, Deduct	-248.96	
		For Aluminized Steel Gate And Post, Add	637.34	
		For Powder Coated Gate And Post, Add	345.23	
		For 1" Mesh Fabric, Add	577.59	
		For 1-1/4" Mesh Fabric, Add	371.78	
		For 1-3/4" Mesh Fabric, Add	231.04	
		For 2-1/8" Mesh Fabric, Deduct	-115.52	
32 31 13 13-0374	EA	9' Wide x 10' High Single Gate Galvanized Steel Without Barbed Wire .....	1,679.26	71.40
		For Gate With Single Barb Wire Arm, Add	161.15	
		For Gate With Double Barb Wire Arm, Add	234.40	
		For 1-5/8" Schedule 40 Pipe Frame, Deduct	-274.69	
		For Aluminized Steel Gate And Post, Add	703.20	
		For Powder Coated Gate And Post, Add	380.90	
		For 1" Mesh Fabric, Add	637.28	
		For 1-1/4" Mesh Fabric, Add	410.20	
		For 1-3/4" Mesh Fabric, Add	254.91	
		For 2-1/8" Mesh Fabric, Deduct	-127.46	

**32 Exterior Improvements****32 30 Site Improvements****32 31 Fences and Gates**

MINOR	CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
32 31 13 13-0375	EA	10' Wide x 10' High Single Gate Galvanized Steel Without Barbed Wire	.....	1,843.04	80.21
		For Gate With Single Barb Wire Arm, Add	176.24		
		For Gate With Double Barb Wire Arm, Add	256.36		
		For 1-5/8" Schedule 40 Pipe Frame, Deduct	-300.42		
		For Aluminized Steel Gate And Post, Add	769.07		
		For Powder Coated Gate And Post, Add	416.58		
		For 1" Mesh Fabric, Add	696.97		
		For 1-1/4" Mesh Fabric, Add	448.62		
		For 1-3/4" Mesh Fabric, Add	278.79		
		For 2-1/8" Mesh Fabric, Deduct	-139.39		
32 31 13 13-0376	EA	10' Wide x 10' High Double Gate Galvanized Steel Without Barbed Wire	.....	2,690.15	95.56
		For Gate With Single Barb Wire Arm, Add	264.36		
		For Gate With Double Barb Wire Arm, Add	384.53		
		For 1-5/8" Schedule 40 Pipe Frame, Deduct	-450.62		
		For Aluminized Steel Gate And Post, Add	1,153.58		
		For Powder Coated Gate And Post, Add	624.86		
		For 1" Mesh Fabric, Add	1,045.44		
		For 1-1/4" Mesh Fabric, Add	672.92		
		For 1-3/4" Mesh Fabric, Add	418.17		
		For 2-1/8" Mesh Fabric, Deduct	-209.09		
32 31 13 13-0377	EA	12' Wide x 10' High Double Gate Galvanized Steel Without Barbed Wire	.....	2,925.80	102.78
		For Gate With Single Barb Wire Arm, Add	287.87		
		For Gate With Double Barb Wire Arm, Add	418.72		
		For 1-5/8" Schedule 40 Pipe Frame, Deduct	-490.69		
		For Aluminized Steel Gate And Post, Add	1,256.16		
		For Powder Coated Gate And Post, Add	680.42		
		For 1" Mesh Fabric, Add	1,138.39		
		For 1-1/4" Mesh Fabric, Add	732.76		
		For 1-3/4" Mesh Fabric, Add	455.36		
		For 2-1/8" Mesh Fabric, Deduct	-227.68		
32 31 13 13-0378	EA	14' Wide x 10' High Double Gate Galvanized Steel Without Barbed Wire	.....	3,336.15	111.48
		For Gate With Single Barb Wire Arm, Add	330.16		
		For Gate With Double Barb Wire Arm, Add	480.24		
		For 1-5/8" Schedule 40 Pipe Frame, Deduct	-562.78		
		For Aluminized Steel Gate And Post, Add	1,440.71		
		For Powder Coated Gate And Post, Add	780.38		
		For 1" Mesh Fabric, Add	1,305.64		
		For 1-1/4" Mesh Fabric, Add	840.41		
		For 1-3/4" Mesh Fabric, Add	522.26		
		For 2-1/8" Mesh Fabric, Deduct	-261.13		
32 31 13 13-0379	EA	16' Wide x 10' High Double Gate Galvanized Steel Without Barbed Wire	.....	3,793.68	121.53
		For Gate With Single Barb Wire Arm, Add	377.16		
		For Gate With Double Barb Wire Arm, Add	548.60		
		For 1-5/8" Schedule 40 Pipe Frame, Deduct	-642.89		
		For Aluminized Steel Gate And Post, Add	1,645.80		
		For Powder Coated Gate And Post, Add	891.47		
		For 1" Mesh Fabric, Add	1,491.50		
		For 1-1/4" Mesh Fabric, Add	960.05		
		For 1-3/4" Mesh Fabric, Add	596.60		
		For 2-1/8" Mesh Fabric, Deduct	-298.30		
32 31 13 13-0380	EA	18' Wide x 10' High Double Gate Galvanized Steel Without Barbed Wire	.....	4,257.60	133.73
		For Gate With Single Barb Wire Arm, Add	424.16		
		For Gate With Double Barb Wire Arm, Add	616.96		
		For 1-5/8" Schedule 40 Pipe Frame, Deduct	-723.00		
		For Aluminized Steel Gate And Post, Add	1,850.88		
		For Powder Coated Gate And Post, Add	1,002.56		
		For 1" Mesh Fabric, Add	1,677.36		
		For 1-1/4" Mesh Fabric, Add	1,079.68		
		For 1-3/4" Mesh Fabric, Add	670.94		
		For 2-1/8" Mesh Fabric, Deduct	-335.47		
32 31 13 13-0381	EA	20' Wide x 10' High Double Gate Galvanized Steel Without Barbed Wire	.....	4,731.93	148.53
		For Gate With Single Barb Wire Arm, Add	471.45		
		For Gate With Double Barb Wire Arm, Add	685.75		
		For 1-5/8" Schedule 40 Pipe Frame, Deduct	-803.61		
		For Aluminized Steel Gate And Post, Add	2,057.25		
		For Powder Coated Gate And Post, Add	1,114.34		
		For 1" Mesh Fabric, Add	1,864.38		
		For 1-1/4" Mesh Fabric, Add	1,200.06		
		For 1-3/4" Mesh Fabric, Add	745.75		
		For 2-1/8" Mesh Fabric, Deduct	-372.88		
32 31 13 13-0382	EA	22' Wide x 10' High Double Gate Galvanized Steel Without Barbed Wire	.....	5,217.86	167.16
		For Gate With Single Barb Wire Arm, Add	518.74		
		For Gate With Double Barb Wire Arm, Add	754.54		
		For 1-5/8" Schedule 40 Pipe Frame, Deduct	-884.22		
		For Aluminized Steel Gate And Post, Add	2,263.61		
		For Powder Coated Gate And Post, Add	1,226.12		
		For 1" Mesh Fabric, Add	2,051.40		
		For 1-1/4" Mesh Fabric, Add	1,320.44		
		For 1-3/4" Mesh Fabric, Add	820.56		
		For 2-1/8" Mesh Fabric, Deduct	-410.28		



Exterior Improvements		32
Site Improvements		32 30
Fences and Gates		32 31

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MINOR CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
32 31 13 13-0383	EA	24' Wide x 10' High Double Gate Galvanized Steel Without Barbed Wire .....	5,716.45	190.88
		For Gate With Single Barb Wire Arm, Add	565.74	
		For Gate With Double Barb Wire Arm, Add	822.90	
		For 1-5/8" Schedule 40 Pipe Frame, Deduct	-964.33	
		For Aluminized Steel Gate And Post, Add	2,468.69	
		For Powder Coated Gate And Post, Add	1,337.21	
		For 1" Mesh Fabric, Add	2,237.25	
		For 1-1/4" Mesh Fabric, Add	1,440.07	
		For 1-3/4" Mesh Fabric, Add	894.90	
		For 2-1/8" Mesh Fabric, Deduct	-447.45	
32 31 13 13-0384	EA	26' Wide x 10' High Double Gate Galvanized Steel Without Barbed Wire .....	6,239.69	222.85
		For Gate With Single Barb Wire Arm, Add	612.74	
		For Gate With Double Barb Wire Arm, Add	891.26	
		For 1-5/8" Schedule 40 Pipe Frame, Deduct	-1,044.44	
		For Aluminized Steel Gate And Post, Add	2,673.78	
		For Powder Coated Gate And Post, Add	1,448.30	
		For 1" Mesh Fabric, Add	2,423.11	
		For 1-1/4" Mesh Fabric, Add	1,559.70	
		For 1-3/4" Mesh Fabric, Add	969.24	
		For 2-1/8" Mesh Fabric, Deduct	-484.62	
32 31 13 13-0385	EA	28' Wide x 10' High Double Gate Galvanized Steel Without Barbed Wire .....	6,800.11	267.23
		For Gate With Single Barb Wire Arm, Add	659.74	
		For Gate With Double Barb Wire Arm, Add	959.62	
		For 1-5/8" Schedule 40 Pipe Frame, Deduct	-1,124.56	
		For Aluminized Steel Gate And Post, Add	2,878.86	
		For Powder Coated Gate And Post, Add	1,559.38	
		For 1" Mesh Fabric, Add	2,608.97	
		For 1-1/4" Mesh Fabric, Add	1,679.34	
		For 1-3/4" Mesh Fabric, Add	1,043.59	
		For 2-1/8" Mesh Fabric, Deduct	-521.79	
32 31 13 13-0386	EA	30' Wide x 10' High Double Gate Galvanized Steel Without Barbed Wire .....	7,434.22	334.32
		For Gate With Single Barb Wire Arm, Add	707.33	
		For Gate With Double Barb Wire Arm, Add	1,028.84	
		For 1-5/8" Schedule 40 Pipe Frame, Deduct	-1,205.67	
		For Aluminized Steel Gate And Post, Add	3,086.51	
		For Powder Coated Gate And Post, Add	1,671.86	
		For 1" Mesh Fabric, Add	2,797.15	
		For 1-1/4" Mesh Fabric, Add	1,800.46	
		For 1-3/4" Mesh Fabric, Add	1,118.86	
		For 2-1/8" Mesh Fabric, Deduct	-559.43	
32 31 13 13-0387		12' Fence Height (32 31 13 13-0266)		
32 31 13 13-0388	EA	3' Wide x 12' High Single Gate Galvanized Steel Without Barbed Wire .....	864.88	38.96
		For Gate With Single Barb Wire Arm, Add	82.26	
		For Gate With Double Barb Wire Arm, Add	119.65	
		For 1-5/8" Schedule 40 Pipe Frame, Deduct	-140.22	
		For Aluminized Steel Gate And Post, Add	358.96	
		For Powder Coated Gate And Post, Add	194.44	
		For 1" Mesh Fabric, Add	325.31	
		For 1-1/4" Mesh Fabric, Add	209.39	
		For 1-3/4" Mesh Fabric, Add	130.12	
		For 2-1/8" Mesh Fabric, Deduct	-65.06	
32 31 13 13-0389	EA	4' Wide x 12' High Single Gate Galvanized Steel Without Barbed Wire .....	1,114.14	38.96
		For Gate With Single Barb Wire Arm, Add	109.68	
		For Gate With Double Barb Wire Arm, Add	159.53	
		For 1-5/8" Schedule 40 Pipe Frame, Deduct	-186.95	
		For Aluminized Steel Gate And Post, Add	478.60	
		For Powder Coated Gate And Post, Add	259.24	
		For 1" Mesh Fabric, Add	433.73	
		For 1-1/4" Mesh Fabric, Add	279.19	
		For 1-3/4" Mesh Fabric, Add	173.49	
		For 2-1/8" Mesh Fabric, Deduct	-86.75	
32 31 13 13-0390	EA	5' Wide x 12' High Single Gate Galvanized Steel Without Barbed Wire .....	1,294.09	40.39
		For Gate With Single Barb Wire Arm, Add	129.00	
		For Gate With Double Barb Wire Arm, Add	187.64	
		For 1-5/8" Schedule 40 Pipe Frame, Deduct	-219.89	
		For Aluminized Steel Gate And Post, Add	562.91	
		For Powder Coated Gate And Post, Add	304.91	
		For 1" Mesh Fabric, Add	510.14	
		For 1-1/4" Mesh Fabric, Add	328.36	
		For 1-3/4" Mesh Fabric, Add	204.06	
		For 2-1/8" Mesh Fabric, Deduct	-102.03	
32 31 13 13-0391	EA	6' Wide x 12' High Single Gate Galvanized Steel Without Barbed Wire .....	1,499.10	50.15
		For Gate With Single Barb Wire Arm, Add	148.32	
		For Gate With Double Barb Wire Arm, Add	215.74	
		For 1-5/8" Schedule 40 Pipe Frame, Deduct	-252.82	
		For Aluminized Steel Gate And Post, Add	647.21	
		For Powder Coated Gate And Post, Add	350.57	
		For 1" Mesh Fabric, Add	586.53	
		For 1-1/4" Mesh Fabric, Add	377.54	
		For 1-3/4" Mesh Fabric, Add	234.61	
		For 2-1/8" Mesh Fabric, Deduct	-117.31	

**32 Exterior Improvements****32 30 Site Improvements****32 31 Fences and Gates**

MINOR	CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
32 31 13 13-0392	EA		7' Wide x 12' High Single Gate Galvanized Steel Without Barbed Wire.....	657.06	60.01
			For Gate With Single Barb Wire Arm, Add	52.46	
			For Gate With Double Barb Wire Arm, Add	76.31	
			For 1-5/8" Schedule 40 Pipe Frame, Deduct	-89.42	
			For Aluminized Steel Gate And Post, Add	228.92	
			For Powder Coated Gate And Post, Add	124.00	
			For 1" Mesh Fabric, Add	207.46	
			For 1-1/4" Mesh Fabric, Add	133.53	
			For 1-3/4" Mesh Fabric, Add	82.98	
			For 2-1/8" Mesh Fabric, Deduct	-41.49	
32 31 13 13-0393	EA		8' Wide x 12' High Single Gate Galvanized Steel Without Barbed Wire.....	740.46	69.50
			For Gate With Single Barb Wire Arm, Add	58.51	
			For Gate With Double Barb Wire Arm, Add	85.10	
			For 1-5/8" Schedule 40 Pipe Frame, Deduct	-99.73	
			For Aluminized Steel Gate And Post, Add	255.30	
			For Powder Coated Gate And Post, Add	138.29	
			For 1" Mesh Fabric, Add	231.36	
			For 1-1/4" Mesh Fabric, Add	148.92	
			For 1-3/4" Mesh Fabric, Add	92.55	
			For 2-1/8" Mesh Fabric, Deduct	-46.27	
32 31 13 13-0394	EA		9' Wide x 12' High Single Gate Galvanized Steel Without Barbed Wire.....	824.81	79.26
			For Gate With Single Barb Wire Arm, Add	64.55	
			For Gate With Double Barb Wire Arm, Add	93.89	
			For 1-5/8" Schedule 40 Pipe Frame, Deduct	-110.03	
			For Aluminized Steel Gate And Post, Add	281.68	
			For Powder Coated Gate And Post, Add	152.58	
			For 1" Mesh Fabric, Add	255.27	
			For 1-1/4" Mesh Fabric, Add	164.31	
			For 1-3/4" Mesh Fabric, Add	102.11	
			For 2-1/8" Mesh Fabric, Deduct	-51.05	
32 31 13 13-0395	EA		10' Wide x 12' High Single Gate Galvanized Steel Without Barbed Wire.....	909.16	89.03
			For Gate With Single Barb Wire Arm, Add	70.60	
			For Gate With Double Barb Wire Arm, Add	102.69	
			For 1-5/8" Schedule 40 Pipe Frame, Deduct	-120.34	
			For Aluminized Steel Gate And Post, Add	308.06	
			For Powder Coated Gate And Post, Add	166.87	
			For 1" Mesh Fabric, Add	279.18	
			For 1-1/4" Mesh Fabric, Add	179.70	
			For 1-3/4" Mesh Fabric, Add	111.67	
			For 2-1/8" Mesh Fabric, Deduct	-55.84	
32 31 13 13-0396	EA		10' Wide x 12' High Double Gate Galvanized Steel Without Barbed Wire .....	1,212.91	106.18
			For Gate With Single Barb Wire Arm, Add	98.36	
			For Gate With Double Barb Wire Arm, Add	143.07	
			For 1-5/8" Schedule 40 Pipe Frame, Deduct	-167.66	
			For Aluminized Steel Gate And Post, Add	429.21	
			For Powder Coated Gate And Post, Add	232.49	
			For 1" Mesh Fabric, Add	388.97	
			For 1-1/4" Mesh Fabric, Add	250.37	
			For 1-3/4" Mesh Fabric, Add	155.59	
			For 2-1/8" Mesh Fabric, Deduct	-77.79	
32 31 13 13-0397	EA		12' Wide x 12' High Double Gate Galvanized Steel Without Barbed Wire .....	1,325.81	114.30
			For Gate With Single Barb Wire Arm, Add	108.10	
			For Gate With Double Barb Wire Arm, Add	157.24	
			For 1-5/8" Schedule 40 Pipe Frame, Deduct	-184.27	
			For Aluminized Steel Gate And Post, Add	471.72	
			For Powder Coated Gate And Post, Add	255.52	
			For 1" Mesh Fabric, Add	427.50	
			For 1-1/4" Mesh Fabric, Add	275.17	
			For 1-3/4" Mesh Fabric, Add	171.00	
			For 2-1/8" Mesh Fabric, Deduct	-85.50	
32 31 13 13-0398	EA		14' Wide x 12' High Double Gate Galvanized Steel Without Barbed Wire .....	1,498.34	123.79
			For Gate With Single Barb Wire Arm, Add	123.92	
			For Gate With Double Barb Wire Arm, Add	180.24	
			For 1-5/8" Schedule 40 Pipe Frame, Deduct	-211.22	
			For Aluminized Steel Gate And Post, Add	540.72	
			For Powder Coated Gate And Post, Add	292.89	
			For 1" Mesh Fabric, Add	490.03	
			For 1-1/4" Mesh Fabric, Add	315.42	
			For 1-3/4" Mesh Fabric, Add	196.01	
			For 2-1/8" Mesh Fabric, Deduct	-98.01	
32 31 13 13-0399	EA		16' Wide x 12' High Double Gate Galvanized Steel Without Barbed Wire .....	1,692.52	134.98
			For Gate With Single Barb Wire Arm, Add	141.56	
			For Gate With Double Barb Wire Arm, Add	205.91	
			For 1-5/8" Schedule 40 Pipe Frame, Deduct	-241.30	
			For Aluminized Steel Gate And Post, Add	617.74	
			For Powder Coated Gate And Post, Add	334.61	
			For 1" Mesh Fabric, Add	559.82	
			For 1-1/4" Mesh Fabric, Add	360.35	
			For 1-3/4" Mesh Fabric, Add	223.93	
			For 2-1/8" Mesh Fabric, Deduct	-111.96	



Exterior Improvements			32
Site Improvements			32 30
Fences and Gates			32 31

MINOR	CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
32 31 13 13-0400	EA	18'	Wide x 12' High Double Gate Galvanized Steel Without Barbed Wire ..... For Gate With Single Barb Wire Arm, Add For Gate With Double Barb Wire Arm, Add For 1-5/8" Schedule 40 Pipe Frame, Deduct For Aluminized Steel Gate And Post, Add For Powder Coated Gate And Post, Add For 1" Mesh Fabric, Add For 1-1/4" Mesh Fabric, Add For 1-3/4" Mesh Fabric, Add For 2-1/8" Mesh Fabric, Deduct	5,071.06 508.76 740.01 -867.20 2,220.03 1,202.52 2,011.90 1,295.02 804.76 -402.38	148.65
32 31 13 13-0401	EA	20'	Wide x 12' High Double Gate Galvanized Steel Without Barbed Wire ..... For Gate With Single Barb Wire Arm, Add For Gate With Double Barb Wire Arm, Add For 1-5/8" Schedule 40 Pipe Frame, Deduct For Aluminized Steel Gate And Post, Add For Powder Coated Gate And Post, Add For 1" Mesh Fabric, Add For 1-1/4" Mesh Fabric, Add For 1-3/4" Mesh Fabric, Add For 2-1/8" Mesh Fabric, Deduct	5,638.50 565.74 822.90 -964.33 2,468.69 1,337.21 2,237.25 1,440.07 894.90 -447.45	165.02
32 31 13 13-0402	EA	22'	Wide x 12' High Double Gate Galvanized Steel Without Barbed Wire ..... For Gate With Single Barb Wire Arm, Add For Gate With Double Barb Wire Arm, Add For 1-5/8" Schedule 40 Pipe Frame, Deduct For Aluminized Steel Gate And Post, Add For Powder Coated Gate And Post, Add For 1" Mesh Fabric, Add For 1-1/4" Mesh Fabric, Add For 1-3/4" Mesh Fabric, Add For 2-1/8" Mesh Fabric, Deduct	6,213.59 622.14 904.93 -1,060.47 2,714.79 1,470.51 2,460.28 1,583.63 984.11 -492.06	185.69
32 31 13 13-0403	EA	24'	Wide x 12' High Double Gate Galvanized Steel Without Barbed Wire ..... For Gate With Single Barb Wire Arm, Add For Gate With Double Barb Wire Arm, Add For 1-5/8" Schedule 40 Pipe Frame, Deduct For Aluminized Steel Gate And Post, Add For Powder Coated Gate And Post, Add For 1" Mesh Fabric, Add For 1-1/4" Mesh Fabric, Add For 1-3/4" Mesh Fabric, Add For 2-1/8" Mesh Fabric, Deduct	6,810.92 679.13 987.82 -1,157.60 2,963.46 1,605.21 2,685.63 1,728.68 1,074.25 -537.13	212.12
32 31 13 13-0404	EA	26'	Wide x 12' High Double Gate Galvanized Steel Without Barbed Wire ..... For Gate With Single Barb Wire Arm, Add For Gate With Double Barb Wire Arm, Add For 1-5/8" Schedule 40 Pipe Frame, Deduct For Aluminized Steel Gate And Post, Add For Powder Coated Gate And Post, Add For 1" Mesh Fabric, Add For 1-1/4" Mesh Fabric, Add For 1-3/4" Mesh Fabric, Add For 2-1/8" Mesh Fabric, Deduct	7,424.94 734.94 1,069.00 -1,252.73 3,207.00 1,737.12 2,906.34 1,870.75 1,162.54 -581.27	247.70
32 31 13 13-0405	EA	28'	Wide x 12' High Double Gate Galvanized Steel Without Barbed Wire ..... For Gate With Single Barb Wire Arm, Add For Gate With Double Barb Wire Arm, Add For 1-5/8" Schedule 40 Pipe Frame, Deduct For Aluminized Steel Gate And Post, Add For Powder Coated Gate And Post, Add For 1" Mesh Fabric, Add For 1-1/4" Mesh Fabric, Add For 1-3/4" Mesh Fabric, Add For 2-1/8" Mesh Fabric, Deduct	8,085.59 791.33 1,151.03 -1,348.87 3,453.10 1,870.43 3,129.37 2,014.31 1,251.75 -625.87	296.95
32 31 13 13-0406	EA	30'	Wide x 12' High Double Gate Galvanized Steel Without Barbed Wire ..... For Gate With Single Barb Wire Arm, Add For Gate With Double Barb Wire Arm, Add For 1-5/8" Schedule 40 Pipe Frame, Deduct For Aluminized Steel Gate And Post, Add For Powder Coated Gate And Post, Add For 1" Mesh Fabric, Add For 1-1/4" Mesh Fabric, Add For 1-3/4" Mesh Fabric, Add For 2-1/8" Mesh Fabric, Deduct	8,827.54 848.32 1,233.92 -1,446.00 3,701.76 2,005.12 3,354.72 2,159.36 1,341.89 -670.94	371.49
32 31 13 13-0407	Chain Link Galvanized Steel Sliding Gate		(32 31 13 13-0265) Note: Includes posts (3" diameter posts for up to 15' wide gate and 4" diameter over 15' wide), caps, upper and lower rails, track brackets, roller gate wheel carrier, track rollers, 2" diameter Schedule 40 pipe frame top and bottom bar, and 1-1/2" bracing. Includes truss rod, latches, track rollers with brackets, pipe track clamps and two wheel carriers. Fabric: galvanized chain link 2" mesh # 9 gauge, galvanized 1.2 ounce coating. See CSI section 32 31 13 13-0458 for additional gate accessories, 32 31 13 13-0512 for gate replacement parts.		
32 31 13 13-0408	4' High Chain Link Galvanized Steel Sliding Gate		(32 31 13 13-0407)		
32 31 13 13-0409	EA	10'	Long x 4' High Chain Link Galvanized Steel Sliding Gate ..... For 1" Mesh Fabric, Add For 1-1/4" Mesh Fabric, Add For 1-3/4" Mesh Fabric, Add For 2-1/8" Mesh Fabric, Deduct For Gate With Barb Wire Arm, Add For Vinyl Coated, Add	2,526.96 780.23 502.22 312.09 -156.05 197.30 538.09	366.63

**32 Exterior Improvements****32 30 Site Improvements****32 31 Fences and Gates**

MINOR CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
32 31 13 13-0410	EA	12' Long x 4' High Chain Link Galvanized Steel Sliding Gate .....	3,037.55	442.65
		For 1" Mesh Fabric, Add	936.28	
		For 1-1/4" Mesh Fabric, Add	602.66	
		For 1-3/4" Mesh Fabric, Add	374.51	
		For 2-1/8" Mesh Fabric, Deduct	-187.26	
		For Gate With Barb Wire Arm, Add	236.76	
		For Vinyl Coated, Add	645.71	
32 31 13 13-0411	EA	14' Long x 4' High Chain Link Galvanized Steel Sliding Gate .....	3,544.01	516.40
		For 1" Mesh Fabric, Add	1,092.33	
		For 1-1/4" Mesh Fabric, Add	703.11	
		For 1-3/4" Mesh Fabric, Add	436.93	
		For 2-1/8" Mesh Fabric, Deduct	-218.47	
		For Gate With Barb Wire Arm, Add	276.22	
		For Vinyl Coated, Add	753.33	
32 31 13 13-0412	EA	16' Long x 4' High Chain Link Galvanized Steel Sliding Gate .....	4,056.90	593.55
		For 1" Mesh Fabric, Add	1,248.38	
		For 1-1/4" Mesh Fabric, Add	803.55	
		For 1-3/4" Mesh Fabric, Add	499.35	
		For 2-1/8" Mesh Fabric, Deduct	-249.68	
		For Gate With Barb Wire Arm, Add	315.68	
		For Vinyl Coated, Add	860.95	
32 31 13 13-0413	EA	18' Long x 4' High Chain Link Galvanized Steel Sliding Gate .....	4,564.06	667.76
		For 1" Mesh Fabric, Add	1,404.43	
		For 1-1/4" Mesh Fabric, Add	904.00	
		For 1-3/4" Mesh Fabric, Add	561.77	
		For 2-1/8" Mesh Fabric, Deduct	-280.89	
		For Gate With Barb Wire Arm, Add	355.14	
		For Vinyl Coated, Add	968.57	
32 31 13 13-0414	EA	20' Long x 4' High Chain Link Galvanized Steel Sliding Gate .....	5,057.51	735.07
		For 1" Mesh Fabric, Add	1,560.48	
		For 1-1/4" Mesh Fabric, Add	1,004.44	
		For 1-3/4" Mesh Fabric, Add	624.19	
		For 2-1/8" Mesh Fabric, Deduct	-312.10	
		For Gate With Barb Wire Arm, Add	394.60	
		For Vinyl Coated, Add	1,076.19	
32 31 13 13-0415	EA	24' Long x 4' High Chain Link Galvanized Steel Sliding Gate .....	6,043.52	885.18
		For 1" Mesh Fabric, Add	1,858.82	
		For 1-1/4" Mesh Fabric, Add	1,196.48	
		For 1-3/4" Mesh Fabric, Add	743.53	
		For 2-1/8" Mesh Fabric, Deduct	-371.76	
		For Gate With Barb Wire Arm, Add	470.05	
		For Vinyl Coated, Add	1,281.95	
32 31 13 13-0416	EA	30' Long x 4' High Chain Link Galvanized Steel Sliding Gate .....	8,722.63	1,670.86
		For 1" Mesh Fabric, Add	2,340.71	
		For 1-1/4" Mesh Fabric, Add	1,506.66	
		For 1-3/4" Mesh Fabric, Add	936.28	
		For 2-1/8" Mesh Fabric, Deduct	-468.14	
		For Gate With Barb Wire Arm, Add	591.90	
		For Vinyl Coated, Add	1,614.28	
32 31 13 13-0417	EA	40' Long x 4' High Chain Link Galvanized Steel Sliding Gate .....	11,630.17	2,227.81
		For 1" Mesh Fabric, Add	3,120.94	
		For 1-1/4" Mesh Fabric, Add	2,008.88	
		For 1-3/4" Mesh Fabric, Add	1,248.38	
		For 2-1/8" Mesh Fabric, Deduct	-624.19	
		For Gate With Barb Wire Arm, Add	789.20	
		For Vinyl Coated, Add	2,152.37	
32 31 13 13-0418		5' High Chain Link Galvanized Steel Sliding Gate (32 31 13 13-0407)		
32 31 13 13-0419	EA	10' Long x 5' High Chain Link Galvanized Steel Sliding Gate .....	2,644.45	399.05
		For 1" Mesh Fabric, Add	803.17	
		For 1-1/4" Mesh Fabric, Add	516.98	
		For 1-3/4" Mesh Fabric, Add	321.27	
		For 2-1/8" Mesh Fabric, Deduct	-160.63	
		For Gate With Barb Wire Arm, Add	203.10	
		For Vinyl Coated, Add	553.91	
32 31 13 13-0420	EA	12' Long x 5' High Chain Link Galvanized Steel Sliding Gate .....	3,172.21	478.34
		For 1" Mesh Fabric, Add	963.80	
		For 1-1/4" Mesh Fabric, Add	620.38	
		For 1-3/4" Mesh Fabric, Add	385.52	
		For 2-1/8" Mesh Fabric, Deduct	-192.76	
		For Gate With Barb Wire Arm, Add	243.72	
		For Vinyl Coated, Add	664.69	
32 31 13 13-0421	EA	14' Long x 5' High Chain Link Galvanized Steel Sliding Gate .....	3,700.73	557.97
		For 1" Mesh Fabric, Add	1,124.44	
		For 1-1/4" Mesh Fabric, Add	723.77	
		For 1-3/4" Mesh Fabric, Add	449.77	
		For 2-1/8" Mesh Fabric, Deduct	-224.89	
		For Gate With Barb Wire Arm, Add	284.34	
		For Vinyl Coated, Add	775.47	
32 31 13 13-0422	EA	16' Long x 5' High Chain Link Galvanized Steel Sliding Gate .....	4,229.72	637.83
		For 1" Mesh Fabric, Add	1,285.07	
		For 1-1/4" Mesh Fabric, Add	827.17	
		For 1-3/4" Mesh Fabric, Add	514.03	
		For 2-1/8" Mesh Fabric, Deduct	-257.01	
		For Gate With Barb Wire Arm, Add	324.96	
		For Vinyl Coated, Add	886.25	





Exterior Improvements			32
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MINOR	CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
32 31 13 13-0423	EA	18'	Long x 5' High Chain Link Galvanized Steel Sliding Gate.....	4,758.17	717.34
			For 1" Mesh Fabric, Add	1,445.70	
			For 1-1/4" Mesh Fabric, Add	930.56	
			For 1-3/4" Mesh Fabric, Add	578.28	
			For 2-1/8" Mesh Fabric, Deduct	-289.14	
			For Gate With Barb Wire Arm, Add	365.58	
			For Vinyl Coated, Add	997.03	
32 31 13 13-0424	EA	20'	Long x 5' High Chain Link Galvanized Steel Sliding Gate.....	5,286.92	797.08
			For 1" Mesh Fabric, Add	1,606.33	
			For 1-1/4" Mesh Fabric, Add	1,033.96	
			For 1-3/4" Mesh Fabric, Add	642.53	
			For 2-1/8" Mesh Fabric, Deduct	-321.27	
			For Gate With Barb Wire Arm, Add	406.20	
			For Vinyl Coated, Add	1,107.82	
32 31 13 13-0425	EA	24'	Long x 5' High Chain Link Galvanized Steel Sliding Gate.....	6,313.97	957.58
			For 1" Mesh Fabric, Add	1,913.46	
			For 1-1/4" Mesh Fabric, Add	1,231.65	
			For 1-3/4" Mesh Fabric, Add	765.38	
			For 2-1/8" Mesh Fabric, Deduct	-382.69	
			For Gate With Barb Wire Arm, Add	483.86	
			For Vinyl Coated, Add	1,319.63	
32 31 13 13-0426	EA	30'	Long x 5' High Chain Link Galvanized Steel Sliding Gate.....	7,930.80	1,195.91
			For 1" Mesh Fabric, Add	2,409.50	
			For 1-1/4" Mesh Fabric, Add	1,550.94	
			For 1-3/4" Mesh Fabric, Add	963.80	
			For 2-1/8" Mesh Fabric, Deduct	-481.90	
			For Gate With Barb Wire Arm, Add	609.30	
			For Vinyl Coated, Add	1,661.72	
32 31 13 13-0427	EA	40'	Long x 5' High Chain Link Galvanized Steel Sliding Gate.....	10,573.83	1,594.16
			For 1" Mesh Fabric, Add	3,212.66	
			For 1-1/4" Mesh Fabric, Add	2,067.92	
			For 1-3/4" Mesh Fabric, Add	1,285.06	
			For 2-1/8" Mesh Fabric, Deduct	-642.53	
			For Gate With Barb Wire Arm, Add	812.40	
			For Vinyl Coated, Add	2,215.63	
32 31 13 13-0428 6' High Chain Link Galvanized Steel Sliding Gate (32 31 13 13-0407)					
32 31 13 13-0429	EA	10'	Long x 6' High Chain Link Galvanized Steel Sliding Gate.....	2,818.85	467.84
			For 1" Mesh Fabric, Add	819.22	
			For 1-1/4" Mesh Fabric, Add	527.31	
			For 1-3/4" Mesh Fabric, Add	327.69	
			For 2-1/8" Mesh Fabric, Deduct	-163.84	
			For Gate With Barb Wire Arm, Add	207.16	
			For Vinyl Coated, Add	564.98	
32 31 13 13-0430	EA	12'	Long x 6' High Chain Link Galvanized Steel Sliding Gate.....	3,379.33	559.67
			For 1" Mesh Fabric, Add	983.06	
			For 1-1/4" Mesh Fabric, Add	632.77	
			For 1-3/4" Mesh Fabric, Add	393.22	
			For 2-1/8" Mesh Fabric, Deduct	-196.61	
			For Gate With Barb Wire Arm, Add	248.59	
			For Vinyl Coated, Add	677.97	
32 31 13 13-0431	EA	14'	Long x 6' High Chain Link Galvanized Steel Sliding Gate.....	3,942.34	652.85
			For 1" Mesh Fabric, Add	1,146.91	
			For 1-1/4" Mesh Fabric, Add	738.24	
			For 1-3/4" Mesh Fabric, Add	458.76	
			For 2-1/8" Mesh Fabric, Deduct	-229.38	
			For Gate With Barb Wire Arm, Add	290.02	
			For Vinyl Coated, Add	790.97	
32 31 13 13-0432	EA	16'	Long x 6' High Chain Link Galvanized Steel Sliding Gate.....	4,505.78	746.26
			For 1" Mesh Fabric, Add	1,310.75	
			For 1-1/4" Mesh Fabric, Add	843.70	
			For 1-3/4" Mesh Fabric, Add	524.30	
			For 2-1/8" Mesh Fabric, Deduct	-262.15	
			For Gate With Barb Wire Arm, Add	331.45	
			For Vinyl Coated, Add	903.97	
32 31 13 13-0433	EA	18'	Long x 6' High Chain Link Galvanized Steel Sliding Gate.....	5,068.79	839.44
			For 1" Mesh Fabric, Add	1,474.59	
			For 1-1/4" Mesh Fabric, Add	949.16	
			For 1-3/4" Mesh Fabric, Add	589.84	
			For 2-1/8" Mesh Fabric, Deduct	-294.92	
			For Gate With Barb Wire Arm, Add	372.89	
			For Vinyl Coated, Add	1,016.96	
32 31 13 13-0434	EA	20'	Long x 6' High Chain Link Galvanized Steel Sliding Gate.....	5,638.09	935.79
			For 1" Mesh Fabric, Add	1,638.44	
			For 1-1/4" Mesh Fabric, Add	1,054.63	
			For 1-3/4" Mesh Fabric, Add	655.37	
			For 2-1/8" Mesh Fabric, Deduct	-327.69	
			For Gate With Barb Wire Arm, Add	414.32	
			For Vinyl Coated, Add	1,129.96	
32 31 13 13-0435	EA	24'	Long x 6' High Chain Link Galvanized Steel Sliding Gate.....	6,725.51	1,119.44
			For 1" Mesh Fabric, Add	1,951.70	
			For 1-1/4" Mesh Fabric, Add	1,256.27	
			For 1-3/4" Mesh Fabric, Add	780.68	
			For 2-1/8" Mesh Fabric, Deduct	-390.34	
			For Gate With Barb Wire Arm, Add	493.53	
			For Vinyl Coated, Add	1,346.00	

**32 Exterior Improvements****32 30 Site Improvements****32 31 Fences and Gates**

MINOR CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
32 31 13 13-0436	EA	30' Long x 6' High Chain Link Galvanized Steel Sliding Gate .....	8,449.02	1,399.67
		For 1" Mesh Fabric, Add	2,457.65	
		For 1-1/4" Mesh Fabric, Add	1,581.94	
		For 1-3/4" Mesh Fabric, Add	983.06	
		For 2-1/8" Mesh Fabric, Deduct	-491.53	
		For Gate With Barb Wire Arm, Add	621.48	
		For Vinyl Coated, Add	1,694.93	
32 31 13 13-0437	EA	40' Long x 6' High Chain Link Galvanized Steel Sliding Gate .....	11,263.81	1,865.36
		For 1" Mesh Fabric, Add	3,276.87	
		For 1-1/4" Mesh Fabric, Add	2,109.25	
		For 1-3/4" Mesh Fabric, Add	1,310.75	
		For 2-1/8" Mesh Fabric, Deduct	-655.37	
		For Gate With Barb Wire Arm, Add	828.63	
		For Vinyl Coated, Add	2,259.91	
32 31 13 13-0438		7' High Chain Link Galvanized Steel Sliding Gate (32 31 13 13-0407)		
32 31 13 13-0439	EA	10' Long x 7' High Chain Link Galvanized Steel Sliding Gate .....	3,000.72	521.83
		For 1" Mesh Fabric, Add	851.33	
		For 1-1/4" Mesh Fabric, Add	547.98	
		For 1-3/4" Mesh Fabric, Add	340.53	
		For 2-1/8" Mesh Fabric, Deduct	-170.27	
		For Gate With Barb Wire Arm, Add	215.28	
		For Vinyl Coated, Add	587.12	
32 31 13 13-0440	EA	12' Long x 7' High Chain Link Galvanized Steel Sliding Gate .....	3,600.05	625.74
		For 1" Mesh Fabric, Add	1,021.61	
		For 1-1/4" Mesh Fabric, Add	657.59	
		For 1-3/4" Mesh Fabric, Add	408.65	
		For 2-1/8" Mesh Fabric, Deduct	-204.32	
		For Gate With Barb Wire Arm, Add	258.34	
		For Vinyl Coated, Add	704.56	
32 31 13 13-0441	EA	14' Long x 7' High Chain Link Galvanized Steel Sliding Gate .....	4,201.05	730.56
		For 1" Mesh Fabric, Add	1,191.85	
		For 1-1/4" Mesh Fabric, Add	767.17	
		For 1-3/4" Mesh Fabric, Add	476.74	
		For 2-1/8" Mesh Fabric, Deduct	-238.37	
		For Gate With Barb Wire Arm, Add	301.39	
		For Vinyl Coated, Add	821.96	
32 31 13 13-0442	EA	16' Long x 7' High Chain Link Galvanized Steel Sliding Gate .....	4,800.29	834.47
		For 1" Mesh Fabric, Add	1,362.12	
		For 1-1/4" Mesh Fabric, Add	876.76	
		For 1-3/4" Mesh Fabric, Add	544.85	
		For 2-1/8" Mesh Fabric, Deduct	-272.42	
		For Gate With Barb Wire Arm, Add	344.44	
		For Vinyl Coated, Add	939.39	
32 31 13 13-0443	EA	18' Long x 7' High Chain Link Galvanized Steel Sliding Gate .....	5,400.51	938.94
		For 1" Mesh Fabric, Add	1,532.38	
		For 1-1/4" Mesh Fabric, Add	986.36	
		For 1-3/4" Mesh Fabric, Add	612.95	
		For 2-1/8" Mesh Fabric, Deduct	-306.48	
		For Gate With Barb Wire Arm, Add	387.50	
		For Vinyl Coated, Add	1,056.81	
32 31 13 13-0444	EA	20' Long x 7' High Chain Link Galvanized Steel Sliding Gate .....	5,999.99	1,042.97
		For 1" Mesh Fabric, Add	1,702.65	
		For 1-1/4" Mesh Fabric, Add	1,095.96	
		For 1-3/4" Mesh Fabric, Add	681.06	
		For 2-1/8" Mesh Fabric, Deduct	-340.53	
		For Gate With Barb Wire Arm, Add	430.55	
		For Vinyl Coated, Add	1,174.24	
32 31 13 13-0445	EA	24' Long x 7' High Chain Link Galvanized Steel Sliding Gate .....	7,165.53	1,251.48
		For 1" Mesh Fabric, Add	2,028.19	
		For 1-1/4" Mesh Fabric, Add	1,305.50	
		For 1-3/4" Mesh Fabric, Add	811.28	
		For 2-1/8" Mesh Fabric, Deduct	-405.64	
		For Gate With Barb Wire Arm, Add	512.88	
		For Vinyl Coated, Add	1,398.75	
32 31 13 13-0446	EA	30' Long x 7' High Chain Link Galvanized Steel Sliding Gate .....	8,999.96	1,564.35
		For 1" Mesh Fabric, Add	2,553.96	
		For 1-1/4" Mesh Fabric, Add	1,643.93	
		For 1-3/4" Mesh Fabric, Add	1,021.59	
		For 2-1/8" Mesh Fabric, Deduct	-510.79	
		For Gate With Barb Wire Arm, Add	645.83	
		For Vinyl Coated, Add	1,761.35	
32 31 13 13-0447	EA	40' Long x 7' High Chain Link Galvanized Steel Sliding Gate .....	11,999.96	2,085.83
		For 1" Mesh Fabric, Add	3,405.29	
		For 1-1/4" Mesh Fabric, Add	2,191.91	
		For 1-3/4" Mesh Fabric, Add	1,362.12	
		For 2-1/8" Mesh Fabric, Deduct	-681.06	
		For Gate With Barb Wire Arm, Add	861.11	
		For Vinyl Coated, Add	2,348.48	

32 31 13 13-0448 8' High Chain Link Galvanized Steel Sliding Gate (32 31 13 13-0407)



Exterior Improvements			32	32
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MINOR	CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
32 31 13 13-0449	EA		10' Long x 8' High Chain Link Galvanized Steel Sliding Gate.....	3,145.68	565.31
			For 1" Mesh Fabric, Add	876.55	
			For 1-1/4" Mesh Fabric, Add	564.22	
			For 1-3/4" Mesh Fabric, Add	350.62	
			For 2-1/8" Mesh Fabric, Deduct	-175.31	
			For Gate With Barb Wire Arm, Add	221.66	
			For Vinyl Coated, Add	604.52	
32 31 13 13-0450	EA		12' Long x 8' High Chain Link Galvanized Steel Sliding Gate.....	3,771.57	676.79
			For 1" Mesh Fabric, Add	1,051.86	
			For 1-1/4" Mesh Fabric, Add	677.06	
			For 1-3/4" Mesh Fabric, Add	420.74	
			For 2-1/8" Mesh Fabric, Deduct	-210.37	
			For Gate With Barb Wire Arm, Add	265.99	
			For Vinyl Coated, Add	725.42	
32 31 13 13-0451	EA		14' Long x 8' High Chain Link Galvanized Steel Sliding Gate.....	4,400.22	789.63
			For 1" Mesh Fabric, Add	1,227.16	
			For 1-1/4" Mesh Fabric, Add	789.90	
			For 1-3/4" Mesh Fabric, Add	490.86	
			For 2-1/8" Mesh Fabric, Deduct	-245.43	
			For Gate With Barb Wire Arm, Add	310.32	
			For Vinyl Coated, Add	846.32	
32 31 13 13-0452	EA		16' Long x 8' High Chain Link Galvanized Steel Sliding Gate.....	5,029.09	902.46
			For 1" Mesh Fabric, Add	1,402.47	
			For 1-1/4" Mesh Fabric, Add	902.74	
			For 1-3/4" Mesh Fabric, Add	560.99	
			For 2-1/8" Mesh Fabric, Deduct	-280.49	
			For Gate With Barb Wire Arm, Add	354.65	
			For Vinyl Coated, Add	967.22	
32 31 13 13-0453	EA		18' Long x 8' High Chain Link Galvanized Steel Sliding Gate.....	5,656.71	1,014.85
			For 1" Mesh Fabric, Add	1,577.78	
			For 1-1/4" Mesh Fabric, Add	1,015.58	
			For 1-3/4" Mesh Fabric, Add	631.11	
			For 2-1/8" Mesh Fabric, Deduct	-315.56	
			For Gate With Barb Wire Arm, Add	398.98	
			For Vinyl Coated, Add	1,088.12	
32 31 13 13-0454	EA		20' Long x 8' High Chain Link Galvanized Steel Sliding Gate.....	6,285.70	1,127.79
			For 1" Mesh Fabric, Add	1,753.09	
			For 1-1/4" Mesh Fabric, Add	1,128.43	
			For 1-3/4" Mesh Fabric, Add	701.24	
			For 2-1/8" Mesh Fabric, Deduct	-350.62	
			For Gate With Barb Wire Arm, Add	443.31	
			For Vinyl Coated, Add	1,209.03	
32 31 13 13-0455	EA		24' Long x 8' High Chain Link Galvanized Steel Sliding Gate.....	7,507.63	1,353.47
			For 1" Mesh Fabric, Add	2,088.28	
			For 1-1/4" Mesh Fabric, Add	1,344.18	
			For 1-3/4" Mesh Fabric, Add	835.31	
			For 2-1/8" Mesh Fabric, Deduct	-417.66	
			For Gate With Barb Wire Arm, Add	528.07	
			For Vinyl Coated, Add	1,440.19	
32 31 13 13-0456	EA		30' Long x 8' High Chain Link Galvanized Steel Sliding Gate.....	9,429.39	1,692.09
			For 1" Mesh Fabric, Add	2,629.64	
			For 1-1/4" Mesh Fabric, Add	1,692.64	
			For 1-3/4" Mesh Fabric, Add	1,051.86	
			For 2-1/8" Mesh Fabric, Deduct	-525.93	
			For Gate With Barb Wire Arm, Add	664.97	
			For Vinyl Coated, Add	1,813.55	
32 31 13 13-0457	EA		40' Long x 8' High Chain Link Galvanized Steel Sliding Gate.....	12,569.14	2,254.47
			For 1" Mesh Fabric, Add	3,506.18	
			For 1-1/4" Mesh Fabric, Add	2,256.85	
			For 1-3/4" Mesh Fabric, Add	1,402.47	
			For 2-1/8" Mesh Fabric, Deduct	-701.24	
			For Gate With Barb Wire Arm, Add	886.62	
			For Vinyl Coated, Add	2,418.06	

#### 32 31 13 13-0458 Gate Accessories (32 31 13 13-0265)

32 31 13 13-0459	EA	Gate Center Stop, Cast Steel, Ground.....	42.23	
32 31 13 13-0460	EA	Gate Latch, Malleable Galvanized Steel.....	47.51	
32 31 13 13-0461	EA	Gate Keeper, Full Length, Galvanized Steel.....	219.39	
32 31 13 13-0462	EA	Gate Keeper Hold-Open For Cantilever Gate.....	106.07	18.02
32 31 13 13-0463	EA	Heavy Duty Gate Latch, Malleable Galvanized Steel.....	58.91	
32 31 13 13-0464	EA	Gate Keeper, Full Length, Stainless Steel, Internal Locking Device With 3/4" Stainless Steel Rod For 3' To 5' High Gate.....	822.45	
32 31 13 13-0465	EA	Gate Keeper, Full Length, Stainless Steel, Internal Locking Device With 3/4" Stainless Steel Rod For >5' To 8' High Gate.....	882.26	
32 31 13 13-0466	EA	Gate Keeper, Full Length, Stainless Steel, Internal Locking Device With 3/4" Stainless Steel Rod For >8' To 12' High Gate.....	942.05	
32 31 13 13-0467	LF	Aluminum V-Groove Gate Track.....	58.16	9.85
32 31 13 13-0468	LF	Galvanized Steel V-Groove Gate Track.....	44.18	9.85

#### 32 31 13 13-0469 Vertical-Pivot Lift Gate (32 31 13 13-0265)

Note: Includes 2" diameter Schedule 40 pipe frame top and bottom bar, and 1-1/2" bracing. Includes operator.  
Fabric: galvanized chain link 2" mesh # 9 gauge, galvanized 1.2 ounce coating. Width listed on tasks is opening width of gate.

**32 Exterior Improvements****32 30 Site Improvements****32 31 Fences and Gates**

MINOR CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
32 31 13 13-0470	EA	5' High x 12' Wide Galvanized Vertical-Pivot Lift Gate..... For Curb Notch, Add For Prewired Loop Kit, Add	19,631.60 239.00 245.00	847.12
32 31 13 13-0471	EA	5' High x 14' Wide Galvanized Vertical-Pivot Lift Gate..... For Curb Notch, Add For Prewired Loop Kit, Add	19,970.45 239.00 245.00	1,016.55
32 31 13 13-0472	EA	5' High x 16' Wide Galvanized Vertical-Pivot Lift Gate..... For Curb Notch, Add For Prewired Loop Kit, Add For Wind Bracing, Add	20,309.30 239.00 245.00 287.50	1,185.96
32 31 13 13-0473	EA	5' High x 18' Wide Galvanized Vertical-Pivot Lift Gate..... For Curb Notch, Add For Prewired Loop Kit, Add For Wind Bracing, Add	20,873.07 239.00 245.00 317.50	1,355.39
32 31 13 13-0474	EA	5' High x 20' Wide Galvanized Vertical-Pivot Lift Gate..... For Curb Notch, Add For Prewired Loop Kit, Add For Wind Bracing, Add	21,425.59 239.00 245.00 317.50	1,524.81
32 31 13 13-0475	EA	6' High x 12' Wide Galvanized Vertical-Pivot Lift Gate..... For Curb Notch, Add For Prewired Loop Kit, Add	20,578.47 239.00 245.00	1,101.25
32 31 13 13-0476	EA	6' High x 14' Wide Galvanized Vertical-Pivot Lift Gate..... For Curb Notch, Add For Prewired Loop Kit, Add	20,917.32 239.00 245.00	1,270.68
32 31 13 13-0477	EA	6' High x 16' Wide Galvanized Vertical-Pivot Lift Gate..... For Curb Notch, Add For Prewired Loop Kit, Add For Wind Bracing, Add	21,256.17 239.00 245.00 287.50	1,440.10
32 31 13 13-0478	EA	6' High x 18' Wide Galvanized Vertical-Pivot Lift Gate..... For Curb Notch, Add For Prewired Loop Kit, Add For Wind Bracing, Add	21,718.73 239.00 245.00 317.50	1,609.53
32 31 13 13-0479	EA	6' High x 20' Wide Galvanized Vertical-Pivot Lift Gate..... For Curb Notch, Add For Prewired Loop Kit, Add For Wind Bracing, Add	22,372.45 239.00 245.00 317.50	1,778.95
32 31 13 13-0480		<b>Reinforced Gate</b> (32 31 13 13-0265) Note: With cross bracing, tension rods, gate keeper (full height, stainless steel rod, internal locking device, gate stop), off-set hinges, and 6 gauge fabric. Excludes gate posts.		
32 31 13 13-0481	LF	Reinforced Single Gate, 4' High, Galvanized..... For Vinyl Coated, Add For Powder Coated, Add For Aluminum Coated, Add	568.42 327.40 436.54 682.09	11.38
32 31 13 13-0482	LF	Reinforced Single Gate, 5' High, Galvanized..... For Vinyl Coated, Add For Powder Coated, Add For Aluminum Coated, Add	609.90 351.15 468.20 731.56	12.33
32 31 13 13-0483	LF	Reinforced Single Gate, 6' High, Galvanized..... For Vinyl Coated, Add For Powder Coated, Add For Aluminum Coated, Add	650.92 374.06 498.74 779.29	13.75
32 31 13 13-0484	LF	Reinforced Single Gate, 7' High, Galvanized..... For Vinyl Coated, Add For Powder Coated, Add For Aluminum Coated, Add	689.67 396.17 528.22 825.35	14.70
32 31 13 13-0485	LF	Reinforced Single Gate, 8' High, Galvanized..... For Vinyl Coated, Add For Powder Coated, Add For Aluminum Coated, Add	729.65 417.88 557.17 870.58	16.59
32 31 13 13-0486	LF	Reinforced Double Gate, 4' High, Galvanized..... For Vinyl Coated, Add For Powder Coated, Add For Aluminum Coated, Add	388.25 219.30 292.40 456.88	11.38
32 31 13 13-0487	LF	Reinforced Double Gate, 5' High, Galvanized..... For Vinyl Coated, Add For Powder Coated, Add For Aluminum Coated, Add	435.87 246.73 328.98 514.03	12.33
32 31 13 13-0488	LF	Reinforced Double Gate, 6' High, Galvanized..... For Vinyl Coated, Add For Powder Coated, Add For Aluminum Coated, Add	482.79 273.18 364.24 569.13	13.75
32 31 13 13-0489	LF	Reinforced Double Gate, 7' High, Galvanized..... For Vinyl Coated, Add For Powder Coated, Add For Aluminum Coated, Add	620.00 354.37 472.49 738.26	14.70
32 31 13 13-0490	LF	Reinforced Double Gate, 8' High, Galvanized..... For Vinyl Coated, Add For Powder Coated, Add For Aluminum Coated, Add	755.84 433.59 578.12 903.31	16.59

32 31 13 13-0491 Accessories (32 31 13 13)

32 31 13 13-0492 Barbed And Concertina Wire (32 31 13 13-0491)



Exterior Improvements		32
Site Improvements		32 30
Fences and Gates		32 31

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MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
32 31 13 13-0493 Single Strand Barbed Wire (32 31 13 13-0492)		
32 31 13 13-0494 LF Galvanized Barbed Wire, Per Strand.....	1.04	0.47
Note: Includes clips. 4 points 12-1/2 Gauge, Class I.		
For >500 To 2,000, Deduct	-0.10	
For >2,000, Deduct	-0.15	
32 31 13 13-0495 LF Vinyl Coated Barbed Wire (Fused), Per Strand .....	1.19	0.47
Note: Includes clips.		
For >500 To 2,000, Deduct	-0.11	
For >2,000, Deduct	-0.16	
32 31 13 13-0496 EA Barbed Wire Extension Arms 3 Strands (Single Arm).....	11.58	7.58
32 31 13 13-0497 EA Barbed Wire Extension Arms 6 Strands (Double Arm) .....	18.95	9.10
32 31 13 13-0498 EA Barbed Wire Eye Tops (For Single Strand).....	11.79	7.58
32 31 13 13-0499 Tension Bar (32 31 13 13-0491)		
32 31 13 13-0500 EA 3' Long x 5/8" Wide x 3/16" Thick Galvanized Steel Tension Bar .....	15.24	
32 31 13 13-0501 EA 3-1/2' Long x 5/8" Wide x 3/16" Thick Galvanized Steel Tension Bar .....	16.22	
32 31 13 13-0502 EA 4' Long x 3/4" Wide x 3/16" Thick Galvanized Steel Tension Bar .....	20.10	
32 31 13 13-0503 EA 5' Long x 3/4" Wide x 3/16" Thick Galvanized Steel Tension Bar .....	23.33	
32 31 13 13-0504 EA 6' Long x 3/4" Wide x 3/16" Thick Galvanized Steel Tension Bar .....	27.62	
32 31 13 13-0505 EA 7' Long x 3/4" Wide x 3/16" Thick Galvanized Steel Tension Bar .....	32.13	
32 31 13 13-0506 EA 8' Long x 3/4" Wide x 3/16" Thick Galvanized Steel Tension Bar .....	36.33	
32 31 13 13-0507 EA 9' Long x 3/4" Wide x 3/16" Thick Galvanized Steel Tension Bar .....	43.70	
32 31 13 13-0508 EA 10' Long x 3/4" Wide x 3/16" Thick Galvanized Steel Tension Bar .....	52.31	
32 31 13 13-0509 Truss Rods (32 31 13 13-0491)		
32 31 13 13-0510 LF 3/8" Diameter Truss Rods.....	2.06	0.51
32 31 13 13-0511 Fence And Gate Repair And Replacement (32 31 13 13)		
32 31 13 13-0512 Fence And Gate Parts Replacement (32 31 13 13-0511)		
32 31 13 13-0513 EA Cantilever Roller Assembly, Ball Bearing With Fittings, Replacement.....	127.78	
32 31 13 13-0514 EA Sliding Gate Roller Assembly Replacement .....	123.74	
32 31 13 13-0515 EA Rod And Lock Gate Keeper Replacement .....	128.09	
32 31 13 13-0516 EA Galvanized Gate Holdback Replacement .....	26.71	
32 31 13 13-0517 LF 3/8" Cross Bracing Rod Replacement .....	1.61	
32 31 13 13-0518 LF 1-5/8" Diagonal Pipe Bracing Replacement.....	2.54	
32 31 13 13-0519 EA 2-3/8" To 2-1/2" Diameter Galvanized Steel Gate Hinge With Bolts, Replacement .....	26.53	
32 31 13 13-0520 EA 2-7/8" To 3" Diameter Galvanized Steel Gate Hinge With Bolts, Replacement .....	30.20	
32 31 13 13-0521 EA 3-1/2" To 4" Diameter Galvanized Steel Gate Hinge With Bolts, Replacement .....	34.02	
32 31 13 13-0522 EA 6-1/2" To 6-5/8" Diameter Galvanized Steel Gate Hinge With Bolts, Replacement .....	50.76	
32 31 13 13-0523 EA 8-5/8" Diameter Galvanized Steel Gate Hinge With Bolts, Replacement.....	114.67	
32 31 13 13-0524 EA 2-1/2" x 2" Off Set Gate Hinge Replacement .....	25.71	
32 31 13 13-0525 EA 3" x 2" Off Set Gate Hinge Replacement .....	26.81	
32 31 13 13-0526 EA 4" x 2" Off Set Gate Hinge Replacement .....	28.58	
32 31 13 13-0527 EA 6-5/8" x 2" Off Set Gate Hinge Replacement .....	47.95	
32 31 13 13-0528 EA 8-5/8" x 2" Off Set Gate Hinge Replacement .....	76.78	
32 31 13 13-0529 EA 1-5/8" Aluminum Die-Cast Post Cap Replacement.....	5.14	
32 31 13 13-0530 EA 2" Aluminum Die-Cast Post Cap Replacement .....	5.63	
32 31 13 13-0531 EA 2-1/2" Aluminum Die-Cast Post Cap Replacement.....	6.53	
32 31 13 13-0532 EA 3" Aluminum Die-Cast Post Cap Replacement .....	7.56	
32 31 13 13-0533 EA 2" Galvanized Post Cap Replacement.....	6.09	
32 31 13 13-0534 EA 2-1/2" Galvanized Post Cap Replacement.....	6.58	
32 31 13 13-0535 EA 3" Galvanized Post Cap Replacement.....	7.57	
32 31 13 13-0536 EA 4" Galvanized Post Cap Replacement.....	11.57	
32 31 13 13-0537 EA 6-5/8" Galvanized Post Cap Replacement.....	22.68	
32 31 13 13-0538 EA 8-5/8" Galvanized Post Cap Replacement.....	37.67	
32 31 13 13-0539 EA 1-5/8" Boulevard Clamp Replacement.....	10.02	
32 31 13 13-0540 EA 2" Boulevard Clamp Replacement .....	12.25	
32 31 13 13-0541 EA 2-1/2" Boulevard Clamp Replacement.....	14.37	
32 31 13 13-0542 EA 3" Boulevard Clamp Replacement.....	17.43	
32 31 13 13-0543 EA 1-5/8" Gate Brace Or End Rail Clamp Replacement .....	9.80	
32 31 13 13-0544 EA 2" Gate Brace Or End Rail Clamp Replacement .....	11.94	
32 31 13 13-0545 EA 2-1/2" Gate Brace Or End Rail Clamp Replacement .....	14.06	
32 31 13 13-0546 EA 3" Gate Brace Or End Rail Clamp Replacement .....	17.10	
32 31 13 13-0547 EA 1-3/8" Heavy Duty Galvanized Tension Band With Bolt, Replacement.....	10.45	
32 31 13 13-0548 EA 1-5/8" Heavy Duty Galvanized Tension Band With Bolt, Replacement .....	10.55	
32 31 13 13-0549 EA 2" Heavy Duty Galvanized Tension Band With Bolt, Replacement.....	10.82	
32 31 13 13-0550 EA 2-1/2" Heavy Duty Galvanized Tension Band With Bolt, Replacement.....	10.70	
32 31 13 13-0551 EA 3" Heavy Duty Galvanized Tension Band With Bolt, Replacement.....	10.90	
32 31 13 13-0552 EA 3-1/2" Heavy Duty Galvanized Tension Band With Bolt, Replacement.....	11.07	
32 31 13 13-0553 EA 4" Heavy Duty Galvanized Tension Band With Bolt, Replacement.....	11.55	
32 31 13 13-0554 EA 6-5/8" Heavy Duty Galvanized Tension Band With Bolt, Replacement.....	15.03	
32 31 13 13-0555 Removal And Reinstallation Of Chain Link Fences (32 31 13 13)		
Note: Includes removal, storage, cleaning and reinstallation of fence fabric, rails and other components. Excludes post work.		
32 31 13 13-0556 LF Removal And Reinstallation Of Chain Link Fence Up To 5' Height.....	18.96	

**32 Exterior Improvements****32 30 Site Improvements****32 31 Fences and Gates**MINOR  
CSI UOM DESCRIPTIONTOTAL DIRECT  
UNIT COST DEMOLITION  
UNIT COST

32 31 13 13-0557 LF Removal And Reinstallation Of Chain Link Fence 6' To 12' Height.....28.44

**32 31 29 Wood Fences and Gates (32 31)**

See CSI section 32 31 13 13-0001 for drilling for augering holes and backfill.

**32 31 29 00-0001 Basket Weave (32 31 29)**

Note: 3/8" x 4" boards, 4" x 4" post

32 31 29 00-0002 LF 6' High #1 Cedar Basket Weave Fence 3/8" x 4" Boards, 4" x 4" Post .....39.76 3.25  
*For Fastening With Screws Instead Of Nails, Add* 2.33  
 32 31 29 00-0003 LF 6' High, Pressure Treated Pine Basket Weave 3/8" x 4" Boards, 4" x 4" Post .....26.15 3.25  
*For Fastening With Screws Instead Of Nails, Add* 1.67

**32 31 29 00-0004 Board Fence (32 31 29)**

Note: 1x4" board, 2x4" rail, 4x4" post.

32 31 29 00-0005 LF Two 2" x 4" Rails, 3' High 1" x 4" Boards, Preservative Treated Board Fence.....26.33 3.25  
*For 1" x 6" Boards, Deduct* -2.70  
*For 1" x 3" Boards (Stockade Top), Add* 3.34  
*For Fastening With Screws Instead Of Nails, Add* 1.69  
 32 31 29 00-0006 LF Three 2" x 4" Rails, 4' High 1" x 4" Boards, Preservative Treated Board Fence.....29.35 3.25  
*For 1" x 6" Boards, Deduct* -2.94  
*For 1" x 3" Boards (Stockade Top), Add* 3.62  
*For Fastening With Screws Instead Of Nails, Add* 1.87  
 32 31 29 00-0007 LF Three 2" x 4" Rails, 5' High 1" x 4" Boards, Preservative Treated Board Fence .....32.90 3.25  
*For 1" x 6" Boards, Deduct* -3.15  
*For 1" x 3" Boards (Stockade Top), Add* 3.83  
*For Fastening With Screws Instead Of Nails, Add* 2.06  
 32 31 29 00-0008 LF Three 2" x 4" Rails, 6' High 1" x 4" Boards, Preservative Treated Board Fence .....35.18 3.25  
*For 1" x 6" Boards, Deduct* -3.32  
*For 1" x 3" Boards (Stockade Top), Add* 4.01  
*For Fastening With Screws Instead Of Nails, Add* 2.19  
 32 31 29 00-0009 LF Three 2" x 4" Rails, 8' High 1" x 4" Boards, Preservative Treated Board Fence .....37.64 3.25  
*For 1" x 6" Boards, Deduct* -3.49  
*For 1" x 3" Boards (Stockade Top), Add* 4.20  
*For Fastening With Screws Instead Of Nails, Add* 2.33  
 32 31 29 00-0010 LF Two 2" x 4" Rails, 3' High 1" x 4" #2 Grade Western Cedar Board Fence .....28.24 3.25  
*For 1" x 6" Boards, Deduct* -2.78  
*For 1" x 3" Boards (Stockade Top), Add* 3.39  
*For Fastening With Screws Instead Of Nails, Add* 1.79  
 32 31 29 00-0011 LF Two 2" x 4" Rails, 4' High 1" x 4" #2 Grade Western Cedar Board Fence .....30.83 3.25  
*For 1" x 6" Boards, Deduct* -3.00  
*For 1" x 3" Boards (Stockade Top), Add* 3.66  
*For Fastening With Screws Instead Of Nails, Add* 1.94  
 32 31 29 00-0012 LF Three 2" x 4" Rails, 5' High 1" x 4" #2 Grade Western Cedar Board Fence.....32.90 3.25  
*For 1" x 6" Boards, Deduct* -3.15  
*For 1" x 3" Boards (Stockade Top), Add* 3.83  
*For Fastening With Screws Instead Of Nails, Add* 2.06  
 32 31 29 00-0013 LF Three 2" x 4" Rails, 6' High 1" x 4" #2 Grade Western Cedar Board Fence.....35.18 3.25  
*For 1" x 6" Boards, Deduct* -3.32  
*For 1" x 3" Boards (Stockade Top), Add* 4.01  
*For Fastening With Screws Instead Of Nails, Add* 2.19  
 32 31 29 00-0014 LF Three 2" x 4" Rails, 8' High 1" x 4" #2 Grade Western Cedar Board Fence.....37.64 3.25  
*For 1" x 6" Boards, Deduct* -3.49  
*For 1" x 3" Boards (Stockade Top), Add* 4.20  
*For Fastening With Screws Instead Of Nails, Add* 2.33  
 32 31 29 00-0015 LF Two 2" x 4" Rails, 3' High 1" x 4" #1 Grade Cedar Board Fence.....28.25 3.25  
*For 1" x 6" Boards, Deduct* -2.78  
*For 1" x 3" Boards (Stockade Top), Add* 3.39  
*For Fastening With Screws Instead Of Nails, Add* 1.79  
 32 31 29 00-0016 LF Two 2" x 4" Rails, 4' High 1" x 4" #1 Grade Cedar Board Fence.....37.36 3.25  
*For 1" x 6" Boards, Deduct* -3.26  
*For 1" x 3" Boards (Stockade Top), Add* 3.86  
*For Fastening With Screws Instead Of Nails, Add* 2.27  
 32 31 29 00-0017 LF Three 2" x 4" Rails, 5' High 1" x 4" #1 Grade Cedar Board Fence.....39.17 3.25  
*For 1" x 6" Boards, Deduct* -3.40  
*For 1" x 3" Boards (Stockade Top), Add* 4.02  
*For Fastening With Screws Instead Of Nails, Add* 2.38  
 32 31 29 00-0018 LF Three 2" x 4" Rails, 6' High 1" x 4" #1 Grade Cedar Board Fence .....42.19 3.25  
*For 1" x 6" Boards, Deduct* -3.60  
*For 1" x 3" Boards (Stockade Top), Add* 4.22  
*For Fastening With Screws Instead Of Nails, Add* 2.54  
 32 31 29 00-0019 LF Three 2" x 4" Rails, 8' High 1" x 4" #1 Grade Cedar Board Fence .....45.45 3.25  
*For 1" x 6" Boards, Deduct* -3.80  
*For 1" x 3" Boards (Stockade Top), Add* 4.43  
*For Fastening With Screws Instead Of Nails, Add* 2.72

**32 31 29 00-0020 Shadow Box (32 31 29)**

Note: 1x6" board, 2x4" Rail, 4x4" post.

32 31 29 00-0021 LF Shadow Box, 3 - 2" x 4" Rails, 6' High 1" x 6" Pressure Treated Pine .....53.80 3.25  
*For Fastening With Screws Instead Of Nails, Add* 3.03  
 32 31 29 00-0022 LF Shadow Box, 3 - 2" x 4" Rails, 4' High 1" x 4" #1 Cedar .....67.58 3.25  
*For Fastening With Screws Instead Of Nails, Add* 3.78  
 32 31 29 00-0023 LF Shadow Box, 3 - 2" x 4" Rails, 6' High 1" x 4" #1 Cedar .....73.62 3.25  
*For Fastening With Screws Instead Of Nails, Add* 4.10



Exterior Improvements			32
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MINOR CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
32 31 29 00-0024	LF	Shadow Box, 3 - 2" x 4" Rails, 8' High 1" x 4" #1 Cedar ..... <i>For Fastening With Screws Instead Of Nails, Add</i>	79.11 4.40	3.25
32 31 29 00-0025		Open Rail Fence (32 31 29)		
32 31 29 00-0026		Post And Rail Fence, Ranch Style (32 31 29 00-0025)		
32 31 29 00-0027	LF	Post And Rail Fence, 2 Rails, 3' High #1 Cedar .....	26.09	3.25
32 31 29 00-0028	LF	Post And Rail Fence, 2 Rails, 3' High #2 Cedar .....	20.20	3.25
32 31 29 00-0029	LF	Post And Rail Fence, 3 Rails, 4' High #1 Cedar .....	31.00	3.25
32 31 29 00-0030	LF	Post And Rail Fence, 3 Rails, 4' High #2 Cedar .....	21.82	3.25
32 31 29 00-0031		Split Rail Fence (32 31 29 00-0025)		
32 31 29 00-0032	LF	Split Rail Fence, 2 Rails, 3' High #1 Cedar .....	24.57	3.25
32 31 29 00-0033	LF	Split Rail Fence, 2 Rails, 3' High #2 Cedar .....	20.13	3.25
32 31 29 00-0034	LF	Split Rail Fence, 3 Rail, 4' High #1 Cedar .....	28.11	3.25
32 31 29 00-0035	LF	Split Rail Fence, 3 Rail, 4' High #2 Cedar .....	22.68	3.25
32 31 29 00-0036		Picket Fence (32 31 29)		
32 31 29 00-0037	LF	Picket Fence, 2 Rail, 3' High, Pressure Treated ..... <i>For Fastening With Screws Instead Of Nails, Add</i>	26.39 1.71	3.25
32 31 29 00-0038	LF	Picket Fence, 2 Rail, 3' High #1 Cedar ..... <i>For Fastening With Screws Instead Of Nails, Add</i>	24.85 1.63	3.25
32 31 29 00-0039		Wood Fence Post Accessories (32 31 29)		
32 31 29 00-0040	EA	3-1/2" x 3-1/2" Copper, Pyramid Slip Over, Wood Fence Post Cap .....	42.59	
32 31 29 00-0041	EA	4" x 4" Copper, Pyramid Slip Over, Wood Fence Post Cap .....	47.94	
32 31 29 00-0042	EA	6" x 6" Copper, Pyramid Slip Over, Wood Fence Post Cap .....	52.14	
32 31 29 00-0043	EA	8" x 8" Copper, Pyramid Slip Over, Wood Fence Post Cap .....	77.77	
32 31 29 00-0044		Wood Gate (32 31 29)		
32 31 29 00-0045		Board Fence Gates, Pressure Treated Wood (32 31 29 00-0044) Note: Includes galvanized extra duty hinges (1-1/2 butts per leaf), a galvanized latch and extra heavy-duty wheels per leaf, based on 2x4 frame, 1x4 cover, galvanized nails and hinges (treated lumber).		
32 31 29 00-0046	EA	3' To 5' High x 3' Wide, Pressure Treated Board Gate, 2 - 2" x 4" Rails With 1" x 4" Board, Post And Hardware .....	435.65	134.90
32 31 29 00-0047	EA	3' To 5' High x 3'-6" Wide, Pressure Treated Board Gate, 2 - 2" x 4" Rails With 1" x 4" Board, Post And Hardware .....	481.68	143.00
32 31 29 00-0048	EA	3' To 5' High x 4' Wide, Pressure Treated Board Gate, 2 - 2" x 4" Rails With 1" x 4" Board, Post And Hardware .....	538.52	156.49
32 31 29 00-0049	EA	3' To 5' High x 5' Wide, Pressure Treated Board Gate, 2 - 2" x 4" Rails With 1" x 4" Board, Post And Hardware .....	611.09	164.58
32 31 29 00-0050	EA	3' To 5' High x 6' Wide, Pressure Treated Board Gate, 2 - 2" x 4" Rails With 1" x 4" Board, Post And Hardware .....	683.66	172.67
32 31 29 00-0051	EA	>5' To 8' High x 3' Wide, Pressure Treated Board Gate, 3 - 2" x 4" Rails With 1" x 4" Board, Post And Hardware .....	555.16	178.07
32 31 29 00-0052	EA	>5' To 8' High x 3'-6" Wide, Pressure Treated Board Gate, 3 - 2" x 4" Rails With 1" x 4" Board, Post And Hardware .....	604.51	186.17
32 31 29 00-0053	EA	>5' To 8' High x 4' Wide, Pressure Treated Board Gate, 3 - 2" x 4" Rails With 1" x 4" Board, Post And Hardware .....	653.86	194.26
32 31 29 00-0054	EA	>5' To 8' High x 5' Wide, Pressure Treated Board Gate, 3 - 2" x 4" Rails With 1" x 4" Board, Post And Hardware .....	736.39	202.35
32 31 29 00-0055	EA	>5' To 8' High x 6' Wide, Pressure Treated Board Gate, 3 - 2" x 4" Rails With 1" x 4" Board, Post And Hardware .....	802.32	210.45
32 31 29 00-0056		Board Fence Gates, Grade 2 Cedar (32 31 29 00-0044) Note: Includes galvanized extra duty hinges (1-1/2 butts per leaf), a galvanized latch and extra heavy-duty wheels per leaf, based on 2x4 frame, 1x4 cover, galvanized nails and hinges (cedar lumber)		
32 31 29 00-0057	EA	3' To 5' High x 3' Wide, #2 Cedar Board Gate, 3 - 2" x 4" Rails With 1" x 4" Board, Post And Hardware .....	650.99	101.61
32 31 29 00-0058	EA	3' To 5' High x 3'-6" Wide, #2 Cedar Board Gate, 3 - 2" x 4" Rails With 1" x 4" Board, Post And Hardware .....	673.14	107.71
32 31 29 00-0059	EA	3' To 5' High x 4' Wide, #2 Cedar Board Gate, 3 - 2" x 4" Rails With 1" x 4" Board, Post And Hardware .....	706.73	117.87
32 31 29 00-0060	EA	3' To 5' High x 5' Wide, #2 Cedar Board Gate, 3 - 2" x 4" Rails With 1" x 4" Board, Post And Hardware .....	745.45	123.97
32 31 29 00-0061	EA	3' To 5' High x 6' Wide, #2 Cedar Board Gate, 3 - 2" x 4" Rails With 1" x 4" Board, Post And Hardware .....	794.13	130.07
32 31 29 00-0062	EA	>5' To 8' High x 3' Wide, #2 Cedar Board Gate, 3 - 2" x 4" Rails With 1" x 4" Board, Post And Hardware .....	765.78	134.13
32 31 29 00-0063	EA	>5' To 8' High x 3'-6" Wide, #2 Cedar Board Gate, 3 - 2" x 4" Rails With 1" x 4" Board, Post And Hardware .....	794.55	140.22
32 31 29 00-0064	EA	>5' To 8' High x 4' Wide, #2 Cedar Board Gate, 3 - 2" x 4" Rails With 1" x 4" Board, Post And Hardware .....	839.91	146.32
32 31 29 00-0065	EA	>5' To 8' High x 5' Wide, #2 Cedar Board Gate, 3 - 2" x 4" Rails With 1" x 4" Board, Post And Hardware .....	885.28	152.41
32 31 29 00-0066	EA	>5' To 8' High x 6' Wide, #2 Cedar Board Gate, 3 - 2" x 4" Rails With 1" x 4" Board, Post And Hardware .....	930.64	158.51
32 31 29 00-0067		Board Fence Gates, Grade 1 Cedar (32 31 29 00-0044) Note: Includes galvanized extra duty hinges (1-1/2 butts per leaf), a galvanized latch and extra heavy-duty wheels per leaf, based on 2x4 frame, 1x4 cover, galvanized nails and hinges (cedar lumber)		
32 31 29 00-0068	EA	3' To 5' High x 3' Wide, #1 Cedar Board Gate, 2 - 2" x 4" Rails With 1" x 4" Board, Post And Hardware .....	700.74	101.61
32 31 29 00-0069	EA	3' To 5' High x 3'-6" Wide, #1 Cedar Board Gate, 2 - 2" x 4" Rails With 1" x 4" Board, Post And Hardware .....	729.52	107.71
32 31 29 00-0070	EA	3' To 5' High x 4' Wide, #1 Cedar Board Gate, 2 - 2" x 4" Rails With 1" x 4" Board, Post And Hardware .....	766.43	117.87
32 31 29 00-0071	EA	3' To 5' High x 5' Wide, #1 Cedar Board Gate, 2 - 2" x 4" Rails With 1" x 4" Board, Post And Hardware .....	811.79	123.97
32 31 29 00-0072	EA	3' To 5' High x 6' Wide, #1 Cedar Board Gate, 2 - 2" x 4" Rails With 1" x 4" Board, Post And Hardware .....	857.15	130.07
32 31 29 00-0073	EA	>5' To 8' High x 3' Wide, #1 Cedar Board Gate, 3 - 2" x 4" Rails With 1" x 4" Board, Post And Hardware .....	832.12	134.13
32 31 29 00-0074	EA	>5' To 8' High x 3'-6" Wide, #1 Cedar Board Gate, 3 - 2" x 4" Rails With 1" x 4" Board, Post And Hardware .....	860.89	140.22
32 31 29 00-0075	EA	>5' To 8' High x 4' Wide, #1 Cedar Board Gate, 3 - 2" x 4" Rails With 1" x 4" Board, Post And Hardware .....	906.25	146.32
32 31 29 00-0076	EA	>5' To 8' High x 5' Wide, #1 Cedar Board Gate, 3 - 2" x 4" Rails With 1" x 4" Board, Post And Hardware .....	951.62	152.41
32 31 29 00-0077	EA	>5' To 8' High x 6' Wide, #1 Cedar Board Gate, 3 - 2" x 4" Rails With 1" x 4" Board, Post And Hardware .....	1,013.56	158.51

**32 Exterior Improvements****32 30 Site Improvements****32 31 Fences and Gates**MINOR  
CSI UOM DESCRIPTIONTOTAL DIRECT DEMOLITION  
UNIT COST UNIT COST**32 31 34 Tubular Barrier Gates (32 31)**

32 31 34 00-0001

Tube Gate (32 31 34)

See CSI section 32 31 13 13-0001 for augering post holes and concrete fill, 32 31 13 13-0458 for gate accessories.

32 31 34 00-0002

50" Height, 2" Diameter 16 Gauge Powder Coated Tubing, Six Rail Tube Gate (32 31 34 00-0001)

Note: Round top edges. Includes lag bolt hinges, lock plate and hardware. Excludes augering, concrete, bollard and chain.

32 31 34 00-0003	EA 4' Wide, 50" Height, 2" Diameter 16 Gauge Powder Coated Tubing, Six Rail Tube Gate.....	193.69	25.60
	For 13 Gauge Tubing, Add	31.15	
	For Galvanized Finish, Add	17.68	
32 31 34 00-0004	EA 6' Wide, 50" Height, 2" Diameter 16 Gauge Powder Coated Tubing, Six Rail Tube Gate.....	251.76	33.19
	For 13 Gauge Tubing, Add	40.40	
	For Galvanized Finish, Add	22.83	
32 31 34 00-0005	EA 8' Wide, 50" Height, 2" Diameter 16 Gauge Powder Coated Tubing, Six Rail Tube Gate.....	339.60	42.66
	For 13 Gauge Tubing, Add	55.12	
	For Galvanized Finish, Add	31.74	
32 31 34 00-0006	EA 10' Wide, 50" Height, 2" Diameter 16 Gauge Powder Coated Tubing, Six Rail Tube Gate.....	391.88	53.10
	For 13 Gauge Tubing, Add	62.26	
	For Galvanized Finish, Add	34.61	
32 31 34 00-0007	EA 12' Wide, 50" Height, 2" Diameter 16 Gauge Powder Coated Tubing, Six Rail Tube Gate.....	464.87	63.15
	For 13 Gauge Tubing, Add	74.01	
	For Galvanized Finish, Add	41.29	
32 31 34 00-0008	EA 14' Wide, 50" Height, 2" Diameter 16 Gauge Powder Coated Tubing, Six Rail Tube Gate.....	507.66	71.11
	For 13 Gauge Tubing, Add	80.20	
	For Galvanized Finish, Add	44.15	
32 31 34 00-0009	EA 16' Wide, 50" Height, 2" Diameter 16 Gauge Powder Coated Tubing, Six Rail Tube Gate.....	596.01	82.01
	For 13 Gauge Tubing, Add	94.55	
	For Galvanized Finish, Add	52.43	

32 31 34 00-0010

33" Height, 1-3/4" Diameter 16 Gauge Galvanized Steel Tubing, Six Rail Tube Gate (32 31 34 00-0001)

Note: Round top edges. Includes lag bolt hinges, lock plate and hardware. Excludes augering and concrete.

32 31 34 00-0011	EA 4' Wide, 33" Height, 1-3/4" Diameter 16 Gauge Galvanized Steel Tubing, Six Rail Tube Gate.....	252.75	25.60
	For Natina (or Equal) Galvanized Surface Stain "Rustic Brown Finish", Add	70.76	
32 31 34 00-0012	EA 6' Wide, 33" Height, 1-3/4" Diameter 16 Gauge Galvanized Steel Tubing, Six Rail Tube Gate.....	302.57	33.19
	For Natina (or Equal) Galvanized Surface Stain "Rustic Brown Finish", Add	81.21	
32 31 34 00-0013	EA 8' Wide, 33" Height, 1-3/4" Diameter 16 Gauge Galvanized Steel Tubing, Six Rail Tube Gate.....	361.71	42.66
	For Natina (or Equal) Galvanized Surface Stain "Rustic Brown Finish", Add	93.49	
32 31 34 00-0014	EA 10' Wide, 33" Height, 1-3/4" Diameter 16 Gauge Galvanized Steel Tubing, Six Rail Tube Gate.....	417.07	53.10
	For Natina (or Equal) Galvanized Surface Stain "Rustic Brown Finish", Add	102.36	
32 31 34 00-0015	EA 12' Wide, 33" Height, 1-3/4" Diameter 16 Gauge Galvanized Steel Tubing, Six Rail Tube Gate.....	473.12	63.15
	For Natina (or Equal) Galvanized Surface Stain "Rustic Brown Finish", Add	113.40	
32 31 34 00-0016	EA 14' Wide, 33" Height, 1-3/4" Diameter 16 Gauge Galvanized Steel Tubing, Six Rail Tube Gate.....	524.18	71.11
	For Natina (or Equal) Galvanized Surface Stain "Rustic Brown Finish", Add	124.34	
32 31 34 00-0017	EA 16' Wide, 33" Height, 1-3/4" Diameter 16 Gauge Galvanized Steel Tubing, Six Rail Tube Gate.....	585.68	82.01
	For Natina (or Equal) Galvanized Surface Stain "Rustic Brown Finish", Add	135.67	
32 31 34 00-0018	EA 18' Wide, 33" Height, 1-3/4" Diameter 16 Gauge Galvanized Steel Tubing, Six Rail Tube Gate.....	672.88	92.29
	For Natina (or Equal) Galvanized Surface Stain "Rustic Brown Finish", Add	157.27	
32 31 34 00-0019	EA 20' Wide, 33" Height, 1-3/4" Diameter 16 Gauge Galvanized Steel Tubing, Six Rail Tube Gate.....	749.17	103.25
	For Natina (or Equal) Galvanized Surface Stain "Rustic Brown Finish", Add	185.90	

32 31 34 00-0020

33" Height, 2" Diameter 16 Gauge Galvanized Steel Tubing, Six Rail Tube Gate (32 31 34 00-0001)

Note: Round top edges. Includes lag bolt hinges, lock plate and hardware. Excludes augering and concrete.

32 31 34 00-0021	EA 4' Wide, 33" Height, 2" Diameter 16 Gauge Galvanized Steel Tubing, Six Rail Tube Gate.....	273.48	25.60
	For Natina (or Equal) Galvanized Surface Stain "Rustic Brown Finish", Add	79.05	
32 31 34 00-0022	EA 6' Wide, 33" Height, 2" Diameter 16 Gauge Galvanized Steel Tubing, Six Rail Tube Gate.....	322.95	33.19
	For Natina (or Equal) Galvanized Surface Stain "Rustic Brown Finish", Add	89.36	
32 31 34 00-0023	EA 8' Wide, 33" Height, 2" Diameter 16 Gauge Galvanized Steel Tubing, Six Rail Tube Gate.....	375.53	42.66
	For Natina (or Equal) Galvanized Surface Stain "Rustic Brown Finish", Add	99.02	
32 31 34 00-0024	EA 10' Wide, 33" Height, 2" Diameter 16 Gauge Galvanized Steel Tubing, Six Rail Tube Gate.....	437.21	53.10
	For Natina (or Equal) Galvanized Surface Stain "Rustic Brown Finish", Add	110.41	
32 31 34 00-0025	EA 12' Wide, 33" Height, 2" Diameter 16 Gauge Galvanized Steel Tubing, Six Rail Tube Gate.....	487.68	63.15
	For Natina (or Equal) Galvanized Surface Stain "Rustic Brown Finish", Add	119.22	
32 31 34 00-0026	EA 14' Wide, 33" Height, 2" Diameter 16 Gauge Galvanized Steel Tubing, Six Rail Tube Gate.....	558.18	71.11
	For Natina (or Equal) Galvanized Surface Stain "Rustic Brown Finish", Add	137.94	
32 31 34 00-0027	EA 16' Wide, 33" Height, 2" Diameter 16 Gauge Galvanized Steel Tubing, Six Rail Tube Gate.....	622.60	82.01
	For Natina (or Equal) Galvanized Surface Stain "Rustic Brown Finish", Add	150.44	
32 31 34 00-0028	EA 18' Wide, 33" Height, 2" Diameter 16 Gauge Galvanized Steel Tubing, Six Rail Tube Gate.....	729.22	92.29
	For Natina (or Equal) Galvanized Surface Stain "Rustic Brown Finish", Add	179.81	
32 31 34 00-0029	EA 20' Wide, 33" Height, 2" Diameter 16 Gauge Galvanized Steel Tubing, Six Rail Tube Gate.....	799.83	103.25
	For Natina (or Equal) Galvanized Surface Stain "Rustic Brown Finish", Add	206.16	

32 31 34 00-0030

Tubular Steel Barrier Gate (Triangular Shape) (32 31 34 00-0001)

Note: Includes posts, caps, welded hinges and lock keeper. Excludes augering, concrete, and bollards.

32 31 34 00-0031	EA 4' High x 10' Wide Opening Tubular Galvanized Steel Barrier Gate With 3" Diameter Post.....	1,933.05	53.10
	For Natina (or Equal) Galvanized Surface Stain "Rustic Brown Finish", Add	622.99	





<b>Exterior Improvements</b>		<b>32</b>
<b>Site Improvements</b>		<b>32 30</b>
<b>Fences and Gates</b>		<b>32 31</b>

32

MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
32 31 34 00-0032 EA 4' High x 12' Wide Opening Tubular Galvanized Steel Barrier Gate With 3" Diameter Post ..... <i>For Natina (or Equal) Galvanized Surface Stain "Rustic Brown Finish", Add</i>	2,100.38 668.46	63.15
32 31 34 00-0033 EA 4' High x 14' Wide Opening Tubular Galvanized Steel Barrier Gate With 3" Diameter Post ..... <i>For Natina (or Equal) Galvanized Surface Stain "Rustic Brown Finish", Add</i>	2,481.02 801.76	71.11
32 31 34 00-0034 EA 4' High x 10' Wide Opening Tubular Galvanized Steel Barrier Gate With 4" Diameter Post ..... <i>For Natina (or Equal) Galvanized Surface Stain "Rustic Brown Finish", Add</i>	2,014.63 655.32	53.10
32 31 34 00-0035 EA 4' High x 12' Wide Opening Tubular Galvanized Steel Barrier Gate With 4" Diameter Post ..... <i>For Natina (or Equal) Galvanized Surface Stain "Rustic Brown Finish", Add</i>	2,193.63 705.42	63.15
32 31 34 00-0036 EA 4' High x 14' Wide Opening Tubular Galvanized Steel Barrier Gate With 4" Diameter Post ..... <i>For Natina (or Equal) Galvanized Surface Stain "Rustic Brown Finish", Add</i>	2,574.26 838.71	71.11
<b>32 31 34 00-0037 Four Rail Tube Gate, 1-1/2" Diameter Welded Galvanized Steel Tubing</b> (32 31 34 00-0001) Note: Excludes augering holes and concrete.		
32 31 34 00-0038 EA 4' Four Rail Metal Frame Tube Gate, 1-1/2" Diameter Welded Galvanized Steel With Posts..... <i>For Natina (or Equal) Galvanized Surface Stain "Rustic Brown Finish", Add</i>	437.25 38.37	25.60
<b>32 31 34 00-0039 Tubular Horse Gate</b> (32 31 34 00-0001) Note: Includes posts, caps and hardware. Treated with Natina (or Equal) galvanized surface stain "rustic brown finish". Excludes augering holes and concrete.		
32 31 34 00-0040 EA 5-1/2' Above Ground, 5' Wide Tubular Galvanized Steel Horse Gate With 3" Diameter Posts..... <i>For Natina (or Equal) Galvanized Surface Stain "Rustic Brown Finish", Add</i>	3,546.95 1,058.50	25.60
<b>32 31 34 00-0041 Pipe Gate</b> (32 31 34) Note: Excludes augering and concrete. See CSI section 32 31 13 13-0001 for augering post holes and concrete fill.		
32 31 34 00-0042 EA 20' Galvanized Steel Pipe Gate, Swinging (Road Access Barrier) .....	3,886.02	
32 31 34 00-0043 EA 25' Galvanized Steel Pipe Gate, Swinging (Road Access Barrier) .....	4,862.89	
32 31 34 00-0044 EA 30' Galvanized Steel Pipe Gate, Swinging (Road Access Barrier) .....	5,796.94	
<b>32 31 41 Precast Concrete Fences</b> (32 31)		
<b>32 31 41 00-0001 Precast Post And Rail Fence, Ranch Style, With Integral Color Concrete.</b> (32 31 41) Note: Includes post holes, fill, spreading of excess material on site. See CSI section 32 31 13 13-0001 for drilling for augering holes and backfill.		
32 31 41 00-0002 LF Precast Post And Rail Fence With Integral Color Concrete, 2 Rails, 3' Above Ground With 2' Bury ..... Note: Includes 12" diameter holes with concrete fill for line posts and 18" diameter holes with concrete fill at corners.	66.78	3.25
<b>32 32 Retaining Walls</b> (32 30)		
<b>32 32 13 Cast-In-Place Concrete Retaining Wall</b> (32 32) Note: System includes all necessary forms (4 uses), 3000 PSI concrete with an 8" chute, all necessary reinforcing steel, and underdrain. Exposed concrete is patched and rubbed. Excludes initial site grading, subbase preparation or finish grading.		
32 32 13 00-0001 LF 4' High With Base, 10" Thick, Reinforced, Cast-In-Place Concrete Retaining Wall ..... <i>For &gt;3:1 Sloped Soil At Top, Add</i>	419.71 13.93	127.97
32 32 13 00-0002 LF 6' High With Base, 10" Thick, Reinforced, Cast-In-Place Concrete Retaining Wall ..... <i>For &gt;3:1 Sloped Soil At Top, Add</i>	526.60 17.99	157.46
32 32 13 00-0003 LF 8' High With Base, 10" Thick, Reinforced, Cast-In-Place Concrete Retaining Wall ..... <i>For &gt;3:1 Sloped Soil At Top, Add</i>	576.15 20.10	169.84
32 32 13 00-0004 LF 10' High With Base, 13" Thick, Reinforced, Cast-In-Place Concrete Retaining Wall ..... <i>For &gt;3:1 Sloped Soil At Top, Add</i>	743.35 27.49	210.00
32 32 13 00-0005 LF 12' High With Base, 14" Thick, Reinforced, Cast-In-Place Concrete Retaining Wall ..... <i>For &gt;3:1 Sloped Soil At Top, Add</i>	857.75 31.89	241.22
32 32 13 00-0006 LF 16' High With Base, 16" Thick, Reinforced, Cast-In-Place Concrete Retaining Wall ..... <i>For &gt;3:1 Sloped Soil At Top, Add</i>	1,233.79 44.72	353.87
32 32 13 00-0007 LF 20' High With Base, 18" Thick, Reinforced, Cast-In-Place Concrete Retaining Wall ..... <i>For &gt;3:1 Sloped Soil At Top, Add</i>	1,689.54 60.55	488.55
32 32 13 00-0008 LF 4' High With Base, 12" Thick, Reinforced, Cast-In-Place Concrete Retaining Wall ..... <i>For &gt;3:1 Sloped Soil At Top, Add</i>	462.44 15.55	139.75
32 32 13 00-0009 LF 6' High With Base, 12" Thick, Reinforced, Cast-In-Place Concrete Retaining Wall ..... <i>For &gt;3:1 Sloped Soil At Top, Add</i>	570.05 19.84	168.38
32 32 13 00-0010 LF 8' High With Base, 12" Thick, Reinforced, Cast-In-Place Concrete Retaining Wall ..... <i>For &gt;3:1 Sloped Soil At Top, Add</i>	607.36 21.76	175.69
32 32 13 00-0011 LF 10' High With Base, 16" Thick, Reinforced, Cast-In-Place Concrete Retaining Wall ..... <i>For &gt;3:1 Sloped Soil At Top, Add</i>	844.65 31.76	235.46
32 32 13 00-0012 LF 12' High With Base, 18" Thick, Reinforced, Cast-In-Place Concrete Retaining Wall ..... <i>For &gt;3:1 Sloped Soil At Top, Add</i>	1,065.33 39.14	302.45
32 32 13 00-0013 LF 16' High With Base, 21" Thick, Reinforced, Cast-In-Place Concrete Retaining Wall ..... <i>For &gt;3:1 Sloped Soil At Top, Add</i>	1,590.25 57.24	458.45
32 32 13 00-0014 LF 20' High With Base, 24" Thick, Reinforced, Cast-In-Place Concrete Retaining Wall ..... <i>For &gt;3:1 Sloped Soil At Top, Add</i>	2,244.06 80.73	647.12
<b>32 32 16 Precast Concrete Retaining Walls</b> (32 32)		
<b>32 32 16 00-0001 Precast Retaining Walls</b> (32 32 16) Note: Tied-back earth walls. Includes precast filter fabric, soil reinforcing mesh and cast-in-place coping. Excludes concrete leveling pad, or select earth excavation and backfill.		

**32 Exterior Improvements****32 30 Site Improvements****32 32 Retaining Walls**

MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
32 32 16 00-0002 SF 10-15' High, Tied-back, Precast Concrete Retaining Walls.....	89.74	13.08
32 32 16 00-0003 SF 16-20' High, Tied-back, Precast Concrete Retaining Walls.....	92.14	10.52
32 32 16 00-0004 SF 21-25' High, Tied-back, Precast Concrete Retaining Walls.....	95.55	8.76
32 32 16 00-0005 SF 26-30' High, Tied-back, Precast Concrete Retaining Walls.....	103.32	8.76
32 32 16 00-0006 SF >30' High, Tied-back, Precast Concrete Retaining Walls.....	109.29	7.48

**32 32 23 Segmental Retaining Walls (32 32)****32 32 23 13 Segmental Concrete Unit Masonry Retaining Walls (32 32 23)**

32 32 23 13-0001	Modular Retaining Wall Systems (32 32 23 13)		
	Note: Includes installation, material and manufacturer's wall design. Includes stone wall, cap stones, #57 stone backing, Geo-Grid (2/3 height of wall), miradrain and fill with earth, and compaction. Includes cap at top, pins, and installation. Excludes initial site grading, subbase preparation or finish grading.		
32 32 23 13-0002	"Criblock" Or Equal (Precast) Modular Retaining Wall Systems (32 32 23 13-0001)		
32 32 23 13-0003	SF Up To 4' Height "Criblock" Type Modular Retaining Wall System.....	60.39	8.60
	For >3:1 Sloped Soil At Top, Add	3.67	
	For Gravel Backfill Instead Of Earth, Add	0.25	
32 32 23 13-0004	SF 4 To 8' Height "Criblock" Type Modular Retaining Wall System.....	63.71	9.05
	For >3:1 Sloped Soil At Top, Add	3.88	
	For Gravel Backfill Instead Of Earth, Add	0.25	
32 32 23 13-0005	SF 8 To 12' Height "Criblock" Type Modular Retaining Wall System.....	66.55	9.96
	For >3:1 Sloped Soil At Top, Add	3.96	
	For Gravel Backfill Instead Of Earth, Add	0.25	
32 32 23 13-0006	SF 12 To 16' Height "Criblock" Type Modular Retaining Wall System.....	69.55	10.87
	For >3:1 Sloped Soil At Top, Add	4.06	
	For Gravel Backfill Instead Of Earth, Add	0.25	

**32 32 29 Timber Retaining Walls (32 32)**

32 32 29 00-0001	Wood Post Retaining Walls (32 32 29)		
	Note: System includes wood posts installed side-by-side to various heights, and underdrain. Excludes initial site grading, subbase preparation or finish grading.		
32 32 29 00-0002	LF 4" x 4", 1' High, Redwood, Wood Post Retaining Walls.....	117.23	29.60
	For >3:1 Sloped Soil At Top, Add	4.94	
32 32 29 00-0003	LF 4" x 4", 2' High, Redwood, Wood Post Retaining Walls.....	229.19	57.95
	For >3:1 Sloped Soil At Top, Add	9.64	
32 32 29 00-0004	LF 4" x 4", 1' High, Cedar, Wood Post Retaining Walls.....	109.81	29.60
	For >3:1 Sloped Soil At Top, Add	4.31	
32 32 29 00-0005	LF 4" x 4", 2' High, Cedar, Wood Post Retaining Walls.....	214.76	57.95
	For >3:1 Sloped Soil At Top, Add	8.41	
32 32 29 00-0006	LF 4" x 4", 1' High, Pressure Treated Lumber, Wood Post Retaining Walls.....	119.84	25.86
	For >3:1 Sloped Soil At Top, Add	5.78	
32 32 29 00-0007	LF 4" x 4", 2' High, Pressure Treated Lumber, Wood Post Retaining Walls.....	234.80	50.57
	For >3:1 Sloped Soil At Top, Add	11.35	
32 32 29 00-0008	LF 4" x 4", 1' High, Creosoted Lumber, Wood Post Retaining Walls.....	94.99	22.95
	For >3:1 Sloped Soil At Top, Add	4.17	
32 32 29 00-0009	LF 4" x 4", 2' High, Creosoted Lumber, Wood Post Retaining Walls.....	171.71	41.54
	For >3:1 Sloped Soil At Top, Add	7.53	
32 32 29 00-0010	LF 6" x 6", 2' High, Redwood, Wood Post Retaining Walls.....	330.02	70.21
	For >3:1 Sloped Soil At Top, Add	16.12	
32 32 29 00-0011	LF 6" x 6", 4' High, Redwood, Wood Post Retaining Walls.....	654.36	137.60
	For >3:1 Sloped Soil At Top, Add	32.24	
32 32 29 00-0012	LF 6" x 6", 2' High, Cedar, Wood Post Retaining Walls.....	321.78	70.21
	For >3:1 Sloped Soil At Top, Add	15.42	
32 32 29 00-0013	LF 6" x 6", 4' High, Cedar, Wood Post Retaining Walls.....	633.75	137.60
	For >3:1 Sloped Soil At Top, Add	30.49	
32 32 29 00-0014	LF 6" x 6", 2' High, Pressure Treated Lumber, Wood Post Retaining Walls.....	330.83	57.02
	For >3:1 Sloped Soil At Top, Add	18.42	
32 32 29 00-0015	LF 6" x 6", 4' High, Pressure Treated Lumber, Wood Post Retaining Walls.....	658.74	112.58
	For >3:1 Sloped Soil At Top, Add	36.85	
32 32 29 00-0016	LF 6" x 6", 2' High, Creosoted Lumber, Wood Post Retaining Walls.....	233.49	45.59
	For >3:1 Sloped Soil At Top, Add	12.09	
32 32 29 00-0017	LF 6" x 6", 4' High, Creosoted Lumber, Wood Post Retaining Walls.....	460.79	89.21
	For >3:1 Sloped Soil At Top, Add	24.00	
32 32 29 00-0018	LF 8" x 8", 4' High, Redwood, Wood Post Retaining Walls.....	869.12	152.14
	For >3:1 Sloped Soil At Top, Add	48.01	
32 32 29 00-0019	LF 8" x 8", 6' High, Redwood, Wood Post Retaining Walls.....	1,627.46	284.04
	For >3:1 Sloped Soil At Top, Add	90.05	
32 32 29 00-0020	LF 8" x 8", 4' High, Cedar, Wood Post Retaining Walls.....	827.90	152.14
	For >3:1 Sloped Soil At Top, Add	44.50	
32 32 29 00-0021	LF 8" x 8", 6' High, Cedar, Wood Post Retaining Walls.....	1,549.14	284.04
	For >3:1 Sloped Soil At Top, Add	83.40	
32 32 29 00-0022	LF 8" x 8", 4' High, Pressure Treated Lumber, Wood Post Retaining Walls.....	865.22	175.52
	For >3:1 Sloped Soil At Top, Add	43.70	
32 32 29 00-0023	LF 8" x 8", 6' High, Pressure Treated Lumber, Wood Post Retaining Walls.....	1,613.30	327.76
	For >3:1 Sloped Soil At Top, Add	81.41	
32 32 29 00-0024	LF 8" x 8", 4' High, Creosoted Lumber, Wood Post Retaining Walls.....	623.81	141.86
	For >3:1 Sloped Soil At Top, Add	28.91	
32 32 29 00-0025	LF 8" x 8", 6' High, Creosoted Lumber, Wood Post Retaining Walls.....	1,156.96	263.16
	For >3:1 Sloped Soil At Top, Add	53.61	



Exterior Improvements		32	32
Site Improvements		32 30	
Retaining Walls		32 32	

MINOR	CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
32 32 29 00-0026	LF	4'	High, Cedar, Random Diameter Poles, Wood Post Retaining Walls..... <i>For &gt;3:1 Sloped Soil At Top, Add</i>	220.08 8.76	58.47
32 32 29 00-0027	LF	6'	High, Cedar, Random Diameter Poles, Wood Post Retaining Walls..... <i>For &gt;3:1 Sloped Soil At Top, Add</i>	328.07 12.97	87.75
32 32 29 00-0028	LF	8'	High, Cedar, Random Diameter Poles, Wood Post Retaining Walls..... <i>For &gt;3:1 Sloped Soil At Top, Add</i>	435.94 17.17	116.94
32 32 29 00-0029	LF	4'	High Creosoted Lumber, Random Diameter Poles, Wood Post Retaining Walls..... <i>For &gt;3:1 Sloped Soil At Top, Add</i>	167.12 8.59	33.03
32 32 29 00-0030	LF	6'	High Creosoted Lumber, Random Diameter Poles, Wood Post Retaining Walls..... <i>For &gt;3:1 Sloped Soil At Top, Add</i>	243.78 12.61	47.66
32 32 29 00-0031	LF	8'	High Creosoted Lumber, Random Diameter Poles, Wood Post Retaining Walls..... <i>For &gt;3:1 Sloped Soil At Top, Add</i>	330.70 17.17	64.39
<b>32 32 29 00-0032 Post And Board Retaining Walls</b> <small>(32 32 29)</small>					
Note: System includes all the elements that must go into a wall that resists lateral pressure. System elements include posts and boards, cap, underdrain, and deadman where required. Excludes initial site grading, subbase preparation or finish grading.					
32 32 29 00-0033	LF	4" x 4"	Post, 4' Spacing, 3' High, 2" Planking, Redwood, Post And Board Retaining Walls..... <i>For &gt;3:1 Sloped Soil At Top, Add</i>	109.93 6.36	17.55
32 32 29 00-0034	LF	4" x 4"	Post, 2' Spacing, 4' High, 2" Planking, Redwood, Post And Board Retaining Walls..... <i>For &gt;3:1 Sloped Soil At Top, Add</i>	160.97 8.59	30.01
32 32 29 00-0035	LF	6" x 6"	Post, 4' Spacing, 5' High 2" Planking, Redwood, Post And Board Retaining Walls..... <i>For &gt;3:1 Sloped Soil At Top, Add</i>	216.82 12.09	37.29
32 32 29 00-0036	LF	6" x 6"	Post, 3' Spacing, 6' High, 2" Planking, Redwood, Post And Board Retaining Walls..... <i>For &gt;3:1 Sloped Soil At Top, Add</i>	301.43 16.64	52.86
32 32 29 00-0037	LF	6" x 6"	With Deadman, 3' Spacing, 8' High, 2" Planking, Redwood, Post And Board Retaining Walls ..... <i>For &gt;3:1 Sloped Soil At Top, Add</i>	395.13 21.90	68.75
32 32 29 00-0038	LF	8" x 8"	Post, 2' Spacing, 8' High, 2" Planking, Redwood, Post And Board Retaining Walls..... <i>For &gt;3:1 Sloped Soil At Top, Add</i>	824.48 46.95	136.04
32 32 29 00-0039	LF	8" x 8"	With Deadman, 2' Spacing, 9' High, 2" Planking, Redwood, Post And Board Retaining Walls ..... <i>For &gt;3:1 Sloped Soil At Top, Add</i>	940.28 54.31	150.69
32 32 29 00-0040	LF	4" x 4"	Post, 4' Spacing, 3' High, 2" Planking, Cedar, Post And Board Retaining Walls ..... <i>For &gt;3:1 Sloped Soil At Top, Add</i>	110.36 6.27	18.28
32 32 29 00-0041	LF	4" x 4"	With Deadman, 2' Spacing, 4' High 2" Planking, Cedar, Post And Board Retaining Walls..... <i>For &gt;3:1 Sloped Soil At Top, Add</i>	192.74 10.86	32.50
32 32 29 00-0042	LF	6" x 6"	Post, 4' Spacing, 4' High 2" Planking, Cedar, Post And Board Retaining Walls ..... <i>For &gt;3:1 Sloped Soil At Top, Add</i>	189.50 10.69	31.89
32 32 29 00-0043	LF	6" x 6"	Post, 3' Spacing, 5' High 2" Planking, Cedar, Post And Board Retaining Walls ..... <i>For &gt;3:1 Sloped Soil At Top, Add</i>	262.66 14.54	45.80
32 32 29 00-0044	LF	6" x 6"	Post, 2' Spacing, 6' High 2" Planking, Cedar, Post And Board Retaining Walls ..... <i>For &gt;3:1 Sloped Soil At Top, Add</i>	403.93 21.90	73.12
32 32 29 00-0045	LF	6" x 6"	Post With Deadman, 3' Spacing, 6' High, 2" Planking, Cedar..... <i>For &gt;3:1 Sloped Soil At Top, Add</i>	324.64 18.05	56.18
32 32 29 00-0046	LF	8" x 8"	Post With Deadman, 2' Spacing, 8' High, 2" Planking, Cedar..... <i>For &gt;3:1 Sloped Soil At Top, Add</i>	853.80 48.71	140.41
32 32 29 00-0047	LF	4" x 4"	Post, 4' Spacing, 3' High 2" Planking, Pressure Treated..... <i>For &gt;3:1 Sloped Soil At Top, Add</i>	109.83 3.59	33.75
32 32 29 00-0048	LF	4" x 4"	Post, 3' Spacing, 4' High 2" Planking, Pressure Treated..... <i>For &gt;3:1 Sloped Soil At Top, Add</i>	161.31 5.55	47.98
32 32 29 00-0049	LF	4" x 4"	Post With Deadman, 2' Space, 5' High, 2" Planking, Pressure Treat..... <i>For &gt;3:1 Sloped Soil At Top, Add</i>	245.00 9.64	65.85
32 32 29 00-0050	LF	6" x 6"	Post, 3' Spacing, 6' High, 2" Planking, Pressure Treated..... <i>For &gt;3:1 Sloped Soil At Top, Add</i>	442.84 18.75	111.12
32 32 29 00-0051	LF	6" x 6"	Post, 2' Spacing, 7' High, 2" Planking, Pressure Treated..... <i>For &gt;3:1 Sloped Soil At Top, Add</i>	453.15 19.62	111.12
32 32 29 00-0052	LF	6" x 6"	Post With Deadman, 3' Spacing 8' High, 2" Planking, Pressure Treat..... <i>For &gt;3:1 Sloped Soil At Top, Add</i>	419.69 17.52	106.76
32 32 29 00-0053	LF	8" x 8"	Post With Deadman, 2' Spacing 10' High, 2" Planking, Pressure Treated ..... <i>For &gt;3:1 Sloped Soil At Top, Add</i>	1,002.33 43.45	245.61
32 32 29 00-0054	LF	4" x 4"	Post, 4' Spacing, 3' High Creosoted 2" Planking..... <i>For &gt;3:1 Sloped Soil At Top, Add</i>	109.83 3.59	33.75
32 32 29 00-0055	LF	4" x 4"	Post, 3' Spacing, 4' High Creosoted, 2" Planking..... <i>For &gt;3:1 Sloped Soil At Top, Add</i>	161.31 5.55	47.98
32 32 29 00-0056	LF	4" x 4"	Post With Deadman, 2' Spacing, 5' High, Creosoted, 2" Planking ..... <i>For &gt;3:1 Sloped Soil At Top, Add</i>	245.00 9.64	65.85
32 32 29 00-0057	LF	6" x 6"	Post, 3' Spacing, 6' High Creosoted, 2" Planking..... <i>For &gt;3:1 Sloped Soil At Top, Add</i>	310.16 12.44	81.94
32 32 29 00-0058	LF	6" x 6"	Post, 2' Spacing, 7' High, 2" Planking, Creosoted, Post And Board Retaining Walls ..... <i>For &gt;3:1 Sloped Soil At Top, Add</i>	442.84 18.75	111.12
32 32 29 00-0059	LF	6" x 6"	Post With Deadman, 3' Spacing, 8' High, 2" Planking, Creosoted, Post And Board Retaining Walls ..... <i>For &gt;3:1 Sloped Soil At Top, Add</i>	419.69 17.52	106.76
32 32 29 00-0060	LF	8" x 8"	Post With Deadman, 2' Spacing, 10' High, Creosoted, 2" Planking, Post And Board Retaining Walls..... <i>For &gt;3:1 Sloped Soil At Top, Add</i>	1,002.33 43.45	245.61

### 32 32 53 Stone Retaining Walls (32 32)

#### 32 32 53 00-0001 Stone Retaining Walls (32 32 53)

Note: Construction is either dry set or mortar set. System includes concrete base, crushed stone, underdrain, and backfill. Standard design to have 12" thick top with vertical backside and sloped face at 2" per foot of height. Excludes initial site grading, subbase preparation or finish grading.

#### 32 32 53 00-0002 Stone Retaining Walls (32 32 53 00-0001)

Note: Stone at \$16.00/ton.

**32 Exterior Improvements****32 30 Site Improvements****32 32 Retaining Walls**

MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
32 32 53 00-0003 LF \$16.00/ton 3' High Stone Retaining Wall, Dry Set.....	455.99	203.82
For >3:1 Sloped Soil At Top, Add	4.10	
32 32 53 00-0004 LF \$16.00/ton 4' High Stone Retaining Wall, Dry Set.....	537.78	242.48
For >3:1 Sloped Soil At Top, Add	4.48	
32 32 53 00-0005 LF \$16.00/ton 6' High Stone Retaining Wall, Dry Set.....	706.04	322.17
For >3:1 Sloped Soil At Top, Add	5.25	
32 32 53 00-0006 LF \$16.00/ton 8' High Stone Retaining Wall, Dry Set.....	1,087.19	503.71
For >3:1 Sloped Soil At Top, Add	6.77	
32 32 53 00-0007 LF \$16.00/ton 10' High Stone Retaining Wall, Dry Set.....	1,412.17	658.91
For >3:1 Sloped Soil At Top, Add	8.01	
32 32 53 00-0008 LF \$16.00/ton 12' High Stone Retaining Wall, Dry Set.....	1,752.26	820.54
For >3:1 Sloped Soil At Top, Add	9.45	
32 32 53 00-0009 LF \$16.00/ton 3' High Stone Retaining Wall, Mortar Set.....	409.18	180.46
For >3:1 Sloped Soil At Top, Add	4.10	
32 32 53 00-0010 LF \$16.00/ton 4' High Stone Retaining Wall, Mortar Set.....	479.83	213.51
For >3:1 Sloped Soil At Top, Add	4.48	
32 32 53 00-0011 LF \$16.00/ton 6' High Stone Retaining Wall, Mortar Set.....	620.50	279.33
For >3:1 Sloped Soil At Top, Add	5.25	
32 32 53 00-0012 LF \$16.00/ton 8' High Stone Retaining Wall, Mortar Set.....	949.50	434.89
For >3:1 Sloped Soil At Top, Add	6.77	
32 32 53 00-0013 LF \$16.00/ton 10' High Stone Retaining Wall, Mortar Set.....	1,219.03	562.39
For >3:1 Sloped Soil At Top, Add	8.01	
32 32 53 00-0014 LF \$16.00/ton 12' High Stone Retaining Wall, Mortar Set.....	1,514.03	701.47
For >3:1 Sloped Soil At Top, Add	9.45	
<b>32 32 53 00-0015 Stone Retaining Walls (32 32 53 00-0001)</b>		
Note: Stone at \$32.00/ton.		
32 32 53 00-0016 LF \$32.00/ton 3' High Stone Retaining Wall, Dry Set.....	470.58	203.82
For >3:1 Sloped Soil At Top, Add	5.34	
32 32 53 00-0017 LF \$32.00/ton 4' High Stone Retaining Wall, Dry Set.....	557.99	242.48
For >3:1 Sloped Soil At Top, Add	6.20	
32 32 53 00-0018 LF \$32.00/ton 6' High Stone Retaining Wall, Dry Set.....	735.23	322.17
For >3:1 Sloped Soil At Top, Add	7.73	
32 32 53 00-0019 LF \$32.00/ton 8' High Stone Retaining Wall, Dry Set.....	1,129.85	503.71
For >3:1 Sloped Soil At Top, Add	10.40	
32 32 53 00-0020 LF \$32.00/ton 10' High Stone Retaining Wall, Dry Set.....	1,470.55	658.91
For >3:1 Sloped Soil At Top, Add	12.98	
32 32 53 00-0021 LF \$32.00/ton 12' High Stone Retaining Wall, Dry Set.....	1,826.35	820.54
For >3:1 Sloped Soil At Top, Add	15.74	
32 32 53 00-0022 LF \$32.00/ton 3' High Stone Retaining Wall, Mortar Set.....	423.77	180.46
For >3:1 Sloped Soil At Top, Add	5.34	
32 32 53 00-0023 LF \$32.00/ton 4' High Stone Retaining Wall, Mortar Set.....	500.04	213.51
For >3:1 Sloped Soil At Top, Add	6.20	
32 32 53 00-0024 LF \$32.00/ton 6' High Stone Retaining Wall, Mortar Set.....	649.69	279.33
For >3:1 Sloped Soil At Top, Add	7.73	
32 32 53 00-0025 LF \$32.00/ton 8' High Stone Retaining Wall, Mortar Set.....	992.16	434.89
For >3:1 Sloped Soil At Top, Add	10.40	
32 32 53 00-0026 LF \$32.00/ton 10' High Stone Retaining Wall, Mortar Set.....	1,277.41	562.39
For >3:1 Sloped Soil At Top, Add	12.98	
32 32 53 00-0027 LF \$32.00/ton 12' High Stone Retaining Wall, Mortar Set.....	1,588.12	701.47
For >3:1 Sloped Soil At Top, Add	15.74	
<b>32 32 53 00-0028 Stone Retaining Walls (32 32 53 00-0001)</b>		
Note: Stone at \$48.00/ton.		
32 32 53 00-0029 LF \$48.00/ton 3' High Stone Retaining Wall, Dry Set.....	486.30	203.82
For >3:1 Sloped Soil At Top, Add	6.68	
32 32 53 00-0030 LF \$48.00/ton 4' High Stone Retaining Wall, Dry Set.....	577.97	242.48
For >3:1 Sloped Soil At Top, Add	7.90	
32 32 53 00-0031 LF \$48.00/ton 6' High Stone Retaining Wall, Dry Set.....	763.29	322.17
For >3:1 Sloped Soil At Top, Add	10.11	
32 32 53 00-0032 LF \$48.00/ton 8' High Stone Retaining Wall, Dry Set.....	1,172.50	503.71
For >3:1 Sloped Soil At Top, Add	14.03	
32 32 53 00-0033 LF \$48.00/ton 10' High Stone Retaining Wall, Dry Set.....	1,528.92	658.91
For >3:1 Sloped Soil At Top, Add	17.94	
32 32 53 00-0034 LF \$48.00/ton 12' High Stone Retaining Wall, Dry Set.....	1,901.56	820.54
For >3:1 Sloped Soil At Top, Add	22.14	
32 32 53 00-0035 LF \$48.00/ton 3' High Stone Retaining Wall, Mortar Set.....	439.49	180.46
For >3:1 Sloped Soil At Top, Add	6.68	
32 32 53 00-0036 LF \$48.00/ton 4' High Stone Retaining Wall, Mortar Set.....	520.24	213.51
For >3:1 Sloped Soil At Top, Add	7.92	
32 32 53 00-0037 LF \$48.00/ton 6' High Stone Retaining Wall, Mortar Set.....	677.75	279.33
For >3:1 Sloped Soil At Top, Add	10.11	
32 32 53 00-0038 LF \$48.00/ton 8' High Stone Retaining Wall, Mortar Set.....	1,034.81	434.89
For >3:1 Sloped Soil At Top, Add	14.03	
32 32 53 00-0039 LF \$48.00/ton 10' High Stone Retaining Wall, Mortar Set.....	1,335.78	562.39
For >3:1 Sloped Soil At Top, Add	17.94	
32 32 53 00-0040 LF \$48.00/ton 12' High Stone Retaining Wall, Mortar Set.....	1,663.33	701.47
For >3:1 Sloped Soil At Top, Add	22.14	
<b>32 32 53 00-0041 Stone Retaining Walls (32 32 53 00-0001)</b>		
Note: Stone at \$64.00/ton.		



Exterior Improvements		32	32
Site Improvements		32 30	
Retaining Walls		32 32	

MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
32 32 53 00-0042 LF \$64.00/ton 3' High Stone Retaining Wall, Dry Set .....	502.01	203.82
For >3:1 Sloped Soil At Top, Add .....	8.01	
32 32 53 00-0043 LF \$64.00/ton 4' High Stone Retaining Wall, Dry Set .....	575.95	242.48
For >3:1 Sloped Soil At Top, Add .....	7.73	
32 32 53 00-0044 LF \$64.00/ton 6' High Stone Retaining Wall, Dry Set .....	793.60	322.17
For >3:1 Sloped Soil At Top, Add .....	12.69	
32 32 53 00-0045 LF \$64.00/ton 8' High Stone Retaining Wall, Dry Set .....	1,217.41	503.71
For >3:1 Sloped Soil At Top, Add .....	17.84	
32 32 53 00-0046 LF \$64.00/ton 10' High Stone Retaining Wall, Dry Set .....	1,589.54	658.91
For >3:1 Sloped Soil At Top, Add .....	23.09	
32 32 53 00-0047 LF \$64.00/ton 12' High Stone Retaining Wall, Dry Set .....	1,977.89	820.54
For >3:1 Sloped Soil At Top, Add .....	28.62	
32 32 53 00-0048 LF \$64.00/ton 3' High Stone Retaining Wall, Mortar Set.....	455.20	180.46
For >3:1 Sloped Soil At Top, Add .....	8.01	
32 32 53 00-0049 LF \$64.00/ton 4' High Stone Retaining Wall, Mortar Set.....	540.45	213.51
For >3:1 Sloped Soil At Top, Add .....	9.64	
32 32 53 00-0050 LF \$64.00/ton 6' High Stone Retaining Wall, Mortar Set.....	708.06	279.33
For >3:1 Sloped Soil At Top, Add .....	12.69	
32 32 53 00-0051 LF \$64.00/ton 8' High Stone Retaining Wall, Mortar Set.....	1,079.72	434.89
For >3:1 Sloped Soil At Top, Add .....	17.84	
32 32 53 00-0052 LF \$64.00/ton 10' High Stone Retaining Wall, Mortar Set.....	1,396.40	562.39
For >3:1 Sloped Soil At Top, Add .....	23.09	
32 32 53 00-0053 LF \$64.00/ton 12' High Stone Retaining Wall, Mortar Set.....	1,739.66	701.47
For >3:1 Sloped Soil At Top, Add .....	28.62	

## 32 35 Screening Devices (32 30)

### 32 35 16 Sound Barriers (32 35)

#### 32 35 16 00-0001 Precast Concrete Roadway Sound Barriers And Support Including Caps For Columns (32 35 16)

Note: Installed on steel supports. Finish to be determined by owner (ribbed, patterned, stamped, exposed aggregate or smooth)

#### 32 35 16 00-0002 4" Thick (32 35 16 00-0001)

32 35 16 00-0003 LF 6' High x 4" Thick Precast Concrete Sound Walls .....	168.71	24.02
For > 500 To 1000, Deduct .....	-16.87	
For > 1000, Deduct .....	-29.52	
32 35 16 00-0004 LF 7' High x 4" Thick Precast Concrete Sound Walls .....	182.51	26.82
For > 500 To 1000, Deduct .....	-18.25	
For > 1000, Deduct .....	-31.94	
32 35 16 00-0005 LF 8' High x 4" Thick Precast Concrete Sound Walls .....	198.69	29.06
For > 500 To 1000, Deduct .....	-19.87	
For > 1000, Deduct .....	-34.77	
32 35 16 00-0006 LF 9' High x 4" Thick Precast Concrete Sound Walls .....	212.01	31.29
For > 500 To 1000, Deduct .....	-21.20	
For > 1000, Deduct .....	-37.10	
32 35 16 00-0007 LF 10' High x 4" Thick Precast Concrete Sound Walls .....	224.23	33.52
For > 500 To 1000, Deduct .....	-22.42	
For > 1000, Deduct .....	-39.24	
32 35 16 00-0008 LF 11' High x 4" Thick Precast Concrete Sound Walls .....	241.55	34.64
For > 500 To 1000, Deduct .....	-24.16	
For > 1000, Deduct .....	-42.27	
32 35 16 00-0009 LF 12' High x 4" Thick Precast Concrete Sound Walls .....	258.39	36.32
For > 500 To 1000, Deduct .....	-25.84	
For > 1000, Deduct .....	-45.22	

#### 32 35 16 00-0010 6" Thick (32 35 16 00-0001)

32 35 16 00-0011 LF 6' High x 6" Thick Precast Concrete Sound Walls .....	201.31	27.94
For > 500 To 1000, Deduct .....	-20.13	
For > 1000, Deduct .....	-35.23	
32 35 16 00-0012 LF 7' High x 6" Thick Precast Concrete Sound Walls .....	217.74	31.29
For > 500 To 1000, Deduct .....	-21.77	
For > 1000, Deduct .....	-38.10	
32 35 16 00-0013 LF 8' High x 6" Thick Precast Concrete Sound Walls .....	237.05	34.64
For > 500 To 1000, Deduct .....	-23.71	
For > 1000, Deduct .....	-41.48	
32 35 16 00-0014 LF 9' High x 6" Thick Precast Concrete Sound Walls .....	252.93	36.87
For > 500 To 1000, Deduct .....	-25.29	
For > 1000, Deduct .....	-44.26	
32 35 16 00-0015 LF 10' High x 6" Thick Precast Concrete Sound Walls .....	267.51	39.11
For > 500 To 1000, Deduct .....	-26.75	
For > 1000, Deduct .....	-46.81	
32 35 16 00-0016 LF 11' High x 6" Thick Precast Concrete Sound Walls .....	288.21	40.78
For > 500 To 1000, Deduct .....	-28.82	
For > 1000, Deduct .....	-50.44	
32 35 16 00-0017 LF 12' High x 6" Thick Precast Concrete Sound Walls .....	308.37	42.47
For > 500 To 1000, Deduct .....	-30.84	
For > 1000, Deduct .....	-53.96	

#### 32 35 16 00-0018 8" Thick (32 35 16 00-0001)

**32 Exterior Improvements****32 30 Site Improvements****32 35 Screening Devices**

MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
32 35 16 00-0019 LF 6' High x 8" Thick Precast Concrete Sound Walls.....	243.13	33.52
For > 500 To 1000, Deduct	-24.31	
For > 1000, Deduct	-42.55	
32 35 16 00-0020 LF 7' High x 8" Thick Precast Concrete Sound Walls.....	262.89	36.87
For > 500 To 1000, Deduct	-26.29	
For > 1000, Deduct	-46.01	
32 35 16 00-0021 LF 8' High x 8" Thick Precast Concrete Sound Walls.....	286.21	40.22
For > 500 To 1000, Deduct	-28.62	
For > 1000, Deduct	-50.09	
32 35 16 00-0022 LF 9' High x 8" Thick Precast Concrete Sound Walls.....	305.34	43.58
For > 500 To 1000, Deduct	-30.53	
For > 1000, Deduct	-53.43	
32 35 16 00-0023 LF 10' High x 8" Thick Precast Concrete Sound Walls.....	322.95	46.38
For > 500 To 1000, Deduct	-32.30	
For > 1000, Deduct	-56.52	
32 35 16 00-0024 LF 11' High x 8" Thick Precast Concrete Sound Walls.....	348.05	48.05
For > 500 To 1000, Deduct	-34.81	
For > 1000, Deduct	-60.91	
32 35 16 00-0025 LF 12' High x 8" Thick Precast Concrete Sound Walls.....	372.52	50.29
For > 500 To 1000, Deduct	-37.25	
For > 1000, Deduct	-65.19	

**32 35 16 00-0026 Redwood Top** (32 35 16 00-0001)

32 35 16 00-0027 LF 2" x 6" Redwood, Construction Grade/Rough.....	5.53	1.21
32 35 16 00-0028 LF 2" x 8" Redwood, Construction Grade/Rough.....	6.34	1.57
32 35 16 00-0029 LF 2" x 10" Redwood, Construction Grade/Rough.....	9.87	1.93
32 35 16 00-0030 LF 2" x 12" Redwood, Construction Grade/Rough.....	11.91	2.42
32 35 16 00-0031 LF 2" x 6" Redwood, Con Heart/Smooth.....	6.85	1.21
32 35 16 00-0032 LF 2" x 8" Redwood, Con Heart/Smooth.....	9.94	1.57
32 35 16 00-0033 LF 2" x 10" Redwood, Con Heart/Smooth.....	13.21	1.93
32 35 16 00-0034 LF 2" x 12" Redwood, Con Heart/Smooth.....	15.88	2.42

**32 39 Manufactured Site Specialties** (32 30)

Note: Excludes coredrilling, augering, concrete footing and compaction See CSI section 02 41 19 13-0025 for concrete core drilling, 02 41 19 13-0163 for asphalt core drilling, 32 31 13 13-0002 for augering, 32 31 13 13-0019 for concrete footing, 32 31 13 13-0045 for compaction of earth.

**32 39 13 Manufactured Metal Bollards** (32 39)**32 39 13 00-0001 Metal Pipe Bollards** (32 39 13)

Note: For bollards by the LF, the quantity is the total length, including the buried portion, if any. See CSI section 32 31 13 13-0001 for augering and filling holes for bollards, 32 31 13 13-0018 for concrete fill for post and post holes.

**32 39 13 00-0002 Steel Pipe Bollard, Schedule 40 Pipe, Painted Or Powder Coated** (32 39 13 00-0001)

32 39 13 00-0003 LF 4" Steel Pipe Bollard, Schedule 40, Painted Or Powder Coated.....	57.54	12.40
For Galvanized Steel, Add	5.57	
For 304 Stainless Steel, Add	44.20	
For Each Surface Mounted Bollard (Includes Base Plate And Anchor Bolts), Add	123.20	
For Each Sleeve For Removable, Lockable Bollard (Includes Tamper Proof Screw), Add	85.51	
For Schedule 80, Add	7.39	
For Concrete Fill, Add Per LF Of Pipe Bollard	12.06	
32 39 13 00-0004 LF 6" Steel Pipe Bollard, Schedule 40, Painted Or Powder Coated.....	76.45	12.40
For Galvanized Steel, Add	8.78	
For 304 Stainless Steel, Add	69.73	
For Each Surface Mounted Bollard (Includes Base Plate And Anchor Bolts), Add	123.20	
For Each Sleeve For Removable, Lockable Bollard (Includes Tamper Proof Screw), Add	85.51	
For Schedule 80, Add	10.23	
For Concrete Fill, Add Per LF Of Pipe Bollard	17.31	
32 39 13 00-0005 LF 8" Steel Pipe Bollard, Schedule 40, Painted Or Powder Coated.....	107.60	15.51
For Galvanized Steel, Add	13.02	
For 304 Stainless Steel, Add	103.41	
For Each Surface Mounted Bollard (Includes Base Plate And Anchor Bolts), Add	162.00	
For Each Sleeve For Removable, Lockable Bollard, Add	127.66	
For Schedule 80, Add	14.59	
For Concrete Fill, Add Per LF Of Pipe Bollard	23.12	
32 39 13 00-0006 LF 10" Steel Pipe Bollard, Schedule 40, Painted Or Powder Coated.....	142.01	18.60
For Galvanized Steel, Add	17.82	
For 304 Stainless Steel, Add	141.49	
For Each Surface Mounted Bollard (Includes Base Plate And Anchor Bolts), Add	186.80	
For Each Sleeve For Removable, Lockable Bollard, Add	139.55	
For Schedule 80, Add	19.44	
For Concrete Fill, Add Per LF Of Pipe Bollard	28.44	
32 39 13 00-0007 LF 12" Steel Pipe Bollard, Schedule 40, Painted Or Powder Coated.....	179.66	24.80
For Galvanized Steel, Add	22.11	
For 304 Stainless Steel, Add	175.58	
For Each Surface Mounted Bollard (Includes Base Plate And Anchor Bolts), Add	248.81	
For Each Sleeve For Removable, Lockable Bollard, Add	192.06	
For Schedule 80, Add	24.47	
For Concrete Fill, Add Per LF Of Pipe Bollard	33.46	

**32 39 13 00-0008 Cast Bollards** (32 39 13 00-0001)



Exterior Improvements			32
Site Improvements			32 30
Manufactured Site Specialties			32 39

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MINOR CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
32 39 13 00-0009	EA	36" Cast Aluminum Bollard, Black Powder Coat Finish..... Note: 8-1/2" diameter, embedded mounting plate, all colors.	1,791.86	74.40
32 39 13 00-0010	EA	36" Cast Aluminum Removable Bollard, Black Powder Coat Finish..... Note: 8-1/2" diameter, embedded mounting plate, lockable, all colors.	3,027.46	74.40
32 39 13 00-0011	EA	36" Cast Iron Bollard, Powder Coat Finish..... Note: 8-1/2" diameter, embedded mounting plate, all colors.	1,518.68	74.40
32 39 13 00-0012	EA	36" Cast Iron Removable Bollard, Black Powder Coat Finish..... Note: 8-1/2" diameter, embedded mounting plate, lockable, all colors.	2,761.59	74.40
<b>32 39 23 Manufactured Concrete Bollards (32 39)</b>				
32 39 23 00-0001		Concrete Bollards (32 39 23) Note: For bollards by the LF, the quantity is the total length, including the buried portion, if any. See CSI section 32 31 13 13-0001 for augering and filling holes for bollards, 32 31 13 13-0018 for concrete fill.		
32 39 23 00-0002		Concrete Bollard, Exposed Aggregate (32 39 23 00-0001)		
32 39 23 00-0003	EA	12" x 12" x 30" High Concrete Bollard, Light Sandblast..... Note: Surface mounted with anchor bolts embedded into grout pockets.	884.26	99.19
32 39 23 00-0004	EA	12" Diameter x 30" High Concrete Bollard, Light Sandblast..... Note: Surface mounted with anchor bolts embedded into grout pockets.	884.26	99.19
<b>32 39 25 Manufactured Wood Bollards (32 39)</b>				
32 39 25 00-0001		Wood Bollards (32 39 25) Note: For bollards by the LF, the quantity is the total length, including the buried portion, if any. See CSI section 32 31 13 13-0001 for augering and filling holes for bollards, 32 31 13 13-0018 for concrete fill.		
32 39 25 00-0002		Wood Bollard, Pressure Treated Timber (32 39 25 00-0001)		
32 39 25 00-0003	LF	4" x 4", Pressure Treated Wood Bollard ..... For Each Sleeve For Removable, Lockable Bollard, Add	26.14 85.09	9.92
32 39 25 00-0004	LF	6" x 6", Pressure Treated Wood Bollard ..... For Each Sleeve For Removable, Lockable Bollard, Add	32.78 85.09	9.92
32 39 25 00-0005	LF	8" x 8", Pressure Treated Wood Bollard ..... For Each Sleeve For Removable, Lockable Bollard, Add	45.34 128.04	11.16
32 39 25 00-0006	LF	10" x 10", Pressure Treated Wood Bollard ..... For Each Sleeve For Removable, Lockable Bollard, Add	65.65 142.31	14.88
32 39 25 00-0007	LF	12" x 12", Pressure Treated Wood Bollard ..... For Each Sleeve For Removable, Lockable Bollard, Add	91.35 200.45	19.84
<b>32 39 27 Manufactured Plastic Bollards (32 39)</b>				
32 39 27 00-0001		Plastic Bollards (32 39 27) See CSI section 32 31 13 13-0001 for augering and filling holes for bollards., 32 31 13 13-0018 for concrete fill.		
32 39 27 00-0002		Recycled Plastic Bollards (32 39 27 00-0001)		
32 39 27 00-0003	EA	6" x 6" x 33" Surface Mounted Recycled Plastic Bollard..... Note: Includes anchor bolts.	333.36	49.60
32 39 27 00-0004	EA	6" Diameter x 6' Steel Reinforced Recycled Plastic Bollard.....	541.82	49.60
32 39 27 00-0005		Plastic Bollard Covers (32 39 27 00-0001)		
32 39 27 00-0006	EA	4" x 60", 1/8" Thick LDPE Bollard Cover, Fits 4" To 4-1/2" Pipe..... For Reflective Tape, Add	82.83 9.83	10.46
32 39 27 00-0007	EA	6" x 60", 1/8" Thick LDPE Bollard Cover, Fits 6" To 6-5/8" Pipe..... For Reflective Tape, Add	89.46 9.83	11.51
32 39 27 00-0008	EA	3" x 60", 1/4" Thick LDPE Bollard Cover, Fits 3" To 3 1/2" Pipe..... For Reflective Tape, Add	113.79 9.83	10.46
32 39 27 00-0009	EA	3-1/2" x 52", 1/4" Thick LDPE Bollard Cover, Fits 3 -1/2" To 4" Pipe..... For Reflective Tape, Add	113.79 9.83	10.46
32 39 27 00-0010	EA	3-1/2" x 68", 1/4" Thick LDPE Bollard Cover, Fits 3-1/2" To 4" Pipe..... For Reflective Tape, Add	128.24 9.83	10.46
32 39 27 00-0011	EA	4" x 52", 1/4" Thick LDPE Bollard Cover, Fits 4" To 4-1/2" Pipe..... For Reflective Tape, Add	113.79 9.83	10.46
32 39 27 00-0012	EA	4" x 60", 1/4" Thick LDPE Bollard Cover, Fits 4" To 4-1/2" Pipe..... For Reflective Tape, Add	115.85 9.83	10.46
32 39 27 00-0013	EA	5" x 52", 1/4" Thick LDPE Bollard Cover, Fits 5" To 5-9/16" Pipe..... For Reflective Tape, Add	113.79 9.83	10.46
32 39 27 00-0014	EA	5" x 60", 1/4" Thick LDPE Bollard Cover, Fits 5" To 5-9/16" Pipe..... For Reflective Tape, Add	115.85 9.83	10.46
32 39 27 00-0015	EA	5" x 72", 1/4" Thick LDPE Bollard Cover, Fits 5" To 5-9/16" Pipe..... For Reflective Tape, Add	163.33 9.83	10.46
32 39 27 00-0016	EA	6" x 52", 1/4" Thick LDPE Bollard Cover, Fits 6" To 6-5/8" Pipe..... For Reflective Tape, Add	115.88 9.83	11.51
32 39 27 00-0017	EA	6" x 65", 1/4" Thick LDPE Bollard Cover, Fits 6" To 6-5/8" Pipe..... For Reflective Tape, Add	148.91 9.83	11.51
32 39 27 00-0018	EA	6" x 84", 1/4" Thick LDPE Bollard Cover, Fits 6" To 6-5/8" Pipe..... For Reflective Tape, Add	169.97 9.83	11.51
32 39 27 00-0019	EA	7" x 56", 1/4" Thick LDPE Bollard Cover, Fits 6" To 6-5/8" Pipe..... For Reflective Tape, Add	142.74 9.83	12.55
32 39 27 00-0020	EA	8" x 52", 1/4" Thick LDPE Bollard Cover, Fits 7" To 7-5/16" Pipe..... For Reflective Tape, Add	155.12 9.83	12.55

**32 Exterior Improvements****32 30 Site Improvements****32 39 Manufactured Site Specialties**

MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
32 39 27 00-0021 EA 8" x 69", 1/4" Thick LDPE Bollard Cover, Fits 8" To 8-5/8" Pipe ..... <i>For Reflective Tape, Add</i>	155.12 9.83	12.55
32 39 27 00-0022 EA 10" x 69", 1/4" Thick LDPE Bollard Cover, Fits 10" To 11" Pipe ..... <i>For Reflective Tape, Add</i>	210.88 9.83	12.55
<b>32 39 29 Manufactured Stone Bollards (32 39)</b>		
32 39 29 00-0001 Stone Bollards (32 39 29) See CSI section 32 31 13 13-0001 for augering and filling holes for bollards, 32 31 13 13-0018 for concrete fill.		
32 39 29 00-0002 Granite Bollards (32 39 29 00-0001)		
32 39 29 00-0003 EA 16" x 16" x 30" Granite Bollard, Smooth Matt Finish..... Note: Surface mounted with anchors embedded into grout pockets.	1,205.05	124.00
32 39 29 00-0004 EA 16" x 16" x 54" Granite Bollard, Smooth Matt Finish..... Note: Surface mounted with anchors embedded into grout pockets.	1,530.46	173.59
32 39 29 00-0005 EA 12" x 12" x 24" Granite Bollard, Rough Finish, Pyramid Top ..... Note: Surface mounted with anchors embedded into grout pockets.	759.58	124.00
32 39 29 00-0006 EA 12" Diameter x 18" Granite Bollard, Smooth Matt Finish ..... Note: Flat Top, surface mounted with anchors embedded into grout pockets.	1,103.25	99.19
32 39 29 00-0007 EA 24" x 24" x 20" Granite Bollard, Octagonal Cross Section ..... Note: Smooth matt finish, flat top, surface mounted with anchors embedded into grout pockets.	1,633.99	99.19
<b>32 80 Irrigation (32)</b>		
<b>32 84 Planting Irrigation (32 80)</b>		
<b>32 84 13 Drip Irrigation (32 84)</b>		
32 84 13 00-0001 Drip Emitter Irrigation Devices (32 84 13)		
32 84 13 00-0002 Drip Emitter Irrigation Valves (32 84 13 00-0001)		
32 84 13 00-0003 EA 1/2" Air/Vacuum Relief Valve For Drip Emitter Irrigation Systems (Rain Bird® ARV050) .....	57.82	14.78
32 84 13 00-0004 EA 1", Low Flow Remote Control Valve For Drip Emitter Irrigation Systems (Rain Bird® LRV100) .....	83.33	14.78
32 84 13 00-0005 EA 3/4", Anti-Siphon, Low Flow Remote Control Valve For Drip Emitter Irrigation Systems (Rain Bird® LRV075) .....	81.55	14.78
32 84 13 00-0006 EA 3/4", Latching Solenoid, Low Flow Remote Control Valve For Drip Emitter Irrigation Systems (Rain Bird® LRV075TBOS) .....	105.52	14.78
32 84 13 00-0007 Drip Emitter Irrigation Filters (32 84 13 00-0001)		
32 84 13 00-0008 EA 3/4" Inlet/Outlet, Inline Basket Filter For Drip Emitter Irrigation Systems (Rain Bird® QKCHK-075).....	156.18	14.78
32 84 13 00-0009 EA 1" Inlet/Outlet, Inline Basket Filter For Drip Emitter Irrigation Systems (Rain Bird® QKCHK-100) .....	157.50	14.78
32 84 13 00-0010 EA 3/4" Inlet/Outlet, Inline Wye Filter For Drip Emitter Irrigation Systems (Rain Bird® RBY075MPTX).....	68.96	14.78
32 84 13 00-0011 EA 1" Inlet/Outlet, Inline Wye Filter For Drip Emitter Irrigation Systems (Rain Bird® RBY100MPTX).....	70.02	14.78
32 84 13 00-0012 EA 1" Inlet/Outlet, Pressure Regulating, Inline Basket Filter For Drip Emitter Irrigation Systems (Rain Bird® PRB-QCHK-100).....	168.46	14.78
32 84 13 00-0013 EA 3/4" Inlet/Outlet, Pressure Regulating, Inline RBY Filter For Drip Emitter Irrigation Systems (Rain Bird® PRF075RBY).....	84.83	14.78
32 84 13 00-0014 EA 1" Inlet/Outlet, Pressure Regulating, Inline RBY Filter For Drip Emitter Irrigation Systems (Rain Bird® PRF100RBY).....	93.09	14.78
32 84 13 00-0015 Drip Emitter Irrigation Pressure Regulators (32 84 13 00-0001)		
32 84 13 00-0016 EA 3/4", 6 To 300 GPH, 30 PSI, Inline Pressure Regulator For Drip Emitter Irrigation Systems (Rain Bird® PSI-L30X-075) .....	67.89	14.78
32 84 13 00-0017 EA 3/4", 120 To 600 GPH, 30 PSI, Inline Pressure Regulator For Drip Emitter Irrigation Systems (Rain Bird® PSI-M30X-075).....	67.89	14.78
32 84 13 00-0018 EA 3/4", 120 To 600 GPH, 40 PSI, Inline Pressure Regulator For Drip Emitter Irrigation Systems (Rain Bird® PSI-M40X-075).....	67.89	14.78
32 84 13 00-0019 EA 1", 120 To 900 GPH, 40 PSI, Inline Pressure Regulator For Drip Emitter Irrigation Systems (Rain Bird® PSI-M40X-100).....	76.58	14.78
32 84 13 00-0020 Drip Emitter Irrigation Tubing (32 84 13 00-0001) Note: Includes surface installation and covering of tubing with existing pine straw, pine bark etc.		
32 84 13 00-0021 LF 1/4", Landscape Dripline With Extruded Non-Pressure Compensating Drip Emitters (Rain Bird® LDQ0806100).....	5.18	2.07
32 84 13 00-0022 LF 1/2", Landscape Dripline With Extruded Pressure Compensating Drip Emitters (Rain Bird® XFD0612100).....	5.04	2.36
32 84 13 00-0023 LF 1/4", UV-Resistant, Polyethylene, Distribution Tubing For Drip Emitter Irrigation Systems (Rain Bird® XQ100).....	4.34	2.07
32 84 13 00-0024 <i>For Shallow Trenching And Backfill By Hand, Add</i> LF 1/2", UV-Resistant, Polyethylene, Distribution Tubing For Drip Emitter Irrigation Systems (Rain Bird® XT700100).....	8.50 5.01	2.36
<i>For Shallow Trenching And Backfill By Hand, Add</i>	9.20	
32 84 13 00-0025 Drip Emitter Irrigation Fittings (32 84 13 00-0001)		
32 84 13 00-0026 EA 1/4", Barbed Coupling For Irrigation Tubing (Rain Bird® XBF1CONN).....	3.86	
32 84 13 00-0027 EA 1/4", Barbed Elbow For Irrigation Tubing (Rain Bird® XBF2EL) .....	3.89	
32 84 13 00-0028 EA 1/4", Barbed Tee For Irrigation Tubing (Rain Bird® XBF3TEE) .....	3.94	
32 84 13 00-0029 EA 1/4", Self Piercing Barbed Coupling For Irrigation Tubing (Rain Bird® SPB025).....	4.09	
32 84 13 00-0030 EA 1/4", Plug For Irrigation Tubing (Rain Bird® EMAGPX) .....	3.84	
32 84 13 00-0031 EA 17mm, Barbed Coupling For Irrigation Tubing (Rain Bird® XFFCOUP) .....	4.02	
<i>For Compression Fitting, Add</i>	0.32	





Exterior Improvements		32	32
Irrigation		32 80	
Planting Irrigation		32 84	

MINOR CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
32 84 13 00-0032	EA	17mm, Barbed Elbow For Irrigation Tubing (Rain Bird® XFF-ELBOW)..... <i>For Compression Fitting, Add</i>	4.11 0.41	
32 84 13 00-0033	EA	17mm, Barbed Tee For Irrigation Tubing (Rain Bird® XFF-TEE) ..... <i>For Compression Fitting, Add</i>	4.15 0.45	
32 84 13 00-0034	EA	17mm, Barbed Male Adapter For Irrigation Tubing (Rain Bird® XFFMA050) ..... <i>For Compression Fitting, Add</i>	4.17 0.47	
32 84 13 00-0035	EA	17mm, Barbed Cross For Irrigation Tubing (Rain Bird® XFDCROSS) ..... <i>For Compression Fitting, Add</i>	4.36 0.66	
32 84 13 00-0036	EA	1/2", Plug For Irrigation Tubing (Rain Bird® MDCFCAP).....	4.58	
32 84 13 00-0037	EA	12 Gauge, Galvanized Stake For Irrigation Tubing (Rain Bird® TDS050BEND) .....	2.27	
<b>32 84 13 00-0038 Drip Emitters</b> (32 84 13 00-0001)				
32 84 13 00-0039	EA	0.5 To 2 GPH, Single Outlet, Pressure Compensating Emitter For Drip Emitter Irrigation Systems (Rain Bird® XB20PC).....	7.87	
32 84 13 00-0040	EA	5 To 24 GPH, Single Outlet, Pressure Compensating Emitter For Drip Emitter Irrigation Systems (Rain Bird® PC24) .....	8.72	
32 84 13 00-0041	EA	0.5 To 2 GPH, Six Outlet, Pressure Compensating Emitter For Drip Emitter Irrigation Systems (Rain Bird® XB056) .....	17.05	
<b>32 84 13 00-0042 Drip Emitter Irrigation Micro-Bubblers, Sprays And Misters</b> (32 84 13 00-0001)				
32 84 13 00-0043	EA	Adjustable Stream Bubbler With Spike For Drip Emitter Irrigation Systems (Rain Bird® SXB360SPYK) .....	30.88	13.30
32 84 13 00-0044	EA	Adjustable Micro Spray With Spike For Drip Emitter Irrigation Systems (Rain Bird® XS360TSPYK) .....	30.92	13.30
32 84 13 00-0045	EA	12" Height, Riser Assembly With Pressure Compensating Nozzle For Drip Emitter Irrigation Systems (Rain Bird® SQADP12 With SQFUL).....	33.25	13.30
32 84 13 00-0046	EA	24" Height, Riser Assembly With Pressure Compensating Nozzle For Drip Emitter Irrigation Systems (Rain Bird® SQADP24 With SQFUL).....	33.50	13.30
32 84 13 00-0047	EA	4" Pop-Up Height, Micro Spray Pop-Ups For Drip Emitter Irrigation Systems (Rain Bird® XP-400X With SQFUL) .....	47.46	17.44
Note: Includes nozzle.				
32 84 13 00-0048	EA	6" Pop-Up Height, Micro Spray Pop-Ups For Drip Emitter Irrigation Systems (Rain Bird® XP-600X With SQFUL) .....	50.47	17.44
Note: Includes nozzle.				
32 84 13 00-0049	EA	12" Pop-Up Height, Micro Spray Pop-Ups For Drip Emitter Irrigation Systems (Rain Bird® XP1200X With SQFUL) .....	48.59	17.44
Note: Includes nozzle.				
<b>32 84 13 00-0050 Subsurface Drip Emitter Irrigation Tubing (Rain Bird® XFS)</b> (32 84 13 00-0001)				
Note: Brown or purple tubing. Includes layout, trenching 4" to 6", installing tubing and backfilling trench.				
32 84 13 00-0051	LF	0.536" ID, 0.634" OD, Subsurface Drip Emitter Irrigation Tubing (Rain Bird® XFS Copper Shield) .....	5.76	2.58
<b>32 84 23 Underground Sprinklers</b> (32 84)				
<b>32 84 23 00-0001 Sprinkler Heads</b> (32 84 23)				
<b>32 84 23 00-0002 Spray Sprinkler Heads</b> (32 84 23 00-0001)				
Note: Includes plastic riser and case. Includes spray, variable arc or bubbler nozzle with partial or full circle coverage.				
32 84 23 00-0003	EA	2" Pop-Up Height, Spray Sprinkler Head (Rain Bird® 1802P)..... <i>For Rotary Nozzle, Add</i>	42.29 3.25	16.33
32 84 23 00-0004	EA	4" Pop-Up Height, Spray Sprinkler Head (Rain Bird® 1804P)..... <i>For Rotary Nozzle, Add</i>	40.59 3.25	16.33
32 84 23 00-0005	EA	6" Pop-Up Height, Spray Sprinkler Head (Rain Bird® 1806P)..... <i>For Rotary Nozzle, Add</i>	46.90 3.25	16.33
32 84 23 00-0006	EA	12" Pop-Up Height, Spray Sprinkler Head (Rain Bird® 1812P)..... <i>For Rotary Nozzle, Add</i>	52.19 3.25	16.33
32 84 23 00-0007	EA	4" Pop-Up Height, Spray Sprinkler Head With Check Valve (Rain Bird® 1804-SAM) .....	42.96	16.33
<i>For Rotary Nozzle, Add</i>				
32 84 23 00-0008	EA	6" Pop-Up Height, Spray Sprinkler Head With Check Valve (Rain Bird® 1806-SAM) .....	51.85	16.33
<i>For Rotary Nozzle, Add</i>				
32 84 23 00-0009	EA	12" Pop-Up Height, Spray Sprinkler Head With Check Valve (Rain Bird® 1812-SAM) .....	56.13	16.33
<i>For Rotary Nozzle, Add</i>				
32 84 23 00-0010	EA	4" Pop-Up Height, Spray Sprinkler Head With Pressure Regulator (Rain Bird® 1804-PRS)..... <i>For Rotary Nozzle, Add</i>	45.50 3.25	16.33
32 84 23 00-0011	EA	6" Pop-Up Height, Spray Sprinkler Head With Pressure Regulator (Rain Bird® 1806-PRS)..... <i>For Rotary Nozzle, Add</i>	53.60 3.25	16.33
32 84 23 00-0012	EA	12" Pop-Up Height, Spray Sprinkler Head With Pressure Regulator (Rain Bird® 1812-PRS)..... <i>For Rotary Nozzle, Add</i>	57.59 3.25	16.33
32 84 23 00-0013	EA	4" Pop-Up Height, Spray Sprinkler Head With Check Valve And Pressure Regulator (Rain Bird® 1804-SAM-PRS)..... <i>For Rotary Nozzle, Add</i>	46.51 3.25	16.33
32 84 23 00-0014	EA	6" Pop-Up Height, Spray Sprinkler Head With Check Valve And Pressure Regulator (Rain Bird® 1806-SAM-PRS)..... <i>For Rotary Nozzle, Add</i>	58.94 3.25	16.33
32 84 23 00-0015	EA	12" Pop-Up Height, Spray Sprinkler Head With Check Valve And Pressure Regulator (Rain Bird® 1812-SAM-PRS)..... <i>For Rotary Nozzle, Add</i>	62.88 3.25	16.33
32 84 23 00-0016	EA	Bubbler Head With Screen, 1/2" NPT (Rain Bird® 1300) .....	37.27	16.33
<i>For Rotary Nozzle, Add</i>				
32 84 23 00-0017	EA	Pressure Compensating Bubbler With Screen, 1/2" NPT (Rain Bird® 1400) .....	41.22	16.33
<b>32 84 23 00-0018 Gear-Drive, Rotary Sprinkler Heads</b> (32 84 23 00-0001)				
Note: Maximum spacing is equivalent to maximum radius.				

**32 Exterior Improvements****32 80 Irrigation****32 84 Planting Irrigation**

MINOR	CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
32 84 23 00-0019			<b>1/2" Inlet, Up To 35' Spacing, Gear-Drive, Rotary Sprinkler Heads</b> (32 84 23 00-0018) Note: Includes plastic riser and case, standard rubber cover and nozzle with partial or full circle coverage.		
32 84 23 00-0020	EA		4" Pop-Up Height, 1/2" Inlet, Up To 35' Spacing, Gear-Drive, Rotary Sprinkler Head (Rain Bird® 3504PC).....	54.78	16.33
			For Non-Potable Cover, Add	2.00	
32 84 23 00-0021	EA		4" Pop-Up Height, 1/2" Inlet, Up To 35' Spacing, Gear-Drive, Rotary Sprinkler Head With Check Valve (Rain Bird® 3504-PC-SAM).....	56.19	16.33
			For Non-Potable Cover, Add	2.00	
32 84 23 00-0022			<b>3/4" Inlet, Up To 55' Spacing, Gear-Drive, Rotary Sprinkler Heads</b> (32 84 23 00-0018) Note: Includes plastic riser and case, standard rubber cover and nozzle with partial or full circle coverage.		
32 84 23 00-0023	EA		4" Pop-Up Height, 3/4" Inlet, Up To 55' Spacing, Gear-Drive, Rotary Sprinkler Head (Rain Bird® 5004-PLPC).....	51.40	16.33
			For Non-Potable Cover, Add	2.00	
			For Stainless Steel Riser, Add	9.00	
32 84 23 00-0024	EA		6" Pop-Up Height, 3/4" Inlet, Up To 55' Spacing, Gear-Drive, Rotary Sprinkler Head (Rain Bird® 5006-PLPC).....	66.60	16.33
			For Non-Potable Cover, Add	2.00	
			For Stainless Steel Riser, Add	9.00	
32 84 23 00-0025	EA		4" Pop-Up Height, 3/4" Inlet, Up To 55' Spacing, Gear-Drive, Rotary Sprinkler Head With Check Valve (Rain Bird® 5004-PLPCS).....	54.22	16.33
			For Non-Potable Cover, Add	2.00	
			For Stainless Steel Riser, Add	9.00	
32 84 23 00-0026	EA		6" Pop-Up Height, 3/4" Inlet, Up To 55' Spacing, Gear-Drive, Rotary Sprinkler Head With Check Valve (Rain Bird® 5006-PLPCS).....	68.85	16.33
			For Non-Potable Cover, Add	2.00	
			For Stainless Steel Riser, Add	9.00	
32 84 23 00-0027	EA		4" Pop-Up Height, 3/4" Inlet, Up To 55' Spacing, Gear-Drive, Rotary Sprinkler Head With Pressure Regulator (Rain Bird® 5004+PCR).....	55.34	16.33
			For Non-Potable Cover, Add	2.00	
			For Stainless Steel Riser, Add	9.00	
32 84 23 00-0028	EA		4" Pop-Up Height, 3/4" Inlet, Up To 55' Spacing, Gear-Drive, Rotary Sprinkler Head With Check Valve And Pressure Regulator (Rain Bird® 5004+FCSR).....	57.59	16.33
			For Non-Potable Cover, Add	2.00	
			For Stainless Steel Riser, Add	9.00	
32 84 23 00-0029	EA		6" Pop-Up Height, 3/4" Inlet, Up To 55' Spacing, Gear-Drive, Rotary Sprinkler Head With Check Valve And Pressure Regulator (Rain Bird® 5006+PCSR).....	72.22	16.33
			For Non-Potable Cover, Add	2.00	
			For Stainless Steel Riser, Add	9.00	
32 84 23 00-0030	EA		12" Pop-Up Height, 3/4" Inlet, Up To 55' Spacing, Gear-Drive, Rotary Sprinkler Head With Check Valve And Pressure Regulator (Rain Bird® 5012+PCSR).....	81.23	16.33
			For Non-Potable Cover, Add	2.00	
			For Stainless Steel Riser, Add	9.00	
32 84 23 00-0031	EA		Shrub Type, 3/4" Inlet, Up To 55' Spacing, Gear-Drive, Rotary Sprinkler Head With Check Valve (Rain Bird® 5000S-PLPCS).....	57.31	16.33
			For Non-Potable Cover, Add	2.00	
32 84 23 00-0032	EA		Shrub Type, 3/4" Inlet, Up To 55' Spacing, Gear-Drive, Rotary Sprinkler Head With Check Valve And Pressure Regulator (Rain Bird® 5000S+PCSR).....	66.32	16.33
			For Non-Potable Cover, Add	2.00	
32 84 23 00-0033			<b>1" Inlet, Up To 65' Spacing, Gear-Drive, Rotary Sprinkler Heads</b> (32 84 23 00-0018) Note: Includes plastic riser and case, standard rubber cover, check valve and nozzle with partial or full circle coverage.		
32 84 23 00-0034	EA		4" Pop-Up Height, 1" Inlet, Up To 65' Spacing, Gear-Drive, Rotary Sprinkler Head (Rain Bird® F4PC).....	87.70	16.33
			For Non-Potable Cover, Add	2.00	
			For Stainless Steel Riser, Add	9.00	
			For Stainless Steel Riser And High Speed Rotor, Add	41.42	
32 84 23 00-0035			<b>1" Inlet, Up To 80' Spacing, Gear-Drive, Rotary Sprinkler Heads</b> (32 84 23 00-0018) Note: Includes plastic riser and case, standard rubber cover, check valve and nozzle with partial or full circle coverage.		
32 84 23 00-0036	EA		5" Pop-Up Height, 1" Inlet, Up To 80' Spacing, Gear-Drive, Rotary Sprinkler Head (Rain Bird® 8005).....	120.34	16.33
			For Non-Potable Cover, Add	2.00	
			For Stainless Steel Riser, Add	9.00	
32 84 23 00-0037			<b>Impact-Drive Sprinkler Heads</b> (32 84 23 00-0001) Note: Includes partial or full circle coverage. Maximum spacing is equivalent to maximum radius.		
32 84 23 00-0038	EA		1/2" Inlet, Up To 45' Spacing, Pop-Up, Impact-Drive Rotary Sprinkler Head (Rain Bird® 2045A-08).....	71.94	16.33
			For Non-Potable Cover, Add	2.00	
32 84 23 00-0039	EA		1/2" Inlet, Up To 45' Spacing, Riser Mounted, Plastic Body, Impact-Drive Sprinkler Head (Rain Bird® 2045-PJ08).....	58.44	16.33
32 84 23 00-0040	EA		3/4" Inlet, Up To 51' Spacing, Riser Mounted, Brass/Bronze Body, Impact-Drive Sprinkler Head (Rain Bird® 35A-ADJ-TNTB).....	103.43	16.33
32 84 23 00-0041			<b>Electric Remote Control Irrigation Valves</b> (32 84 23)		
32 84 23 00-0042			<b>0.2 To 22 GPM, Plastic, Electric Remote Control Irrigation Valves (Rain Bird® DV Series)</b> (32 84 23 00-0041) Note: 15 to 150 PSI.		
32 84 23 00-0043	EA		3/4", 0.2 To 22 GPM, Plastic, Electric Remote Control Irrigation Valve (Rain Bird® 75DV).....	178.23	68.05
32 84 23 00-0044	EA		1", 0.2 To 40 GPM, Plastic, Electric Remote Control Irrigation Valve (Rain Bird® 100DV).....	178.23	68.05
32 84 23 00-0045	EA		1", 0.2 To 40 GPM, Slip-On, Plastic, Electric Remote Control Irrigation Valve (Rain Bird® 100DVSS).....	197.67	77.57



Exterior Improvements			32
Irrigation			32 80
Planting Irrigation			32 84

MINOR	CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
32 84 23 00-0046	EA		1", 0.2 To 22 GPM, Plastic, Electric Remote Control Irrigation Angle Valve (Rain Bird® 100DVA) .....	179.36	68.05
32 84 23 00-0047			<b>0.2 To 22 GPM, Plastic, Electric Remote Control Irrigation Valves With Flow Control (Rain Bird® DVF Series)</b> (32 84 23 00-0041) Note: 15 to 150 PSI.		
32 84 23 00-0048	EA		1", 0.2 To 40 GPM, Plastic, Electric Remote Control Irrigation Valve With Flow Control (Rain Bird® 100DVF) .....	179.36	68.05
32 84 23 00-0049	EA		1", 0.2 To 40 GPM, Slip-On, Plastic, Electric Remote Control Irrigation Valve With Flow Control (Rain Bird® 100DVFSS) .....	199.36	77.57
32 84 23 00-0050	EA		1", 0.2 To 40 GPM, Male x Barb, Plastic, Electric Remote Control Irrigation Valve With Flow Control (Rain Bird® 100DVFMB) .....	200.48	77.57
32 84 23 00-0051			<b>0.25 To 200 GPM, Plastic, Electric Remote Control Irrigation Valves (Rain Bird® PEB Series)</b> (32 84 23 00-0041) Note: 20 to 200 PSI.		
32 84 23 00-0052	EA		1", 0.25 To 200 GPM, Plastic, Electric Remote Control Irrigation Valve (Rain Bird® 100PEB) .....	269.39	68.05
32 84 23 00-0053	EA		1-1/2", 0.25 To 200 GPM, Plastic, Electric Remote Control Irrigation Valve (Rain Bird® 150PEB) .....	308.78	68.05
32 84 23 00-0054	EA		2", 0.25 To 200 GPM, Plastic, Electric Remote Control Irrigation Valve (Rain Bird® 200PEB) .....	359.42	68.05
32 84 23 00-0055			<b>5 To 200 GPM, Plastic, Electric Remote Control Irrigation Valves With Pressure Regulator (Rain Bird® PEB PRS-D Series)</b> (32 84 23 00-0041) Note: 20 to 200 PSI operating range pressure and 15 to 100 PSI pressure regulation.		
32 84 23 00-0056	EA		1", 5 To 200 GPM, Plastic, Electric Remote Control Irrigation Valve With Pressure Regulator (Rain Bird® 100PEB PRS-D) .....	372.69	76.49
32 84 23 00-0057	EA		1-1/2", 5 To 200 GPM, Plastic, Electric Remote Control Irrigation Valve With Pressure Regulator (Rain Bird® 150PEB PRS-D) .....	412.08	76.49
32 84 23 00-0058	EA		2", 5 To 200 GPM, Plastic, Electric Remote Control Irrigation Valve With Pressure Regulator (Rain Bird® 200PEB PRS-D) .....	462.73	76.49
32 84 23 00-0059			<b>20 To 200 GPM, Plastic, Electric Remote Control Irrigation Valves With Pressure Regulator And Scrubber Valve (Rain Bird® PESB PRS-D Series)</b> (32 84 23 00-0041) Note: 20 to 200 PSI operating range pressure and 15 to 100 PSI pressure regulation.		
32 84 23 00-0060	EA		1", 5 To 200 GPM, Plastic, Electric Remote Control Irrigation Valve With Pressure Regulator And Scrubber Valve (Rain Bird® 100PESB PRS-D) .....	428.96	76.49
32 84 23 00-0061	EA		1-1/2", 5 To 200 GPM, Plastic, Electric Remote Control Irrigation Valve With Pressure Regulator And Scrubber Valve (Rain Bird® 150PESB PRS-D) .....	468.35	76.49
32 84 23 00-0062	EA		2", 5 To 200 GPM, Plastic, Electric Remote Control Irrigation Valve With Pressure Regulator And Scrubber Valve (Rain Bird® 200PESB PRS-D) .....	519.00	76.49
32 84 23 00-0063			<b>0.1 To 300 GPM, Brass, Electric Remote Control Irrigation Valves (Hunter IBV Series)</b> (32 84 23 00-0041) Note: 20 to 200 PSI operating range pressure.		
32 84 23 00-0064	EA		1", 0.1 To 300 GPM, Brass, Electric Remote Control Irrigation Valve (Hunter IBV-101G-B) .....	381.42	68.05
32 84 23 00-0065	EA		1-1/2", 0.1 To 300 GPM, Brass, Electric Remote Control Irrigation Valve (Hunter IBV-151G-B) .....	562.51	68.05
32 84 23 00-0066	EA		2", 0.1 To 300 GPM, Brass, Electric Remote Control Irrigation Valve (Hunter IBV-201G-B) .....	578.88	68.05
32 84 23 00-0067	EA		3", 0.1 To 300 GPM, Brass, Electric Remote Control Irrigation Valve (Hunter IBV-301G-B) .....	1,319.33	91.87
32 84 23 00-0068			<b>5 To 200 GPM, Brass, Contamination Proof, Electric Remote Control Irrigation Valves (Rain Bird® EFB-CP Series)</b> (32 84 23 00-0041) Note: 15 to 200 PSI operating range pressure and 15 to 100 PSI pressure regulation.		
32 84 23 00-0069	EA		1", 5 To 200 GPM, Brass, Contamination Proof, Electric Remote Control Irrigation Valve (Rain Bird® 100EFB-CP) .....	360.48	76.49
32 84 23 00-0070	EA		1-1/4", 5 To 200 GPM, Brass, Contamination Proof, Electric Remote Control Irrigation Valve (Rain Bird® 125EFB- CP) .....	414.33	76.49
32 84 23 00-0071	EA		1-1/2", 5 To 200 GPM, Brass, Contamination Proof, Electric Remote Control Irrigation Valve (Rain Bird® 150EFB- CP) .....	472.80	76.49
32 84 23 00-0072	EA		2", 5 To 200 GPM, Brass, Contamination Proof, Electric Remote Control Irrigation Valve (Rain Bird® 200EFB-CP) .....	549.78	76.49
32 84 23 00-0073			<b>0.1 To 300 GPM, Brass, Contamination Proof, Electric Remote Control Irrigation Valves (Hunter IBV FS Series)</b> (32 84 23 00-0041) Note: 20 to 200 PSI operating range pressure and 20 to 100 PSI pressure regulation.		
32 84 23 00-0074	EA		1", 0.1 To 300 GPM, Brass, Contamination Proof, Electric Remote Control Irrigation Valve (Hunter IBV-101G-B- FS) .....	461.70	76.49
32 84 23 00-0075	EA		1-1/2", 0.1 To 300 GPM, Brass, Contamination Proof, Electric Remote Control Irrigation Valve (Hunter IBV-151G- B-FS) .....	676.55	76.49
32 84 23 00-0076	EA		2", 0.1 To 300 GPM, Brass, Contamination Proof, Electric Remote Control Irrigation Valve (Hunter IBV-201G-B- FS) .....	694.97	76.49
32 84 23 00-0077	EA		3", 0.1 To 300 GPM, Brass, Contamination Proof, Electric Remote Control Irrigation Valve (Hunter IBV-301G-B- FS) .....	1,396.82	76.49
32 84 23 00-0078			<b>0.1 To 300 GPM, Brass, Electric Remote Control Irrigation Valves With Pressure Regulator (Hunter IBV ACCU-SYNC Series)</b> (32 84 23 00-0041) Note: 20 to 200 PSI operating range pressure and 20 to 100 PSI pressure regulation.		

**32 Exterior Improvements****32 80 Irrigation****32 84 Planting Irrigation**

MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
32 84 23 00-0079 EA 1", 0.1 To 300 GPM, Brass, Electric Remote Control Irrigation Valves With Pressure Regulator (Hunter IBV-101G-B ACCU-SYNC-ADJ).....	463.27	68.05
32 84 23 00-0080 EA 1-1/2", 0.1 To 300 GPM, Brass, Electric Remote Control Irrigation Valves With Pressure Regulator (Hunter IBV-151G-B ACCU-SYNC-ADJ).....	644.35	68.05
32 84 23 00-0081 EA 2", 0.1 To 300 GPM, Brass, Electric Remote Control Irrigation Valves With Pressure Regulator (Hunter IBV-201G-B ACCU-SYNC-ADJ).....	660.72	68.05
32 84 23 00-0082 EA 3", 0.1 To 300 GPM, Brass, Electric Remote Control Irrigation Valves With Pressure Regulator (Hunter IBV-301G-B ACCU-SYNC-ADJ).....	1,401.18	91.87
<b>32 84 23 00-0083 5 To 200 GPM, Brass, Contamination Proof, Electric Remote Control Irrigation Valves With Pressure Regulator (Rain Bird® EFB-CP PRS-D Series) (32 84 23 00-0041)</b> Note: 15 to 200 PSI operating range pressure and 15 to 100 PSI pressure regulation.		
32 84 23 00-0084 EA 1", 5 To 200 GPM, Brass, Contamination Proof, Electric Remote Control Irrigation Valve With Pressure Regulator (Rain Bird® 100EFB-CP PRS-D).....	444.89	76.49
32 84 23 00-0085 EA 1-1/4", 5 To 200 GPM, Brass, Contamination Proof, Electric Remote Control Irrigation Valve With Pressure Regulator (Rain Bird® 125EFB-CP PRS-D).....	498.74	76.49
32 84 23 00-0086 EA 1-1/2", 5 To 200 GPM, Brass, Contamination Proof, Electric Remote Control Irrigation Valve With Pressure Regulator (Rain Bird® 150EFB-CP PRS-D).....	557.20	76.49
32 84 23 00-0087 EA 2", 5 To 200 GPM, Brass, Contamination Proof, Electric Remote Control Irrigation Valve With Pressure Regulator (Rain Bird® 200EFB-CP PRS-D).....	634.18	76.49
<b>32 84 23 00-0088 0.1 To 300 GPM, Brass, Contamination Proof, Electric Remote Control Irrigation Valves With Pressure Regulator (Hunter IBV FS ACCU-SYNC Series) (32 84 23 00-0041)</b> Note: 20 to 200 PSI operating range pressure and 20 to 100 PSI pressure regulation.		
32 84 23 00-0089 EA 1", 0.1 To 300 GPM, Brass, Contamination Proof, Electric Remote Control Irrigation Valve With Pressure Regulator (Hunter IBV-101G-B-FS ACCU-SYNC-ADJ).....	543.55	76.49
32 84 23 00-0090 EA 1-1/2", 0.1 To 300 GPM, Brass, Contamination Proof, Electric Remote Control Irrigation Valve With Pressure Regulator (Hunter IBV-151G-B-FS ACCU-SYNC-ADJ).....	758.40	76.49
32 84 23 00-0091 EA 2", 0.1 To 300 GPM, Brass, Contamination Proof, Electric Remote Control Irrigation Valve With Pressure Regulator (Hunter IBV-201G-B-FS ACCU-SYNC-ADJ).....	776.82	76.49
32 84 23 00-0092 EA 3", 0.1 To 300 GPM, Brass, Contamination Proof, Electric Remote Control Irrigation Valve With Pressure Regulator (Hunter IBV-301G-B-FS ACCU-SYNC-ADJ).....	1,478.66	76.49
<b>32 84 23 00-0093 Other Electric Remote Control Valves/Accessories (32 84 23 00-0041)</b>		
32 84 23 00-0094 EA Pressure Regulator Module For Electric Remote Control Valves (Rain Bird® PRS-DIAL).....	138.85	
<b>32 84 23 00-0095 Remote Control Valve Assemblies (32 84 23 00-0041)</b> Note: Includes excavation and disposal of soil, installation of 6" minimum depth gravel or crushed rock, woven wire cloth, valve, fittings, valve box (Carson 1419-12), as detailed in the Caltrans Standard Plans 2010 page 224.		
32 84 23 00-0096 EA 1" Glass-Filled Nylon Remote Control Valve With Flow Control And Captured Solenoid (Rain Bird® PEB) And Box (Carson 1419-12).....	592.37	170.12
32 84 23 00-0097 EA 1-1/2" Glass-Filled Nylon Remote Control Valve With Flow Control And Captured Solenoid (Rain Bird® PEB) And Box (Carson 1419-12).....	631.76	170.12
32 84 23 00-0098 EA 2" Glass-Filled Nylon Remote Control Valve With Flow Control And Captured Solenoid (Rain Bird® PEB) And Box (Carson 1419-12).....	682.41	170.12
32 84 23 00-0099 EA 1" Glass-Filled Nylon Remote Control Scrubber Valve With Flow Control And Captured Solenoid (Rain Bird® PESB-R) And Box (Carson 1419-12)..... Note: Purple components for use with recycled water	648.64	170.12
32 84 23 00-0100 EA 1-1/2" Glass-Filled Nylon Remote Control Scrubber Valve With Flow Control And Captured Solenoid (Rain Bird® PESB-R) And Box (Carson 1419-12)..... Note: Purple components for use with recycled water	688.03	170.12
32 84 23 00-0101 EA 2" Glass-Filled Nylon Remote Control Scrubber Valve With Flow Control And Captured Solenoid (Rain Bird® PESB-R) And Box (Carson 1419-12)..... Note: Purple components for use with recycled water	738.68	170.12
32 84 23 00-0102 EA 1" Brass Remote Control Valve With Flow Control And Captured Solenoid (Rain Bird® EFB-CP-R) And Box (Carson 1419-12)..... Note: Purple components for use with recycled water	664.57	170.12
32 84 23 00-0103 EA 1-1/2" Brass Remote Control Valve With Flow Control And Captured Solenoid (Rain Bird® EFB-CP-R) And Box (Carson 1419-12)..... Note: Purple components for use with recycled water	776.88	170.12
32 84 23 00-0104 EA 2" Brass Remote Control Valve With Flow Control And Captured Solenoid (Rain Bird® EFB-CP-R) And Box (Carson 1419-12)..... Note: Purple components for use with recycled water	853.86	170.12
<b>32 84 23 00-0105 Irrigation Valve Boxes (32 84 23)</b> Note: Includes lid.		
32 84 23 00-0106 EA 6" Round Irrigation Valve Box With Lid (Rain Bird® PVB-6RND).....	113.27	48.99
32 84 23 00-0107 EA 7" Round Irrigation Valve Box With Lid (Rain Bird® VB-7RND).....	126.56	48.99
32 84 23 00-0108 EA 10" Round Irrigation Valve Box With Lid (Rain Bird® VB-10RND).....	166.15	64.51
32 84 23 00-0109 EA 21.8" x 16.6" x 12" Depth, Rectangular Irrigation Valve Box With Lid (Rain Bird® VB-STD).....	280.12	94.18
32 84 23 00-0110 EA 21.8" x 16.6" x 12" Depth, Rectangular Irrigation Valve Box With Lock (Rain Bird® VB-STDH).....	285.03	94.18
32 84 23 00-0111 EA 26.3" x 19.8" x 12.1" Depth, Rectangular Irrigation Valve Box With Lid (Rain Bird® VB-JMB).....	320.18	94.18
32 84 23 00-0112 EA 26.3" x 19.8" x 12.1" Depth, Rectangular Irrigation Valve Box With Lock (Rain Bird® VB-JMBH).....	324.37	94.18
32 84 23 00-0113 EA 33.1" x 23.8" x 15" Depth, Rectangular Irrigation Valve Box With Lock (Rain Bird® VB-SPRH).....	525.30	94.18



Exterior Improvements			32
Irrigation			32 80
Planting Irrigation			32 84

MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
32 84 23 00-0114 EA 40.3" x 27.1" x 18" Depth, Rectangular Irrigation Valve Box With Lock (Rain Bird® VB-MAXH) .....	785.54	94.18
32 84 23 00-0115 EA Number 5 CALTRANS Concrete Valve Box With Non-Traffic Rated Concrete Lid.....	422.42	121.22
For 12" Extension, Add	92.87	
32 84 23 00-0116 EA Number 5 CALTRANS Concrete Valve Box With Non-Traffic Rated Steel Lid .....	678.08	121.22
For 12" Extension, Add	92.87	
32 84 23 00-0117 EA 12" x 17" x 12" Depth, Rectangular Irrigation Valve Box With Lid (Carson 1419-12).....	228.78	81.66
32 84 23 00-0118 EA 15" x 21" x 12" Depth, Rectangular Irrigation Valve Box With Lid (Carson 1220-12).....	322.39	94.18
32 84 23 00-0119 EA 10" Round Irrigation Valve Box With Lid (Carson 910-10) .....	179.08	64.51
32 84 23 00-0120 Irrigation Controllers (32 84 23)		
32 84 23 00-0121 Irrigation Controllers (32 84 23 00-0120)		
32 84 23 00-0122 Irrigation Controllers (Rain Bird®) (32 84 23 00-0121)		
32 84 23 00-0123 Four Program, Indoor Mount, Modular Irrigation Controllers (Rain Bird® ESP Series) (32 84 23 00-0122)		
32 84 23 00-0124 Four Program, Modular Irrigation Controllers (Rain Bird® ESP-ME Series) (32 84 23 00-0123)		
32 84 23 00-0125 Four Program, Indoor Mount, Modular Irrigation Controllers (Rain Bird® ESP-MEI Series) (32 84 23 00-0124)		
32 84 23 00-0126 EA 4-Station, Four Program, Indoor Mount, Modular Irrigation Controller (Rain Bird® ESP-MEI Series) .....	354.58	32.36
32 84 23 00-0127 EA 7-Station, Four Program, Indoor Mount, Modular Irrigation Controller (Rain Bird® ESP-MEI Series) .....	495.17	32.36
32 84 23 00-0128 EA 10-Station, Four Program, Indoor Mount, Modular Irrigation Controller (Rain Bird® ESP-MEI Series) .....	635.77	32.36
32 84 23 00-0129 EA 13-Station, Four Program, Indoor Mount, Modular Irrigation Controller (Rain Bird® ESP-MEI Series) .....	776.37	32.36
32 84 23 00-0130 EA 16-Station, Four Program, Indoor Mount, Modular Irrigation Controller (Rain Bird® ESP-MEI Series) .....	884.61	32.36
32 84 23 00-0131 EA 19-Station, Four Program, Indoor Mount, Modular Irrigation Controller (Rain Bird® ESP-MEI Series) .....	1,029.26	32.36
32 84 23 00-0132 EA 22-Station, Four Program, Indoor Mount, Modular Irrigation Controller (Rain Bird® ESP-MEI Series) .....	1,173.90	32.36
32 84 23 00-0133 Four Program, Outdoor Mount, Modular Irrigation Controllers (Rain Bird® ESP-ME Series) (32 84 23 00-0132)		
32 84 23 00-0134 EA 4-Station, Four Program, Outdoor Mount, Modular Irrigation Controller (Rain Bird® ESP-ME Series).....	416.14	32.36
32 84 23 00-0135 EA 7-Station, Four Program, Outdoor Mount, Modular Irrigation Controller (Rain Bird® ESP-ME Series).....	556.73	32.36
32 84 23 00-0136 EA 10-Station, Four Program, Outdoor Mount, Modular Irrigation Controller (Rain Bird® ESP-ME Series).....	697.33	32.36
32 84 23 00-0137 EA 13-Station, Four Program, Outdoor Mount, Modular Irrigation Controller (Rain Bird® ESP-ME Series).....	837.93	32.36
32 84 23 00-0138 EA 16-Station, Four Program, Outdoor Mount, Modular Irrigation Controller (Rain Bird® ESP-ME Series).....	946.17	32.36
32 84 23 00-0139 EA 19-Station, Four Program, Outdoor Mount, Modular Irrigation Controller (Rain Bird® ESP-ME Series).....	1,090.82	32.36
32 84 23 00-0140 EA 22-Station, Four Program, Outdoor Mount, Modular Irrigation Controller (Rain Bird® ESP-ME Series).....	1,235.46	32.36
32 84 23 00-0141 Four Program, Modular Irrigation Controllers (Rain Bird® ESP-SMTE Series) (32 84 23 00-0140)		
32 84 23 00-0142 Four Program, Indoor Mount, Modular Irrigation Controllers (Rain Bird® ESP-SMTEI Series) (32 84 23 00-0141)		
32 84 23 00-0143 EA 4-Station, Four Program, Indoor Mount, Modular Irrigation Controller (Rain Bird® ESP-SMTEI Series).....	568.42	32.36
32 84 23 00-0144 EA 7-Station, Four Program, Indoor Mount, Modular Irrigation Controller (Rain Bird® ESP-SMTEI Series).....	709.01	32.36
32 84 23 00-0145 EA 10-Station, Four Program, Indoor Mount, Modular Irrigation Controller (Rain Bird® ESP-SMTEI Series).....	849.61	32.36
32 84 23 00-0146 EA 13-Station, Four Program, Indoor Mount, Modular Irrigation Controller (Rain Bird® ESP-SMTEI Series).....	990.21	32.36
32 84 23 00-0147 EA 16-Station, Four Program, Indoor Mount, Modular Irrigation Controller (Rain Bird® ESP-SMTEI Series).....	1,098.46	32.36
32 84 23 00-0148 EA 19-Station, Four Program, Indoor Mount, Modular Irrigation Controller (Rain Bird® ESP-SMTEI Series).....	1,243.10	32.36
32 84 23 00-0149 EA 22-Station, Four Program, Indoor Mount, Modular Irrigation Controller (Rain Bird® ESP-SMTEI Series).....	1,387.74	32.36
32 84 23 00-0150 Four Program, Outdoor Mount, Modular Irrigation Controllers (Rain Bird® ESP-SMTE Series) (32 84 23 00-0149)		
32 84 23 00-0151 EA 4-Station, Four Program, Outdoor Mount, Modular Irrigation Controller (Rain Bird® ESP-SMTE Series).....	614.55	32.36
32 84 23 00-0152 EA 7-Station, Four Program, Outdoor Mount, Modular Irrigation Controller (Rain Bird® ESP-SMTE Series).....	755.14	32.36
32 84 23 00-0153 EA 10-Station, Four Program, Outdoor Mount, Modular Irrigation Controller (Rain Bird® ESP-SMTE Series).....	895.74	32.36
32 84 23 00-0154 EA 13-Station, Four Program, Outdoor Mount, Modular Irrigation Controller (Rain Bird® ESP-SMTE Series).....	1,036.33	32.36
32 84 23 00-0155 EA 16-Station, Four Program, Outdoor Mount, Modular Irrigation Controller (Rain Bird® ESP-SMTE Series).....	1,144.58	32.36
32 84 23 00-0156 EA 19-Station, Four Program, Outdoor Mount, Modular Irrigation Controller (Rain Bird® ESP-SMTE Series).....	1,289.23	32.36
32 84 23 00-0157 EA 22-Station, Four Program, Outdoor Mount, Modular Irrigation Controller (Rain Bird® ESP-SMTE Series).....	1,433.87	32.36
32 84 23 00-0158 Accessories For ESP-ME/MEI Irrigation Controllers (32 84 23 00-0157)		
32 84 23 00-0159 EA 3-Station Expansion Module For ESP Series Irrigation Controllers (Rain Bird® ESP-SM3).....	144.64	
Note: Use task for increasing capacity of existing ESP series irrigation controllers up to a maximum of 22-stations.		
32 84 23 00-0160 EA 6-Station Expansion Module For ESP Series Irrigation Controllers (Rain Bird® ESP-SM6).....	276.44	
Note: Use task for increasing capacity of existing ESP series irrigation controllers up to a maximum of 22-stations.		
32 84 23 00-0161 EA Smart Controller Upgrade Kit For ESP Series Irrigation Controllers (Rain Bird® ESPSMTEUPG) .....	395.28	
32 84 23 00-0162 Four Program, Indoor/Outdoor Mount, Modular Irrigation Controllers (Rain Bird® ESP-LX Series) (32 84 23 00-0161)		

**32 Exterior Improvements****32 80 Irrigation****32 84 Planting Irrigation**

MINOR  
CSI UOM DESCRIPTION

TOTAL DIRECT DEMOLITION  
UNIT COST UNIT COST

32 84 23 00-0163	<b>Four Program, Indoor/Outdoor Mount, Modular Irrigation Controllers (Rain Bird® ESP-LX Basic Series) (32 84 23 00-0162)</b>			
32 84 23 00-0164	EA	12-Station, Four Program, Indoor/Outdoor Mount, Modular Irrigation Controller (Rain Bird® ESP-LX Basic Series) .....	842.87	32.36
32 84 23 00-0165	EA	16-Station, Four Program, Indoor/Outdoor Mount, Modular Irrigation Controller (Rain Bird® ESP-LX Basic Series) .....	1,020.16	32.36
32 84 23 00-0166	EA	20-Station, Four Program, Indoor/Outdoor Mount, Modular Irrigation Controller (Rain Bird® ESP-LX Basic Series) .....	1,200.43	32.36
32 84 23 00-0167	EA	24-Station, Four Program, Indoor/Outdoor Mount, Modular Irrigation Controller (Rain Bird® ESP-LX Basic Series) .....	1,377.71	32.36
32 84 23 00-0168	EA	28-Station, Four Program, Indoor/Outdoor Mount, Modular Irrigation Controller (Rain Bird® ESP-LX Basic Series) .....	1,557.99	32.36
32 84 23 00-0169	EA	32-Station, Four Program, Indoor/Outdoor Mount, Modular Irrigation Controller (Rain Bird® ESP-LX Basic Series) .....	1,735.28	32.36
32 84 23 00-0170	EA	36-Station, Four Program, Indoor/Outdoor Mount, Modular Irrigation Controller (Rain Bird® ESP-LX Basic Series) .....	1,915.55	32.36
32 84 23 00-0171	EA	40-Station, Four Program, Indoor/Outdoor Mount, Modular Irrigation Controller (Rain Bird® ESP-LX Basic Series) .....	2,092.84	32.36
32 84 23 00-0172	EA	44-Station, Four Program, Indoor/Outdoor Mount, Modular Irrigation Controller (Rain Bird® ESP-LX Basic Series) .....	2,273.11	32.36
32 84 23 00-0173	EA	48-Station, Four Program, Indoor/Outdoor Mount, Modular Irrigation Controller (Rain Bird® ESP-LX Basic Series) .....	2,450.39	32.36
32 84 23 00-0174	<b>Four Program, Indoor/Outdoor Mount, Modular Irrigation Controllers (Rain Bird® ESP-LXME Series) (32 84 23 00-0162)</b>			
32 84 23 00-0175	EA	8-Station, Four Program, Indoor/Outdoor Mount, Modular Irrigation Controller (Rain Bird® ESP-LXME Series) .....	844.72	32.36
32 84 23 00-0176	EA	12-Station, Four Program, Indoor/Outdoor Mount, Modular Irrigation Controller (Rain Bird® ESP-LXME Series) .....	1,022.01	32.36
32 84 23 00-0177	EA	16-Station, Four Program, Indoor/Outdoor Mount, Modular Irrigation Controller (Rain Bird® ESP-LXME Series) .....	1,202.28	32.36
32 84 23 00-0178	EA	20-Station, Four Program, Indoor/Outdoor Mount, Modular Irrigation Controller (Rain Bird® ESP-LXME Series) .....	1,379.56	32.36
32 84 23 00-0179	EA	24-Station, Four Program, Indoor/Outdoor Mount, Modular Irrigation Controller (Rain Bird® ESP-LXME Series) .....	1,559.83	32.36
32 84 23 00-0180	EA	28-Station, Four Program, Indoor/Outdoor Mount, Modular Irrigation Controller (Rain Bird® ESP-LXME Series) .....	1,737.12	32.36
32 84 23 00-0181	EA	32-Station, Four Program, Indoor/Outdoor Mount, Modular Irrigation Controller (Rain Bird® ESP-LXME Series) .....	1,917.40	32.36
32 84 23 00-0182	EA	36-Station, Four Program, Indoor/Outdoor Mount, Modular Irrigation Controller (Rain Bird® ESP-LXME Series) .....	2,094.69	32.36
32 84 23 00-0183	EA	40-Station, Four Program, Indoor/Outdoor Mount, Modular Irrigation Controller (Rain Bird® ESP-LXME Series) .....	2,274.96	32.36
32 84 23 00-0184	EA	44-Station, Four Program, Indoor/Outdoor Mount, Modular Irrigation Controller (Rain Bird® ESP-LXME Series) .....	2,452.24	32.36
32 84 23 00-0185	EA	48-Station, Four Program, Indoor/Outdoor Mount, Modular Irrigation Controller (Rain Bird® ESP-LXME Series) .....	2,632.51	32.36
32 84 23 00-0186	<b>Accessories For ESP-LX/LXME Irrigation Controllers (32 84 23 00-0162)</b>			
32 84 23 00-0187	EA	Powder Coated Steel Wall Cabinet For ESP-LX/LXME Irrigation Controllers (Rain Bird® LXMM) .....	625.74	
32 84 23 00-0188	EA	Powder Coated Steel Cabinet And Pedestal For ESP-LX/LXME Irrigation Controllers (Rain Bird® LXMPED + LXMM) .....	1,453.02	
		Note: Excludes concrete foundation.		
32 84 23 00-0189	EA	Stainless Steel Wall Cabinet For ESP-LX/LXME Irrigation Controllers (Rain Bird® LXMMSS) .....	1,379.59	
32 84 23 00-0190	EA	Stainless Steel Cabinet And Pedestal For ESP-LX/LXME Irrigation Controllers (Rain Bird® LXMMSSPED + LXMMSS) .....	3,065.23	
		Note: Excludes concrete foundation.		
32 84 23 00-0191	EA	4-Station Expansion Module For ESP-LX/LXME Irrigation Controllers (Rain Bird® ESPLXMSM4) .....	177.29	
		Note: Use task for increasing capacity of existing ESP-LX/LXME irrigation controllers up to a maximum of 48-stations.		
32 84 23 00-0192	EA	8-Station Expansion Module For ESP-LX/LXME Irrigation Controllers (Rain Bird® ESPLXMSM8) .....	357.57	
		Note: Use task for increasing capacity of existing ESP-LX/LXME irrigation controllers up to a maximum of 48-stations.		
32 84 23 00-0193	EA	12-Station Expansion Module For ESP-LX/LXME Irrigation Controllers (Rain Bird® ESPLXMSM12) .....	555.37	
		Note: Use task for increasing capacity of existing ESP-LX/LXME irrigation controllers up to a maximum of 48-stations.		
32 84 23 00-0194	EA	Flow Smart Water Management Module For ESP-LXME Irrigation Controllers (Rain Bird® FSM-LXME) .....	206.51	
32 84 23 00-0195	<b>Three Program, Battery-Operated, Buriable Irrigation Control Modules (Rain Bird® TBOS-II Series) (32 84 23 00-0122)</b>			
32 84 23 00-0196	<b>Three Program, Battery-Operated, Buriable Irrigation Control Modules (Rain Bird® TBOS-II Series) (32 84 23 00-0195)</b>			
32 84 23 00-0197	EA	1-Station, Three Program, Battery-Operated, Buriable Irrigation Control Module (Rain Bird® TBOS-II Series) .....	410.54	32.36
32 84 23 00-0198	EA	2-Station, Three Program, Battery-Operated, Buriable Irrigation Control Module (Rain Bird® TBOS-II Series) .....	495.13	32.36
32 84 23 00-0199	EA	4-Station, Three Program, Battery-Operated, Buriable Irrigation Control Module (Rain Bird® TBOS-II Series) .....	613.58	32.36
32 84 23 00-0200	<b>Accessories For TBOS-II Series Irrigation Controllers (32 84 23 00-0195)</b>			
32 84 23 00-0201	EA	Field Transmitter For TBOS-II Series Irrigation Controllers (Rain Bird® TBOS2FTUS) .....	522.47	
32 84 23 00-0202	EA	Potted Latching Solenoid For TBOS-II Series Irrigation Controllers (Rain Bird® TBOSPSOL) .....	103.14	24.26
32 84 23 00-0203	<b>Accessories For Irrigation Controllers (Rain Bird®) (32 84 23 00-0122)</b>			
32 84 23 00-0204	EA	Wired Rain Sensor For Irrigation Controllers (Rain Bird® RSDBEX) .....	146.32	24.26
32 84 23 00-0205	EA	Wireless Rain Sensor And Controller Interface For Irrigation Controllers (Rain Bird® WR2RC) .....	300.59	24.26
32 84 23 00-0206	EA	Wireless Rain/Freeze Sensor And Controller Interface For Irrigation Controllers (Rain Bird® WR2RFC) .....	318.50	24.26
32 84 23 00-0207	EA	Soil Moisture Sensor And Controller Interface For Irrigation Controllers (Rain Bird® SMRT-Y) .....	473.75	24.26
32 84 23 00-0208	<b>Two-Wire Decoder Systems (32 84 23 00-0120)</b>			
32 84 23 00-0209	<b>Two-Wire Decoder Systems (Rain Bird®) (32 84 23 00-0208)</b>			
32 84 23 00-0210	<b>Controllers For Two-Wire Decoder Systems (Rain Bird® ESP-LXD Series) (32 84 23 00-0209)</b>			
		Note: Includes water resistant cabinet.		
32 84 23 00-0211	EA	50-Station, Modular Controller For Two-Wire Decoder Systems (Rain Bird® ESP-LXD Series) .....	2,445.17	32.36



Exterior Improvements			32
Irrigation			32 80
Planting Irrigation			32 84

MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
32 84 23 00-0212 EA 125-Station, Modular Controller For Two-Wire Decoder Systems (Rain Bird® ESP-LXD Series).....	3,474.09	32.36
32 84 23 00-0213 EA 200-Station, Modular Controller For Two-Wire Decoder Systems (Rain Bird® ESP-LXD Series).....	4,503.00	32.36
<b>32 84 23 00-0214 Field Decoders For Two-Wire Decoder Systems (Rain Bird®) (32 84 23 00-0209)</b>		
32 84 23 00-0215 EA One Individual Valve Interface, Field Decoder For Two-Wire Decoder System (Rain Bird® FD101TURF).....	299.06	32.36
32 84 23 00-0216 EA One Pair Of Valves Interface, Field Decoder For Two-Wire Decoder System (Rain Bird® FD102TURF).....	380.94	32.36
32 84 23 00-0217 EA Two Pair Of Valves Interface, Field Decoder For Two-Wire Decoder System (Rain Bird® FD202TURF).....	570.60	32.36
32 84 23 00-0218 EA Up To Four Individual Valves Interface, Field Decoder For Two-Wire Decoder System (Rain Bird® FD401TURF).....	697.15	32.36
32 84 23 00-0219 EA Up To Six Individual Valves Interface, Field Decoder For Two-Wire Decoder System (Rain Bird® FD601TURF).....	1,156.12	32.36
<b>32 84 23 00-0220 Accessories For Two-Wire Decoder Systems (Rain Bird®) (32 84 23 00-0209)</b>		
32 84 23 00-0221 EA 50-Station Replacement Base Module For ESP-LXD Series Two Wire Decoder Based Controllers (Rain Bird® MOD50-LXD).....	1,814.46	
32 84 23 00-0222 EA 75-Station Expansion Module For ESP-LXD Series Two Wire Decoder Based Controllers (Rain Bird® SPLXDSM75).....	1,028.91	
32 84 23 00-0223 EA Line Surge Protection For ESP-LXD Series Two-Wire Decoder Systems (Rain Bird® LSP1TURF).....	225.92	28.31
32 84 23 00-0224 EA Sensor Decoder Interface For ESP-LXD Series Two-Wire Decoder Systems (Rain Bird® SD210TURF).....	1,028.79	32.36
<b>32 84 23 00-0225 Calsense Controllers (32 84 23 00-0120)</b>		
<b>32 84 23 00-0226 Irrigation Controllers (32 84 23 00-0225)</b>		
32 84 23 00-0227 EA 6 Station ET-Driven Irrigation Controller (Calsense ET2000E-6).....	2,648.91	80.87
32 84 23 00-0228 EA 8 Station ET-Driven Irrigation Controller (Calsense ET2000E-8).....	3,421.06	90.99
32 84 23 00-0229 EA 12 Station ET-Driven Irrigation Controller (Calsense ET2000E-12).....	4,702.21	101.10
32 84 23 00-0230 EA 16 Station ET-Driven Irrigation Controller (Calsense ET2000E-16).....	5,176.50	101.10
32 84 23 00-0231 EA 24 Station ET-Driven Irrigation Controller (Calsense ET2000E-24).....	6,122.17	111.21
32 84 23 00-0232 EA 32 Station ET-Driven Irrigation Controller (Calsense ET2000E-32).....	7,394.66	111.21
32 84 23 00-0233 EA 40 Station ET-Driven Irrigation Controller (Calsense ET2000E-40).....	8,375.04	121.32
32 84 23 00-0234 EA 48 Station ET-Driven Irrigation Controller (Calsense ET2000E-48).....	9,381.47	121.32
32 84 23 00-0235 EA Upgrade Existing Calsense Controller To ET2000E (Calsense ET2000E-UPGRADE).....	2,709.99	40.44
32 84 23 00-0236 EA Upgrade Existing Calsense Controller With 8 Additional Stations (Calsense STATION UPGRADE).....	1,132.52	40.44
<b>32 84 23 00-0237 Irrigation Controller Accessories (32 84 23 00-0225)</b>		
32 84 23 00-0238 EA Set Of 10 Keys For Calsense Controllers Or Enclosures (Calsense KEY-1).....	111.05	
32 84 23 00-0239 EA Spare Lock For Enclosures (Calsense PAD).....	120.31	
32 84 23 00-0240 EA Hardware And Software For Up To 4 Additional Light Circuits (Calsense L).....	140.53	10.11
32 84 23 00-0241 EA Transformer For Irrigation Controllers (Calsense TR-1).....	196.55	40.44
32 84 23 00-0242 EA AC Line Protection For Irrigation Controllers (Calsense TP-110).....	555.16	40.44
32 84 23 00-0243 EA Transient Protection Board For Irrigation Controller Stations (Calsense TP-1).....	740.25	40.44
For Outdoor Gray Powder Coated Stainless Steel Enclosure, Add		350.06
<b>32 84 23 00-0244 Sensors For Irrigation Controllers (32 84 23 00-0225)</b>		
<b>32 84 23 00-0245 Flow Sensors (32 84 23 00-0244)</b>		
32 84 23 00-0246 EA 1-1/2" Polyvinyl Chloride (PVC) Schedule 80 Tee Mounted Flow Meter (Calsense FM 1.5).....	1,301.27	60.66
For Flow Meter Replacement Insert Only, Deduct		-925.39
32 84 23 00-0247 EA 2" Polyvinyl Chloride (PVC) Schedule 80 Tee Mounted Flow Meter (Calsense FM 2).....	1,347.54	60.66
For Flow Meter Replacement Insert Only, Deduct		-971.66
32 84 23 00-0248 EA 3" Polyvinyl Chloride (PVC) Schedule 80 Tee Mounted Flow Meter (Calsense FM 3).....	1,393.82	60.66
For Flow Meter Replacement Insert Only, Deduct		-1,017.94
32 84 23 00-0249 EA 1" Brass Tee Mounted Flow Meter (Calsense FM 1B).....	1,538.37	80.87
For Flow Meter Replacement Insert Only, Deduct		-1,162.18
32 84 23 00-0250 EA 1-1/4" Brass Tee Mounted Flow Meter (Calsense FM 1.25B).....	1,654.05	80.87
For Flow Meter Replacement Insert Only, Deduct		-1,277.86
32 84 23 00-0251 EA 1-1/2" Brass Tee Mounted Flow Meter (Calsense FM 1.5B).....	1,700.32	80.87
For Flow Meter Replacement Insert Only, Deduct		-1,324.13
32 84 23 00-0252 EA 2" Brass Tee Mounted Flow Meter (Calsense FM 2B).....	2,001.10	80.87
For Flow Meter Replacement Insert Only, Deduct		-1,496.72
32 84 23 00-0253 EA 2" Pipe Saddle Mounted Insertion Flow Meter (Calsense FMBX).....	1,561.59	40.44
Note: For 4" and larger pipe. Excludes pipe saddle.		
For Flow Meter Replacement Insert Only, Deduct		-1,057.22
<b>32 84 23 00-0254 Moisture Sensors (32 84 23 00-0244)</b>		
32 84 23 00-0255 EA Soil Moisture Sensor (Calsense 1000-S).....	546.52	30.33
<b>32 84 23 00-0256 Weather Sensors (32 84 23 00-0244)</b>		
32 84 23 00-0257 EA Wind Gage, Irrigation Weather Sensor (Calsense WG-1).....	1,492.10	80.87
32 84 23 00-0258 EA Tipping Rain Bucket, Irrigation Weather Sensor (Calsense RB-1).....	1,700.13	161.76
32 84 23 00-0259 EA ET Gage, Irrigation Weather Sensor (Calsense ETG).....	3,423.87	121.32
<b>32 84 23 00-0260 Weather Sensor Accessories (32 84 23 00-0244)</b>		
32 84 23 00-0261 EA Ceramic Cup For ET Gage Weather Sensor (Calsense ETG-C).....	1,006.32	
32 84 23 00-0262 EA Removal And Replacement Of Circuit Board For ET Gage Weather Sensor (Calsense ETG-PCB).....	1,908.64	

**32 Exterior Improvements****32 80 Irrigation****32 84 Planting Irrigation**

MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
32 84 23 00-0263 EA Vandal Resistant Mounting Base For ET Gage Enclosure (Calsense ETGE-BASE).....	1,006.32	40.44
32 84 23 00-0264 EA Vandal Resistant Stainless Steel Enclosure For ET Gage (Calsense ETGE).....	2,342.50	40.44
<b>32 84 23 00-0265 Antennas For Irrigation Controllers (32 84 23 00-0225)</b>		
Note: Excludes antenna cable.		
32 84 23 00-0266 EA Local Radio Dome Antenna (Calsense LR-DOME) .....	520.46	40.44
32 84 23 00-0267 EA Local Radio Stick Antenna (Calsense LR-STICK) .....	763.39	40.44
32 84 23 00-0268 EA Local Radio Yagi Antenna (Calsense LR-YAGI) .....	844.28	80.87
32 84 23 00-0269 EA Local Radio And Calsense Radio, Remote Dome Antenna (Calsense LR-DOME-RR) .....	520.46	40.44
32 84 23 00-0270 EA Local Radio And Calsense Radio, Enhanced Remote Dome Antenna (Calsense LR-DOME-RRE) .....	520.46	40.44
32 84 23 00-0271 EA GPRS Stubby Antenna (Calsense GR-STUBBY) .....	520.46	40.44
32 84 23 00-0272 EA GPRS Stick Antenna (Calsense GR-STICK) .....	763.39	40.44
32 84 23 00-0273 EA Spread Spectrum Dome Antenna (Calsense SR-DOME) .....	520.46	40.44
32 84 23 00-0274 EA Spread Spectrum Stick Antenna (Calsense SR-STICK) .....	763.39	40.44
32 84 23 00-0275 EA Spread Spectrum Yagi Antenna (Calsense SR-YAGI).....	844.28	80.87
32 84 23 00-0276 EA Spread Spectrum And Calsense Radio, Remote Dome Antenna (Calsense SR-DOME-RR).....	520.46	40.44
32 84 23 00-0277 EA Spread Spectrum And Calsense Radio, Enhanced Remote Dome Antenna (Calsense SR-DOME-RRE) .....	520.46	40.44
32 84 23 00-0278 EA Spread Spectrum Stubby Antenna (Calsense SR-STUBBY) .....	520.46	40.44
32 84 23 00-0279 EA WiFi Stubby Antenna (Calsense WEN-STUBBY) .....	520.46	40.44
32 84 23 00-0280 LF Antenna Cable With End Connectors (Calsense LMR-400-DB) .....	14.39	0.48
32 84 23 00-0281 EA Surge Protection Device For Antenna (Calsense ANT-PROT) .....	526.30	20.22
32 84 23 00-0282 EA 5' High, Non-Penetrating, Antenna Tripod Mount (Calsense ANT-TRIP5).....	855.94	40.44
32 84 23 00-0283 EA 3' Antenna Stand Off Mount For 3" Maximum Tower Leg (Calsense ANT-SOM) .....	751.93	
32 84 23 00-0284 EA Local Radio Frequency Filter (Calsense LR-FILTER).....	1,064.27	
32 84 23 00-0285 EA Spread Spectrum Frequency Filter (Calsense SR-FILTER) .....	786.63	
<b>32 84 23 00-0286 Pedestals And Enclosures For Irrigation Controllers (32 84 23 00-0225)</b>		
32 84 23 00-0287 EA 15 Amperes, Circuit Breaker With Enclosure For Irrigation Controllers (Calsense SSE-BREAKER).....	468.36	60.66
32 84 23 00-0288 EA Standard Gray Powder Coated Stainless Steel Controller Enclosure (Calsense C-BOX) .....	1,148.68	101.10
32 84 23 00-0289 EA Indoor Wall Mount, Stainless Steel Back Panel (Calsense SSBP) .....	1,295.53	40.44
Note: Includes GFI and receptacle.		
32 84 23 00-0290 EA Standard Gray Powder Coated Stainless Steel Pedestal (Calsense PD-1) .....	1,552.95	30.33
Note: Includes factory installed transient protection board and AC line protection.		
32 84 23 00-0291 EA Heavy-Duty Stainless Steel Enclosure For Irrigation Controllers (Calsense SSE).....	4,886.16	30.33
Note: Includes factory installed transient protection board and AC line protection.		
32 84 23 00-0292 EA Heavy-Duty Stainless Steel Enclosure For Irrigation Controllers (Calsense SSE-R).....	5,520.83	30.33
Note: Includes factory installed transient protection board, AC line protection and dome antenna.		
32 84 23 00-0293 EA Double-Wide Heavy-Duty Stainless Steel Enclosure For Irrigation Controllers (Calsense SSE-D) .....	8,005.54	60.66
Note: Includes factory installed transient protection boards and AC line protection. Pre-wired for two controllers.		
32 84 23 00-0294 EA Double-Wide Heavy-Duty Stainless Steel Enclosure For Irrigation Controllers (Calsense SSE-D-R) .....	8,392.02	60.66
Note: Includes factory installed transient protection boards, AC line protection and dome antenna. Pre-wired for two controllers.		
32 84 23 00-0295 EA Bolt Mounting Template For Heavy-Duty Stainless Steel Enclosures (Calsense SSE-CAM) .....	272.62	
32 84 23 00-0296 EA Stainless Steel Fully Enclosed Riser For Calsense SSE Enclosures (Calsense SSE-PED).....	882.00	
<b>32 84 23 00-0297 Central Computer For Irrigation Control Systems (32 84 23 00-0225)</b>		
32 84 23 00-0298 EA Central Computer For Irrigation Control Systems (Calsense COMP-2).....	6,159.41	
Note: Includes a minimum of 133 MHz Pentium, 32 Meg Ram, 1.2 GB hard drive, 14.4 modem and a printer. Excludes Command Center Water Management software.		
32 84 23 00-0299 EA Command Center Water Management Software For Central Computer (Calsense COMM-1).....	10,912.87	
32 84 23 00-0300 EA Up To 5 Simultaneous Users Capacity, Calsense Advantage Client/Server Database Add-On (Calsense CS-5).....	2,091.16	
Note: Package price for up to 5 users. Includes remote communication through internet connection.		
32 84 23 00-0301 EA >5 To 10 Simultaneous Users Capacity, Calsense Advantage Client/Server Database Add-On (Calsense CS-10) .....	4,125.70	
Note: Package price for 6 to 10 users. Includes remote communication through internet connection.		
32 84 23 00-0302 EA Data Logger With Phone Modem For Irrigation Control Systems (Calsense DL-2) .....	6,645.62	
32 84 23 00-0303 EA GPRS Radio For Use At Central Computer (Calsense DTR-G).....	3,975.24	
<b>32 84 23 00-0304 Data Access Service (32 84 23 00-0225)</b>		
32 84 23 00-0305 EA 1 Month, Data Access Plan For Up To 2 Controllers (Calsense COMM-1MN) .....	33.65	
Note: For communication between GPRS unit and up to 2 controllers.		
32 84 23 00-0306 EA 1 Year, Data Access Plan For Up To 2 Controllers (Calsense COMM-1YR) .....	368.08	
Note: For communication between GPRS unit and up to 2 controllers.		
32 84 23 00-0307 EA 5 Year, Data Access Plan For Up To 2 Controllers (Calsense COMM-5YR) .....	1,577.48	
Note: For communication between GPRS unit and up to 2 controllers.		
32 84 23 00-0308 EA 1 Month, Data Access Plan For Up To 2 Controllers (Calsense COMM-1MN-M) .....	136.71	
Note: For communication between GPRS unit and multiple controllers.		
32 84 23 00-0309 EA 1 Year, Data Access Plan For Up To 2 Controllers (Calsense COMM-1YR-M) .....	1,472.31	
Note: For communication between GPRS unit and multiple controllers.		
32 84 23 00-0310 EA 5 Year, Data Access Plan For Up To 2 Controllers (Calsense COMM-5YR-M) .....	6,309.90	
Note: For communication between GPRS unit and multiple controllers.		
<b>32 84 23 00-0311 Communication Options For Irrigation Controllers (32 84 23 00-0225)</b>		
32 84 23 00-0312 EA FCC License Fee (Calsense).....	219.22	
32 84 23 00-0313 EA P.C.I.A. And/Or A.P.C.O. Fee (Calsense).....	429.55	
Note: Per frequency or frequency pair.		
32 84 23 00-0314 EA Hardware Communication Option For Irrigation Controllers (Calsense M) .....	1,219.91	
Note: Allows multiple controllers to be chained together via a communications cable and share one phone line.		





Exterior Improvements			32
Irrigation			32 80
Planting Irrigation			32 84

MINOR CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
32 84 23 00-0315	EA	Phone Line Communication Option For Irrigation Controllers (Calsense R).....	1,283.01	
32 84 23 00-0316	EA	Ethernet Communication Option For Irrigation Controllers (Calsense EN).....	1,283.01	
32 84 23 00-0317	EA	WiFi Communication Option For Irrigation Controllers (Calsense WEN).....	2,629.12	
32 84 23 00-0318	EA	Local Radio Communication Option For Irrigation Controllers (Calsense LR).....	3,344.25	
32 84 23 00-0319	EA	Spread Spectrum Radio Communication Option For Irrigation Controllers (Calsense SR).....	3,344.25	
32 84 23 00-0320	EA	GPRS Radio Modem Communication Option For Irrigation Controllers (Calsense GR).....	3,344.25	
32 84 23 00-0321	EA	Fiber Optic Modem Communication Option For Irrigation Controllers (Calsense FOM).....	10,726.83	
32 84 23 00-0322	EA	Communication Hub For Irrigation Controllers (Calsense HUB).....	4,126.10	
Note: Accepts up to two communication options. Excludes communication options.				
32 84 23 00-0323		Retrofit Options For Irrigation Controllers (32 84 23 00-0225)		
32 84 23 00-0324		Weather Retrofits For Irrigation Controllers (32 84 23 00-0323)		
32 84 23 00-0325	EA	Add One Flow Sensor Interface To An Existing Calsense Controller (Calsense F-RETRO).....	1,626.80	
32 84 23 00-0326	EA	Add One ET Gage Interface To An Existing Calsense Controller (Calsense G-RETRO).....	1,626.80	
32 84 23 00-0327	EA	Add One Tipping Rain Bucket Interface To An Existing Calsense Controller (Calsense RB-RETRO).....	1,626.80	
32 84 23 00-0328	EA	Add One Wind Gage Interface To An Existing Calsense Controller (Calsense WG-RETRO).....	1,626.80	
32 84 23 00-0329		Phone Communication Retrofits For Irrigation Controllers (32 84 23 00-0323)		
32 84 23 00-0330	EA	Add The Ability To Chain To Another Calsense Controller With The Phone Line Communication Option And Share One Phone Line (Calsense M-RETRO).....	1,710.93	
32 84 23 00-0331	EA	Add The Phone Line Communication Option To An Existing Calsense Controller (Calsense R-RETRO).....	2,026.42	
32 84 23 00-0332	EA	Add The Phone Line Communication Option And The Ability To Chain To Another Calsense Controller And Share One Phone Line (Calsense MLR-RETRO).....	3,256.85	
32 84 23 00-0333		Local Radio Communication Retrofits For Irrigation Controllers (32 84 23 00-0323)		
32 84 23 00-0334	EA	Add The Ability To Chain To Another Calsense Controller With The Local Radio Communication Option And Share One Local Radio (Calsense ML-RETRO).....	1,921.26	
32 84 23 00-0335	EA	Add The Local Radio Communication Option To An Existing Calsense Controller (Calsense LR-RETRO).....	4,066.62	
32 84 23 00-0336	EA	Add The Local Radio Communication Option And The Ability To Chain To Another Calsense Controller And Share One Local Radio (Calsense MLR-RETRO).....	5,286.54	
32 84 23 00-0337		Spread Spectrum Radio Communication Retrofits For Irrigation Controllers (32 84 23 00-0323)		
32 84 23 00-0338	EA	Add The Ability To Chain To Another Calsense Controller With The Spread Spectrum Radio Communication Option And Share One Spread Spectrum Radio (Calsense MS-Retro).....	1,921.26	
32 84 23 00-0339	EA	Add The Spread Spectrum Radio Communication Option To An Existing Calsense Controller (Calsense SR-RETRO).....	4,066.62	
32 84 23 00-0340	EA	Add The Spread Spectrum Radio Communication Option And The Ability To Chain To Another Calsense Controller And Share One Spread Spectrum Radio (Calsense MSR-RETRO).....	5,286.54	
32 84 23 00-0341		Ethernet Communication Retrofits For Irrigation Controllers (32 84 23 00-0323)		
32 84 23 00-0342	EA	Add The Ability To Chain To Another Calsense Controller With The Ethernet Communication Option And Share One Ethernet Device (Calsense ME-Retro).....	1,921.26	
32 84 23 00-0343	EA	Add The Ethernet Communication Option To An Existing Calsense Controller (Calsense EN-RETRO).....	2,026.42	
32 84 23 00-0344	EA	Add The Ethernet Communication Option And The Ability To Chain To Another Calsense Controller And Share One Ethernet Device (Calsense MEN-RETRO).....	3,256.85	
32 84 23 00-0345		GPRS Radio Modem Communication Retrofits For Irrigation Controllers (32 84 23 00-0323)		
32 84 23 00-0346	EA	Add The Ability To Chain To Another Calsense Controller With The GPRS Communication Option And Share One GPRS Modem (Calsense MG-RETRO).....	1,921.26	
32 84 23 00-0347	EA	Add The GPRS Communication Option To An Existing Calsense Controller (Calsense GR-RETRO).....	4,066.62	
32 84 23 00-0348	EA	Add The GPRS Communication Option And The Ability To Chain To Another Calsense Controller And Share One GPRS Modem (Calsense MGR-RETRO).....	5,286.54	
32 84 23 00-0349		Radio Remote Units For Irrigation Controllers (32 84 23 00-0225)		
32 84 23 00-0350	EA	Enhanced Radio Remote Hand-Held Transmitter With Carry Case (Calsense RRe-TRAN).....	1,931.77	
32 84 23 00-0351	EA	Calsense Integrated Radio Remote Receiver Board (Calsense RR/RRe).....	416.45	
Note: Includes polyvinyl chloride (PVC) stick antenna. Excludes antenna cable.				
32 84 23 00-0352	EA	Wall Mount Charger For Hand-Held Transmitter (Calsense RRTRAN-CHG).....	178.78	
32 84 23 00-0353	EA	Removal And Replacement Of Battery For Hand-Held Transmitter (Calsense RRTRAN-BAT).....	314.68	
32 84 23 00-0354	EA	Polyvinyl Chloride (PVC) Stick Antenna For Radio Remote Receiver Board (Calsense RR-ANT).....	199.00	10.11
Note: Excludes antenna cable.				
32 84 23 00-0355	EA	Whip Antenna For Radio Remote Receiver Board (Calsense RRe-WHIP).....	388.30	10.11
Note: Excludes antenna cable.				
32 84 23 00-0356	EA	Dome Antenna For Radio Remote Receiver Board (Calsense RR-Dome/RRe-Dome).....	419.85	10.11
Note: Excludes antenna cable.				
32 84 23 00-0357		Satellite Irrigation Controllers (Rain Bird® ESP-SAT) (32 84 23 00-0120)		
Note: Satellite controllers compatible with Maxi-Con Central Control. Includes link communication with SEMET at the controller and stainless steel cabinet. Excludes concrete pad.				
32 84 23 00-0358	EA	12 Station, Satellite Irrigation Controller With Stainless Steel Cabinet (Rain Bird® RBESP12SATLS).....	4,506.86	181.98
32 84 23 00-0359	EA	24 Station, Satellite Irrigation Controller With Stainless Steel Cabinet (Rain Bird® RBESP24SATLS).....	4,752.83	192.09

**32 Exterior Improvements****32 80 Irrigation****32 84 Planting Irrigation**

MINOR CSI UOM DESCRIPTION			TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
32 84 23 00-0360	EA	40 Station, Satellite Irrigation Controller With Stainless Steel Cabinet (Rain Bird® RBESP40SATLS) .....	6,619.39	202.20
<b>32 84 23 00-0361</b>		<b>LEIT Controllers</b> (32 84 23 00-0120)		
<b>32 84 23 00-0362</b>		<b>LEIT X Series Irrigation Controller</b> (32 84 23 00-0361)		
32 84 23 00-0363	EA	10 Station, Four Program Ambient Light Irrigation Controller (LEIT X Series) .....	4,247.72	32.36
32 84 23 00-0364	EA	12 Station, Four Program Ambient Light Irrigation Controller (LEIT X Series) .....	4,661.99	32.36
32 84 23 00-0365	EA	16 Station, Four Program Ambient Light Irrigation Controller (LEIT X Series) .....	5,331.90	32.36
32 84 23 00-0366	EA	20 Station, Four Program Ambient Light Irrigation Controller (LEIT X Series) .....	6,001.81	32.36
32 84 23 00-0367	EA	24 Station, Four Program Ambient Light Irrigation Controller (LEIT X Series) .....	6,472.68	32.36
32 84 23 00-0368	EA	28 Station, Four Program Ambient Light Irrigation Controller (LEIT X Series) .....	6,943.56	32.36
<b>32 84 23 00-0369</b>		<b>LEIT X Series Irrigation Controller Assembly</b> (32 84 23 00-0361)		
Note: Includes excavation and concrete for footing, 2" diameter galvanized steel pole (minimum 18" bury), 2" sweeps, controller, and number 5 concrete box with non-traffic rated lid per detail.				
32 84 23 00-0370	EA	10 Station, Four Program Ambient Light Irrigation Controller (LEIT X Series) Assembly Mounted On Pole .....	4,792.13	169.26
32 84 23 00-0371	EA	12 Station, Four Program Ambient Light Irrigation Controller (LEIT X Series) Assembly Mounted On Pole .....	5,206.40	169.26
32 84 23 00-0372	EA	16 Station, Four Program Ambient Light Irrigation Controller (LEIT X Series) Assembly Mounted On Pole .....	5,876.31	169.26
32 84 23 00-0373	EA	20 Station, Four Program Ambient Light Irrigation Controller (LEIT X Series) Assembly Mounted On Pole .....	6,546.21	169.26
32 84 23 00-0374	EA	24 Station, Four Program Ambient Light Irrigation Controller (LEIT X Series) Assembly Mounted On Pole .....	7,017.10	169.26
32 84 23 00-0375	EA	28 Station, Four Program Ambient Light Irrigation Controller (LEIT X Series) Assembly Mounted On Pole .....	7,487.97	169.26
<b>32 84 23 00-0376</b>		<b>Enclosure For LEIT Controller Assembly</b> (32 84 23 00-0361)		
Note: Includes mounting bolts to concrete foundation and installation of enclosure per detail.				
32 84 23 00-0377	EA	12" x 12" x 54" Milled Steel, #9 Expanded Metal, Painted Per Detail, Enclosure With Access Hatch .....	3,252.37	237.20
Note: For LEIT Controller				
<b>32 84 23 00-0378</b>		<b>Hunter Controllers</b> (32 84 23 00-0120)		
<b>32 84 23 00-0379</b>		<b>Hunter XC Hybrid Controller</b> (32 84 23 00-0378)		
Note: Operates DC latching solenoids with battery power or a plug in 24 VAC transformer. Includes 6 AA batteries, outdoor stainless steel enclosure and installation of controller in Irrigation Controller Enclosure.				
32 84 23 00-0380	EA	6 Station Hybrid Irrigation Controller With Stainless Steel Enclosure (Hunter XCH-600-SS) .....	689.13	80.87
32 84 23 00-0381	EA	12 Station Hybrid Irrigation Controller With Stainless Steel Enclosure (Hunter XCH-1200-SS) .....	877.28	101.10
<b>32 84 23 00-0382</b>		<b>DC Latching Solenoid</b> (32 84 23 00-0120)		
32 84 23 00-0383	EA	DC Latching Solenoid (Micro Power Solenoid) For Non LEIT Controllers .....	37.36	
Note: As per manufacture of valve.				
32 84 23 00-0384	EA	DC Solenoid For LEIT Controllers (DIG S-305DC) .....	59.78	
<b>32 84 23 00-0385</b>		<b>Irrigation Controller Enclosure Cabinet</b> (32 84 23 00-0120)		
Note: Includes excavation, installation of concrete foundation, mounting bolts, sweeps, number 5 concrete pull box with non-traffic rated lid and installation of enclosure per detail.				
32 84 23 00-0386	EA	35" (H) x 18" (W) x 12" (D), 12 Gauge Cold Rolled Steel Irrigation Controller Enclosure Cabinet, Powdercoated (Tan) .....	3,046.78	444.47
32 84 23 00-0387	EA	35" (H) x 24" (W) x 12" (D), 12 Gauge Cold Rolled Steel Irrigation Controller Enclosure Cabinet, Powdercoated (Tan) .....	3,286.74	484.87
32 84 23 00-0388	EA	35" (H) x 36" (W) x 12" (D), 12 Gauge Cold Rolled Steel Irrigation Controller Enclosure Cabinet, Powdercoated (Tan) .....	3,636.21	525.27
32 84 23 00-0389	EA	35" (H) x 18" (W) x 12" (D), 0.125" 5052-H-32 Aluminum Irrigation Controller Enclosure Cabinet, .....	3,046.80	444.47
32 84 23 00-0390	EA	35" (H) x 24" (W) x 12" (D), 0.125" 5052-H-32 Aluminum Steel Irrigation Controller Enclosure Cabinet .....	3,286.74	484.87
32 84 23 00-0391	EA	35" (H) x 36" (W) x 12" (D), 0.125" 5052-H-32 Aluminum Steel Irrigation Controller Enclosure Cabinet .....	3,636.21	525.27
32 84 23 00-0392	EA	35" (H) x 18" (W) x 12" (D), Type 304 Stainless Steel Irrigation Controller Enclosure Cabinet .....	3,808.68	444.47
32 84 23 00-0393	EA	35" (H) x 24" (W) x 12" (D), Type 304 Stainless Steel Irrigation Controller Enclosure Cabinet .....	4,143.85	484.87
32 84 23 00-0394	EA	35" (H) x 36" (W) x 12" (D), Type 304 Stainless Steel Irrigation Controller Enclosure Cabinet .....	4,493.32	525.27
<b>32 84 23 00-0395</b>		<b>Irrigation Valves</b> (32 84 23)		
<b>32 84 23 00-0396</b>		<b>Reduced Pressure Zone Valves With QT Shut-Offs</b> (32 84 23 00-0395)		
Note: Includes ball type test cocks, two quarter-turn (QT) full port resilient seated bronze body ball valves, and captured spring assemblies (Watts 009 QT series).				
32 84 23 00-0397	EA	3/4" Threaded Reduced Pressure Zone Assembly With Quarter Turn Shut-offs (Watts 009M3 QT series) .....	824.27	56.17
32 84 23 00-0398	EA	1" Threaded Reduced Pressure Zone Assembly With Quarter Turn Shut-offs (Watts 009M2 QT series) .....	979.06	68.59
32 84 23 00-0399	EA	1-1/4" Threaded Reduced Pressure Zone Assembly With Quarter Turn Shut-offs (Watts 009M2 QT series) .....	1,466.44	79.82
32 84 23 00-0400	EA	1-1/2" Threaded Reduced Pressure Zone Assembly With Quarter Turn Shut-offs (Watts 009M2 QT series) .....	1,554.10	91.65
32 84 23 00-0401	EA	2" Threaded Reduced Pressure Zone Assembly With Quarter Turn Shut-offs (Watts 009M2 QT series) .....	1,869.68	118.25
<b>32 84 23 00-0402</b>		<b>Brass Quick-Coupling Irrigation Valves</b> (32 84 23 00-0395)		
32 84 23 00-0403	EA	3/4", 1-Piece Brass Body, Quick-Coupling Irrigation Valve (Rain Bird® 3RC) .....	180.90	48.99
For Valve Key, Add			41.36	
32 84 23 00-0404	EA	3/4", 2-Piece Brass Body, Quick-Coupling Irrigation Valve (Rain Bird® 33DRC) .....	185.68	48.99
For Locking Cover, Add			25.00	
For Valve Key, Add			41.36	



Exterior Improvements		32
Irrigation		32 80
Planting Irrigation		32 84

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MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
32 84 23 00-0405 EA 1", 1-Piece Brass Body, Quick-Coupling Irrigation Valve (Rain Bird® 44RC)..... For Valve Key, Add	238.29 105.79	48.99
32 84 23 00-0406 EA 1", 2-Piece Brass Body, Quick-Coupling Irrigation Valve (Rain Bird® 44LRC)..... For Valve Key, Add	257.42 105.79	48.99
32 84 23 00-0407 EA 1", 1-Piece Brass Body, Non-Potable (Purple) Quick-Coupling Irrigation Valve (Rain Bird® 5NP).....	248.42	48.99
32 84 23 00-0408 EA 1", 2-Piece Brass Body, Non-Potable (Purple) Quick-Coupling Irrigation Valve (Rain Bird® 44NP).....	257.42	48.99
<b>32 84 23 00-0409 Anti-Siphon Pressure Type Vacuum Breaker</b> (32 84 23 00-0395) Note: Pressure: 15 to 150 PSI, temperature: 33 to 140 degrees Fahrenheit.		
32 84 23 00-0410 EA 3/4" Anti-Siphon Pressure Type Vacuum Breaker (Watts 800M4QT).....	286.02	41.39
32 84 23 00-0411 EA 1" Anti-Siphon Pressure Type Vacuum Breaker (Watts 800M4QT).....	403.04	47.30
32 84 23 00-0412 EA 1-1/4" Anti-Siphon Pressure Type Vacuum Breaker (Watts 800M4QT).....	714.59	54.69
32 84 23 00-0413 EA 1-1/2" Anti-Siphon Pressure Type Vacuum Breaker (Watts 800M4QT).....	868.92	60.60
32 84 23 00-0414 EA 2" Anti-Siphon Pressure Type Vacuum Breaker .....	882.72	73.91
<b>32 84 23 00-0415 Aluminum Cam And Groove Adapter</b> (32 84 23 00-0395)		
32 84 23 00-0416 EA 1-1/2" Type A Aluminum Cam And Groove Male Adapter x 1-1/2" NPT Female Pipe Thread.....	50.61	
32 84 23 00-0417 EA 2" Type A Aluminum Cam And Groove Male Adapter x 2" NPT Female Pipe Thread.....	53.40	
32 84 23 00-0418 EA 1-1/2" Type F Aluminum Cam And Groove Male Adapter x 1-1/2" NPT Male Pipe Thread.....	51.81	
32 84 23 00-0419 EA 2" Type F Aluminum Cam And Groove Male Adapter x 2" NPT Male Pipe Thread .....	55.65	
<b>32 84 23 00-0420 Irrigation Piping</b> (32 84 23)		
<b>32 84 23 00-0421 Irrigation Piping With Fittings, On Grade With Pipe Stabilizers</b> (32 84 23 00-0420) Note: Install stabilizers every 20', at change of direction and at sprinkler heads less than 12" tall.		
<b>32 84 23 00-0422 Schedule 40 Polyvinyl Chloride (PVC) Irrigation Piping With Fittings, On Grade With Pipe Stabilizers</b> (32 84 23 00-0421)		
32 84 23 00-0423 LF 1/2" Schedule 40 Polyvinyl Chloride (PVC) Pipe With Fittings, On Grade With Pipe Stabilizers .....	3.64	1.36
For >1,000, Deduct	-0.18	
32 84 23 00-0424 LF 3/4" Schedule 40 Polyvinyl Chloride (PVC) Pipe With Fittings, On Grade With Pipe Stabilizers .....	4.44	1.70
For >1,000, Deduct	-0.22	
32 84 23 00-0425 LF 1" Schedule 40 Polyvinyl Chloride (PVC) Pipe With Fittings, On Grade With Pipe Stabilizers .....	5.31	2.04
For >1,000, Deduct	-0.27	
32 84 23 00-0426 LF 1-1/2" Schedule 40 Polyvinyl Chloride (PVC) Pipe With Fittings, On Grade With Pipe Stabilizers .....	6.97	2.58
For >1,000, Deduct	-0.35	
32 84 23 00-0427 LF 2" Schedule 40 Polyvinyl Chloride (PVC) Pipe With Fittings, On Grade With Pipe Stabilizers .....	8.69	3.24
For >1,000, Deduct	-0.43	
32 84 23 00-0428 LF 2-1/2" Schedule 40 Polyvinyl Chloride (PVC) Pipe With Fittings, On Grade With Pipe Stabilizers .....	10.81	3.78
For >1,000, Deduct	-0.54	
32 84 23 00-0429 LF 3" Schedule 40 Polyvinyl Chloride (PVC) Pipe With Fittings, On Grade With Pipe Stabilizers .....	14.97	5.44
For >1,000, Deduct	-0.75	
32 84 23 00-0430 LF 4" Schedule 40 Polyvinyl Chloride (PVC) Pipe With Fittings, On Grade With Pipe Stabilizers .....	19.31	6.81
For >1,000, Deduct	-0.97	
32 84 23 00-0431 LF 6" Schedule 40 Polyvinyl Chloride (PVC) Pipe With Fittings, On Grade With Pipe Stabilizers .....	26.62	8.51
For >1,000, Deduct	-1.33	
<b>32 84 23 00-0432 Class 200, SDR-21 Polyvinyl Chloride (PVC) Irrigation Piping With Fittings, On Grade With Pipe Stabilizers</b> (32 84 23 00-0421)		
32 84 23 00-0433 LF 3/4" Class 200 Polyvinyl Chloride (PVC) Socketweld Pipe With Fittings, On Grade With Pipe Stabilizers.....	4.26	1.70
For >1,000, Deduct	-0.21	
32 84 23 00-0434 LF 1" Class 200 Polyvinyl Chloride (PVC) Socketweld Pipe With Fittings, On Grade With Pipe Stabilizers.....	5.01	2.04
For >1,000, Deduct	-0.25	
32 84 23 00-0435 LF 1-1/2" Class 200 Polyvinyl Chloride (PVC) Socketweld Pipe With Fittings, On Grade With Pipe Stabilizers.....	6.77	2.58
For >1,000, Deduct	-0.34	
32 84 23 00-0436 LF 2" Class 200 Polyvinyl Chloride (PVC) Socketweld Pipe With Fittings, On Grade With Pipe Stabilizers.....	8.52	3.24
For >1,000, Deduct	-0.43	
32 84 23 00-0437 LF 2-1/2" Class 200 Polyvinyl Chloride (PVC) Socketweld Pipe With Fittings, On Grade With Pipe Stabilizers.....	10.55	3.78
For >1,000, Deduct	-0.53	
32 84 23 00-0438 LF 3" Class 200, SDR-21 Polyvinyl Chloride (PVC) Pipe With Fittings, On Grade With Pipe Stabilizers .....	14.87	5.44
For >1,000, Deduct	-0.74	
32 84 23 00-0439 LF 4" Class 200, SDR-21 Polyvinyl Chloride (PVC) Pipe With Fittings, On Grade With Pipe Stabilizers .....	19.86	6.81
For >1,000, Deduct	-0.99	
32 84 23 00-0440 LF 6" Class 200, SDR-21 Polyvinyl Chloride (PVC) Pipe With Fittings, On Grade With Pipe Stabilizers .....	30.10	8.51
For >1,000, Deduct	-1.51	
<b>32 84 23 00-0441 Class 315, SDR-13.5 Polyvinyl Chloride (PVC) Irrigation Piping With Fittings, On Grade With Pipe Stabilizers</b> (32 84 23 00-0421)		
32 84 23 00-0442 LF 3/4" Class 315, SDR-13.5 Polyvinyl Chloride (PVC) Pipe With Fittings, On Grade With Pipe Stabilizers .....	4.41	1.70
For >1,000, Deduct	-0.22	
32 84 23 00-0443 LF 1" Class 315, SDR-13.5 Polyvinyl Chloride (PVC) Pipe With Fittings, On Grade With Pipe Stabilizers.....	5.21	2.04
For >1,000, Deduct	-0.26	
32 84 23 00-0444 LF 1-1/2" Class 315, SDR-13.5 Polyvinyl Chloride (PVC) Pipe With Fittings, On Grade With Pipe Stabilizers .....	7.15	2.58
For >1,000, Deduct	-0.36	
32 84 23 00-0445 LF 2" Class 315, SDR-13.5 Polyvinyl Chloride (PVC) Pipe With Fittings, On Grade With Pipe Stabilizers.....	9.16	3.24
For >1,000, Deduct	-0.46	

**32 Exterior Improvements****32 80 Irrigation****32 84 Planting Irrigation**

MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
32 84 23 00-0446 LF 2-1/2" Class 315, SDR-13.5 Polyvinyl Chloride (PVC) Pipe With Fittings, On Grade With Pipe Stabilizers.....	11.57	3.78
For >1,000, Deduct	-0.58	
32 84 23 00-0447 LF 3" Class 315, SDR-13.5 Polyvinyl Chloride (PVC) Pipe With Fittings, On Grade With Pipe Stabilizers.....	14.97	5.44
For >1,000, Deduct	-0.75	
32 84 23 00-0448 LF 4" Class 315, SDR-13.5 Polyvinyl Chloride (PVC) Pipe With Fittings, On Grade With Pipe Stabilizers.....	19.31	6.81
For >1,000, Deduct	-0.97	
32 84 23 00-0449 LF 6" Class 315, SDR-13.5 Polyvinyl Chloride (PVC) Pipe With Fittings, On Grade With Pipe Stabilizers.....	26.96	8.51
For >1,000, Deduct	-1.35	
<b>32 84 23 00-0450 Irrigation Piping With Fittings, Trenching, Cover, Backfilled And Compacted</b> (32 84 23 00-0450) Note: Install thrust blocks per Caltrans details for 3" piping and larger, upstream of remote control valve.		
<b>32 84 23 00-0451 Schedule 40 Polyvinyl Chloride (PVC) Irrigation Piping With Fittings, Trenching, 12" Of Cover, Backfilled And Compacted</b> (32 84 23 00-0450)		
32 84 23 00-0452 LF 3/4" Schedule 40 Polyvinyl Chloride (PVC) Pipe With Fittings, 12" Of Cover, Backfilled And Compacted .....	6.54	1.70
For >1,000, Deduct	-0.33	
32 84 23 00-0453 LF 1" Schedule 40 Polyvinyl Chloride (PVC) Pipe With Fittings, 12" Of Cover, Backfilled And Compacted .....	7.41	2.04
For >1,000, Deduct	-0.37	
32 84 23 00-0454 LF 1-1/2" Schedule 40 Polyvinyl Chloride (PVC) Pipe With Fittings, 12" Of Cover, Backfilled And Compacted .....	9.08	2.58
For >1,000, Deduct	-0.45	
32 84 23 00-0455 LF 2" Schedule 40 Polyvinyl Chloride (PVC) Pipe With Fittings, 12" Of Cover, Backfilled And Compacted .....	10.78	3.24
For >1,000, Deduct	-0.54	
32 84 23 00-0456 LF 2-1/2" Schedule 40 Polyvinyl Chloride (PVC) Pipe With Fittings, 12" Of Cover, Backfilled And Compacted .....	12.90	3.78
For >1,000, Deduct	-0.65	
32 84 23 00-0457 LF 3" Schedule 40 Polyvinyl Chloride (PVC) Gasketed Pipe With Fittings, 12" Of Cover, Backfilled And Compacted .....	17.07	5.44
For >1,000, Deduct	-0.85	
32 84 23 00-0458 LF 4" Schedule 40 Polyvinyl Chloride (PVC) Gasketed Pipe With Fittings, 12" Of Cover, Backfilled And Compacted .....	21.40	6.81
For >1,000, Deduct	-1.07	
32 84 23 00-0459 LF 6" Schedule 40 Polyvinyl Chloride (PVC) Gasketed Pipe With Fittings, 12" Of Cover, Backfilled And Compacted .....	28.72	8.51
For >1,000, Deduct	-1.44	
<b>32 84 23 00-0460 Schedule 40 Polyvinyl Chloride (PVC) Irrigation Piping With Fittings, Trenching, 18" Of Cover, Backfilled And Compacted</b> (32 84 23 00-0450)		
32 84 23 00-0461 LF 3/4" Schedule 40 Polyvinyl Chloride (PVC) Pipe With Fittings, 18" Of Cover, Backfilled And Compacted .....	6.79	1.70
For >1,000, Deduct	-0.34	
32 84 23 00-0462 LF 1" Schedule 40 Polyvinyl Chloride (PVC) Pipe With Fittings, 18" Of Cover, Backfilled And Compacted .....	7.66	2.04
For >1,000, Deduct	-0.38	
32 84 23 00-0463 LF 1-1/2" Schedule 40 Polyvinyl Chloride (PVC) Pipe With Fittings, 18" Of Cover, Backfilled And Compacted .....	9.33	2.58
For >1,000, Deduct	-0.47	
32 84 23 00-0464 LF 2" Schedule 40 Polyvinyl Chloride (PVC) Pipe With Fittings, 18" Of Cover, Backfilled And Compacted .....	11.03	3.24
For >1,000, Deduct	-0.55	
32 84 23 00-0465 LF 2-1/2" Schedule 40 Polyvinyl Chloride (PVC) Pipe With Fittings, 18" Of Cover, Backfilled And Compacted .....	13.16	3.78
For >1,000, Deduct	-0.66	
32 84 23 00-0466 LF 3" Schedule 40 Polyvinyl Chloride (PVC) Gasketed Pipe With Fittings, 18" Of Cover, Backfilled And Compacted .....	17.32	5.44
For >1,000, Deduct	-0.87	
32 84 23 00-0467 LF 4" Schedule 40 Polyvinyl Chloride (PVC) Gasketed Pipe With Fittings, 18" Of Cover, Backfilled And Compacted .....	21.65	6.81
For >1,000, Deduct	-1.08	
32 84 23 00-0468 LF 6" Schedule 40 Polyvinyl Chloride (PVC) Gasketed Pipe With Fittings, 18" Of Cover, Backfilled And Compacted .....	28.97	8.51
For >1,000, Deduct	-1.45	
<b>32 84 23 00-0469 Schedule 40 Polyvinyl Chloride (PVC) Irrigation Piping With Fittings, Trenching, 24" Of Cover, Backfilled And Compacted</b> (32 84 23 00-0450)		
32 84 23 00-0470 LF 3/4" Schedule 40 Polyvinyl Chloride (PVC) Pipe With Fittings, 24" Of Cover, Backfilled And Compacted .....	7.05	1.70
For >1,000, Deduct	-0.35	
32 84 23 00-0471 LF 1" Schedule 40 Polyvinyl Chloride (PVC) Pipe With Fittings, 24" Of Cover, Backfilled And Compacted .....	7.91	2.04
For >1,000, Deduct	-0.40	
32 84 23 00-0472 LF 1-1/2" Schedule 40 Polyvinyl Chloride (PVC) Pipe With Fittings, 24" Of Cover, Backfilled And Compacted .....	9.59	2.58
For >1,000, Deduct	-0.48	
32 84 23 00-0473 LF 2" Schedule 40 Polyvinyl Chloride (PVC) Pipe With Fittings, 24" Of Cover, Backfilled And Compacted .....	11.29	3.24
For >1,000, Deduct	-0.56	
32 84 23 00-0474 LF 2-1/2" Schedule 40 Polyvinyl Chloride (PVC) Pipe With Fittings, 24" Of Cover, Backfilled And Compacted .....	13.41	3.78
For >1,000, Deduct	-0.67	
32 84 23 00-0475 LF 3" Schedule 40 Polyvinyl Chloride (PVC) Gasketed Pipe With Fittings, 24" Of Cover, Backfilled And Compacted .....	17.58	5.44
For >1,000, Deduct	-0.88	
32 84 23 00-0476 LF 4" Schedule 40 Polyvinyl Chloride (PVC) Gasketed Pipe With Fittings, 24" Of Cover, Backfilled And Compacted .....	21.90	6.81
For >1,000, Deduct	-1.10	
32 84 23 00-0477 LF 6" Schedule 40 Polyvinyl Chloride (PVC) Gasketed Pipe With Fittings, 24" Of Cover, Backfilled And Compacted .....	29.23	8.51
For >1,000, Deduct	-1.46	
<b>32 84 23 00-0478 Class 200, SDR-21 Polyvinyl Chloride (PVC) Irrigation Piping With Fittings, Trenching, 12" Of Cover, Backfilled And Compacted</b> (32 84 23 00-0450)		
32 84 23 00-0479 LF 3/4" Class 200, SDR-21 Polyvinyl Chloride (PVC) Pipe With Fittings, 12" Of Cover, Backfilled And Compacted .....	6.45	1.70
For >1,000, Deduct	-0.32	
32 84 23 00-0480 LF 1" Class 200, SDR-21 Polyvinyl Chloride (PVC) Pipe With Fittings, 12" Of Cover, Backfilled And Compacted .....	7.26	2.04
For >1,000, Deduct	-0.36	
32 84 23 00-0481 LF 1-1/2" Class 200, SDR-21 Polyvinyl Chloride (PVC) Pipe With Fittings, 12" Of Cover, Backfilled And Compacted .....	9.09	2.58
For >1,000, Deduct	-0.45	



Exterior Improvements			32
Irrigation			32 80
Planting Irrigation			32 84

MINOR	CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
32 84 23 00-0482	LF	2"	Class 200, SDR-21 Polyvinyl Chloride (PVC) Pipe With Fittings, 12" Of Cover, Backfilled And Compacted..... <i>For &gt;1,000, Deduct</i>	11.09 -0.55	3.24
32 84 23 00-0483	LF	2-1/2"	Class 200, SDR-21 Polyvinyl Chloride (PVC) Pipe With Fittings, 12" Of Cover, Backfilled And Compacted..... <i>For &gt;1,000, Deduct</i>	13.41 -0.67	3.78
32 84 23 00-0484	LF	3"	Class 200, SDR-21 Polyvinyl Chloride (PVC) Gasketed Pipe With Fittings, 12" Of Cover, Backfilled And Compacted..... <i>For &gt;1,000, Deduct</i>	16.97 -0.85	5.44
32 84 23 00-0485	LF	4"	Class 200, SDR-21 Polyvinyl Chloride (PVC) Gasketed Pipe With Fittings, 12" Of Cover, Backfilled And Compacted..... <i>For &gt;1,000, Deduct</i>	21.95 -1.10	6.81
32 84 23 00-0486	LF	6"	Class 200, SDR-21 Polyvinyl Chloride (PVC) Gasketed Pipe With Fittings, 12" Of Cover, Backfilled And Compacted..... <i>For &gt;1,000, Deduct</i>	32.19 -1.61	8.51
<b>32 84 23 00-0487 Class 200, SDR-21 Polyvinyl Chloride (PVC) Irrigation Piping With Fittings, Trenching, 18" Of Cover, Backfilled And Compacted (32 84 23 00-0450)</b>					
32 84 23 00-0488	LF	3/4"	Class 200, SDR-21 Polyvinyl Chloride (PVC) Pipe With Fittings, 18" Of Cover, Backfilled And Compacted..... <i>For &gt;1,000, Deduct</i>	6.70 -0.34	1.70
32 84 23 00-0489	LF	1"	Class 200, SDR-21 Polyvinyl Chloride (PVC) Pipe With Fittings, 18" Of Cover, Backfilled And Compacted..... <i>For &gt;1,000, Deduct</i>	7.51 -0.38	2.04
32 84 23 00-0490	LF	1-1/2"	Class 200, SDR-21 Polyvinyl Chloride (PVC) Pipe With Fittings, 18" Of Cover, Backfilled And Compacted..... <i>For &gt;1,000, Deduct</i>	9.34 -0.47	2.58
32 84 23 00-0491	LF	2"	Class 200, SDR-21 Polyvinyl Chloride (PVC) Pipe With Fittings, 18" Of Cover, Backfilled And Compacted..... <i>For &gt;1,000, Deduct</i>	11.34 -0.57	3.24
32 84 23 00-0492	LF	2-1/2"	Class 200, SDR-21 Polyvinyl Chloride (PVC) Pipe With Fittings, 18" Of Cover, Backfilled And Compacted..... <i>For &gt;1,000, Deduct</i>	13.67 -0.68	3.78
32 84 23 00-0493	LF	3"	Class 200, SDR-21 Polyvinyl Chloride (PVC) Gasketed Pipe With Fittings, 18" Of Cover, Backfilled And Compacted..... <i>For &gt;1,000, Deduct</i>	17.22 -0.86	5.44
32 84 23 00-0494	LF	4"	Class 200, SDR-21 Polyvinyl Chloride (PVC) Gasketed Pipe With Fittings, 18" Of Cover, Backfilled And Compacted..... <i>For &gt;1,000, Deduct</i>	22.20 -1.11	6.81
32 84 23 00-0495	LF	6"	Class 200, SDR-21 Polyvinyl Chloride (PVC) Gasketed Pipe With Fittings, 18" Of Cover, Backfilled And Compacted..... <i>For &gt;1,000, Deduct</i>	32.44 -1.62	8.51
<b>32 84 23 00-0496 Class 200, SDR-21 Polyvinyl Chloride (PVC) Irrigation Piping With Fittings, Trenching, 24" Of Cover, Backfilled And Compacted (32 84 23 00-0450)</b>					
32 84 23 00-0497	LF	3/4"	Class 200, SDR-21 Polyvinyl Chloride (PVC) Pipe With Fittings, 24" Of Cover, Backfilled And Compacted..... <i>For &gt;1,000, Deduct</i>	6.96 -0.35	1.70
32 84 23 00-0498	LF	1"	Class 200, SDR-21 Polyvinyl Chloride (PVC) Pipe With Fittings, 24" Of Cover, Backfilled And Compacted..... <i>For &gt;1,000, Deduct</i>	7.76 -0.39	2.04
32 84 23 00-0499	LF	1-1/2"	Class 200, SDR-21 Polyvinyl Chloride (PVC) Pipe With Fittings, 24" Of Cover, Backfilled And Compacted..... <i>For &gt;1,000, Deduct</i>	9.60 -0.48	2.58
32 84 23 00-0500	LF	2"	Class 200, SDR-21 Polyvinyl Chloride (PVC) Pipe With Fittings, 24" Of Cover, Backfilled And Compacted..... <i>For &gt;1,000, Deduct</i>	11.60 -0.58	3.24
32 84 23 00-0501	LF	2-1/2"	Class 200, SDR-21 Polyvinyl Chloride (PVC) Pipe With Fittings, 24" Of Cover, Backfilled And Compacted..... <i>For &gt;1,000, Deduct</i>	13.92 -0.70	3.78
32 84 23 00-0502	LF	3"	Class 200, SDR-21 Polyvinyl Chloride (PVC) Gasketed Pipe With Fittings, 24" Of Cover, Backfilled And Compacted..... <i>For &gt;1,000, Deduct</i>	17.48 -0.87	5.44
32 84 23 00-0503	LF	4"	Class 200, SDR-21 Polyvinyl Chloride (PVC) Gasketed Pipe With Fittings, 24" Of Cover, Backfilled And Compacted..... <i>For &gt;1,000, Deduct</i>	22.45 -1.12	6.81
32 84 23 00-0504	LF	6"	Class 200, SDR-21 Polyvinyl Chloride (PVC) Gasketed Pipe With Fittings, 24" Of Cover, Backfilled And Compacted..... <i>For &gt;1,000, Deduct</i>	32.70 -1.64	8.51
<b>32 84 23 00-0505 Class 315, SDR-13.5 Polyvinyl Chloride (PVC) Irrigation Piping With Fittings, Trenching, 12" Of Cover, Backfilled And Compacted (32 84 23 00-0450)</b>					
32 84 23 00-0506	LF	3/4"	Class 315, SDR-13.5 Polyvinyl Chloride (PVC) Pipe With Fittings, 12" Of Cover, Backfilled And Compacted..... <i>For &gt;1,000, Deduct</i>	6.51 -0.33	1.70
32 84 23 00-0507	LF	1"	Class 315, SDR-13.5 Polyvinyl Chloride (PVC) Pipe With Fittings, 12" Of Cover, Backfilled And Compacted..... <i>For &gt;1,000, Deduct</i>	7.32 -0.37	2.04
32 84 23 00-0508	LF	1-1/2"	Class 315, SDR-13.5 Polyvinyl Chloride (PVC) Pipe With Fittings, 12" Of Cover, Backfilled And Compacted..... <i>For &gt;1,000, Deduct</i>	9.25 -0.46	2.58
32 84 23 00-0509	LF	2"	Class 315, SDR-13.5 Polyvinyl Chloride (PVC) Pipe With Fittings, 12" Of Cover, Backfilled And Compacted..... <i>For &gt;1,000, Deduct</i>	11.25 -0.56	3.24
32 84 23 00-0510	LF	2-1/2"	Class 315, SDR-13.5 Polyvinyl Chloride (PVC) Pipe With Fittings, 12" Of Cover, Backfilled And Compacted..... <i>For &gt;1,000, Deduct</i>	13.66 -0.68	3.78
32 84 23 00-0511	LF	3"	Class 315, SDR-13.5 Polyvinyl Chloride (PVC) Gasketed Pipe With Fittings, 12" Of Cover, Backfilled And Compacted..... <i>For &gt;1,000, Deduct</i>	17.07 -0.85	5.44
32 84 23 00-0512	LF	4"	Class 315, SDR-13.5 Polyvinyl Chloride (PVC) Gasketed Pipe With Fittings, 12" Of Cover, Backfilled And Compacted..... <i>For &gt;1,000, Deduct</i>	21.40 -1.07	6.81
32 84 23 00-0513	LF	6"	Class 315, SDR-13.5 Polyvinyl Chloride (PVC) Gasketed Pipe With Fittings, 12" Of Cover, Backfilled And Compacted..... <i>For &gt;1,000, Deduct</i>	29.06 -1.45	8.51

**32 Exterior Improvements****32 80 Irrigation****32 84 Planting Irrigation**MINOR  
CSI UOM DESCRIPTIONTOTAL DIRECT DEMOLITION  
UNIT COST UNIT COST

<b>32 84 23 00-0514</b>		<b>Class 315, SDR-13.5 Polyvinyl Chloride (PVC) Irrigation Piping With Fittings, Trenching, 18" Of Cover, Backfilled And Compacted</b> (32 84 23 00-0450)		
32 84 23 00-0515	LF	3/4" Class 315, SDR-13.5 Polyvinyl Chloride (PVC) Pipe With Fittings, 18" Of Cover, Backfilled And Compacted.....	6.76	1.70
		For >1,000, Deduct	-0.34	
32 84 23 00-0516	LF	1" Class 315, SDR-13.5 Polyvinyl Chloride (PVC) Pipe With Fittings, 18" Of Cover, Backfilled And Compacted.....	7.57	2.04
		For >1,000, Deduct	-0.38	
32 84 23 00-0517	LF	1-1/2" Class 315, SDR-13.5 Polyvinyl Chloride (PVC) Pipe With Fittings, 18" Of Cover, Backfilled And Compacted.....	9.50	2.58
		For >1,000, Deduct	-0.48	
32 84 23 00-0518	LF	2" Class 315, SDR-13.5 Polyvinyl Chloride (PVC) Pipe With Fittings, 18" Of Cover, Backfilled And Compacted.....	11.50	3.24
		For >1,000, Deduct	-0.58	
32 84 23 00-0519	LF	2-1/2" Class 315, SDR-13.5 Polyvinyl Chloride (PVC) Pipe With Fittings, 18" Of Cover, Backfilled And Compacted.....	13.92	3.78
		For >1,000, Deduct	-0.70	
32 84 23 00-0520	LF	3" Class 315, SDR-13.5 Polyvinyl Chloride (PVC) Gasketed Pipe With Fittings, 18" Of Cover, Backfilled And Compacted .....	17.32	5.44
		For >1,000, Deduct	-0.87	
32 84 23 00-0521	LF	4" Class 315, SDR-13.5 Polyvinyl Chloride (PVC) Gasketed Pipe With Fittings, 18" Of Cover, Backfilled And Compacted .....	21.65	6.81
		For >1,000, Deduct	-1.08	
32 84 23 00-0522	LF	6" Class 315, SDR-13.5 Polyvinyl Chloride (PVC) Gasketed Pipe With Fittings, 18" Of Cover, Backfilled And Compacted .....	29.31	8.51
		For >1,000, Deduct	-1.47	
<b>32 84 23 00-0523</b>		<b>Class 315, SDR-13.5 Polyvinyl Chloride (PVC) Irrigation Piping With Fittings, Trenching, 24" Of Cover, Backfilled And Compacted</b> (32 84 23 00-0450)		
32 84 23 00-0524	LF	3/4" Class 315, SDR-13.5 Polyvinyl Chloride (PVC) Pipe With Fittings, 24" Of Cover, Backfilled And Compacted.....	7.02	1.70
		For >1,000, Deduct	-0.35	
32 84 23 00-0525	LF	1" Class 315, SDR-13.5 Polyvinyl Chloride (PVC) Pipe With Fittings, 24" Of Cover, Backfilled And Compacted.....	7.82	2.04
		For >1,000, Deduct	-0.39	
32 84 23 00-0526	LF	1-1/2" Class 315, SDR-13.5 Polyvinyl Chloride (PVC) Pipe With Fittings, 24" Of Cover, Backfilled And Compacted.....	9.76	2.58
		For >1,000, Deduct	-0.49	
32 84 23 00-0527	LF	2" Class 315, SDR-13.5 Polyvinyl Chloride (PVC) Pipe With Fittings, 24" Of Cover, Backfilled And Compacted.....	11.76	3.24
		For >1,000, Deduct	-0.59	
32 84 23 00-0528	LF	2-1/2" Class 315, SDR-13.5 Polyvinyl Chloride (PVC) Pipe With Fittings, 24" Of Cover, Backfilled And Compacted.....	14.17	3.78
		For >1,000, Deduct	-0.71	
32 84 23 00-0529	LF	3" Class 315, SDR-13.5 Polyvinyl Chloride (PVC) Gasketed Pipe With Fittings, 24" Of Cover, Backfilled And Compacted .....	17.58	5.44
		For >1,000, Deduct	-0.88	
32 84 23 00-0530	LF	4" Class 315, SDR-13.5 Polyvinyl Chloride (PVC) Gasketed Pipe With Fittings, 24" Of Cover, Backfilled And Compacted .....	21.90	6.81
		For >1,000, Deduct	-1.10	
32 84 23 00-0531	LF	6" Class 315, SDR-13.5 Polyvinyl Chloride (PVC) Gasketed Pipe With Fittings, 24" Of Cover, Backfilled And Compacted .....	29.57	8.51
		For >1,000, Deduct	-1.48	
<b>32 84 23 00-0532</b>		<b>Irrigation Riser Piping With Fittings</b> (32 84 23 00-0420)		
32 84 23 00-0533	EA	1/2" Polyvinyl Chloride (PVC) Riser Pipe With Fittings, 6" Exposed, Type IV .....	19.62	4.08
		Note: Includes #4 steel reinforcing bar, stainless steel hose clamp		
32 84 23 00-0534	EA	3/4" Polyvinyl Chloride (PVC) Riser Pipe With Fittings, 6" Exposed, Type IV .....	21.24	5.10
		Note: Includes #4 steel reinforcing bar, stainless steel hose clamp		
32 84 23 00-0535	EA	1/2" Polyvinyl Chloride (PVC) Riser Pipe With Fittings, 12" Exposed, Type IV .....	21.15	4.77
		Note: Includes #4 steel reinforcing bar, stainless steel hose clamp		
32 84 23 00-0536	EA	3/4" Polyvinyl Chloride (PVC) Riser Pipe With Fittings, 12" Exposed, Type IV .....	23.17	5.95
		Note: Includes #4 steel reinforcing bar, stainless steel hose clamp		
32 84 23 00-0537	EA	1/2" Polyvinyl Chloride (PVC) Riser Pipe With Fittings, 24" Exposed, Type I .....	42.24	7.14
		Note: Includes 2" diameter lodge poll support stake, two stainless steel sprinkler ties		
32 84 23 00-0538	EA	3/4" Polyvinyl Chloride (PVC) Riser Pipe With Fittings, 24" Exposed, Type I .....	45.09	8.93
		Note: Includes 2" diameter lodge poll support stake, two stainless steel sprinkler ties		
32 84 23 00-0539	EA	1/2" Polyvinyl Chloride (PVC) Riser Pipe With Fittings, 36" Exposed, Type I .....	49.76	9.18
		Note: Includes 2" diameter lodge poll support stake, two stainless steel sprinkler ties		
32 84 23 00-0540	EA	3/4" Polyvinyl Chloride (PVC) Riser Pipe With Fittings, 36" Exposed, Type I .....	53.43	11.49
		Note: Includes 2" diameter lodge poll support stake, two stainless steel sprinkler ties		
32 84 23 00-0541	EA	1/2" Polyvinyl Chloride (PVC) Riser Pipe With Fittings, 48" Exposed, Type I .....	57.29	11.22
		Note: Includes 2" diameter lodge poll support stake, two stainless steel sprinkler ties		
32 84 23 00-0542	EA	3/4" Polyvinyl Chloride (PVC) Riser Pipe With Fittings, 48" Exposed, Type I .....	61.77	14.04
		Note: Includes 2" diameter lodge poll support stake, two stainless steel sprinkler ties		
<b>32 84 23 00-0543</b>		<b>Irrigation Crossover Piping With Fittings</b> (32 84 23 00-0420)		
		Note: Install per Caltrans details. Includes thrust blocks, HDPE sleeve pipe and fittings, 3" pvc irrigation piping and 1" electrical pvc conduit. Excludes #5 concrete irrigation pull boxes on ends, electrical control wiring. See CSI section 32 84 23 00-0105 for #5 concrete pull box, 32 84 23 00-0587 for irrigation wiring.		
<b>32 84 23 00-0544</b>		<b>Irrigation Crossover, Corrugated High Density Polyethylene Pipe (CHDPE), 24" Open Trench</b> (32 84 23 00-0543)		
32 84 23 00-0545	LF	6" Irrigation Crossover, Corrugated High Density Polyethylene Pipe (CHDPE), 24" Open Trench Installation.....	35.26	
		For >1,000, Deduct	-1.76	
32 84 23 00-0546	LF	8" Irrigation Crossover, Corrugated High Density Polyethylene Pipe (CHDPE), 24" Open Trench Installation.....	48.15	
		For >1,000, Deduct	-2.41	



Exterior Improvements			32
Irrigation			32 80
Planting Irrigation			32 84

MINOR	CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
32 84 23 00-0547	LF		10" Irrigation Crossover, Corrugated High Density Polyethylene Pipe (CHDPE), 24" Open Trench Installation.....	64.45	
			For >1,000, Deduct	-3.22	
32 84 23 00-0548	LF		12" Irrigation Crossover, Corrugated High Density Polyethylene Pipe (CHDPE), 24" Open Trench Installation.....	83.69	
			For >1,000, Deduct	-4.18	
32 84 23 00-0549			<b>Irrigation Crossover, Corrugated High Density Polyethylene Pipe (CHDPE), 36" Open Trench</b> (32 84 23 00-0543)		
32 84 23 00-0550	LF		6" Irrigation Crossover, Corrugated High Density Polyethylene Pipe (CHDPE), 36" Open Trench Installation .....	36.01	
			For >1,000, Deduct	-1.80	
32 84 23 00-0551	LF		8" Irrigation Crossover, Corrugated High Density Polyethylene Pipe (CHDPE), 36" Open Trench Installation .....	49.00	
			For >1,000, Deduct	-2.45	
32 84 23 00-0552	LF		10" Irrigation Crossover, Corrugated High Density Polyethylene Pipe (CHDPE), 36" Open Trench Installation.....	65.37	
			For >1,000, Deduct	-3.27	
32 84 23 00-0553	LF		12" Irrigation Crossover, Corrugated High Density Polyethylene Pipe (CHDPE), 36" Open Trench Installation.....	84.71	
			For >1,000, Deduct	-4.24	
32 84 23 00-0554			<b>Irrigation Crossover, Corrugated High Density Polyethylene Pipe (CHDPE), 48" Open Trench</b> (32 84 23 00-0543)		
32 84 23 00-0555	LF		6" Irrigation Crossover, Corrugated High Density Polyethylene Pipe (CHDPE), 48" Open Trench Installation .....	36.77	
			For >1,000, Deduct	-1.84	
32 84 23 00-0556	LF		8" Irrigation Crossover, Corrugated High Density Polyethylene Pipe (CHDPE), 36" Open Trench Installation .....	49.85	
			For >1,000, Deduct	-2.49	
32 84 23 00-0557	LF		10" Irrigation Crossover, Corrugated High Density Polyethylene Pipe (CHDPE), 36" Open Trench Installation.....	66.31	
			For >1,000, Deduct	-3.32	
32 84 23 00-0558	LF		12" Irrigation Crossover, Corrugated High Density Polyethylene Pipe (CHDPE), 36" Open Trench Installation.....	85.72	
			For >1,000, Deduct	-4.29	
32 84 23 00-0559			<b>Irrigation Crossover, Corrugated High Density Polyethylene Pipe (CHDPE), Directional Bore</b> (32 84 23 00-0543)		
32 84 23 00-0560	LF		6" Irrigation Crossover, Corrugated High Density Polyethylene Pipe (CHDPE), Directional Bore Installation .....	87.83	
			For >1,000, Deduct	-4.39	
32 84 23 00-0561	LF		8" Irrigation Crossover, Corrugated High Density Polyethylene Pipe (CHDPE), Directional Bore Installation .....	111.39	
			For >1,000, Deduct	-5.57	
32 84 23 00-0562	LF		10" Irrigation Crossover, Corrugated High Density Polyethylene Pipe (CHDPE), Directional Bore Installation .....	132.91	
			For >1,000, Deduct	-6.65	
32 84 23 00-0563	LF		12" Irrigation Crossover, Corrugated High Density Polyethylene Pipe (CHDPE), Directional Bore Installation .....	157.40	
			For >1,000, Deduct	-7.87	
32 84 23 00-0564			<b>Below Ground Cam Adapter Assembly</b> (32 84 23 00-0420)		
			Note: Includes minimum 6" depth gravel or crushed rock, woven wire cloth, jumbo valve box with 15" x 21.5" cover, 1-1/2" brass ball valve, 1-1/2" aluminum male cam adapter x female NPT, 1-1/2" PVC elbow, 2" PVC reducing tee, 30" PVC pipe		
32 84 23 00-0565	EA		Below Ground Cam Adapter Assembly .....	847.01	
			Note: Includes 6" depth gravel or crushed rock, woven wire cloth, jumbo valve box with 15" x 21.5" cover, 1-1/2" brass ball valve, 1-1/2" aluminum male cam adapter x female NPT, 1-1/2" PVC elbow, 2" PVC reducing tee, 30" PVC pipe.		
32 84 23 00-0566			<b>Above Ground Cam Adapter Assembly</b> (32 84 23 00-0420)		
			Note: Includes concrete thrust block, 1-1/2" plastic ball valve, 1-1/2" aluminum male cam adapter x female NPT, 1-1/2" PVC elbow, 2" PVC reducing tee, 30" PVC pipe		
32 84 23 00-0567	EA		Above Ground Cam Adapter Assembly .....	533.14	
			Note: Includes concrete thrust block, 1-1/2" plastic ball valve, 1-1/2" aluminum male cam adapter x female NPT, 1-1/2" PVC elbow, 2" PVC reducing tee, 30" PVC pipe.		
32 84 23 00-0568			<b>Thrust Block</b> (32 84 23 00-0420)		
32 84 23 00-0569	EA		Thrust Block For 1-1/2" Pipe Size And Smaller .....	40.80	
32 84 23 00-0570	EA		Thrust Block For 2" Pipe .....	71.58	
32 84 23 00-0571	EA		Thrust Block For 3" And 4" Pipe .....	102.36	
32 84 23 00-0572	EA		Thrust Block For 6" Pipe .....	164.42	
32 84 23 00-0573	EA		Thrust Block For 8" Pipe .....	238.25	
32 84 23 00-0574			<b>Irrigation Swing Joints</b> (32 84 23)		
32 84 23 00-0575	EA		3/4" Male NPT, 12" Length, Polyvinyl Chloride (PVC) Irrigation Swing Joint (Rain Bird® TSJ12075) .....	68.76	27.09
32 84 23 00-0576	EA		1" Male NPT, 12" Length, Polyvinyl Chloride (PVC) Irrigation Swing Joint (Rain Bird® TSJ12) .....	78.00	30.24
32 84 23 00-0577	EA		1" Male NPT, 12" Length, Polyvinyl Chloride (PVC) Irrigation Swing Joint With 70 PSI Pressure Regulator (Rain Bird® TSJ100PRS) .....	100.51	30.24
32 84 23 00-0578	EA		1/2" Diameter, 12" Length, Polyvinyl Chloride (PVC) Irrigation Swing Joint, CALTRANS Type I .....	56.34	35.30
			Note: Consists of three threaded 90 degree elbows and 12" threaded pipe.		
32 84 23 00-0579	EA		3/4" Diameter, 12" Length, Polyvinyl Chloride (PVC) Irrigation Swing Joint, CALTRANS Type I .....	75.28	47.09
			Note: Consists of three threaded 90 degree elbows and 12" threaded pipe.		
32 84 23 00-0580	EA		1" Diameter, 12" Length, Polyvinyl Chloride (PVC) Irrigation Swing Joint, CALTRANS Type I .....	94.38	57.74
			Note: Consists of three threaded 90 degree elbows and 12" threaded pipe.		
32 84 23 00-0581	EA		1/2" Diameter, 24" Length, Polyvinyl Chloride (PVC) Irrigation Swing Joint, CALTRANS Type II .....	80.37	35.85
			Note: Consists of one threaded 90 degree elbow, one threaded x socket 90 degree elbow, one adapter and 24" threaded pipe.		

**32 Exterior Improvements****32 80 Irrigation****32 84 Planting Irrigation**

MINOR CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
32 84 23 00-0582	EA	3/4" Diameter, 24" Length, Polyvinyl Chloride (PVC) Irrigation Swing Joint, CALTRANS Type II..... Note: Consists of one threaded 90 degree elbow, one threaded x socket 90 degree elbow, one adapter and 24" threaded pipe.	106.27	47.56
32 84 23 00-0583	EA	1" Diameter, 24" Length, Polyvinyl Chloride (PVC) Irrigation Swing Joint, CALTRANS Type II..... Note: Consists of one threaded 90 degree elbow, one threaded x socket 90 degree elbow, one adapter and 24" threaded pipe.	130.49	58.33
32 84 23 00-0584	EA	1/2" Diameter, Polyvinyl Chloride (PVC) Irrigation Swing Joint, CALTRANS Type III..... Note: Consists of two street 90 degree elbows.	45.56	21.96
32 84 23 00-0585	EA	3/4" Diameter, Polyvinyl Chloride (PVC) Irrigation Swing Joint, CALTRANS Type III..... Note: Consists of two street 90 degree elbows.	60.88	29.28
32 84 23 00-0586	EA	1" Diameter, Polyvinyl Chloride (PVC) Irrigation Swing Joint, CALTRANS Type III..... Note: Consists of two street 90 degree elbows.	72.14	36.30
<b>32 84 23 00-0587</b>		<b>Irrigation Control Wire</b> (32 84 23) Note: Excludes excavation and backfill.		
<b>32 84 23 00-0588</b>		<b>18 AWG, Irrigation Control Wire, Buried In Trench</b> (32 84 23 00-0587)		
32 84 23 00-0589	CLF	1-Conductor, 18 AWG, Irrigation Control Wire, Buried In Trench .....	60.28	20.42
32 84 23 00-0590	CLF	2-Conductor, 18 AWG, Irrigation Control Wire, Buried In Trench .....	77.90	23.82
32 84 23 00-0591	CLF	3-Conductor, 18 AWG, Irrigation Control Wire, Buried In Trench .....	89.58	27.22
32 84 23 00-0592	CLF	4-Conductor, 18 AWG, Irrigation Control Wire, Buried In Trench .....	102.33	30.63
32 84 23 00-0593	CLF	5-Conductor, 18 AWG, Irrigation Control Wire, Buried In Trench .....	116.15	34.03
32 84 23 00-0594	CLF	6-Conductor, 18 AWG, Irrigation Control Wire, Buried In Trench .....	137.56	37.42
32 84 23 00-0595	CLF	7-Conductor, 18 AWG, Irrigation Control Wire, Buried In Trench .....	158.15	40.82
32 84 23 00-0596	CLF	8-Conductor, 18 AWG, Irrigation Control Wire, Buried In Trench .....	171.78	44.23
32 84 23 00-0597	CLF	9-Conductor, 18 AWG, Irrigation Control Wire, Buried In Trench .....	188.26	47.63
32 84 23 00-0598	CLF	10-Conductor, 18 AWG, Irrigation Control Wire, Buried In Trench.....	206.97	51.03
32 84 23 00-0599	CLF	11-Conductor, 18 AWG, Irrigation Control Wire, Buried In Trench.....	214.83	54.44
32 84 23 00-0600	CLF	12-Conductor, 18 AWG, Irrigation Control Wire, Buried In Trench.....	223.80	57.84
32 84 23 00-0601	CLF	13-Conductor, 18 AWG, Irrigation Control Wire, Buried In Trench.....	236.21	61.24
<b>32 84 23 00-0602</b>		<b>16 AWG, Irrigation Control Wire, Buried In Trench</b> (32 84 23 00-0587)		
32 84 23 00-0603	CLF	1-Conductor, 16 AWG, Irrigation Control Wire, Buried In Trench .....	63.16	20.42
<b>32 84 23 00-0604</b>		<b>14 AWG, Irrigation Control Wire, Buried In Trench</b> (32 84 23 00-0587)		
32 84 23 00-0605	CLF	1-Conductor, 14 AWG, Irrigation Control Wire, Buried In Trench .....	63.17	20.42
<b>32 84 23 00-0606</b>		<b>12 AWG, Irrigation Control Wire, Buried In Trench</b> (32 84 23 00-0587)		
32 84 23 00-0607	CLF	1-Conductor, 12 AWG, Irrigation Control Wire, Buried In Trench .....	82.18	20.42
<b>32 84 23 00-0608</b>		<b>10 AWG, Irrigation Control Wire, Buried In Trench</b> (32 84 23 00-0587)		
32 84 23 00-0609	CLF	1-Conductor, 10 AWG, Irrigation Control Wire, Buried In Trench .....	106.27	20.42
<b>32 84 23 00-0610</b>		<b>Root Watering Systems</b> (32 84 23) Note: Includes swing assembly.		
32 84 23 00-0611	EA	0.25 GPM Bubbler On Riser, 36" Tube, 4" Diameter Grate, Root Watering System (Rain Bird® RWS-B-1401)..... For Root Watering Sand Sock, Add 1.23	108.13	27.22
32 84 23 00-0612	EA	0.25 GPM Bubbler And Check Valve On Riser, 36" Tube, 4" Diameter Grate, Root Watering System (Rain Bird® RWS-B-C-1401)..... For Root Watering Sand Sock, Add 1.23	115.58	27.22
32 84 23 00-0613	EA	0.5 GPM Bubbler On Riser, 36" Tube, 4" Diameter Grate, Root Watering System (Rain Bird® RWS-B-1402)..... For Root Watering Sand Sock, Add 1.23	108.13	27.22
32 84 23 00-0614	EA	0.5 GPM Bubbler And Check Valve On Riser, 36" Tube, 4" Diameter Grate, Root Watering System (Rain Bird® RWS-B-C-1402)..... For Root Watering Sand Sock, Add 1.23	115.58	27.22
32 84 23 00-0615	EA	1 GPM Bubbler And Check Valve On Riser, 36" Tube, 4" Diameter Grate, Root Watering System (Rain Bird® RWS-B-C-1404)..... For Root Watering Sand Sock, Add 1.23	115.58	27.22
32 84 23 00-0616	EA	0.25 GPM Bubbler On Riser, 18" Tube, 4" Diameter Grate, Root Watering System (Rain Bird® RWS-M-B-1401)..... For Root Watering Sand Sock, Add 1.23	93.94	23.82
32 84 23 00-0617	EA	0.25 GPM Bubbler And Check Valve On Riser, 18" Tube, 4" Diameter Grate, Root Watering System (Rain Bird® RWS-M-B-C-1401)..... For Root Watering Sand Sock, Add 1.23	101.09	23.82
32 84 23 00-0618	EA	0.5 GPM Bubbler On Riser, 18" Tube, 4" Diameter Grate, Root Watering System (Rain Bird® RWS-M-B-1402)..... For Root Watering Sand Sock, Add 1.23	93.94	23.82
32 84 23 00-0619	EA	0.5 GPM Bubbler And Check Valve On Riser, 18" Tube, 4" Diameter Grate, Root Watering System (Rain Bird® RWS-M-B-C-1402)..... For Root Watering Sand Sock, Add 1.23	101.09	23.82
32 84 23 00-0620	EA	0.25 GPM Bubbler On Riser, 10" Tube, 4" Diameter Grate, Root Watering System (Rain Bird® RWS-S-B-1401)..... For Root Watering Sand Sock, Add 1.23	65.46	20.42
32 84 23 00-0621	EA	0.25 GPM Bubbler And Check Valve On Riser, 10" Tube, 4" Diameter Grate, Root Watering System (Rain Bird® RWS-S-B-C-1401)..... For Root Watering Sand Sock, Add 1.23	72.26	20.42

**32 90 Planting** (32)





Exterior Improvements		32	32
Planting		32 90	
Planting Irrigation		32 84	

MINOR	CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
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Note: Plant installation includes the initial watering only. The extended watering period for the establishment of lawns, plants and trees is addressed on a per plant per amount per occurrence basis as directed in the specification. cvs = cultivar.

## 32 92 Turf and Grasses (32 90)

### 32 92 19 Seeding (32 92)

#### 32 92 19 13 Mechanical Seeding (32 92 19)

Note: Includes fertilizing, liming, mixing, seeding and initial watering.

#### 32 92 19 13-0001 Hydro Or Air Mechanical Seeding (32 92 19 13)

32 92 19 13-0002	MSF Tall Fescue, Hydro Or Air Seeding	97.47
	Note: 5.5 LB/MSF spread rate.	
	For Spot Areas Up To 1, Add	97.73
	For >1 To 4, Add	62.21
	For >4 To 7.5, Add	41.79
	For >7.5 To 10, Add	20.89
	For >45, Deduct	-7.54
	For Tackifier, Add	1.36
32 92 19 13-0003	MSF Rye, Hydro Or Air Spread	91.89
	Note: 10 LB/MSF spread rate.	
	For Spot Areas Up To 1, Add	95.50
	For >1 To 4, Add	61.10
	For >4 To 7.5, Add	41.23
	For >7.5 To 10, Add	20.61
	For >45, Deduct	-7.26
	For Tackifier, Add	1.36
32 92 19 13-0004	MSF Utility Mix, Hydro Or Air Seeding	92.96
	Note: 7 LB/MSF spread rate. Mixture of perennial/annual rye, creeping red fescue and bluegrass.	
	For Spot Areas Up To 1, Add	95.92
	For >1 To 4, Add	61.31
	For >4 To 7.5, Add	41.34
	For >7.5 To 10, Add	20.67
	For >45, Deduct	-7.32
	For Tackifier, Add	1.36
32 92 19 13-0005	MSF 2,500 LB/Acre, High Performance - Flexible Growth Medium	121.47
	Note: Applied with seed. Excludes seed.	
	For Spot Areas Up To 1, Add	77.96
	For >1 To 4, Add	45.65
	For >4 To 7.5, Add	28.17
	For >7.5 To 10, Add	14.08
	For >45, Deduct	-7.41
32 92 19 13-0006	MSF 3,000 LB/Acre, High Performance - Flexible Growth Medium	141.77
	Note: Applied with seed. Excludes seed.	
	For Spot Areas Up To 1, Add	87.55
	For >1 To 4, Add	50.79
	For >4 To 7.5, Add	31.00
	For >7.5 To 10, Add	15.50
	For >45, Deduct	-8.49
32 92 19 13-0007	MSF 3,500 LB/Acre, High Performance - Flexible Growth Medium	162.14
	Note: Applied with seed. Excludes seed.	
	For Spot Areas Up To 1, Add	97.25
	For >1 To 4, Add	55.99
	For >4 To 7.5, Add	33.88
	For >7.5 To 10, Add	16.94
	For >45, Deduct	-9.58
32 92 19 13-0008	MSF 4,000 LB/Acre, High Performance - Flexible Growth Medium	182.55
	Note: Applied with seed. Excludes seed.	
	For Spot Areas Up To 1, Add	107.02
	For >1 To 4, Add	61.24
	For >4 To 7.5, Add	36.80
	For >7.5 To 10, Add	18.40
	For >45, Deduct	-10.67
32 92 19 13-0009	MSF 4,500 LB/Acre, High Performance - Flexible Growth Medium	203.05
	Note: Applied with seed. Excludes seed.	
	For Spot Areas Up To 1, Add	116.93
	For >1 To 4, Add	66.58
	For >4 To 7.5, Add	39.78
	For >7.5 To 10, Add	19.89
	For >45, Deduct	-11.78

END OF SECTION 32

32	32	Exterior Improvements
	32 90	Planting
	32 92	Turf and Grasses



MINOR			TOTAL DIRECT	DEMOLITION
CSI	UOM	DESCRIPTION	UNIT COST	UNIT COST

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		<b>Utilities</b>	<b>33</b>	<b>CS</b>
		<b>Operation and Maintenance of Utilities</b>	<b>33 01</b>	
		<b>Operation and Maintenance of Water Utilities</b>	<b>33 01 10</b>	

MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
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## 33 Utilities

Note: Buried plastic pipe and conduit includes detectable tracer wire

### 33 01 Operation and Maintenance of Utilities <sup>(33)</sup>

#### 33 01 10 Operation and Maintenance of Water Utilities <sup>(33 01)</sup>

##### 33 01 10 54 **Cleaning of Water Utility Piping** <sup>(33 01 10)</sup>

See CSI section 33 01 30 41-0006 for cleaning of water lines.

##### 33 01 10 58 **Disinfection of Water Utility Piping Systems** <sup>(33 01 10)</sup>

##### 33 01 10 58-0001 **Water Main Disinfection/Sterilization** <sup>(33 01 10 58)</sup>

Note: Gas chlorination. Continuous or plug method.

33 01 10 58-0002	EA	Setting Up And Removing Equipment For Water Main Disinfection/Sterilization, Gas Chlorination Method .....	952.96	
33 01 10 58-0003	EA	Re-Set Up/Move Equipment For Water Main Disinfection/Sterilization, Gas Chlorination Method .....	476.48	
33 01 10 58-0004	LF	Up To 4" Diameter Pipe Water Main Disinfection/Sterilization .....	0.36	
		For >250 To 500, Deduct .....	-0.02	
		For >500 To 1,000, Deduct .....	-0.04	
		For >1,000 To 2,000, Deduct .....	-0.05	
		For >2,000 To 5,000, Deduct .....	-0.07	
		For >5,000, Deduct .....	-0.09	
33 01 10 58-0005	LF	6" Diameter Pipe Water Main Disinfection/Sterilization .....	0.55	
		For >250 To 500, Deduct .....	-0.03	
		For >500 To 1,000, Deduct .....	-0.06	
		For >1,000 To 2,000, Deduct .....	-0.08	
		For >2,000 To 5,000, Deduct .....	-0.11	
		For >5,000, Deduct .....	-0.14	
33 01 10 58-0006	LF	8" Diameter Pipe Water Main Disinfection/Sterilization .....	0.71	
		For >250 To 500, Deduct .....	-0.04	
		For >500 To 1,000, Deduct .....	-0.07	
		For >1,000 To 2,000, Deduct .....	-0.11	
		For >2,000 To 5,000, Deduct .....	-0.14	
		For >5,000, Deduct .....	-0.18	
33 01 10 58-0007	LF	10" Diameter Pipe Water Main Disinfection/Sterilization .....	0.84	
		For >250 To 500, Deduct .....	-0.04	
		For >500 To 1,000, Deduct .....	-0.08	
		For >1,000 To 2,000, Deduct .....	-0.13	
		For >2,000 To 5,000, Deduct .....	-0.17	
		For >5,000, Deduct .....	-0.21	
33 01 10 58-0008	LF	12" Diameter Pipe Water Main Disinfection/Sterilization .....	1.10	
		For >250 To 500, Deduct .....	-0.06	
		For >500 To 1,000, Deduct .....	-0.11	
		For >1,000 To 2,000, Deduct .....	-0.17	
		For >2,000 To 5,000, Deduct .....	-0.22	
		For >5,000, Deduct .....	-0.28	
33 01 10 58-0009	LF	>12" To 16" Diameter Pipe Water Main Disinfection/Sterilization .....	1.24	
		For >250 To 500, Deduct .....	-0.06	
		For >500 To 1,000, Deduct .....	-0.12	
		For >1,000 To 2,000, Deduct .....	-0.19	
		For >2,000 To 5,000, Deduct .....	-0.25	
		For >5,000, Deduct .....	-0.31	
33 01 10 58-0010	LF	>16" To 24" Diameter Pipe Water Main Disinfection/Sterilization .....	1.43	
		For >250 To 500, Deduct .....	-0.07	
		For >500 To 1,000, Deduct .....	-0.14	
		For >1,000 To 2,000, Deduct .....	-0.21	
		For >2,000 To 5,000, Deduct .....	-0.29	
		For >5,000, Deduct .....	-0.36	
33 01 10 58-0011	LF	>24" To 30" Diameter Pipe Water Main Disinfection/Sterilization .....	1.68	
		For >250 To 500, Deduct .....	-0.08	
		For >500 To 1,000, Deduct .....	-0.17	
		For >1,000 To 2,000, Deduct .....	-0.25	
		For >2,000 To 5,000, Deduct .....	-0.34	
		For >5,000, Deduct .....	-0.42	
33 01 10 58-0012	LF	>30" To 42" Diameter Pipe Water Main Disinfection/Sterilization .....	2.17	
		For >250 To 500, Deduct .....	-0.11	
		For >500 To 1,000, Deduct .....	-0.22	
		For >1,000 To 2,000, Deduct .....	-0.33	
		For >2,000 To 5,000, Deduct .....	-0.43	
		For >5,000, Deduct .....	-0.54	
33 01 10 58-0013	LF	>42" To 60" Diameter Pipe Water Main Disinfection/Sterilization .....	3.17	
		For >250 To 500, Deduct .....	-0.16	
		For >500 To 1,000, Deduct .....	-0.32	
		For >1,000 To 2,000, Deduct .....	-0.48	
		For >2,000 To 5,000, Deduct .....	-0.63	
		For >5,000, Deduct .....	-0.79	
33 01 10 58-0014	LF	>60" Diameter Pipe Water Main Disinfection/Sterilization .....	4.39	
		For >250 To 500, Deduct .....	-0.22	
		For >500 To 1,000, Deduct .....	-0.44	
		For >1,000 To 2,000, Deduct .....	-0.66	
		For >2,000 To 5,000, Deduct .....	-0.88	
		For >5,000, Deduct .....	-1.10	

**33 Utilities****33 01 Operation and Maintenance of Utilities****33 01 10 Operation and Maintenance of Water Utilities**

MINOR  
CSI UOM DESCRIPTION

TOTAL DIRECT DEMOLITION  
UNIT COST UNIT COST

**33 01 10 71 Relining Water Utilities Pipelines** (33 01 10)

See CSI section 33 01 30 71-0000 for relining water pipelines.

**33 01 10 71-0001 Relining Underground Water Pipelines** (33 01 10 71)

Note: Excludes costs for CCTV inspection, pipe cleaning, pavement; temporary and permanent, emergency after hours response for homeowners backups.

**33 01 10 71-0002 Relining Underground Water Pipelines Set-Up And Reinsertion** (33 01 10 71-0001)

33 01 10 71-0003	EA	Initial Set Up And Final Equipment Removal For Relining Underground Water Pipelines .....	5,480.90
33 01 10 71-0004	EA	Move And Reset Up At Different Access/Location .....	2,192.36

**33 01 10 71-0005 Lining Pipe With Cement** (33 01 10 71-0001)

33 01 10 71-0006	LF	Up To 500', 4" Pipe, 1/8" Pipe Lining With Cement .....	73.73
		For 3/16" Thickness, Add .....	2.00
		For 1/4" Thickness, Add .....	4.00
33 01 10 71-0007	LF	>500' To 1,000', 4" Pipe, 1/8" Pipe Lining With Cement .....	65.86
		For 3/16" Thickness, Add .....	2.00
		For 1/4" Thickness, Add .....	4.00
33 01 10 71-0008	LF	>1,000' To 5,000', 4" Pipe, 1/8" Pipe Lining With Cement .....	55.31
		For 3/16" Thickness, Add .....	2.00
		For 1/4" Thickness, Add .....	4.00
33 01 10 71-0009	LF	>5,000', 4" Pipe, 1/8" Pipe Lining With Cement .....	42.06
		For 3/16" Thickness, Add .....	2.00
		For 1/4" Thickness, Add .....	4.00
33 01 10 71-0010	LF	Up To 500', 6" Pipe, 1/8" Pipe Lining With Cement .....	77.53
		For 3/16" Thickness, Add .....	3.00
		For 1/4" Thickness, Add .....	5.99
33 01 10 71-0011	LF	>500' To 1,000', 6" Pipe, 1/8" Pipe Lining With Cement .....	69.35
		For 3/16" Thickness, Add .....	3.00
		For 1/4" Thickness, Add .....	5.99
33 01 10 71-0012	LF	>1,000' To 5,000', 6" Pipe, 1/8" Pipe Lining With Cement .....	58.45
		For 3/16" Thickness, Add .....	3.00
		For 1/4" Thickness, Add .....	5.99
33 01 10 71-0013	LF	>5,000', 6" Pipe, 1/8" Pipe Lining With Cement .....	45.01
		For 3/16" Thickness, Add .....	3.00
		For 1/4" Thickness, Add .....	5.99
33 01 10 71-0014	LF	Up To 500', 8" Pipe, 1/8" Pipe Lining With Cement .....	81.20
		For 3/16" Thickness, Add .....	3.99
		For 1/4" Thickness, Add .....	7.97
33 01 10 71-0015	LF	>500' To 1,000', 8" Pipe, 1/8" Pipe Lining With Cement .....	72.84
		For 3/16" Thickness, Add .....	3.99
		For 1/4" Thickness, Add .....	7.97
33 01 10 71-0016	LF	>1,000' To 5,000', 8" Pipe, 1/8" Pipe Lining With Cement .....	61.57
		For 3/16" Thickness, Add .....	3.99
		For 1/4" Thickness, Add .....	7.97
33 01 10 71-0017	LF	>5,000', 8" Pipe, 1/8" Pipe Lining With Cement .....	47.95
		For 3/16" Thickness, Add .....	3.99
		For 1/4" Thickness, Add .....	7.97
33 01 10 71-0018	LF	Up To 500', 10" Pipe, 1/8" Pipe Lining With Cement .....	84.25
		For 3/16" Thickness, Add .....	5.00
		For 1/4" Thickness, Add .....	9.99
33 01 10 71-0019	LF	>500' To 1,000', 10" Pipe, 1/8" Pipe Lining With Cement .....	75.75
		For 3/16" Thickness, Add .....	5.00
		For 1/4" Thickness, Add .....	9.99
33 01 10 71-0020	LF	>1,000' To 5,000', 10" Pipe, 1/8" Pipe Lining With Cement .....	64.31
		For 3/16" Thickness, Add .....	5.00
		For 1/4" Thickness, Add .....	9.99
33 01 10 71-0021	LF	>5,000', 10" Pipe, 1/8" Pipe Lining With Cement .....	50.94
		For 3/16" Thickness, Add .....	5.00
		For 1/4" Thickness, Add .....	9.99
33 01 10 71-0022	LF	Up To 500', 12" Pipe, 1/8" Pipe Lining With Cement .....	91.58
		For 3/16" Thickness, Add .....	5.99
		For 1/4" Thickness, Add .....	11.97
33 01 10 71-0023	LF	>500' To 1,000', 12" Pipe, 1/8" Pipe Lining With Cement .....	82.56
		For 3/16" Thickness, Add .....	5.99
		For 1/4" Thickness, Add .....	11.97
33 01 10 71-0024	LF	>1,000' To 5,000', 12" Pipe, 1/8" Pipe Lining With Cement .....	70.38
		For 3/16" Thickness, Add .....	5.99
		For 1/4" Thickness, Add .....	11.97
33 01 10 71-0025	LF	>5,000', 12" Pipe, 1/8" Pipe Lining With Cement .....	55.93
		For 3/16" Thickness, Add .....	5.99
		For 1/4" Thickness, Add .....	11.97
33 01 10 71-0026	LF	Up To 500', >12" To 16" Pipe, 3/16" Pipe Lining With Cement .....	102.00
		For 1/4" Thickness, Add .....	6.66
		For 5/16" Thickness, Add .....	13.32
33 01 10 71-0027	LF	>500' To 1,000', >12" To 16" Pipe, 3/16" Pipe Lining With Cement .....	92.65
		For 1/4" Thickness, Add .....	6.66
		For 5/16" Thickness, Add .....	13.32
33 01 10 71-0028	LF	>1,000' To 5,000', >12" To 16" Pipe, 3/16" Pipe Lining With Cement .....	79.96
		For 1/4" Thickness, Add .....	6.66
		For 5/16" Thickness, Add .....	13.32
33 01 10 71-0029	LF	>5,000', >12" To 16" Pipe, 3/16" Pipe Lining With Cement .....	66.11
		For 1/4" Thickness, Add .....	6.66
		For 5/16" Thickness, Add .....	13.32



Utilities		33	CS
Operation and Maintenance of Utilities		33 01	
Operation and Maintenance of Water Utilities		33 01 10	

MINOR CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
33 01 10 71-0030	LF	Up To 500', >16" To 20" Pipe, 3/16" Pipe Lining With Cement .....	108.38	
		For 1/4" Thickness, Add .....	7.98	
		For 5/16" Thickness, Add .....	15.97	
33 01 10 71-0031	LF	>500' To 1,000', >16" To 20" Pipe, 3/16" Pipe Lining With Cement.....	98.73	
		For 1/4" Thickness, Add .....	7.98	
		For 5/16" Thickness, Add .....	15.97	
33 01 10 71-0032	LF	>1,000' To 5,000', >16" To 20" Pipe, 3/16" Pipe Lining With Cement.....	85.62	
		For 1/4" Thickness, Add .....	7.98	
		For 5/16" Thickness, Add .....	15.97	
33 01 10 71-0033	LF	>5,000', >16" To 20" Pipe, 3/16" Pipe Lining With Cement.....	72.49	
		For 1/4" Thickness, Add .....	7.98	
		For 5/16" Thickness, Add .....	15.97	
33 01 10 71-0034	LF	Up To 500', >20" To 22" Pipe, 3/16" Pipe Lining With Cement.....	115.88	
		For 1/4" Thickness, Add .....	9.32	
		For 5/16" Thickness, Add .....	18.63	
33 01 10 71-0035	LF	>500' To 1,000', >20" To 22" Pipe, 3/16" Pipe Lining With Cement.....	105.89	
		For 1/4" Thickness, Add .....	9.32	
		For 5/16" Thickness, Add .....	18.63	
33 01 10 71-0036	LF	>1,000' To 5,000', >20" To 22" Pipe, 3/16" Pipe Lining With Cement.....	92.14	
		For 1/4" Thickness, Add .....	9.32	
		For 5/16" Thickness, Add .....	18.63	
33 01 10 71-0037	LF	>5,000', >20" To 22" Pipe, 3/16" Pipe Lining With Cement.....	79.86	
		For 1/4" Thickness, Add .....	9.32	
		For 5/16" Thickness, Add .....	18.63	
33 01 10 71-0038	LF	Up To 500', 24" Pipe, 3/16" Pipe Lining With Cement .....	123.49	
		For 1/4" Thickness, Add .....	10.65	
		For 5/16" Thickness, Add .....	21.31	
33 01 10 71-0039	LF	>500' To 1,000', 24" Pipe, 3/16" Pipe Lining With Cement .....	113.10	
		For 1/4" Thickness, Add .....	10.65	
		For 5/16" Thickness, Add .....	21.31	
33 01 10 71-0040	LF	>1,000' To 5,000', 24" Pipe, 3/16" Pipe Lining With Cement .....	98.93	
		For 1/4" Thickness, Add .....	10.65	
		For 5/16" Thickness, Add .....	21.31	
33 01 10 71-0041	LF	>5,000', 24" Pipe, 3/16" Pipe Lining With Cement .....	87.48	
		For 1/4" Thickness, Add .....	10.65	
		For 5/16" Thickness, Add .....	21.31	
33 01 10 71-0042	LF	Up To 500', 30" Pipe, 3/16" Pipe Lining With Cement .....	134.96	
		For 1/4" Thickness, Add .....	13.31	
		For 5/16" Thickness, Add .....	26.62	
33 01 10 71-0043	LF	>500' To 1,000', 30" Pipe, 3/16" Pipe Lining With Cement .....	123.96	
		For 1/4" Thickness, Add .....	13.31	
		For 5/16" Thickness, Add .....	26.62	
33 01 10 71-0044	LF	>1,000' To 5,000', 30" Pipe, 3/16" Pipe Lining With Cement .....	108.95	
		For 1/4" Thickness, Add .....	13.31	
		For 5/16" Thickness, Add .....	26.62	
33 01 10 71-0045	LF	>5,000', 30" Pipe, 3/16" Pipe Lining With Cement .....	97.38	
		For 1/4" Thickness, Add .....	13.31	
		For 5/16" Thickness, Add .....	26.62	
33 01 10 71-0046	LF	Up To 500', 36" Pipe, 3/16" Pipe Lining With Cement .....	146.34	
		For 1/4" Thickness, Add .....	15.98	
		For 5/16" Thickness, Add .....	31.96	
33 01 10 71-0047	LF	500' To 1,000', 36" Pipe, 3/16" Pipe Lining With Cement .....	134.86	
		For 1/4" Thickness, Add .....	15.98	
		For 5/16" Thickness, Add .....	31.96	
33 01 10 71-0048	LF	>1,000' To 5,000', 36" Pipe, 3/16" Pipe Lining With Cement .....	119.00	
		For 1/4" Thickness, Add .....	15.98	
		For 5/16" Thickness, Add .....	31.96	
33 01 10 71-0049	LF	>5,000', 36" Pipe, 3/16" Pipe Lining With Cement .....	107.32	
		For 1/4" Thickness, Add .....	15.98	
		For 5/16" Thickness, Add .....	31.96	
33 01 10 71-0050	LF	Up To 500', 42" Pipe, 1/4" Pipe Lining With Cement .....	191.41	
		For 3/8" Thickness, Add .....	41.93	
		For 7/16" Thickness, Add .....	62.90	
33 01 10 71-0051	LF	>500' To 1,000', 42" Pipe, 1/4" Pipe Lining With Cement .....	178.90	
		For 3/8" Thickness, Add .....	41.93	
		For 7/16" Thickness, Add .....	62.90	
33 01 10 71-0052	LF	>1,000' To 5,000', 42" Pipe, 1/4" Pipe Lining With Cement .....	161.66	
		For 3/8" Thickness, Add .....	41.93	
		For 7/16" Thickness, Add .....	62.90	
33 01 10 71-0053	LF	>5,000', 42" Pipe, 1/4" Pipe Lining With Cement .....	149.62	
		For 3/8" Thickness, Add .....	41.93	
		For 7/16" Thickness, Add .....	62.90	
33 01 10 71-0054	LF	Up To 500', 48" Pipe, 1/4" Pipe Lining With Cement .....	212.43	
		For 3/8" Thickness, Add .....	47.92	
		For 7/16" Thickness, Add .....	71.88	
33 01 10 71-0055	LF	>500' To 1,000', 48" Pipe, 1/4" Pipe Lining With Cement .....	199.04	
		For 3/8" Thickness, Add .....	47.92	
		For 7/16" Thickness, Add .....	71.88	
33 01 10 71-0056	LF	>1,000' To 5,000', 48" Pipe, 1/4" Pipe Lining With Cement .....	180.51	
		For 3/8" Thickness, Add .....	47.92	
		For 7/16" Thickness, Add .....	71.88	
33 01 10 71-0057	LF	>5,000', 48" Pipe, 1/4" Pipe Lining With Cement .....	168.22	
		For 3/8" Thickness, Add .....	47.92	
		For 7/16" Thickness, Add .....	71.88	

**33 Utilities****33 01 Operation and Maintenance of Utilities****33 01 10 Operation and Maintenance of Water Utilities**

MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
33 01 10 71-0058 LF Up To 500', 54" Pipe, 1/4" Pipe Lining With Cement.....	226.56	
For 3/8" Thickness, Add	53.91	
For 7/16" Thickness, Add	80.86	
33 01 10 71-0059 LF >500' To 1,000', 54" Pipe, 1/4" Pipe Lining With Cement .....	212.89	
For 3/8" Thickness, Add	53.91	
For 7/16" Thickness, Add	80.86	
33 01 10 71-0060 LF >1,000' To 5,000', 54" Pipe, 1/4" Pipe Lining With Cement .....	193.93	
For 3/8" Thickness, Add	53.91	
For 7/16" Thickness, Add	80.86	
33 01 10 71-0061 LF >5,000', 54" Pipe, 1/4" Pipe Lining With Cement .....	182.12	
For 3/8" Thickness, Add	53.91	
For 7/16" Thickness, Add	80.86	
33 01 10 71-0062 LF Up To 500', 60" Pipe, 1/4" Pipe Lining With Cement.....	240.75	
For 3/8" Thickness, Add	59.92	
For 7/16" Thickness, Add	89.87	
33 01 10 71-0063 LF >500' To 1,000', 60" Pipe, 1/4" Pipe Lining With Cement .....	226.83	
For 3/8" Thickness, Add	59.92	
For 7/16" Thickness, Add	89.87	
33 01 10 71-0064 LF >1,000' To 5,000', 60" Pipe, 1/4" Pipe Lining With Cement .....	207.51	
For 3/8" Thickness, Add	59.92	
For 7/16" Thickness, Add	89.87	
33 01 10 71-0065 LF >5,000', 60" Pipe, 1/4" Pipe Lining With Cement .....	196.07	
For 3/8" Thickness, Add	59.92	
For 7/16" Thickness, Add	89.87	
33 01 10 71-0066 LF Up To 500', 66" Pipe, 1/4" Pipe Lining With Cement.....	255.25	
For 3/8" Thickness, Add	65.90	
For 7/16" Thickness, Add	98.85	
33 01 10 71-0067 LF >500' To 1,000', 66" Pipe, 1/4" Pipe Lining With Cement .....	241.04	
For 3/8" Thickness, Add	65.90	
For 7/16" Thickness, Add	98.85	
33 01 10 71-0068 LF >1,000' To 5,000', 66" Pipe, 1/4" Pipe Lining With Cement .....	221.41	
For 3/8" Thickness, Add	65.90	
For 7/16" Thickness, Add	98.85	
33 01 10 71-0069 LF >5,000', 66" Pipe, 1/4" Pipe Lining With Cement .....	210.81	
For 3/8" Thickness, Add	65.90	
For 7/16" Thickness, Add	98.85	
33 01 10 71-0070 LF Up To 500', 72" Pipe, 1/4" Pipe Lining With Cement.....	270.24	
For 3/8" Thickness, Add	71.89	
For 7/16" Thickness, Add	107.84	
33 01 10 71-0071 LF >500' To 1,000', 72" Pipe, 1/4" Pipe Lining With Cement .....	255.79	
For 3/8" Thickness, Add	71.89	
For 7/16" Thickness, Add	107.84	
33 01 10 71-0072 LF >1,000' To 5,000', 72" Pipe, 1/4" Pipe Lining With Cement .....	235.68	
For 3/8" Thickness, Add	71.89	
For 7/16" Thickness, Add	107.84	
33 01 10 71-0073 LF >5,000', 72" Pipe, 1/4" Pipe Lining With Cement .....	225.68	
For 3/8" Thickness, Add	71.89	
For 7/16" Thickness, Add	107.84	

**33 01 30 Operation and Maintenance of Sewer Utilities** (33 01)**33 01 30 11 Television Inspection Of Pipelines** (33 01 30)

Note: Rotating head color camera. Includes all log records and color video tape, DVD or CD.

**33 01 30 11-0001 Remote Visual Inspection (RVI) Of Pipe Interior And Culverts** (33 01 30 11)**33 01 30 11-0002 Video Camera Set-up** (33 01 30 11-0001)

33 01 30 11-0003 EA Initial Set Up For "Push Camera" Video Camera Inspection, 1" To 12" Diameter Pipe Or Culvert .....	939.26
Note: A "push camera" is a straight view camera at the end of a rigid push rod for 1"-12" diameter pipes for distances up to 300 feet.	
33 01 30 11-0004 EA Initial Set Up For "Crawler" Video Camera Inspection, 4" To 30" Diameter Pipe Or Culvert.....	1,878.52
Note: Crawlers are generally remotely operated vehicles (ROVs) for longer distances (over 300') and for larger diameters (4" and larger).	
33 01 30 11-0005 EA Initial Set Up For "Crawler" Video Camera Inspection, >30" Diameter Pipe Or Culvert .....	2,817.79
33 01 30 11-0006 EA Re-Set Up/Move For "Push Camera" Video Camera Inspection, 1" To 12" Diameter Pipe Or Culvert.....	469.63
33 01 30 11-0007 EA Re-Set Up/Move For "Crawler" Video Camera Inspection, 4" And Larger Diameter Pipe Or Culvert .....	939.26

**33 01 30 11-0008 Video Camera Planning And Analysis Inspection** (33 01 30 11-0001)

Note: For pipe interior and culverts.

33 01 30 11-0009 LF 4" To 6" Diameter Pipe Inspection, Planning/Analysis Phase.....	2.38
Note: CCTV inspection of pipe interior.	
For >500 To 1,000, Deduct	-0.24
For >1,000 To 5,000, Deduct	-0.60
For >5,000, Deduct	-0.83
33 01 30 11-0010 LF >6" To 12" Diameter Pipe Inspection, Planning/Analysis Phase.....	3.17
Note: CCTV inspection of pipe interior.	
For >500 To 1,000, Deduct	-0.32
For >1,000 To 5,000, Deduct	-0.79
For >5,000, Deduct	-1.11
33 01 30 11-0011 LF >12" To 21" Diameter Pipe Inspection, Planning/Analysis Phase.....	3.97
Note: CCTV inspection of pipe interior.	
For >500 To 1,000, Deduct	-0.40
For >1,000 To 5,000, Deduct	-0.99
For >5,000, Deduct	-1.39



		Utilities	33	CS
		Operation and Maintenance of Utilities	33 01	
		Operation and Maintenance of Sewer Utilities	33 01 30	

MINOR CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
33 01 30 11-0012	LF	>21" To 30" Diameter Pipe Inspection, Planning/Analysis Phase..... Note: CCTV inspection of pipe interior. For >500 To 1,000, Deduct For >1,000 To 5,000, Deduct For >5,000, Deduct	5.29  -0.53 -1.32 -1.85	
33 01 30 11-0013	LF	>30" To 42" Diameter Pipe Inspection, Planning/Analysis Phase..... Note: CCTV inspection of pipe interior. For >500 To 1,000, Deduct For >1,000 To 5,000, Deduct For >5,000, Deduct	7.44  -0.74 -1.86 -2.60	
33 01 30 11-0014	LF	>42" To 60" Diameter Pipe Inspection, Planning/Analysis Phase..... Note: CCTV inspection of pipe interior. For >500 To 1,000, Deduct For >1,000 To 5,000, Deduct For >5,000, Deduct	9.92  -0.99 -2.48 -3.47	
33 01 30 11-0015	LF	>60" To 72" Diameter Pipe Inspection, Planning/Analysis Phase..... Note: CCTV inspection of pipe interior. For >500 To 1,000, Deduct For >1,000 To 5,000, Deduct For >5,000, Deduct	14.01  -1.40 -3.50 -4.90	
33 01 30 11-0016	LF	>72" To 84" Diameter Pipe Inspection, Planning/Analysis Phase..... Note: CCTV inspection of pipe interior. For >500 To 1,000, Deduct For >1,000 To 5,000, Deduct For >5,000, Deduct	19.84  -1.98 -4.96 -6.94	
33 01 30 11-0017		Video Camera Pre-Rehab For Pipe Interior And Culverts (33 01 30 11-0001)		
33 01 30 11-0018	LF	4" To 6" Diameter Pipe Inspection, Pre-Rehabilitation Phase..... Note: CCTV inspection of pipe interior. For >500 To 1,000, Deduct For >1,000 To 5,000, Deduct For >5,000, Deduct	3.52  -0.35 -0.88 -1.23	
33 01 30 11-0019	LF	>6" To 12" Diameter Pipe Inspection, Pre-Rehabilitation Phase ..... Note: CCTV inspection of pipe interior. For >500 To 1,000, Deduct For >1,000 To 5,000, Deduct For >5,000, Deduct	4.69  -0.47 -1.17 -1.64	
33 01 30 11-0020	LF	>12" To 21" Diameter Pipe Inspection, Pre-Rehabilitation Phase ..... Note: CCTV inspection of pipe interior. For >500 To 1,000, Deduct For >1,000 To 5,000, Deduct For >5,000, Deduct	5.87  -0.59 -1.47 -2.05	
33 01 30 11-0021	LF	>21" To 30" Diameter Pipe Inspection, Pre-Rehabilitation Phase ..... Note: CCTV inspection of pipe interior. For >500 To 1,000, Deduct For >1,000 To 5,000, Deduct For >5,000, Deduct	7.82  -0.78 -1.96 -2.74	
33 01 30 11-0022	LF	>30" To 42" Diameter Pipe Inspection, Pre-Rehabilitation Phase ..... Note: CCTV inspection of pipe interior. For >500 To 1,000, Deduct For >1,000 To 5,000, Deduct For >5,000, Deduct	11.01  -1.10 -2.75 -3.85	
33 01 30 11-0023	LF	>42" To 60" Diameter Pipe Inspection, Pre-Rehabilitation Phase ..... Note: CCTV inspection of pipe interior. For >500 To 1,000, Deduct For >1,000 To 5,000, Deduct For >5,000, Deduct	14.68  -1.47 -3.67 -5.14	
33 01 30 11-0024	LF	>60" To 72" Diameter Pipe Inspection, Pre-Rehabilitation Phase ..... Note: CCTV inspection of pipe interior. For >500 To 1,000, Deduct For >1,000 To 5,000, Deduct For >5,000, Deduct	20.72  -2.07 -5.18 -7.25	
33 01 30 11-0025	LF	>72" To 84" Diameter Pipe Inspection, Pre-Rehabilitation Phase ..... Note: CCTV inspection of pipe interior. For >500 To 1,000, Deduct For >1,000 To 5,000, Deduct For >5,000, Deduct	29.35  -2.94 -7.34 -10.27	
33 01 30 11-0026		Video Camera Post-Rehab For Pipe Interior And Culverts (33 01 30 11-0001)		
33 01 30 11-0027	LF	4" To 6" Diameter Pipe Inspection, Post-Rehabilitation Phase..... Note: CCTV inspection of pipe interior. For >500 To 1,000, Deduct For >1,000 To 5,000, Deduct For >5,000, Deduct	2.52  -0.25 -0.63 -0.88	
33 01 30 11-0028	LF	>6" To 12" Diameter Pipe Inspection, Post-Rehabilitation Phase..... Note: CCTV inspection of pipe interior. For >500 To 1,000, Deduct For >1,000 To 5,000, Deduct For >5,000, Deduct	3.35  -0.34 -0.84 -1.17	
33 01 30 11-0029	LF	>12" To 21" Diameter Pipe Inspection, Post-Rehabilitation Phase..... Note: CCTV inspection of pipe interior. For >500 To 1,000, Deduct For >1,000 To 5,000, Deduct For >5,000, Deduct	4.19  -0.42 -1.05 -1.47	

**33 Utilities****33 01 Operation and Maintenance of Utilities****33 01 30 Operation and Maintenance of Sewer Utilities**

MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
33 01 30 11-0030 LF >21" To 30" Diameter Pipe Inspection, Post-Rehabilitation Phase.....	5.59	
Note: CCTV inspection of pipe interior.		
For >500 To 1,000, Deduct	-0.56	
For >1,000 To 5,000, Deduct	-1.40	
For >5,000, Deduct	-1.96	
33 01 30 11-0031 LF >30" To 42" Diameter Pipe Inspection, Post-Rehabilitation Phase.....	7.86	
Note: CCTV inspection of pipe interior.		
For >500 To 1,000, Deduct	-0.79	
For >1,000 To 5,000, Deduct	-1.97	
For >5,000, Deduct	-2.75	
33 01 30 11-0032 LF >42" To 60" Diameter Pipe Inspection, Post-Rehabilitation Phase.....	10.48	
Note: CCTV inspection of pipe interior.		
For >500 To 1,000, Deduct	-1.05	
For >1,000 To 5,000, Deduct	-2.62	
For >5,000, Deduct	-3.67	
33 01 30 11-0033 LF >60" To 72" Diameter Pipe Inspection, Post-Rehabilitation Phase.....	14.79	
Note: CCTV inspection of pipe interior.		
For >500 To 1,000, Deduct	-1.48	
For >1,000 To 5,000, Deduct	-3.70	
For >5,000, Deduct	-5.18	
33 01 30 11-0034 LF >72" To 84" Diameter Pipe Inspection, Post-Rehabilitation Phase.....	20.97	
Note: CCTV inspection of pipe interior.		
For >500 To 1,000, Deduct	-2.10	
For >1,000 To 5,000, Deduct	-5.24	
For >5,000, Deduct	-7.34	
<b>33 01 30 41 Cleaning of Sewers (33 01 30)</b>		
33 01 30 41-0001 Pipe Line Cleaning And Flushing (33 01 30 41)		
Note: Includes flushing. Owner provided water.		
33 01 30 41-0002 Pipe Line Cleaning (33 01 30 41-0001)		
Note: Includes removal of all debris/waste. Excludes disposal.		
33 01 30 41-0003 Hydro Jet Set-up And Reinsertion (33 01 30 41-0002)		
33 01 30 41-0004 EA Initial Set Up And Final Equipment Removal For Jet Cleaning.....	2,593.32	
33 01 30 41-0005 EA Move And Reset Up At Different Access/Location For Jet Cleaning.....	648.32	
<b>33 01 30 41-0006 Hydro Jet Cleaning Of Sewer And Water Pipelines (33 01 30 41-0002)</b>		
33 01 30 41-0007 LF Up To 4" Diameter Pipe Line Cleaning, Hydro Jetting Method, Light Cleaning - 3 Passes.....	3.49	
For >250 To 500, Deduct	-0.17	
For >500 To 1,000, Deduct	-0.35	
For >1,000 To 2,000, Deduct	-0.52	
For >2,000 To 5,000, Deduct	-0.70	
For >5,000, Deduct	-0.87	
For Heavy Cleaning, >4 Passes (Includes Attached Mechanical Device), Add	2.62	
33 01 30 41-0008 LF 6" Diameter Pipe Line Cleaning, Hydro Jetting Method, Light Cleaning - 3 Passes.....	4.00	
For >250 To 500, Deduct	-0.20	
For >500 To 1,000, Deduct	-0.40	
For >1,000 To 2,000, Deduct	-0.60	
For >2,000 To 5,000, Deduct	-0.80	
For >5,000, Deduct	-1.00	
For Heavy Cleaning, >4 Passes (Includes Attached Mechanical Device), Add	3.00	
33 01 30 41-0009 LF 8" Diameter Pipe Line Cleaning, Hydro Jetting Method, Light Cleaning - 3 Passes.....	4.70	
For >250 To 500, Deduct	-0.24	
For >500 To 1,000, Deduct	-0.47	
For >1,000 To 2,000, Deduct	-0.71	
For >2,000 To 5,000, Deduct	-0.94	
For >5,000, Deduct	-1.18	
For Heavy Cleaning, >4 Passes (Includes Attached Mechanical Device), Add	3.53	
33 01 30 41-0010 LF 10" Diameter Pipe Line Cleaning, Hydro Jetting Method, Light Cleaning - 3 Passes.....	5.81	
For >250 To 500, Deduct	-0.29	
For >500 To 1,000, Deduct	-0.58	
For >1,000 To 2,000, Deduct	-0.87	
For >2,000 To 5,000, Deduct	-1.16	
For >5,000, Deduct	-1.45	
For Heavy Cleaning, >4 Passes (Includes Attached Mechanical Device), Add	4.36	
33 01 30 41-0011 LF 12" Diameter Pipe Line Cleaning, Hydro Jetting Method, Light Cleaning - 3 Passes.....	6.59	
For >250 To 500, Deduct	-0.33	
For >500 To 1,000, Deduct	-0.66	
For >1,000 To 2,000, Deduct	-0.99	
For >2,000 To 5,000, Deduct	-1.32	
For >5,000, Deduct	-1.65	
For Heavy Cleaning, >4 Passes (Includes Attached Mechanical Device), Add	4.94	
33 01 30 41-0012 LF >12" To 16" Diameter Pipe Line Cleaning, Hydro Jetting Method, Light Cleaning - 3 Passes.....	7.61	
For >250 To 500, Deduct	-0.38	
For >500 To 1,000, Deduct	-0.76	
For >1,000 To 2,000, Deduct	-1.14	
For >2,000 To 5,000, Deduct	-1.52	
For >5,000, Deduct	-1.90	
For Heavy Cleaning, >4 Passes (Includes Attached Mechanical Device), Add	5.71	





		<b>Utilities</b>	<b>33</b>	<b>CS</b>
		<b>Operation and Maintenance of Utilities</b>	<b>33 01</b>	
		<b>Operation and Maintenance of Sewer Utilities</b>	<b>33 01 30</b>	

MINOR CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
33 01 30 41-0013	LF	>16" To 24" Diameter Pipe Line Cleaning, Hydro Jetting Method, Light Cleaning - 3 Passes.....	9.16	
		For >250 To 500, Deduct	-0.46	
		For >500 To 1,000, Deduct	-0.92	
		For >1,000 To 2,000, Deduct	-1.37	
		For >2,000 To 5,000, Deduct	-1.83	
		For >5,000, Deduct	-2.29	
		For Heavy Cleaning, >4 Passes (Includes Attached Mechanical Device), Add	6.87	
33 01 30 41-0014	LF	>24" To 30" Diameter Pipe Line Cleaning, Hydro Jetting Method, Light Cleaning - 3 Passes.....	10.39	
		For >250 To 500, Deduct	-0.52	
		For >500 To 1,000, Deduct	-1.04	
		For >1,000 To 2,000, Deduct	-1.56	
		For >2,000 To 5,000, Deduct	-2.08	
		For >5,000, Deduct	-2.60	
		For Heavy Cleaning, >4 Passes (Includes Attached Mechanical Device), Add	7.79	
33 01 30 41-0015	LF	>30" To 42" Diameter Pipe Line Cleaning, Hydro Jetting Method, Light Cleaning - 3 Passes.....	12.28	
		For >250 To 500, Deduct	-0.61	
		For >500 To 1,000, Deduct	-1.23	
		For >1,000 To 2,000, Deduct	-1.84	
		For >2,000 To 5,000, Deduct	-2.46	
		For >5,000, Deduct	-3.07	
		For Heavy Cleaning, >4 Passes (Includes Attached Mechanical Device), Add	9.21	
33 01 30 41-0016	LF	>42" To 60" Diameter Pipe Line Cleaning, Hydro Jetting Method, Light Cleaning - 3 Passes.....	15.44	
		For >250 To 500, Deduct	-0.77	
		For >500 To 1,000, Deduct	-1.54	
		For >1,000 To 2,000, Deduct	-2.32	
		For >2,000 To 5,000, Deduct	-3.09	
		For >5,000, Deduct	-3.86	
		For Heavy Cleaning, >4 Passes (Includes Attached Mechanical Device), Add	11.58	
33 01 30 41-0017	LF	>60" Diameter Pipe Line Cleaning, Hydro Jetting Method, Light Cleaning - 3 Passes.....	18.01	
		For >250 To 500, Deduct	-0.90	
		For >500 To 1,000, Deduct	-1.80	
		For >1,000 To 2,000, Deduct	-2.70	
		For >2,000 To 5,000, Deduct	-3.60	
		For >5,000, Deduct	-4.50	
		For Heavy Cleaning, >4 Passes (Includes Attached Mechanical Device), Add	13.51	
<b>33 01 30 41-0018 Flushing Of Storm Water Pipelines (33 01 30 41-0002)</b>				
Note: To remove silt and small debris from storm drainage pipes. Excludes disposal.				
33 01 30 41-0019	LF	12" To 16" Diameter Pipe Line Flushing.....	1.31	
		For >250 To 500, Deduct	-0.07	
		For >500 To 1,000, Deduct	-0.13	
		For >1,000 To 2,000, Deduct	-0.20	
		For >2,000 To 5,000, Deduct	-0.26	
		For >5,000, Deduct	-0.33	
33 01 30 41-0020	LF	>16" To 24" Diameter Pipe Line Flushing.....	1.50	
		For >250 To 500, Deduct	-0.08	
		For >500 To 1,000, Deduct	-0.15	
		For >1,000 To 2,000, Deduct	-0.23	
		For >2,000 To 5,000, Deduct	-0.30	
		For >5,000, Deduct	-0.38	
33 01 30 41-0021	LF	>24" To 30" Diameter Pipe Line Flushing.....	1.76	
		For >250 To 500, Deduct	-0.09	
		For >500 To 1,000, Deduct	-0.18	
		For >1,000 To 2,000, Deduct	-0.26	
		For >2,000 To 5,000, Deduct	-0.35	
		For >5,000, Deduct	-0.44	
33 01 30 41-0022	LF	>30" To 42" Diameter Pipe Line Flushing.....	2.02	
		For >250 To 500, Deduct	-0.10	
		For >500 To 1,000, Deduct	-0.20	
		For >1,000 To 2,000, Deduct	-0.30	
		For >2,000 To 5,000, Deduct	-0.40	
		For >5,000, Deduct	-0.51	
33 01 30 41-0023	LF	>42" To 60" Diameter Pipe Line Flushing.....	2.70	
		For >250 To 500, Deduct	-0.14	
		For >500 To 1,000, Deduct	-0.27	
		For >1,000 To 2,000, Deduct	-0.41	
		For >2,000 To 5,000, Deduct	-0.54	
		For >5,000, Deduct	-0.68	
<b>33 01 30 41-0024 Hydro Jet Cleaning Of Culverts (33 01 30 41-0002)</b>				
33 01 30 41-0025	LF	Jet Cleaning Of Culvert, 0-250 LF.....	16.13	
		For >250 To 500, Deduct	-0.81	
		For >500 To 1,000, Deduct	-1.61	
		For >1,000 To 2,000, Deduct	-2.42	
		For >2,000 To 5,000, Deduct	-3.23	
		For >5,000, Deduct	-4.03	
<b>33 01 30 41-0026 Pipe Line Cleaning, Mechanical Method (33 01 30 41-0001)</b>				
Note: Power winching buckets, scrapers, scooters, porcupines, brushes and other debris removing equipment. Includes removal of all debris/waste. Excludes disposal.				
33 01 30 41-0027	EA	Initial Set Up And Final Equipment Removal For Mechanical Cleaning.....	1,143.55	
33 01 30 41-0028	EA	Move And Reset Up At Different Access/Location.....	381.18	

**33 Utilities****33 01 Operation and Maintenance of Utilities****33 01 30 Operation and Maintenance of Sewer Utilities**

MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
33 01 30 41-0029 LF Up To 4" Diameter Pipe Line Cleaning, Mechanical Method .....	6.64	
For >250 To 500, Deduct	-0.32	
For >500 To 1,000, Deduct	-0.64	
For >1,000 To 2,000, Deduct	-0.95	
For >2,000 To 5,000, Deduct	-1.27	
For >5,000, Deduct	-1.59	
33 01 30 41-0030 LF 6" Diameter Pipe Line Cleaning, Mechanical Method .....	8.74	
For >250 To 500, Deduct	-0.41	
For >500 To 1,000, Deduct	-0.82	
For >1,000 To 2,000, Deduct	-1.23	
For >2,000 To 5,000, Deduct	-1.63	
For >5,000, Deduct	-2.04	
33 01 30 41-0031 LF 8" Diameter Pipe Line Cleaning, Mechanical Method .....	10.24	
For >250 To 500, Deduct	-0.48	
For >500 To 1,000, Deduct	-0.95	
For >1,000 To 2,000, Deduct	-1.43	
For >2,000 To 5,000, Deduct	-1.91	
For >5,000, Deduct	-2.38	
33 01 30 41-0032 LF 10" Diameter Pipe Line Cleaning, Mechanical Method .....	11.85	
For >250 To 500, Deduct	-0.55	
For >500 To 1,000, Deduct	-1.10	
For >1,000 To 2,000, Deduct	-1.65	
For >2,000 To 5,000, Deduct	-2.20	
For >5,000, Deduct	-2.75	
33 01 30 41-0033 LF 12" Diameter Pipe Line Cleaning, Mechanical Method .....	12.92	
For >250 To 500, Deduct	-0.60	
For >500 To 1,000, Deduct	-1.19	
For >1,000 To 2,000, Deduct	-1.79	
For >2,000 To 5,000, Deduct	-2.38	
For >5,000, Deduct	-2.98	
33 01 30 41-0034 LF >12" To 16" Diameter Pipe Line Cleaning, Mechanical Method.....	14.90	
For >250 To 500, Deduct	-0.68	
For >500 To 1,000, Deduct	-1.36	
For >1,000 To 2,000, Deduct	-2.04	
For >2,000 To 5,000, Deduct	-2.72	
For >5,000, Deduct	-3.40	
33 01 30 41-0035 LF >16" To 24" Diameter Pipe Line Cleaning, Mechanical Method.....	18.82	
For >250 To 500, Deduct	-0.84	
For >500 To 1,000, Deduct	-1.68	
For >1,000 To 2,000, Deduct	-2.52	
For >2,000 To 5,000, Deduct	-3.36	
For >5,000, Deduct	-4.21	
33 01 30 41-0036 LF >24" To 30" Diameter Pipe Line Cleaning, Mechanical Method.....	21.61	
For >250 To 500, Deduct	-0.94	
For >500 To 1,000, Deduct	-1.88	
For >1,000 To 2,000, Deduct	-2.81	
For >2,000 To 5,000, Deduct	-3.75	
For >5,000, Deduct	-4.69	
33 01 30 41-0037 LF >30" To 42" Diameter Pipe Line Cleaning, Mechanical Method.....	25.14	
For >250 To 500, Deduct	-1.08	
For >500 To 1,000, Deduct	-2.16	
For >1,000 To 2,000, Deduct	-3.24	
For >2,000 To 5,000, Deduct	-4.31	
For >5,000, Deduct	-5.39	
33 01 30 41-0038 LF >42 To 60" Diameter Pipe Line Cleaning, Mechanical Method.....	32.87	
For >250 To 500, Deduct	-1.43	
For >500 To 1,000, Deduct	-2.86	
For >1,000 To 2,000, Deduct	-4.29	
For >2,000 To 5,000, Deduct	-5.72	
For >5,000, Deduct	-7.15	
33 01 30 41-0039 LF >60" Diameter Pipe Line Cleaning, Mechanical Method.....	37.47	
For >250 To 500, Deduct	-1.59	
For >500 To 1,000, Deduct	-3.18	
For >1,000 To 2,000, Deduct	-4.76	
For >2,000 To 5,000, Deduct	-6.35	
For >5,000, Deduct	-7.94	
<b>33 01 30 41-0040 Pipe Line Auguring/Rod Out Pipe (33 01 30 41-0001)</b>		
33 01 30 41-0041 EA Initial Set Up And Final Equipment Removal For Auguring.....	1,143.55	
33 01 30 41-0042 EA Move And Reset Up At Different Location .....	381.18	
33 01 30 41-0043 LF Up To 4" Diameter Pipe Line Auguring/Rod Out.....	3.81	
For >250 To 500, Deduct	-0.19	
For >500 To 1,000, Deduct	-0.38	
For >1,000 To 2,000, Deduct	-0.57	
For >2,000 To 5,000, Deduct	-0.76	
For >5,000, Deduct	-0.95	
33 01 30 41-0044 LF 6" Diameter Pipe Line Auguring/Rod Out.....	4.93	
For >250 To 500, Deduct	-0.25	
For >500 To 1,000, Deduct	-0.49	
For >1,000 To 2,000, Deduct	-0.74	
For >2,000 To 5,000, Deduct	-0.99	
For >5,000, Deduct	-1.23	



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Operation and Maintenance of Utilities		33 01	
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MINOR CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
33 01 30 41-0045	LF	8" Diameter Pipe Line Auguring/Rod Out .....	5.72	
		For >250 To 500, Deduct	-0.29	
		For >500 To 1,000, Deduct	-0.57	
		For >1,000 To 2,000, Deduct	-0.86	
		For >2,000 To 5,000, Deduct	-1.14	
		For >5,000, Deduct	-1.43	
33 01 30 41-0046	LF	10" Diameter Pipe Line Auguring/Rod Out .....	6.65	
		For >250 To 500, Deduct	-0.33	
		For >500 To 1,000, Deduct	-0.67	
		For >1,000 To 2,000, Deduct	-1.00	
		For >2,000 To 5,000, Deduct	-1.33	
		For >5,000, Deduct	-1.66	
33 01 30 41-0047	LF	12" Diameter Pipe Line Auguring/Rod Out .....	7.15	
		For >250 To 500, Deduct	-0.36	
		For >500 To 1,000, Deduct	-0.72	
		For >1,000 To 2,000, Deduct	-1.07	
		For >2,000 To 5,000, Deduct	-1.43	
		For >5,000, Deduct	-1.79	
33 01 30 41-0048	LF	>12" To 16" Diameter Pipe Line Auguring/Rod Out .....	8.17	
		For >250 To 500, Deduct	-0.41	
		For >500 To 1,000, Deduct	-0.82	
		For >1,000 To 2,000, Deduct	-1.23	
		For >2,000 To 5,000, Deduct	-1.63	
		For >5,000, Deduct	-2.04	
33 01 30 41-0049	LF	>16" To 24" Diameter Pipe Line Auguring/Rod Out .....	10.03	
		For >250 To 500, Deduct	-0.50	
		For >500 To 1,000, Deduct	-1.00	
		For >1,000 To 2,000, Deduct	-1.50	
		For >2,000 To 5,000, Deduct	-2.01	
		For >5,000, Deduct	-2.51	
33 01 30 41-0050	LF	>24" To 30" Diameter Pipe Line Auguring/Rod Out .....	11.22	
		For >250 To 500, Deduct	-0.56	
		For >500 To 1,000, Deduct	-1.12	
		For >1,000 To 2,000, Deduct	-1.68	
		For >2,000 To 5,000, Deduct	-2.24	
		For >5,000, Deduct	-2.81	
33 01 30 41-0051	LF	>30" To 42" Diameter Pipe Line Auguring/Rod Out .....	12.99	
		For >250 To 500, Deduct	-0.65	
		For >500 To 1,000, Deduct	-1.30	
		For >1,000 To 2,000, Deduct	-1.95	
		For >2,000 To 5,000, Deduct	-2.60	
		For >5,000, Deduct	-3.25	
33 01 30 41-0052	LF	>42 To 60" Diameter Pipe Line Auguring/Rod Out .....	17.87	
		For >250 To 500, Deduct	-0.89	
		For >500 To 1,000, Deduct	-1.79	
		For >1,000 To 2,000, Deduct	-2.68	
		For >2,000 To 5,000, Deduct	-3.57	
		For >5,000, Deduct	-4.47	
33 01 30 41-0053	LF	>60" Diameter Pipe Line Auguring/Rod Out .....	19.06	
		For >250 To 500, Deduct	-0.95	
		For >500 To 1,000, Deduct	-1.91	
		For >1,000 To 2,000, Deduct	-2.86	
		For >2,000 To 5,000, Deduct	-3.81	
		For >5,000, Deduct	-4.77	

### 33 01 30 42 Cleaning of Manholes (33 01 30)

#### 33 01 30 42-0001 Structure Cleaning And Flushing (33 01 30 42)

Note: Includes flushing. Owner provided water.

#### 33 01 30 42-0002 Rod Out Structures And Other Hand Operations (33 01 30 42-0001)

33 01 30 42-0003	EA	Rod Out Waste Water Drain .....	60.22	
33 01 30 42-0004	EA	Rod Out Sewer Catch Basin .....	120.44	
33 01 30 42-0005	EA	Up To 6" Diameter Pipe, Rod Out Blockage .....	24.09	
33 01 30 42-0006	EA	8" Diameter Pipe, Rod Out Blockage .....	26.50	
33 01 30 42-0007	EA	10" Diameter Pipe, Rod Out Blockage .....	30.11	
33 01 30 42-0008	EA	12" Diameter Pipe, Rod Out Blockage .....	34.93	
33 01 30 42-0009	EA	>12" To 16" Diameter Pipe, Rod Out Blockage .....	40.95	
33 01 30 42-0010	EA	>16" To 24" Diameter Pipe, Rod Out Blockage .....	48.17	
33 01 30 42-0011	EA	>24" To 30" Diameter Pipe, Rod Out Blockage .....	56.60	
33 01 30 42-0012	EA	>30" To 42" Diameter Pipe, Rod Out Blockage .....	65.04	
33 01 30 42-0013	EA	>42" To 60" Diameter Pipe, Rod Out Blockage .....	75.88	
33 01 30 42-0014	EA	>60" Diameter Pipe, Rod Out Blockage .....	90.33	
33 01 30 42-0015	EA	Clean Out Debris From Entrance To Inlet Structure .....	301.10	
33 01 30 42-0016	EA	3' To 4' Diameter, Clean Out Blocked Manhole By Hand .....	808.80	
		For >10 To 100, Deduct	-121.32	
		For >100 To 250, Deduct	-181.98	
		For >250, Deduct	-242.64	
33 01 30 42-0017	EA	5' To 6' Diameter, Clean Out Blocked Manhole By Hand .....	970.55	
		For >10 To 100, Deduct	-145.58	
		For >100 To 250, Deduct	-218.37	
		For >250, Deduct	-291.17	

**33 Utilities****33 01 Operation and Maintenance of Utilities****33 01 30 Operation and Maintenance of Sewer Utilities**

MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
33 01 30 42-0018 EA Clean Out Blocked Catch Basin By Hand .....	485.28	
For >10 To 100, Deduct	-72.79	
For >100 To 250, Deduct	-109.19	
For >250, Deduct	-145.58	
<b>33 01 30 42-0019 Cleaning Manholes And Drainage Structures With Jet/Vacuum (33 01 30 42-0001)</b>		
Note: Includes the removal of debris with high pressure water jetting and vacuum equipment and cleaning of grate. Excludes hardened concrete debris and disposal of material.		
33 01 30 42-0020 EA Jet/Vacuum Clean 1 To 2 Catch Basins Or Manholes .....	296.38	
33 01 30 42-0021 EA Jet/Vacuum Clean 3 To 10 Catch Basins Or Manholes .....	275.10	
33 01 30 42-0022 EA Jet/Vacuum Clean 11 To 25 Catch Basins Or Manholes .....	253.82	
33 01 30 42-0023 EA Jet/Vacuum Clean 26 To 100 Catch Basins Or Manholes .....	232.55	
33 01 30 42-0024 EA Jet/Vacuum Clean 101 To 250 Catch Basins Or Manholes .....	211.27	
33 01 30 42-0025 EA Jet/Vacuum Clean >250 Catch Basins Or Manholes .....	190.00	
<b>33 01 30 51 Maintenance of Utilities (33 01 30)</b>		
<b>33 01 30 51-0001 Pipe Repair (33 01 30 51)</b>		
<b>33 01 30 51-0002 Pipe Repair Clamp, Full Circle, Single Band (33 01 30 51-0001)</b>		
Note: Repair clamps for asbestos cement pipe, cast iron soil pipe, non-reinforced concrete pipe, PVC pipe, vitrified clay pipe, gray iron pipe and ductile iron pipe.		
33 01 30 51-0003 EA 2" Diameter, 7-1/2" Long, Pipe Repair Clamp, Single Band With Alloy Bolts And Nuts (Smith-Blair 226) .....	138.51	
For Stainless Steel Nuts And Bolts, Add	20.64	
33 01 30 51-0004 EA 2" Diameter, 10" Long, Pipe Repair Clamp, Single Band With Alloy Bolts And Nuts (Smith-Blair 226) .....	194.35	
For Stainless Steel Nuts And Bolts, Add	31.10	
33 01 30 51-0005 EA 2" Diameter, 12-1/2" Long, Pipe Repair Clamp, Single Band With Alloy Bolts And Nuts (Smith-Blair 226) .....	223.57	
For Stainless Steel Nuts And Bolts, Add	36.63	
33 01 30 51-0006 EA 2" Diameter, 15" Long, Pipe Repair Clamp, Single Band With Alloy Bolts And Nuts (Smith-Blair 226) .....	254.15	
For Stainless Steel Nuts And Bolts, Add	42.14	
33 01 30 51-0007 EA 2-1/2" Diameter, 7-1/2" Long, Pipe Repair Clamp, Single Band With Alloy Bolts And Nuts (Smith-Blair 226) .....	149.19	
For Stainless Steel Nuts And Bolts, Add	22.41	
33 01 30 51-0008 EA 2-1/2" Diameter, 10" Long, Pipe Repair Clamp, Single Band With Alloy Bolts And Nuts (Smith-Blair 226) .....	206.39	
For Stainless Steel Nuts And Bolts, Add	33.19	
33 01 30 51-0009 EA 2-1/2" Diameter, 12-1/2" Long, Pipe Repair Clamp, Single Band With Alloy Bolts And Nuts (Smith-Blair 226) .....	235.77	
For Stainless Steel Nuts And Bolts, Add	38.59	
33 01 30 51-0010 EA 2-1/2" Diameter, 15" Long, Pipe Repair Clamp, Single Band With Alloy Bolts And Nuts (Smith-Blair 226) .....	271.69	
For Stainless Steel Nuts And Bolts, Add	45.15	
33 01 30 51-0011 EA 3" Diameter, 7-1/2" Long, Pipe Repair Clamp, Single Band With Alloy Bolts And Nuts (Smith-Blair 226) .....	159.83	
For Stainless Steel Nuts And Bolts, Add	24.52	
33 01 30 51-0012 EA 3" Diameter, 10" Long, Pipe Repair Clamp, Single Band With Alloy Bolts And Nuts (Smith-Blair 226) .....	214.43	
For Stainless Steel Nuts And Bolts, Add	34.70	
33 01 30 51-0013 EA 3" Diameter, 12-1/2" Long, Pipe Repair Clamp, Single Band With Alloy Bolts And Nuts (Smith-Blair 226) .....	247.11	
For Stainless Steel Nuts And Bolts, Add	40.68	
33 01 30 51-0014 EA 3" Diameter, 15" Long, Pipe Repair Clamp, Single Band With Alloy Bolts And Nuts (Smith-Blair 226) .....	286.87	
For Stainless Steel Nuts And Bolts, Add	48.30	
33 01 30 51-0015 EA 4" Diameter, 7-1/2" Long, Pipe Repair Clamp, Single Band With Alloy Bolts And Nuts (Smith-Blair 226) .....	179.72	
For Stainless Steel Nuts And Bolts, Add	27.88	
33 01 30 51-0016 EA 4" Diameter, 10" Long, Pipe Repair Clamp, Single Band With Alloy Bolts And Nuts (Smith-Blair 226) .....	236.38	
For Stainless Steel Nuts And Bolts, Add	37.53	
33 01 30 51-0017 EA 4" Diameter, 12-1/2" Long, Pipe Repair Clamp, Single Band With Alloy Bolts And Nuts (Smith-Blair 226) .....	286.41	
For Stainless Steel Nuts And Bolts, Add	45.68	
33 01 30 51-0018 EA 4" Diameter, 15" Long, Pipe Repair Clamp, Single Band With Alloy Bolts And Nuts (Smith-Blair 226) .....	344.94	
For Stainless Steel Nuts And Bolts, Add	55.11	
33 01 30 51-0019 EA 4" Diameter, 20" Long, Pipe Repair Clamp, Single Band With Alloy Bolts And Nuts (Smith-Blair 226) .....	448.24	
For Stainless Steel Nuts And Bolts, Add	74.02	
33 01 30 51-0020 EA 4" Diameter, 25" Long, Pipe Repair Clamp, Single Band With Alloy Bolts And Nuts (Smith-Blair 226) .....	556.46	
For Stainless Steel Nuts And Bolts, Add	92.93	
33 01 30 51-0021 EA 4" Diameter, 30" Long, Pipe Repair Clamp, Single Band With Alloy Bolts And Nuts (Smith-Blair 226) .....	678.00	
For Stainless Steel Nuts And Bolts, Add	113.99	
33 01 30 51-0022 EA 6" Diameter, 7-1/2" Long, Pipe Repair Clamp, Single Band With Alloy Bolts And Nuts (Smith-Blair 226) .....	211.09	
For Stainless Steel Nuts And Bolts, Add	32.90	
33 01 30 51-0023 EA 6" Diameter, 10" Long, Pipe Repair Clamp, Single Band With Alloy Bolts And Nuts (Smith-Blair 226) .....	279.09	
For Stainless Steel Nuts And Bolts, Add	44.63	
33 01 30 51-0024 EA 6" Diameter, 12-1/2" Long, Pipe Repair Clamp, Single Band With Alloy Bolts And Nuts (Smith-Blair 226) .....	330.88	
For Stainless Steel Nuts And Bolts, Add	52.62	
33 01 30 51-0025 EA 6" Diameter, 15" Long, Pipe Repair Clamp, Single Band With Alloy Bolts And Nuts (Smith-Blair 226) .....	388.36	
For Stainless Steel Nuts And Bolts, Add	61.15	
33 01 30 51-0026 EA 6" Diameter, 20" Long, Pipe Repair Clamp, Single Band With Alloy Bolts And Nuts (Smith-Blair 226) .....	532.25	
For Stainless Steel Nuts And Bolts, Add	88.61	
33 01 30 51-0027 EA 6" Diameter, 25" Long, Pipe Repair Clamp, Single Band With Alloy Bolts And Nuts (Smith-Blair 226) .....	646.72	
For Stainless Steel Nuts And Bolts, Add	108.06	
33 01 30 51-0028 EA 6" Diameter, 30" Long, Pipe Repair Clamp, Single Band With Alloy Bolts And Nuts (Smith-Blair 226) .....	772.36	
For Stainless Steel Nuts And Bolts, Add	129.12	
33 01 30 51-0029 EA 8" Diameter, 7-1/2" Long, Pipe Repair Clamp, Single Band With Alloy Bolts And Nuts (Smith-Blair 226) .....	280.00	
For Stainless Steel Nuts And Bolts, Add	39.36	
33 01 30 51-0030 EA 8" Diameter, 10" Long, Pipe Repair Clamp, Single Band With Alloy Bolts And Nuts (Smith-Blair 226) .....	362.53	
For Stainless Steel Nuts And Bolts, Add	52.08	
33 01 30 51-0031 EA 8" Diameter, 12-1/2" Long, Pipe Repair Clamp, Single Band With Alloy Bolts And Nuts (Smith-Blair 226) .....	437.34	
For Stainless Steel Nuts And Bolts, Add	63.02	
33 01 30 51-0032 EA 8" Diameter, 15" Long, Pipe Repair Clamp, Single Band With Alloy Bolts And Nuts (Smith-Blair 226) .....	522.50	
For Stainless Steel Nuts And Bolts, Add	75.10	



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		<b>Operation and Maintenance of Sewer Utilities</b>	<b>33 01 30</b>	

MINOR CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
33 01 30 51-0033	EA	8" Diameter, 20" Long, Pipe Repair Clamp, Single Band With Alloy Bolts And Nuts (Smith-Blair 226) ..... <i>For Stainless Steel Nuts And Bolts, Add</i>	687.80 104.04	
33 01 30 51-0034	EA	8" Diameter, 25" Long, Pipe Repair Clamp, Single Band With Alloy Bolts And Nuts (Smith-Blair 226) ..... <i>For Stainless Steel Nuts And Bolts, Add</i>	822.65 124.41	
33 01 30 51-0035	EA	8" Diameter, 30" Long, Pipe Repair Clamp, Single Band With Alloy Bolts And Nuts (Smith-Blair 226) ..... <i>For Stainless Steel Nuts And Bolts, Add</i>	975.54 146.43	
33 01 30 51-0036	EA	10" Diameter, 7-1/2" Long, Pipe Repair Clamp, Single Band With Alloy Bolts And Nuts (Smith-Blair 226) ..... <i>For Stainless Steel Nuts And Bolts, Add</i>	325.32 47.90	
33 01 30 51-0037	EA	10" Diameter, 10" Long, Pipe Repair Clamp, Single Band With Alloy Bolts And Nuts (Smith-Blair 226) ..... <i>For Stainless Steel Nuts And Bolts, Add</i>	434.39 66.26	
33 01 30 51-0038	EA	10" Diameter, 12-1/2" Long, Pipe Repair Clamp, Single Band With Alloy Bolts And Nuts (Smith-Blair 226) ..... <i>For Stainless Steel Nuts And Bolts, Add</i>	512.40 77.47	
33 01 30 51-0039	EA	10" Diameter, 15" Long, Pipe Repair Clamp, Single Band With Alloy Bolts And Nuts (Smith-Blair 226) ..... <i>For Stainless Steel Nuts And Bolts, Add</i>	627.58 95.82	
33 01 30 51-0040	EA	10" Diameter, 20" Long, Pipe Repair Clamp, Single Band With Alloy Bolts And Nuts (Smith-Blair 226) ..... <i>For Stainless Steel Nuts And Bolts, Add</i>	818.23 129.97	
33 01 30 51-0041	EA	10" Diameter, 25" Long, Pipe Repair Clamp, Single Band With Alloy Bolts And Nuts (Smith-Blair 226) ..... <i>For Stainless Steel Nuts And Bolts, Add</i>	935.08 145.27	
33 01 30 51-0042	EA	10" Diameter, 30" Long, Pipe Repair Clamp, Single Band With Alloy Bolts And Nuts (Smith-Blair 226) ..... <i>For Stainless Steel Nuts And Bolts, Add</i>	1,196.65 191.65	
33 01 30 51-0043	EA	12" Diameter, 7-1/2" Long, Pipe Repair Clamp, Single Band With Alloy Bolts And Nuts (Smith-Blair 226) ..... <i>For Stainless Steel Nuts And Bolts, Add</i>	371.01 54.03	
33 01 30 51-0044	EA	12" Diameter, 10" Long, Pipe Repair Clamp, Single Band With Alloy Bolts And Nuts (Smith-Blair 226) ..... <i>For Stainless Steel Nuts And Bolts, Add</i>	482.56 71.86	
33 01 30 51-0045	EA	12" Diameter, 12-1/2" Long, Pipe Repair Clamp, Single Band With Alloy Bolts And Nuts (Smith-Blair 226) ..... <i>For Stainless Steel Nuts And Bolts, Add</i>	582.22 86.96	
33 01 30 51-0046	EA	12" Diameter, 15" Long, Pipe Repair Clamp, Single Band With Alloy Bolts And Nuts (Smith-Blair 226) ..... <i>For Stainless Steel Nuts And Bolts, Add</i>	714.77 108.06	
33 01 30 51-0047	EA	12" Diameter, 20" Long, Pipe Repair Clamp, Single Band With Alloy Bolts And Nuts (Smith-Blair 226) ..... <i>For Stainless Steel Nuts And Bolts, Add</i>	914.51 142.72	
33 01 30 51-0048	EA	12" Diameter, 25" Long, Pipe Repair Clamp, Single Band With Alloy Bolts And Nuts (Smith-Blair 226) ..... <i>For Stainless Steel Nuts And Bolts, Add</i>	1,077.13 166.67	
33 01 30 51-0049	EA	12" Diameter, 30" Long, Pipe Repair Clamp, Single Band With Alloy Bolts And Nuts (Smith-Blair 226) ..... <i>For Stainless Steel Nuts And Bolts, Add</i>	1,362.84 216.11	
<b>33 01 30 51-0050 Pipe Repair Clamp, Full Circle, Double Bands (33 01 30 51-0001)</b>				
Note: Repair clamps for reinforced concrete pipe, gray iron pipe and ductile iron pipe.				
33 01 30 51-0051	EA	14.38"-15.13" OD Diameter Pipe, 10" Long, Pipe Repair Clamp, Double Bands With Alloy Bolts And Nuts (Smith-Blair 228) ..... <i>For Stainless Steel Nuts And Bolts, Add</i>	796.54 207.89	
33 01 30 51-0052	EA	14.38"-15.13" OD Diameter Pipe, 15" Long, Pipe Repair Clamp, Double Bands With Alloy Bolts And Nuts (Smith-Blair 228) ..... <i>For Stainless Steel Nuts And Bolts, Add</i>	1,124.00 300.12	
33 01 30 51-0053	EA	14.38"-15.13" OD Diameter Pipe, 20" Long, Pipe Repair Clamp, Double Bands With Alloy Bolts And Nuts (Smith-Blair 228) ..... <i>For Stainless Steel Nuts And Bolts, Add</i>	1,510.75 407.00	
33 01 30 51-0054	EA	14.38"-15.13" OD Diameter Pipe, 30" Long, Pipe Repair Clamp, Double Bands With Alloy Bolts And Nuts (Smith-Blair 228) ..... <i>For Stainless Steel Nuts And Bolts, Add</i>	2,211.81 613.43	
33 01 30 51-0055	EA	15.07"-15.82" OD Diameter Pipe, 10" Long, Pipe Repair Clamp, Double Bands With Alloy Bolts And Nuts (Smith-Blair 228) ..... <i>For Stainless Steel Nuts And Bolts, Add</i>	836.15 218.12	
33 01 30 51-0056	EA	15.07"-15.82" OD Diameter Pipe, 15" Long, Pipe Repair Clamp, Double Bands With Alloy Bolts And Nuts (Smith-Blair 228) ..... <i>For Stainless Steel Nuts And Bolts, Add</i>	1,176.75 314.03	
33 01 30 51-0057	EA	15.07"-15.82" OD Diameter Pipe, 20" Long, Pipe Repair Clamp, Double Bands With Alloy Bolts And Nuts (Smith-Blair 228) ..... <i>For Stainless Steel Nuts And Bolts, Add</i>	1,578.05 424.56	
33 01 30 51-0058	EA	15.07"-15.82" OD Diameter Pipe, 30" Long, Pipe Repair Clamp, Double Bands With Alloy Bolts And Nuts (Smith-Blair 228) ..... <i>For Stainless Steel Nuts And Bolts, Add</i>	2,318.97 642.70	
33 01 30 51-0059	EA	15.92"-16.67" OD Diameter Pipe, 10" Long, Pipe Repair Clamp, Double Bands With Alloy Bolts And Nuts (Smith-Blair 228) ..... <i>For Stainless Steel Nuts And Bolts, Add</i>	858.63 222.53	
33 01 30 51-0060	EA	15.92"-16.67" OD Diameter Pipe, 15" Long, Pipe Repair Clamp, Double Bands With Alloy Bolts And Nuts (Smith-Blair 228) ..... <i>For Stainless Steel Nuts And Bolts, Add</i>	1,206.24 319.90	
33 01 30 51-0061	EA	15.92"-16.67" OD Diameter Pipe, 20" Long, Pipe Repair Clamp, Double Bands With Alloy Bolts And Nuts (Smith-Blair 228) ..... <i>For Stainless Steel Nuts And Bolts, Add</i>	1,621.04 434.08	
33 01 30 51-0062	EA	15.92"-16.67" OD Diameter Pipe, 30" Long, Pipe Repair Clamp, Double Bands With Alloy Bolts And Nuts (Smith-Blair 228) ..... <i>For Stainless Steel Nuts And Bolts, Add</i>	2,380.27 656.60	
33 01 30 51-0063	EA	16.56"-17.31" OD Diameter Pipe, 10" Long, Pipe Repair Clamp, Double Bands With Alloy Bolts And Nuts (Smith-Blair 228) ..... <i>For Stainless Steel Nuts And Bolts, Add</i>	882.43 226.92	
33 01 30 51-0064	EA	16.56"-17.31" OD Diameter Pipe, 15" Long, Pipe Repair Clamp, Double Bands With Alloy Bolts And Nuts (Smith-Blair 228) ..... <i>For Stainless Steel Nuts And Bolts, Add</i>	1,239.92 326.48	
33 01 30 51-0065	EA	16.56"-17.31" OD Diameter Pipe, 20" Long, Pipe Repair Clamp, Double Bands With Alloy Bolts And Nuts (Smith-Blair 228) ..... <i>For Stainless Steel Nuts And Bolts, Add</i>	1,663.76 442.13	

**33 Utilities****33 01 Operation and Maintenance of Utilities****33 01 30 Operation and Maintenance of Sewer Utilities**

MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
33 01 30 51-0066 EA 16.56"-17.31" OD Diameter Pipe, 30" Long, Pipe Repair Clamp, Double Bands With Alloy Bolts And Nuts (Smith-Blair 228) .....	2,442.18	
For Stainless Steel Nuts And Bolts, Add .....	669.79	
33 01 30 51-0067 EA 17.15"-17.90" OD Diameter Pipe, 10" Long, Pipe Repair Clamp, Double Bands With Alloy Bolts And Nuts (Smith-Blair 228) .....	904.11	
For Stainless Steel Nuts And Bolts, Add .....	230.58	
33 01 30 51-0068 EA 17.15"-17.90" OD Diameter Pipe, 15" Long, Pipe Repair Clamp, Double Bands With Alloy Bolts And Nuts (Smith-Blair 228) .....	1,269.25	
For Stainless Steel Nuts And Bolts, Add .....	331.60	
33 01 30 51-0069 EA 17.15"-17.90" OD Diameter Pipe, 20" Long, Pipe Repair Clamp, Double Bands With Alloy Bolts And Nuts (Smith-Blair 228) .....	1,706.47	
For Stainless Steel Nuts And Bolts, Add .....	450.18	
33 01 30 51-0070 EA 17.15"-17.90" OD Diameter Pipe, 30" Long, Pipe Repair Clamp, Double Bands With Alloy Bolts And Nuts (Smith-Blair 228) .....	2,499.00	
For Stainless Steel Nuts And Bolts, Add .....	680.76	
33 01 30 51-0071 EA 17.82"-18.57" OD Diameter Pipe, 10" Long, Pipe Repair Clamp, Double Bands With Alloy Bolts And Nuts (Smith-Blair 228) .....	924.41	
For Stainless Steel Nuts And Bolts, Add .....	234.25	
33 01 30 51-0072 EA 17.82"-18.57" OD Diameter Pipe, 15" Long, Pipe Repair Clamp, Double Bands With Alloy Bolts And Nuts (Smith-Blair 228) .....	1,298.73	
For Stainless Steel Nuts And Bolts, Add .....	337.45	
33 01 30 51-0073 EA 17.82"-18.57" OD Diameter Pipe, 20" Long, Pipe Repair Clamp, Double Bands With Alloy Bolts And Nuts (Smith-Blair 228) .....	1,744.37	
For Stainless Steel Nuts And Bolts, Add .....	457.50	
33 01 30 51-0074 EA 17.82"-18.57" OD Diameter Pipe, 30" Long, Pipe Repair Clamp, Double Bands With Alloy Bolts And Nuts (Smith-Blair 228) .....	2,536.87	
For Stainless Steel Nuts And Bolts, Add .....	686.25	
33 01 30 51-0075 EA 18.46"-19.21" OD Diameter Pipe, 10" Long, Pipe Repair Clamp, Double Bands With Alloy Bolts And Nuts (Smith-Blair 228) .....	947.34	
For Stainless Steel Nuts And Bolts, Add .....	238.81	
33 01 30 51-0076 EA 18.46"-19.21" OD Diameter Pipe, 15" Long, Pipe Repair Clamp, Double Bands With Alloy Bolts And Nuts (Smith-Blair 228) .....	1,333.18	
For Stainless Steel Nuts And Bolts, Add .....	344.77	
33 01 30 51-0077 EA 18.46"-19.21" OD Diameter Pipe, 20" Long, Pipe Repair Clamp, Double Bands With Alloy Bolts And Nuts (Smith-Blair 228) .....	1,784.34	
For Stainless Steel Nuts And Bolts, Add .....	465.55	
33 01 30 51-0078 EA 18.46"-19.21" OD Diameter Pipe, 30" Long, Pipe Repair Clamp, Double Bands With Alloy Bolts And Nuts (Smith-Blair 228) .....	2,614.38	
For Stainless Steel Nuts And Bolts, Add .....	705.65	
<b>33 01 30 51-0079 Polyseal Pipe Coupler</b> (33 01 30 51-0001)		
33 01 30 51-0080 EA 18" Diameter Pipe, PolySeal Repair Couplers (MarMac) .....	396.46	
33 01 30 51-0081 EA 24" Diameter Pipe, PolySeal Repair Couplers (MarMac) .....	448.08	
<b>33 01 30 71 Relining Sewer Utilities Pipelines</b> (33 01 30)		
<b>33 01 30 71-0001 Relining Underground Pipelines</b> (33 01 30 71)		
Note: Excludes CCTV inspection, sewer cleaning, pavement both temporary and permanent, emergency after hours response for homeowners backups. See CSI section 01 22 20 00-0000 for hourly rates for after hours response for homeowners backups, 32 01 17 63-0000 for temporary pavement, 32 12 16 00-0000 for permanent pavement, 33 01 30 11-0000 for CCTV Inspection, 33 01 30 41-0002 for sewer cleaning.		
<b>33 01 30 71-0002 Lining Pipe, Spray Applied With Structural Polyurethane</b> (33 01 30 71-0001)		
Note: Two part structural polyurethane.		
<b>33 01 30 71-0003 Mobilization And Setup For Spray Applied Structural Polyurethane Lining</b> (33 01 30 71-0002)		
33 01 30 71-0004 EA Initial Set Up And Final Equipment Removal For Spray Applied Structural Polyurethane Lining .....	1,695.35	
<b>33 01 30 71-0005 Lining Pipe, Spray Applied With 100 mil Structural Polyurethane</b> (33 01 30 71-0002)		
Note: Two part structural polyurethane.		
33 01 30 71-0006 LF 36" Diameter Pipe Lining, Spray Applied With 100 mil Structural Polyurethane .....	55.59	
For Up To 75, Add .....	12.03	
For >75 To 150, Add .....	5.56	
For >500 To 1,000, Deduct .....	-1.48	
For >1,000 To 2,000, Deduct .....	-2.86	
For >2,000 To 5,000, Deduct .....	-4.43	
For >5,000, Deduct .....	-6.47	
33 01 30 71-0007 LF 42" Diameter Pipe Lining, Spray Applied With 100 mil Structural Polyurethane .....	64.85	
For Up To 75, Add .....	14.04	
For >75 To 150, Add .....	6.49	
For >500 To 1,000, Deduct .....	-1.72	
For >1,000 To 2,000, Deduct .....	-3.34	
For >2,000 To 5,000, Deduct .....	-5.17	
For >5,000, Deduct .....	-7.55	
33 01 30 71-0008 LF 48" Diameter Pipe Lining, Spray Applied With 100 mil Structural Polyurethane .....	74.12	
For Up To 75, Add .....	16.04	
For >75 To 150, Add .....	7.41	
For >500 To 1,000, Deduct .....	-1.97	
For >1,000 To 2,000, Deduct .....	-3.82	
For >2,000 To 5,000, Deduct .....	-5.91	
For >5,000, Deduct .....	-8.63	



		<b>Utilities</b>	<b>33</b>	<b>CS</b>
		<b>Operation and Maintenance of Utilities</b>	<b>33 01</b>	
		<b>Operation and Maintenance of Sewer Utilities</b>	<b>33 01 30</b>	

MINOR CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
33 01 30 71-0009	LF	54" Diameter Pipe Lining, Spray Applied With 100 mil Structural Polyurethane .....	83.38	
		For Up To 75, Add	18.05	
		For >75 To 150, Add	8.34	
		For >500 To 1,000, Deduct	-2.22	
		For >1,000 To 2,000, Deduct	-4.30	
		For >2,000 To 5,000, Deduct	-6.65	
		For >5,000, Deduct	-9.71	
33 01 30 71-0010	LF	60" Diameter Pipe Lining, Spray Applied With 100 mil Structural Polyurethane .....	92.65	
		For Up To 75, Add	20.05	
		For >75 To 150, Add	9.27	
		For >500 To 1,000, Deduct	-2.46	
		For >1,000 To 2,000, Deduct	-4.77	
		For >2,000 To 5,000, Deduct	-7.39	
		For >5,000, Deduct	-10.79	
33 01 30 71-0011	LF	66" Diameter Pipe Lining, Spray Applied With 100 mil Structural Polyurethane .....	101.91	
		For Up To 75, Add	22.06	
		For >75 To 150, Add	10.19	
		For >500 To 1,000, Deduct	-2.71	
		For >1,000 To 2,000, Deduct	-5.25	
		For >2,000 To 5,000, Deduct	-8.13	
		For >5,000, Deduct	-11.87	
33 01 30 71-0012	LF	72" Diameter Pipe Lining, Spray Applied With 100 mil Structural Polyurethane .....	111.18	
		For Up To 75, Add	24.07	
		For >75 To 150, Add	11.12	
		For >500 To 1,000, Deduct	-2.96	
		For >1,000 To 2,000, Deduct	-5.73	
		For >2,000 To 5,000, Deduct	-8.87	
		For >5,000, Deduct	-12.95	
33 01 30 71-0013	LF	78" Diameter Pipe Lining, Spray Applied With 100 mil Structural Polyurethane .....	120.44	
		For Up To 75, Add	26.07	
		For >75 To 150, Add	12.04	
		For >500 To 1,000, Deduct	-3.20	
		For >1,000 To 2,000, Deduct	-6.20	
		For >2,000 To 5,000, Deduct	-9.60	
		For >5,000, Deduct	-14.03	
33 01 30 71-0014	LF	84" Diameter Pipe Lining, Spray Applied With 100 mil Structural Polyurethane .....	129.71	
		For Up To 75, Add	28.08	
		For >75 To 150, Add	12.97	
		For >500 To 1,000, Deduct	-3.45	
		For >1,000 To 2,000, Deduct	-6.68	
		For >2,000 To 5,000, Deduct	-10.34	
		For >5,000, Deduct	-15.10	
33 01 30 71-0015	LF	90" Diameter Pipe Lining, Spray Applied With 100 mil Structural Polyurethane .....	138.97	
		For Up To 75, Add	30.08	
		For >75 To 150, Add	13.90	
		For >500 To 1,000, Deduct	-3.69	
		For >1,000 To 2,000, Deduct	-7.16	
		For >2,000 To 5,000, Deduct	-11.08	
		For >5,000, Deduct	-16.18	
33 01 30 71-0016	LF	96" Diameter Pipe Lining, Spray Applied With 100 mil Structural Polyurethane .....	148.23	
		For Up To 75, Add	32.08	
		For >75 To 150, Add	14.82	
		For >500 To 1,000, Deduct	-3.94	
		For >1,000 To 2,000, Deduct	-7.64	
		For >2,000 To 5,000, Deduct	-11.82	
		For >5,000, Deduct	-17.26	
33 01 30 71-0017	LF	102" Diameter Pipe Lining, Spray Applied With 100 mil Structural Polyurethane .....	157.51	
		For Up To 75, Add	34.09	
		For >75 To 150, Add	15.75	
		For >500 To 1,000, Deduct	-4.19	
		For >1,000 To 2,000, Deduct	-8.11	
		For >2,000 To 5,000, Deduct	-12.56	
		For >5,000, Deduct	-18.34	
33 01 30 71-0018	LF	108" Diameter Pipe Lining, Spray Applied With 100 mil Structural Polyurethane .....	166.77	
		For Up To 75, Add	36.10	
		For >75 To 150, Add	16.68	
		For >500 To 1,000, Deduct	-4.43	
		For >1,000 To 2,000, Deduct	-8.59	
		For >2,000 To 5,000, Deduct	-13.30	
		For >5,000, Deduct	-19.42	
33 01 30 71-0019	LF	114" Diameter Pipe Lining, Spray Applied With 100 mil Structural Polyurethane .....	176.03	
		For Up To 75, Add	38.10	
		For >75 To 150, Add	17.60	
		For >500 To 1,000, Deduct	-4.68	
		For >1,000 To 2,000, Deduct	-9.07	
		For >2,000 To 5,000, Deduct	-14.04	
		For >5,000, Deduct	-20.50	
33 01 30 71-0020	LF	120" Diameter Pipe Lining, Spray Applied With 100 mil Structural Polyurethane .....	185.30	
		For Up To 75, Add	40.11	
		For >75 To 150, Add	18.53	
		For >500 To 1,000, Deduct	-4.93	
		For >1,000 To 2,000, Deduct	-9.55	
		For >2,000 To 5,000, Deduct	-14.78	
		For >5,000, Deduct	-21.58	
33 01 30 71-0021	SF	Structure Lining, Spray Applied With 100 mil Structural Polyurethane .....	5.90	

**33 Utilities****33 01 Operation and Maintenance of Utilities****33 01 30 Operation and Maintenance of Sewer Utilities**

MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
<b>33 01 30 71-0022 Lining Pipe, Spray Applied With 150 mil Structural Polyurethane</b> <small>(33 01 30 71-0002)</small>		
Note: Two part structural polyurethane.		
33 01 30 71-0023 LF 36" Diameter Pipe Lining, Spray Applied With 150 mil Structural Polyurethane .....	75.24	
For Up To 75, Add	16.01	
For >75 To 150, Add	7.52	
For >500 To 1,000, Deduct	-1.89	
For >1,000 To 2,000, Deduct	-3.68	
For >2,000 To 5,000, Deduct	-5.67	
For >5,000, Deduct	-8.49	
33 01 30 71-0024 LF 42" Diameter Pipe Lining, Spray Applied With 150 mil Structural Polyurethane .....	87.77	
For Up To 75, Add	18.68	
For >75 To 150, Add	8.78	
For >500 To 1,000, Deduct	-2.20	
For >1,000 To 2,000, Deduct	-4.30	
For >2,000 To 5,000, Deduct	-6.61	
For >5,000, Deduct	-9.90	
33 01 30 71-0025 LF 48" Diameter Pipe Lining, Spray Applied With 150 mil Structural Polyurethane .....	100.32	
For Up To 75, Add	21.35	
For >75 To 150, Add	10.03	
For >500 To 1,000, Deduct	-2.52	
For >1,000 To 2,000, Deduct	-4.91	
For >2,000 To 5,000, Deduct	-7.56	
For >5,000, Deduct	-11.32	
33 01 30 71-0026 LF 54" Diameter Pipe Lining, Spray Applied With 150 mil Structural Polyurethane .....	112.85	
For Up To 75, Add	24.01	
For >75 To 150, Add	11.29	
For >500 To 1,000, Deduct	-2.83	
For >1,000 To 2,000, Deduct	-5.52	
For >2,000 To 5,000, Deduct	-8.50	
For >5,000, Deduct	-12.73	
33 01 30 71-0027 LF 60" Diameter Pipe Lining, Spray Applied With 150 mil Structural Polyurethane .....	125.40	
For Up To 75, Add	26.68	
For >75 To 150, Add	12.54	
For >500 To 1,000, Deduct	-3.15	
For >1,000 To 2,000, Deduct	-6.14	
For >2,000 To 5,000, Deduct	-9.45	
For >5,000, Deduct	-14.14	
33 01 30 71-0028 LF 66" Diameter Pipe Lining, Spray Applied With 150 mil Structural Polyurethane .....	137.93	
For Up To 75, Add	29.35	
For >75 To 150, Add	13.79	
For >500 To 1,000, Deduct	-3.46	
For >1,000 To 2,000, Deduct	-6.75	
For >2,000 To 5,000, Deduct	-10.39	
For >5,000, Deduct	-15.56	
33 01 30 71-0029 LF 72" Diameter Pipe Lining, Spray Applied With 150 mil Structural Polyurethane .....	150.48	
For Up To 75, Add	32.02	
For >75 To 150, Add	15.05	
For >500 To 1,000, Deduct	-3.78	
For >1,000 To 2,000, Deduct	-7.37	
For >2,000 To 5,000, Deduct	-11.34	
For >5,000, Deduct	-16.97	
33 01 30 71-0030 LF 78" Diameter Pipe Lining, Spray Applied With 150 mil Structural Polyurethane .....	163.01	
For Up To 75, Add	34.69	
For >75 To 150, Add	16.30	
For >500 To 1,000, Deduct	-4.09	
For >1,000 To 2,000, Deduct	-7.98	
For >2,000 To 5,000, Deduct	-12.28	
For >5,000, Deduct	-18.39	
33 01 30 71-0031 LF 84" Diameter Pipe Lining, Spray Applied With 150 mil Structural Polyurethane .....	175.55	
For Up To 75, Add	37.36	
For >75 To 150, Add	17.56	
For >500 To 1,000, Deduct	-4.41	
For >1,000 To 2,000, Deduct	-8.59	
For >2,000 To 5,000, Deduct	-13.23	
For >5,000, Deduct	-19.80	
33 01 30 71-0032 LF 90" Diameter Pipe Lining, Spray Applied With 150 mil Structural Polyurethane .....	188.09	
For Up To 75, Add	40.02	
For >75 To 150, Add	18.81	
For >500 To 1,000, Deduct	-4.72	
For >1,000 To 2,000, Deduct	-9.21	
For >2,000 To 5,000, Deduct	-14.17	
For >5,000, Deduct	-21.22	
33 01 30 71-0033 LF 96" Diameter Pipe Lining, Spray Applied With 150 mil Structural Polyurethane .....	200.63	
For Up To 75, Add	42.69	
For >75 To 150, Add	20.06	
For >500 To 1,000, Deduct	-5.04	
For >1,000 To 2,000, Deduct	-9.82	
For >2,000 To 5,000, Deduct	-15.12	
For >5,000, Deduct	-22.63	
33 01 30 71-0034 LF 102" Diameter Pipe Lining, Spray Applied With 150 mil Structural Polyurethane .....	213.17	
For Up To 75, Add	45.36	
For >75 To 150, Add	21.32	
For >500 To 1,000, Deduct	-5.35	
For >1,000 To 2,000, Deduct	-10.44	
For >2,000 To 5,000, Deduct	-16.06	
For >5,000, Deduct	-24.04	





		<b>Utilities</b>	<b>33</b>	<b>CS</b>
		<b>Operation and Maintenance of Utilities</b>	<b>33 01</b>	
		<b>Operation and Maintenance of Sewer Utilities</b>	<b>33 01 30</b>	

MINOR CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
33 01 30 71-0035	LF	108" Diameter Pipe Lining, Spray Applied With 150 mil Structural Polyurethane .....	225.71	
		For Up To 75, Add	48.03	
		For >75 To 150, Add	22.57	
		For >500 To 1,000, Deduct	-5.67	
		For >1,000 To 2,000, Deduct	-11.05	
		For >2,000 To 5,000, Deduct	-17.01	
		For >5,000, Deduct	-25.46	
33 01 30 71-0036	LF	114" Diameter Pipe Lining, Spray Applied With 150 mil Structural Polyurethane .....	238.25	
		For Up To 75, Add	50.70	
		For >75 To 150, Add	23.83	
		For >500 To 1,000, Deduct	-5.98	
		For >1,000 To 2,000, Deduct	-11.66	
		For >2,000 To 5,000, Deduct	-17.95	
		For >5,000, Deduct	-26.87	
33 01 30 71-0037	LF	120" Diameter Pipe Lining, Spray Applied With 150 mil Structural Polyurethane .....	250.79	
		For Up To 75, Add	53.37	
		For >75 To 150, Add	25.08	
		For >500 To 1,000, Deduct	-6.30	
		For >1,000 To 2,000, Deduct	-12.28	
		For >2,000 To 5,000, Deduct	-18.90	
		For >5,000, Deduct	-28.29	
33 01 30 71-0038	SF	Structure Lining, Spray Applied With 150 mil Structural Polyurethane .....	7.98	
<b>33 01 30 71-0039 Lining Pipe, Spray Applied With 200 mil Structural Polyurethane (33 01 30 71-0002)</b>				
Note: Two part structural polyurethane.				
33 01 30 71-0040	LF	36" Diameter Pipe Lining, Spray Applied With 200 mil Structural Polyurethane .....	94.86	
		For Up To 75, Add	19.99	
		For >75 To 150, Add	9.49	
		For >500 To 1,000, Deduct	-2.30	
		For >1,000 To 2,000, Deduct	-4.50	
		For >2,000 To 5,000, Deduct	-6.91	
		For >5,000, Deduct	-10.50	
33 01 30 71-0041	LF	42" Diameter Pipe Lining, Spray Applied With 200 mil Structural Polyurethane .....	110.68	
		For Up To 75, Add	23.32	
		For >75 To 150, Add	11.07	
		For >500 To 1,000, Deduct	-2.69	
		For >1,000 To 2,000, Deduct	-5.25	
		For >2,000 To 5,000, Deduct	-8.06	
		For >5,000, Deduct	-12.25	
33 01 30 71-0042	LF	48" Diameter Pipe Lining, Spray Applied With 200 mil Structural Polyurethane .....	126.49	
		For Up To 75, Add	26.65	
		For >75 To 150, Add	12.65	
		For >500 To 1,000, Deduct	-3.07	
		For >1,000 To 2,000, Deduct	-6.01	
		For >2,000 To 5,000, Deduct	-9.21	
		For >5,000, Deduct	-14.00	
33 01 30 71-0043	LF	54" Diameter Pipe Lining, Spray Applied With 200 mil Structural Polyurethane .....	142.30	
		For Up To 75, Add	29.98	
		For >75 To 150, Add	14.23	
		For >500 To 1,000, Deduct	-3.45	
		For >1,000 To 2,000, Deduct	-6.76	
		For >2,000 To 5,000, Deduct	-10.36	
		For >5,000, Deduct	-15.75	
33 01 30 71-0044	LF	60" Diameter Pipe Lining, Spray Applied With 200 mil Structural Polyurethane .....	158.11	
		For Up To 75, Add	33.31	
		For >75 To 150, Add	15.81	
		For >500 To 1,000, Deduct	-3.84	
		For >1,000 To 2,000, Deduct	-7.51	
		For >2,000 To 5,000, Deduct	-11.51	
		For >5,000, Deduct	-17.50	
33 01 30 71-0045	LF	66" Diameter Pipe Lining, Spray Applied With 200 mil Structural Polyurethane .....	173.92	
		For Up To 75, Add	36.64	
		For >75 To 150, Add	17.39	
		For >500 To 1,000, Deduct	-4.22	
		For >1,000 To 2,000, Deduct	-8.26	
		For >2,000 To 5,000, Deduct	-12.66	
		For >5,000, Deduct	-19.25	
33 01 30 71-0046	LF	72" Diameter Pipe Lining, Spray Applied With 200 mil Structural Polyurethane .....	189.73	
		For Up To 75, Add	39.97	
		For >75 To 150, Add	18.97	
		For >500 To 1,000, Deduct	-4.61	
		For >1,000 To 2,000, Deduct	-9.01	
		For >2,000 To 5,000, Deduct	-13.82	
		For >5,000, Deduct	-21.00	
33 01 30 71-0047	LF	78" Diameter Pipe Lining, Spray Applied With 200 mil Structural Polyurethane .....	205.54	
		For Up To 75, Add	43.30	
		For >75 To 150, Add	20.55	
		For >500 To 1,000, Deduct	-4.99	
		For >1,000 To 2,000, Deduct	-9.76	
		For >2,000 To 5,000, Deduct	-14.97	
		For >5,000, Deduct	-22.75	

**33 Utilities****33 01 Operation and Maintenance of Utilities****33 01 30 Operation and Maintenance of Sewer Utilities**

MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
33 01 30 71-0048 LF 84" Diameter Pipe Lining, Spray Applied With 200 mil Structural Polyurethane .....	221.36	
For Up To 75, Add	46.64	
For >75 To 150, Add	22.14	
For >500 To 1,000, Deduct	-5.37	
For >1,000 To 2,000, Deduct	-10.51	
For >2,000 To 5,000, Deduct	-16.12	
For >5,000, Deduct	-24.50	
33 01 30 71-0049 LF 90" Diameter Pipe Lining, Spray Applied With 200 mil Structural Polyurethane .....	237.16	
For Up To 75, Add	49.97	
For >75 To 150, Add	23.72	
For >500 To 1,000, Deduct	-5.76	
For >1,000 To 2,000, Deduct	-11.26	
For >2,000 To 5,000, Deduct	-17.27	
For >5,000, Deduct	-26.25	
33 01 30 71-0050 LF 96" Diameter Pipe Lining, Spray Applied With 200 mil Structural Polyurethane .....	252.98	
For Up To 75, Add	53.30	
For >75 To 150, Add	25.30	
For >500 To 1,000, Deduct	-6.14	
For >1,000 To 2,000, Deduct	-12.01	
For >2,000 To 5,000, Deduct	-18.42	
For >5,000, Deduct	-28.00	
33 01 30 71-0051 LF 102" Diameter Pipe Lining, Spray Applied With 200 mil Structural Polyurethane .....	268.79	
For Up To 75, Add	56.63	
For >75 To 150, Add	26.88	
For >500 To 1,000, Deduct	-6.52	
For >1,000 To 2,000, Deduct	-12.76	
For >2,000 To 5,000, Deduct	-19.57	
For >5,000, Deduct	-29.75	
33 01 30 71-0052 LF 108" Diameter Pipe Lining, Spray Applied With 200 mil Structural Polyurethane .....	284.59	
For Up To 75, Add	59.96	
For >75 To 150, Add	28.46	
For >500 To 1,000, Deduct	-6.91	
For >1,000 To 2,000, Deduct	-13.51	
For >2,000 To 5,000, Deduct	-20.72	
For >5,000, Deduct	-31.50	
33 01 30 71-0053 LF 114" Diameter Pipe Lining, Spray Applied With 200 mil Structural Polyurethane .....	300.41	
For Up To 75, Add	63.29	
For >75 To 150, Add	30.04	
For >500 To 1,000, Deduct	-7.29	
For >1,000 To 2,000, Deduct	-14.26	
For >2,000 To 5,000, Deduct	-21.87	
For >5,000, Deduct	-33.25	
33 01 30 71-0054 LF 120" Diameter Pipe Lining, Spray Applied With 200 mil Structural Polyurethane .....	316.22	
For Up To 75, Add	66.62	
For >75 To 150, Add	31.62	
For >500 To 1,000, Deduct	-7.68	
For >1,000 To 2,000, Deduct	-15.01	
For >2,000 To 5,000, Deduct	-23.03	
For >5,000, Deduct	-35.00	
33 01 30 71-0055 SF Structure Lining, Spray Applied With 200 mil Structural Polyurethane.....	10.07	
<b>33 01 30 71-0056 Lining Pipe, Spray Applied With 250 mil Structural Polyurethane</b> (33 01 30 71-0002)		
Note: Two part structural polyurethane.		
33 01 30 71-0057 LF 36" Diameter Pipe Lining, Spray Applied With 250 mil Structural Polyurethane .....	114.57	
For Up To 75, Add	23.98	
For >75 To 150, Add	11.46	
For >500 To 1,000, Deduct	-2.72	
For >1,000 To 2,000, Deduct	-5.33	
For >2,000 To 5,000, Deduct	-8.15	
For >5,000, Deduct	-12.52	
33 01 30 71-0058 LF 42" Diameter Pipe Lining, Spray Applied With 250 mil Structural Polyurethane .....	133.68	
For Up To 75, Add	27.98	
For >75 To 150, Add	13.37	
For >500 To 1,000, Deduct	-3.17	
For >1,000 To 2,000, Deduct	-6.22	
For >2,000 To 5,000, Deduct	-9.51	
For >5,000, Deduct	-14.61	
33 01 30 71-0059 LF 48" Diameter Pipe Lining, Spray Applied With 250 mil Structural Polyurethane .....	152.78	
For Up To 75, Add	31.98	
For >75 To 150, Add	15.28	
For >500 To 1,000, Deduct	-3.62	
For >1,000 To 2,000, Deduct	-7.11	
For >2,000 To 5,000, Deduct	-10.87	
For >5,000, Deduct	-16.70	
33 01 30 71-0060 LF 54" Diameter Pipe Lining, Spray Applied With 250 mil Structural Polyurethane .....	171.87	
For Up To 75, Add	35.97	
For >75 To 150, Add	17.19	
For >500 To 1,000, Deduct	-4.08	
For >1,000 To 2,000, Deduct	-7.99	
For >2,000 To 5,000, Deduct	-12.23	
For >5,000, Deduct	-18.79	



		<b>Utilities</b>	<b>33</b>	<b>CS</b>
		<b>Operation and Maintenance of Utilities</b>	<b>33 01</b>	
		<b>Operation and Maintenance of Sewer Utilities</b>	<b>33 01 30</b>	

MINOR CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
33 01 30 71-0061	LF	60" Diameter Pipe Lining, Spray Applied With 250 mil Structural Polyurethane .....	190.97	
		For Up To 75, Add	39.97	
		For >75 To 150, Add	19.10	
		For >500 To 1,000, Deduct	-4.53	
		For >1,000 To 2,000, Deduct	-8.88	
		For >2,000 To 5,000, Deduct	-13.59	
		For >5,000, Deduct	-20.87	
33 01 30 71-0062	LF	66" Diameter Pipe Lining, Spray Applied With 250 mil Structural Polyurethane .....	210.07	
		For Up To 75, Add	43.97	
		For >75 To 150, Add	21.01	
		For >500 To 1,000, Deduct	-4.98	
		For >1,000 To 2,000, Deduct	-9.77	
		For >2,000 To 5,000, Deduct	-14.95	
		For >5,000, Deduct	-22.96	
33 01 30 71-0063	LF	72" Diameter Pipe Lining, Spray Applied With 250 mil Structural Polyurethane .....	229.16	
		For Up To 75, Add	47.97	
		For >75 To 150, Add	22.92	
		For >500 To 1,000, Deduct	-5.44	
		For >1,000 To 2,000, Deduct	-10.66	
		For >2,000 To 5,000, Deduct	-16.31	
		For >5,000, Deduct	-25.05	
33 01 30 71-0064	LF	78" Diameter Pipe Lining, Spray Applied With 250 mil Structural Polyurethane .....	248.26	
		For Up To 75, Add	51.96	
		For >75 To 150, Add	24.83	
		For >500 To 1,000, Deduct	-5.89	
		For >1,000 To 2,000, Deduct	-11.55	
		For >2,000 To 5,000, Deduct	-17.67	
		For >5,000, Deduct	-27.14	
33 01 30 71-0065	LF	84" Diameter Pipe Lining, Spray Applied With 250 mil Structural Polyurethane .....	267.35	
		For Up To 75, Add	55.96	
		For >75 To 150, Add	26.74	
		For >500 To 1,000, Deduct	-6.34	
		For >1,000 To 2,000, Deduct	-12.44	
		For >2,000 To 5,000, Deduct	-19.03	
		For >5,000, Deduct	-29.22	
33 01 30 71-0066	LF	90" Diameter Pipe Lining, Spray Applied With 250 mil Structural Polyurethane .....	286.46	
		For Up To 75, Add	59.96	
		For >75 To 150, Add	28.65	
		For >500 To 1,000, Deduct	-6.80	
		For >1,000 To 2,000, Deduct	-13.32	
		For >2,000 To 5,000, Deduct	-20.39	
		For >5,000, Deduct	-31.31	
33 01 30 71-0067	LF	96" Diameter Pipe Lining, Spray Applied With 250 mil Structural Polyurethane .....	305.55	
		For Up To 75, Add	63.95	
		For >75 To 150, Add	30.56	
		For >500 To 1,000, Deduct	-7.25	
		For >1,000 To 2,000, Deduct	-14.21	
		For >2,000 To 5,000, Deduct	-21.75	
		For >5,000, Deduct	-33.40	
33 01 30 71-0068	LF	102" Diameter Pipe Lining, Spray Applied With 250 mil Structural Polyurethane .....	324.64	
		For Up To 75, Add	67.95	
		For >75 To 150, Add	32.46	
		For >500 To 1,000, Deduct	-7.70	
		For >1,000 To 2,000, Deduct	-15.10	
		For >2,000 To 5,000, Deduct	-23.10	
		For >5,000, Deduct	-35.49	
33 01 30 71-0069	LF	108" Diameter Pipe Lining, Spray Applied With 250 mil Structural Polyurethane .....	343.75	
		For Up To 75, Add	71.95	
		For >75 To 150, Add	34.38	
		For >500 To 1,000, Deduct	-8.15	
		For >1,000 To 2,000, Deduct	-15.99	
		For >2,000 To 5,000, Deduct	-24.46	
		For >5,000, Deduct	-37.57	
33 01 30 71-0070	LF	114" Diameter Pipe Lining, Spray Applied With 250 mil Structural Polyurethane .....	362.85	
		For Up To 75, Add	75.95	
		For >75 To 150, Add	36.29	
		For >500 To 1,000, Deduct	-8.61	
		For >1,000 To 2,000, Deduct	-16.88	
		For >2,000 To 5,000, Deduct	-25.82	
		For >5,000, Deduct	-39.66	
33 01 30 71-0071	LF	120" Diameter Pipe Lining, Spray Applied With 250 mil Structural Polyurethane .....	381.94	
		For Up To 75, Add	79.94	
		For >75 To 150, Add	38.19	
		For >500 To 1,000, Deduct	-9.06	
		For >1,000 To 2,000, Deduct	-17.77	
		For >2,000 To 5,000, Deduct	-27.18	
		For >5,000, Deduct	-41.75	
33 01 30 71-0072	SF	Structure Lining, Spray Applied With 250 mil Structural Polyurethane .....	12.16	
33 01 30 71-0073		Lining Pipe, Spray Applied With 300 mil Structural Polyurethane (33 01 30 71-0002) Note: Two part structural polyurethane.		

**33 Utilities****33 01 Operation and Maintenance of Utilities****33 01 30 Operation and Maintenance of Sewer Utilities**

MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
33 01 30 71-0074 LF 36" Diameter Pipe Lining, Spray Applied With 300 mil Structural Polyurethane .....	134.42	
For Up To 75, Add	28.01	
For >75 To 150, Add	13.44	
For >500 To 1,000, Deduct	-3.14	
For >1,000 To 2,000, Deduct	-6.16	
For >2,000 To 5,000, Deduct	-9.41	
For >5,000, Deduct	-14.56	
33 01 30 71-0075 LF 42" Diameter Pipe Lining, Spray Applied With 300 mil Structural Polyurethane .....	156.82	
For Up To 75, Add	32.67	
For >75 To 150, Add	15.68	
For >500 To 1,000, Deduct	-3.66	
For >1,000 To 2,000, Deduct	-7.19	
For >2,000 To 5,000, Deduct	-10.98	
For >5,000, Deduct	-16.99	
33 01 30 71-0076 LF 48" Diameter Pipe Lining, Spray Applied With 300 mil Structural Polyurethane .....	179.24	
For Up To 75, Add	37.35	
For >75 To 150, Add	17.92	
For >500 To 1,000, Deduct	-4.18	
For >1,000 To 2,000, Deduct	-8.22	
For >2,000 To 5,000, Deduct	-12.55	
For >5,000, Deduct	-19.42	
33 01 30 71-0077 LF 54" Diameter Pipe Lining, Spray Applied With 300 mil Structural Polyurethane .....	201.64	
For Up To 75, Add	42.01	
For >75 To 150, Add	20.16	
For >500 To 1,000, Deduct	-4.71	
For >1,000 To 2,000, Deduct	-9.24	
For >2,000 To 5,000, Deduct	-14.12	
For >5,000, Deduct	-21.85	
33 01 30 71-0078 LF 60" Diameter Pipe Lining, Spray Applied With 300 mil Structural Polyurethane .....	224.04	
For Up To 75, Add	46.68	
For >75 To 150, Add	22.40	
For >500 To 1,000, Deduct	-5.23	
For >1,000 To 2,000, Deduct	-10.27	
For >2,000 To 5,000, Deduct	-15.69	
For >5,000, Deduct	-24.28	
33 01 30 71-0079 LF 66" Diameter Pipe Lining, Spray Applied With 300 mil Structural Polyurethane .....	246.44	
For Up To 75, Add	51.35	
For >75 To 150, Add	24.64	
For >500 To 1,000, Deduct	-5.75	
For >1,000 To 2,000, Deduct	-11.30	
For >2,000 To 5,000, Deduct	-17.26	
For >5,000, Deduct	-26.70	
33 01 30 71-0080 LF 72" Diameter Pipe Lining, Spray Applied With 300 mil Structural Polyurethane .....	268.84	
For Up To 75, Add	56.01	
For >75 To 150, Add	26.88	
For >500 To 1,000, Deduct	-6.27	
For >1,000 To 2,000, Deduct	-12.33	
For >2,000 To 5,000, Deduct	-18.82	
For >5,000, Deduct	-29.13	
33 01 30 71-0081 LF 78" Diameter Pipe Lining, Spray Applied With 300 mil Structural Polyurethane .....	291.26	
For Up To 75, Add	60.68	
For >75 To 150, Add	29.13	
For >500 To 1,000, Deduct	-6.80	
For >1,000 To 2,000, Deduct	-13.35	
For >2,000 To 5,000, Deduct	-20.39	
For >5,000, Deduct	-31.56	
33 01 30 71-0082 LF 84" Diameter Pipe Lining, Spray Applied With 300 mil Structural Polyurethane .....	313.66	
For Up To 75, Add	65.35	
For >75 To 150, Add	31.37	
For >500 To 1,000, Deduct	-7.32	
For >1,000 To 2,000, Deduct	-14.38	
For >2,000 To 5,000, Deduct	-21.96	
For >5,000, Deduct	-33.99	
33 01 30 71-0083 LF 90" Diameter Pipe Lining, Spray Applied With 300 mil Structural Polyurethane .....	336.06	
For Up To 75, Add	70.02	
For >75 To 150, Add	33.61	
For >500 To 1,000, Deduct	-7.84	
For >1,000 To 2,000, Deduct	-15.41	
For >2,000 To 5,000, Deduct	-23.53	
For >5,000, Deduct	-36.41	
33 01 30 71-0084 LF 96" Diameter Pipe Lining, Spray Applied With 300 mil Structural Polyurethane .....	358.46	
For Up To 75, Add	74.69	
For >75 To 150, Add	35.85	
For >500 To 1,000, Deduct	-8.37	
For >1,000 To 2,000, Deduct	-16.43	
For >2,000 To 5,000, Deduct	-25.10	
For >5,000, Deduct	-38.84	
33 01 30 71-0085 LF 102" Diameter Pipe Lining, Spray Applied With 300 mil Structural Polyurethane .....	380.86	
For Up To 75, Add	79.35	
For >75 To 150, Add	38.09	
For >500 To 1,000, Deduct	-8.89	
For >1,000 To 2,000, Deduct	-17.46	
For >2,000 To 5,000, Deduct	-26.67	
For >5,000, Deduct	-41.27	



		<b>Utilities</b>	<b>33</b>	<b>CS</b>
		<b>Operation and Maintenance of Utilities</b>	<b>33 01</b>	
		<b>Operation and Maintenance of Sewer Utilities</b>	<b>33 01 30</b>	

MINOR CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
33 01 30 71-0086	LF	108" Diameter Pipe Lining, Spray Applied With 300 mil Structural Polyurethane .....	403.28	
		For Up To 75, Add	84.02	
		For >75 To 150, Add	40.33	
		For >500 To 1,000, Deduct	-9.41	
		For >1,000 To 2,000, Deduct	-18.49	
		For >2,000 To 5,000, Deduct	-28.24	
		For >5,000, Deduct	-43.70	
33 01 30 71-0087	LF	114" Diameter Pipe Lining, Spray Applied With 300 mil Structural Polyurethane .....	425.68	
		For Up To 75, Add	88.69	
		For >75 To 150, Add	42.57	
		For >500 To 1,000, Deduct	-9.94	
		For >1,000 To 2,000, Deduct	-19.52	
		For >2,000 To 5,000, Deduct	-29.81	
		For >5,000, Deduct	-46.12	
33 01 30 71-0088	LF	120" Diameter Pipe Lining, Spray Applied With 300 mil Structural Polyurethane .....	448.08	
		For Up To 75, Add	93.36	
		For >75 To 150, Add	44.81	
		For >500 To 1,000, Deduct	-10.46	
		For >1,000 To 2,000, Deduct	-20.54	
		For >2,000 To 5,000, Deduct	-31.38	
		For >5,000, Deduct	-48.55	
33 01 30 71-0089	SF	Structure Lining, Spray Applied With 300 mil Structural Polyurethane .....	14.26	
<b>33 01 30 71-0090 Lining Pipe, Spray Applied With 400 mil Structural Polyurethane (33 01 30 71-0002)</b>				
Note: Two part structural polyurethane.				
33 01 30 71-0091	LF	36" Diameter Pipe Lining, Spray Applied With 400 mil Structural Polyurethane .....	174.15	
		For Up To 75, Add	36.08	
		For >75 To 150, Add	17.42	
		For >500 To 1,000, Deduct	-3.98	
		For >1,000 To 2,000, Deduct	-7.64	
		For >2,000 To 5,000, Deduct	-11.95	
		For >5,000, Deduct	-18.66	
33 01 30 71-0092	LF	42" Diameter Pipe Lining, Spray Applied With 400 mil Structural Polyurethane .....	203.18	
		For Up To 75, Add	42.09	
		For >75 To 150, Add	20.32	
		For >500 To 1,000, Deduct	-4.65	
		For >1,000 To 2,000, Deduct	-9.15	
		For >2,000 To 5,000, Deduct	-13.94	
		For >5,000, Deduct	-21.77	
33 01 30 71-0093	LF	48" Diameter Pipe Lining, Spray Applied With 400 mil Structural Polyurethane .....	232.21	
		For Up To 75, Add	48.11	
		For >75 To 150, Add	23.22	
		For >500 To 1,000, Deduct	-5.31	
		For >1,000 To 2,000, Deduct	-10.45	
		For >2,000 To 5,000, Deduct	-15.93	
		For >5,000, Deduct	-24.88	
33 01 30 71-0094	LF	54" Diameter Pipe Lining, Spray Applied With 400 mil Structural Polyurethane .....	261.22	
		For Up To 75, Add	54.12	
		For >75 To 150, Add	26.12	
		For >500 To 1,000, Deduct	-5.97	
		For >1,000 To 2,000, Deduct	-11.76	
		For >2,000 To 5,000, Deduct	-17.92	
		For >5,000, Deduct	-27.99	
33 01 30 71-0095	LF	60" Diameter Pipe Lining, Spray Applied With 400 mil Structural Polyurethane .....	290.24	
		For Up To 75, Add	60.13	
		For >75 To 150, Add	29.02	
		For >500 To 1,000, Deduct	-6.64	
		For >1,000 To 2,000, Deduct	-13.06	
		For >2,000 To 5,000, Deduct	-19.91	
		For >5,000, Deduct	-31.10	
33 01 30 71-0096	LF	66" Diameter Pipe Lining, Spray Applied With 400 mil Structural Polyurethane .....	319.28	
		For Up To 75, Add	66.14	
		For >75 To 150, Add	31.93	
		For >500 To 1,000, Deduct	-7.30	
		For >1,000 To 2,000, Deduct	-14.37	
		For >2,000 To 5,000, Deduct	-21.90	
		For >5,000, Deduct	-34.22	
33 01 30 71-0097	LF	72" Diameter Pipe Lining, Spray Applied With 400 mil Structural Polyurethane .....	348.30	
		For Up To 75, Add	72.15	
		For >75 To 150, Add	34.83	
		For >500 To 1,000, Deduct	-7.96	
		For >1,000 To 2,000, Deduct	-15.68	
		For >2,000 To 5,000, Deduct	-23.89	
		For >5,000, Deduct	-37.32	
33 01 30 71-0098	LF	78" Diameter Pipe Lining, Spray Applied With 400 mil Structural Polyurethane .....	377.32	
		For Up To 75, Add	78.17	
		For >75 To 150, Add	37.73	
		For >500 To 1,000, Deduct	-8.63	
		For >1,000 To 2,000, Deduct	-16.98	
		For >2,000 To 5,000, Deduct	-25.88	
		For >5,000, Deduct	-40.43	

**33 Utilities****33 01 Operation and Maintenance of Utilities****33 01 30 Operation and Maintenance of Sewer Utilities**

MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
33 01 30 71-0099 LF 84" Diameter Pipe Lining, Spray Applied With 400 mil Structural Polyurethane .....	406.35	
For Up To 75, Add	84.18	
For >75 To 150, Add	40.64	
For >500 To 1,000, Deduct	-9.29	
For >1,000 To 2,000, Deduct	-18.29	
For >2,000 To 5,000, Deduct	-27.87	
For >5,000, Deduct	-43.55	
33 01 30 71-0100 LF 90" Diameter Pipe Lining, Spray Applied With 400 mil Structural Polyurethane .....	435.38	
For Up To 75, Add	90.19	
For >75 To 150, Add	43.54	
For >500 To 1,000, Deduct	-9.96	
For >1,000 To 2,000, Deduct	-19.60	
For >2,000 To 5,000, Deduct	-29.87	
For >5,000, Deduct	-46.66	
33 01 30 71-0101 LF 96" Diameter Pipe Lining, Spray Applied With 400 mil Structural Polyurethane .....	464.39	
For Up To 75, Add	96.20	
For >75 To 150, Add	46.44	
For >500 To 1,000, Deduct	-10.62	
For >1,000 To 2,000, Deduct	-20.90	
For >2,000 To 5,000, Deduct	-31.85	
For >5,000, Deduct	-49.77	
33 01 30 71-0102 LF 102" Diameter Pipe Lining, Spray Applied With 400 mil Structural Polyurethane .....	493.43	
For Up To 75, Add	102.22	
For >75 To 150, Add	49.34	
For >500 To 1,000, Deduct	-11.28	
For >1,000 To 2,000, Deduct	-22.21	
For >2,000 To 5,000, Deduct	-33.85	
For >5,000, Deduct	-52.88	
33 01 30 71-0103 LF 108" Diameter Pipe Lining, Spray Applied With 400 mil Structural Polyurethane .....	522.45	
For Up To 75, Add	108.23	
For >75 To 150, Add	52.25	
For >500 To 1,000, Deduct	-11.95	
For >1,000 To 2,000, Deduct	-23.52	
For >2,000 To 5,000, Deduct	-35.84	
For >5,000, Deduct	-55.99	
33 01 30 71-0104 LF 114" Diameter Pipe Lining, Spray Applied With 400 mil Structural Polyurethane .....	551.48	
For Up To 75, Add	114.25	
For >75 To 150, Add	55.15	
For >500 To 1,000, Deduct	-12.61	
For >1,000 To 2,000, Deduct	-24.82	
For >2,000 To 5,000, Deduct	-37.83	
For >5,000, Deduct	-59.10	
33 01 30 71-0105 LF 120" Diameter Pipe Lining, Spray Applied With 400 mil Structural Polyurethane .....	580.50	
For Up To 75, Add	120.26	
For >75 To 150, Add	58.05	
For >500 To 1,000, Deduct	-13.27	
For >1,000 To 2,000, Deduct	-26.13	
For >2,000 To 5,000, Deduct	-39.82	
For >5,000, Deduct	-62.21	
33 01 30 71-0106 SF Structure Lining, Spray Applied With 400 mil Structural Polyurethane.....	18.48	
<b>33 01 30 71-0107 Lining Pipe, Spray Applied With 500 mil Structural Polyurethane (33 01 30 71-0002)</b>		
Note: Two part structural polyurethane.		
33 01 30 71-0108 LF 36" Diameter Pipe Lining, Spray Applied With 500 mil Structural Polyurethane .....	214.22	
For Up To 75, Add	44.23	
For >75 To 150, Add	21.42	
For >500 To 1,000, Deduct	-4.84	
For >1,000 To 2,000, Deduct	-9.54	
For >2,000 To 5,000, Deduct	-14.52	
For >5,000, Deduct	-22.81	
33 01 30 71-0109 LF 42" Diameter Pipe Lining, Spray Applied With 500 mil Structural Polyurethane .....	249.93	
For Up To 75, Add	51.60	
For >75 To 150, Add	24.99	
For >500 To 1,000, Deduct	-5.65	
For >1,000 To 2,000, Deduct	-11.13	
For >2,000 To 5,000, Deduct	-16.94	
For >5,000, Deduct	-26.61	
33 01 30 71-0110 LF 48" Diameter Pipe Lining, Spray Applied With 500 mil Structural Polyurethane .....	285.63	
For Up To 75, Add	58.97	
For >75 To 150, Add	28.56	
For >500 To 1,000, Deduct	-6.45	
For >1,000 To 2,000, Deduct	-12.72	
For >2,000 To 5,000, Deduct	-19.36	
For >5,000, Deduct	-30.41	
33 01 30 71-0111 LF 54" Diameter Pipe Lining, Spray Applied With 500 mil Structural Polyurethane .....	321.33	
For Up To 75, Add	66.34	
For >75 To 150, Add	32.13	
For >500 To 1,000, Deduct	-7.26	
For >1,000 To 2,000, Deduct	-14.31	
For >2,000 To 5,000, Deduct	-21.77	
For >5,000, Deduct	-34.21	



		<b>Utilities</b>	<b>33</b>	<b>CS</b>
		<b>Operation and Maintenance of Utilities</b>	<b>33 01</b>	
		<b>Operation and Maintenance of Sewer Utilities</b>	<b>33 01 30</b>	

MINOR CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
33 01 30 71-0112	LF	60" Diameter Pipe Lining, Spray Applied With 500 mil Structural Polyurethane .....	357.04	
		For Up To 75, Add	73.72	
		For >75 To 150, Add	35.70	
		For >500 To 1,000, Deduct	-8.06	
		For >1,000 To 2,000, Deduct	-15.90	
		For >2,000 To 5,000, Deduct	-24.19	
		For >5,000, Deduct	-38.01	
33 01 30 71-0113	LF	66" Diameter Pipe Lining, Spray Applied With 500 mil Structural Polyurethane .....	392.74	
		For Up To 75, Add	81.09	
		For >75 To 150, Add	39.27	
		For >500 To 1,000, Deduct	-8.87	
		For >1,000 To 2,000, Deduct	-17.49	
		For >2,000 To 5,000, Deduct	-26.61	
		For >5,000, Deduct	-41.82	
33 01 30 71-0114	LF	72" Diameter Pipe Lining, Spray Applied With 500 mil Structural Polyurethane .....	428.44	
		For Up To 75, Add	88.46	
		For >75 To 150, Add	42.84	
		For >500 To 1,000, Deduct	-9.68	
		For >1,000 To 2,000, Deduct	-19.08	
		For >2,000 To 5,000, Deduct	-29.03	
		For >5,000, Deduct	-45.62	
33 01 30 71-0115	LF	78" Diameter Pipe Lining, Spray Applied With 500 mil Structural Polyurethane .....	464.15	
		For Up To 75, Add	95.83	
		For >75 To 150, Add	46.42	
		For >500 To 1,000, Deduct	-10.48	
		For >1,000 To 2,000, Deduct	-20.67	
		For >2,000 To 5,000, Deduct	-31.45	
		For >5,000, Deduct	-49.42	
33 01 30 71-0116	LF	84" Diameter Pipe Lining, Spray Applied With 500 mil Structural Polyurethane .....	499.85	
		For Up To 75, Add	103.20	
		For >75 To 150, Add	49.99	
		For >500 To 1,000, Deduct	-11.29	
		For >1,000 To 2,000, Deduct	-22.26	
		For >2,000 To 5,000, Deduct	-33.87	
		For >5,000, Deduct	-53.22	
33 01 30 71-0117	LF	90" Diameter Pipe Lining, Spray Applied With 500 mil Structural Polyurethane .....	535.56	
		For Up To 75, Add	110.58	
		For >75 To 150, Add	53.56	
		For >500 To 1,000, Deduct	-12.10	
		For >1,000 To 2,000, Deduct	-23.85	
		For >2,000 To 5,000, Deduct	-36.29	
		For >5,000, Deduct	-57.02	
33 01 30 71-0118	LF	96" Diameter Pipe Lining, Spray Applied With 500 mil Structural Polyurethane .....	571.25	
		For Up To 75, Add	117.95	
		For >75 To 150, Add	57.13	
		For >500 To 1,000, Deduct	-12.90	
		For >1,000 To 2,000, Deduct	-25.44	
		For >2,000 To 5,000, Deduct	-38.71	
		For >5,000, Deduct	-60.82	
33 01 30 71-0119	LF	102" Diameter Pipe Lining, Spray Applied With 500 mil Structural Polyurethane .....	606.97	
		For Up To 75, Add	125.32	
		For >75 To 150, Add	60.70	
		For >500 To 1,000, Deduct	-13.71	
		For >1,000 To 2,000, Deduct	-27.03	
		For >2,000 To 5,000, Deduct	-41.13	
		For >5,000, Deduct	-64.62	
33 01 30 71-0120	LF	108" Diameter Pipe Lining, Spray Applied With 500 mil Structural Polyurethane .....	642.67	
		For Up To 75, Add	132.69	
		For >75 To 150, Add	64.27	
		For >500 To 1,000, Deduct	-14.52	
		For >1,000 To 2,000, Deduct	-28.62	
		For >2,000 To 5,000, Deduct	-43.55	
		For >5,000, Deduct	-68.43	
33 01 30 71-0121	LF	114" Diameter Pipe Lining, Spray Applied With 500 mil Structural Polyurethane .....	678.36	
		For Up To 75, Add	140.06	
		For >75 To 150, Add	67.84	
		For >500 To 1,000, Deduct	-15.32	
		For >1,000 To 2,000, Deduct	-30.21	
		For >2,000 To 5,000, Deduct	-45.97	
		For >5,000, Deduct	-72.22	
33 01 30 71-0122	LF	120" Diameter Pipe Lining, Spray Applied With 500 mil Structural Polyurethane .....	714.08	
		For Up To 75, Add	147.44	
		For >75 To 150, Add	71.41	
		For >500 To 1,000, Deduct	-16.13	
		For >1,000 To 2,000, Deduct	-31.80	
		For >2,000 To 5,000, Deduct	-48.39	
		For >5,000, Deduct	-76.03	
33 01 30 71-0123	SF	Structure Lining, Spray Applied With 500 mil Structural Polyurethane .....	22.73	

### 33 01 30 72 Cured-in-Place Pipe Lining (33 01 30)

33 01 30 72-0001 Cured-In-Place Pipe (CIPP) Relining Underground Pipelines (33 01 30 72)  
Note: Excludes CCTV inspection and sewer cleaning. See CSI section 33 01 30 11-0000 for CCTV inspection, 33 01 30 41-0002 for sewer cleaning.

33 01 30 72-0002 Cured In-Place Pipe (CIPP) Lining Set-Up And Reinsertion (33 01 30 72-0001)

**33 Utilities****33 01 Operation and Maintenance of Utilities****33 01 30 Operation and Maintenance of Sewer Utilities**

MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
33 01 30 72-0003 EA Initial Set Up And Final Equipment Removal For Relining Up To 12" Underground Pipelines Cured In-Place Pipe (CIPP).....	1,644.27	
33 01 30 72-0004 EA Initial Set Up And Final Equipment Removal For Relining >12" To 24" Underground Pipelines Cured In-Place Pipe (CIPP).....	2,740.45	
33 01 30 72-0005 EA Initial Set Up And Final Equipment Removal For Relining >24" To 48" Underground Pipelines Cured In-Place Pipe (CIPP).....	4,110.68	
33 01 30 72-0006 EA Initial Set Up And Final Equipment Removal For Relining > 48" Underground Pipelines Cured In-Place Pipe (CIPP).....	5,480.90	
33 01 30 72-0007 EA Move And Reset Up At Different Access/Location For Relining Up To 12" Underground Pipelines Cured In-Place Pipe (CIPP).....	822.14	
33 01 30 72-0008 EA Move And Reset Up At Different Access/Location For Relining >12" To 24" Underground Pipelines Cured In-Place Pipe (CIPP).....	1,370.22	
33 01 30 72-0009 EA Move And Reset Up At Different Access/Location For Relining >24" To 48" Underground Pipelines Cured In-Place Pipe (CIPP).....	1,712.78	
33 01 30 72-0010 EA Move And Reset Up At Different Access/Location For Relining > 48" Underground Pipelines Cured In-Place Pipe (CIPP).....	2,192.36	
33 01 30 72-0011 EA Mixing Truck And Refrigeration For Relining Up To 12" Underground Pipelines Cured In-Place Pipe (CIPP) .....	1,370.22	
Note: Need to mix wet material in bag prior to installation.		
33 01 30 72-0012 EA Mixing Truck And Refrigeration For Relining >12" To 24" Underground Pipelines Cured In-Place Pipe (CIPP).....	3,288.54	
Note: Need to mix wet material in bag prior to installation.		
33 01 30 72-0013 EA Mixing Truck And Refrigeration For Relining >24" To 48" Underground Pipelines Cured In-Place Pipe (CIPP).....	5,480.90	
Note: Need to mix wet material in bag prior to installation.		
33 01 30 72-0014 EA Mixing Truck And Refrigeration For Relining >48" Underground Pipelines Cured In-Place Pipe (CIPP) .....	8,221.35	
Note: Need to mix wet material in bag prior to installation.		
<b>33 01 30 72-0015 Lining Pipe With Polyester Resin Impregnated Cured In-Place Pipe (CIPP)</b> (33 01 30 72-0001) Note: Cured in-place thermosetting resin pipe and resin impregnated tube. Excludes video camera inspection, culvert cleaning and grouting. Use round equivalent pipe sizes for elliptical, oval or arched pipe.		
<b>33 01 30 72-0016 4.5mm Thick Lining Cured In-Place Pipe</b> (33 01 30 72-0015)		
33 01 30 72-0017 LF 4.5mm Lining 2" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP) .....	23.33	
For Vinylster Resin, Add	6.27	
For Epoxy Resin, Add	0.74	
For Up To >10, Add	47.62	
For >10 To 25, Add	38.19	
For >25 To 50, Add	23.36	
For >50 To 100, Add	11.68	
For >500 To 1,000, Deduct	-1.53	
For >1,000 To 2,000, Deduct	-2.47	
For >2,000 To 5,000, Deduct	-4.67	
For >5,000, Deduct	-7.54	
33 01 30 72-0018 LF 4.5mm Lining 3" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP) .....	28.24	
For Vinylster Resin, Add	9.70	
For Epoxy Resin, Add	1.14	
For Up To >10, Add	50.07	
For >10 To 25, Add	39.42	
For >25 To 50, Add	24.34	
For >50 To 100, Add	12.17	
For >500 To 1,000, Deduct	-1.77	
For >1,000 To 2,000, Deduct	-2.84	
For >2,000 To 5,000, Deduct	-5.26	
For >5,000, Deduct	-8.52	
33 01 30 72-0019 LF 4.5mm Lining 4" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP) .....	33.15	
For Vinylster Resin, Add	13.14	
For Epoxy Resin, Add	1.55	
For Up To >10, Add	52.53	
For >10 To 25, Add	40.64	
For >25 To 50, Add	25.32	
For >50 To 100, Add	12.66	
For >500 To 1,000, Deduct	-2.02	
For >1,000 To 2,000, Deduct	-3.21	
For >2,000 To 5,000, Deduct	-5.85	
For >5,000, Deduct	-9.51	
33 01 30 72-0020 LF 4.5mm Lining 6" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP) .....	44.34	
For Vinylster Resin, Add	20.01	
For Epoxy Resin, Add	2.36	
For Up To >10, Add	61.57	
For >10 To 25, Add	46.55	
For >25 To 50, Add	29.36	
For >50 To 100, Add	14.68	
For >500 To 1,000, Deduct	-2.61	
For >1,000 To 2,000, Deduct	-4.11	
For >2,000 To 5,000, Deduct	-7.37	
For >5,000, Deduct	-12.02	
33 01 30 72-0021 LF 4.5mm Lining 8" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP) .....	55.53	
For Vinylster Resin, Add	26.88	
For Epoxy Resin, Add	3.17	
For Up To >10, Add	70.59	
For >10 To 25, Add	52.43	
For >25 To 50, Add	33.38	
For >50 To 100, Add	16.69	
For >500 To 1,000, Deduct	-3.20	
For >1,000 To 2,000, Deduct	-5.02	
For >2,000 To 5,000, Deduct	-8.89	
For >5,000, Deduct	-14.53	





		<b>Utilities</b>	<b>33</b>	<b>CS</b>
		<b>Operation and Maintenance of Utilities</b>	<b>33 01</b>	
		<b>Operation and Maintenance of Sewer Utilities</b>	<b>33 01 30</b>	

MINOR	CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
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**33 01 30 72-0022      6mm Thick Lining Cured In-Place Pipe** (33 01 30 72-0015)

33 01 30 72-0023	LF	6mm Lining 3" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP).....	32.47	
		For Vinylester Resin, Add	12.66	
		For Epoxy Resin, Add	1.49	
		For Up To >10, Add	52.19	
		For >10 To 25, Add	40.47	
		For >25 To 50, Add	25.19	
		For >50 To 100, Add	12.59	
		For >500 To 1,000, Deduct	-1.98	
		For >1,000 To 2,000, Deduct	-3.15	
		For >2,000 To 5,000, Deduct	-5.77	
		For >5,000, Deduct	-9.37	
33 01 30 72-0024	LF	6mm Lining 4" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP).....	39.01	
		For Vinylester Resin, Add	17.24	
		For Epoxy Resin, Add	2.03	
		For Up To >10, Add	55.46	
		For >10 To 25, Add	42.11	
		For >25 To 50, Add	26.50	
		For >50 To 100, Add	13.25	
		For >500 To 1,000, Deduct	-2.31	
		For >1,000 To 2,000, Deduct	-3.64	
		For >2,000 To 5,000, Deduct	-6.55	
		For >5,000, Deduct	-10.68	
33 01 30 72-0025	LF	6mm Lining 6" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP).....	53.49	
		For Vinylester Resin, Add	26.41	
		For Epoxy Resin, Add	3.11	
		For Up To >10, Add	66.15	
		For >10 To 25, Add	48.83	
		For >25 To 50, Add	31.19	
		For >50 To 100, Add	15.59	
		For >500 To 1,000, Deduct	-3.07	
		For >1,000 To 2,000, Deduct	-4.80	
		For >2,000 To 5,000, Deduct	-8.47	
		For >5,000, Deduct	-13.85	
33 01 30 72-0026	LF	6mm Lining 8" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP).....	67.95	
		For Vinylester Resin, Add	35.57	
		For Epoxy Resin, Add	4.19	
		For Up To >10, Add	76.80	
		For >10 To 25, Add	55.53	
		For >25 To 50, Add	35.86	
		For >50 To 100, Add	17.93	
		For >500 To 1,000, Deduct	-3.83	
		For >1,000 To 2,000, Deduct	-5.95	
		For >2,000 To 5,000, Deduct	-10.38	
		For >5,000, Deduct	-17.02	
33 01 30 72-0027	LF	6mm Lining 10" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP).....	82.54	
		For Vinylester Resin, Add	44.74	
		For Epoxy Resin, Add	5.27	
		For Up To >10, Add	87.85	
		For >10 To 25, Add	62.55	
		For >25 To 50, Add	40.73	
		For >50 To 100, Add	20.36	
		For >500 To 1,000, Deduct	-4.59	
		For >1,000 To 2,000, Deduct	-7.12	
		For >2,000 To 5,000, Deduct	-12.33	
		For >5,000, Deduct	-20.23	
33 01 30 72-0028	LF	6mm Lining 12" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP).....	97.56	
		For Vinylester Resin, Add	53.90	
		For Epoxy Resin, Add	6.35	
		For Up To >10, Add	100.18	
		For >10 To 25, Add	70.65	
		For >25 To 50, Add	46.24	
		For >50 To 100, Add	23.12	
		For >500 To 1,000, Deduct	-5.39	
		For >1,000 To 2,000, Deduct	-8.35	
		For >2,000 To 5,000, Deduct	-14.38	
		For >5,000, Deduct	-23.62	

**33 01 30 72-0029      7.5mm Thick Lining Cured In-Place Pipe** (33 01 30 72-0015)

33 01 30 72-0030	LF	7.5mm Lining 4" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP).....	44.69	
		For Vinylester Resin, Add	21.22	
		For Epoxy Resin, Add	2.50	
		For Up To >10, Add	58.30	
		For >10 To 25, Add	43.53	
		For >25 To 50, Add	27.63	
		For >50 To 100, Add	13.82	
		For >500 To 1,000, Deduct	-2.59	
		For >1,000 To 2,000, Deduct	-4.07	
		For >2,000 To 5,000, Deduct	-7.23	
		For >5,000, Deduct	-11.81	

**33 Utilities****33 01 Operation and Maintenance of Utilities****33 01 30 Operation and Maintenance of Sewer Utilities**

MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
33 01 30 72-0031 LF 7.5mm Lining 6" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP) .....	62.43	
For Vinylster Resin, Add	32.67	
For Epoxy Resin, Add	3.85	
For Up To >10, Add	70.62	
For >10 To 25, Add	51.07	
For >25 To 50, Add	32.97	
For >50 To 100, Add	16.49	
For >500 To 1,000, Deduct	-3.52	
For >1,000 To 2,000, Deduct	-5.47	
For >2,000 To 5,000, Deduct	-9.54	
For >5,000, Deduct	-15.64	
33 01 30 72-0032 LF 7.5mm Lining 8" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP) .....	80.17	
For Vinylster Resin, Add	44.13	
For Epoxy Resin, Add	5.20	
For Up To >10, Add	82.91	
For >10 To 25, Add	58.59	
For >25 To 50, Add	38.30	
For >50 To 100, Add	19.15	
For >500 To 1,000, Deduct	-4.44	
For >1,000 To 2,000, Deduct	-6.87	
For >2,000 To 5,000, Deduct	-11.85	
For >5,000, Deduct	-19.46	
33 01 30 72-0033 LF 7.5mm Lining 10" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP) .....	98.03	
For Vinylster Resin, Add	55.58	
For Epoxy Resin, Add	6.55	
For Up To >10, Add	95.59	
For >10 To 25, Add	66.43	
For >25 To 50, Add	43.83	
For >50 To 100, Add	21.91	
For >500 To 1,000, Deduct	-5.37	
For >1,000 To 2,000, Deduct	-8.28	
For >2,000 To 5,000, Deduct	-14.19	
For >5,000, Deduct	-23.33	
33 01 30 72-0034 LF 7.5mm Lining 12" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP) .....	116.32	
For Vinylster Resin, Add	67.03	
For Epoxy Resin, Add	7.90	
For Up To >10, Add	109.56	
For >10 To 25, Add	75.34	
For >25 To 50, Add	49.99	
For >50 To 100, Add	25.00	
For >500 To 1,000, Deduct	-6.33	
For >1,000 To 2,000, Deduct	-9.75	
For >2,000 To 5,000, Deduct	-16.63	
For >5,000, Deduct	-27.38	
33 01 30 72-0035 LF 7.5mm Lining 15" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP) .....	143.60	
For Vinylster Resin, Add	84.22	
For Epoxy Resin, Add	9.93	
For Up To >10, Add	130.03	
For >10 To 25, Add	88.30	
For >25 To 50, Add	59.00	
For >50 To 100, Add	29.50	
For >500 To 1,000, Deduct	-7.76	
For >1,000 To 2,000, Deduct	-11.93	
For >2,000 To 5,000, Deduct	-20.26	
For >5,000, Deduct	-33.38	
33 01 30 72-0036 LF 7.5mm Lining 18" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP) .....	171.16	
For Vinylster Resin, Add	101.40	
For Epoxy Resin, Add	11.95	
For Up To >10, Add	151.36	
For >10 To 25, Add	101.99	
For >25 To 50, Add	68.44	
For >50 To 100, Add	34.22	
For >500 To 1,000, Deduct	-9.22	
For >1,000 To 2,000, Deduct	-14.15	
For >2,000 To 5,000, Deduct	-23.96	
For >5,000, Deduct	-39.49	
33 01 30 72-0037 9mm Thick Lining Cured In-Place Pipe (33 01 30 72-0015) .....	71.18	
33 01 30 72-0038 LF 9mm Lining 6" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP) .....	71.18	
For Vinylster Resin, Add	38.79	
For Epoxy Resin, Add	4.57	
For Up To >10, Add	74.99	
For >10 To 25, Add	53.26	
For >25 To 50, Add	34.72	
For >50 To 100, Add	17.36	
For >500 To 1,000, Deduct	-3.95	
For >1,000 To 2,000, Deduct	-6.13	
For >2,000 To 5,000, Deduct	-10.59	
For >5,000, Deduct	-17.39	



		Utilities	33	CS
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		Operation and Maintenance of Sewer Utilities	33 01 30	

MINOR	CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
33 01 30 72-0039	LF		9mm Lining 8" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP).....	92.19	
			For Vinlyester Resin, Add	52.54	
			For Epoxy Resin, Add	6.19	
			For Up To >10, Add	88.92	
			For >10 To 25, Add	61.59	
			For >25 To 50, Add	40.71	
			For >50 To 100, Add	20.35	
			For >500 To 1,000, Deduct	-5.04	
			For >1,000 To 2,000, Deduct	-7.77	
			For >2,000 To 5,000, Deduct	-13.29	
			For >5,000, Deduct	-21.86	
33 01 30 72-0040	LF		9mm Lining 10" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP).....	113.33	
			For Vinlyester Resin, Add	66.29	
			For Epoxy Resin, Add	7.81	
			For Up To >10, Add	103.24	
			For >10 To 25, Add	70.25	
			For >25 To 50, Add	46.89	
			For >50 To 100, Add	23.44	
			For >500 To 1,000, Deduct	-6.13	
			For >1,000 To 2,000, Deduct	-9.43	
			For >2,000 To 5,000, Deduct	-16.02	
			For >5,000, Deduct	-26.39	
33 01 30 72-0041	LF		9mm Lining 12" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP).....	134.89	
			For Vinlyester Resin, Add	80.03	
			For Epoxy Resin, Add	9.43	
			For Up To >10, Add	118.85	
			For >10 To 25, Add	79.98	
			For >25 To 50, Add	53.71	
			For >50 To 100, Add	26.85	
			For >500 To 1,000, Deduct	-7.26	
			For >1,000 To 2,000, Deduct	-11.14	
			For >2,000 To 5,000, Deduct	-18.86	
			For >5,000, Deduct	-31.09	
33 01 30 72-0042	LF		9mm Lining 15" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP).....	167.08	
			For Vinlyester Resin, Add	100.65	
			For Epoxy Resin, Add	11.86	
			For Up To >10, Add	141.77	
			For >10 To 25, Add	94.17	
			For >25 To 50, Add	63.69	
			For >50 To 100, Add	31.85	
			For >500 To 1,000, Deduct	-8.94	
			For >1,000 To 2,000, Deduct	-13.70	
			For >2,000 To 5,000, Deduct	-23.08	
			For >5,000, Deduct	-38.07	
33 01 30 72-0043	LF		9mm Lining 18" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP).....	199.55	
			For Vinlyester Resin, Add	121.27	
			For Epoxy Resin, Add	14.29	
			For Up To >10, Add	165.55	
			For >10 To 25, Add	109.09	
			For >25 To 50, Add	74.11	
			For >50 To 100, Add	37.06	
			For >500 To 1,000, Deduct	-10.64	
			For >1,000 To 2,000, Deduct	-16.28	
			For >2,000 To 5,000, Deduct	-27.37	
			For >5,000, Deduct	-45.17	
33 01 30 72-0044	LF		9mm Lining 21" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP).....	231.19	
			For Vinlyester Resin, Add	141.88	
			For Epoxy Resin, Add	16.72	
			For Up To >10, Add	186.85	
			For >10 To 25, Add	121.92	
			For >25 To 50, Add	83.29	
			For >50 To 100, Add	41.64	
			For >500 To 1,000, Deduct	-12.27	
			For >1,000 To 2,000, Deduct	-18.76	
			For >2,000 To 5,000, Deduct	-31.45	
			For >5,000, Deduct	-51.94	
33 01 30 72-0045	LF		9mm Lining 24" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP).....	263.25	
			For Vinlyester Resin, Add	162.51	
			For Epoxy Resin, Add	19.15	
			For Up To >10, Add	209.38	
			For >10 To 25, Add	135.79	
			For >25 To 50, Add	93.08	
			For >50 To 100, Add	46.54	
			For >500 To 1,000, Deduct	-13.94	
			For >1,000 To 2,000, Deduct	-21.30	
			For >2,000 To 5,000, Deduct	-35.63	
			For >5,000, Deduct	-58.87	

33 01 30 72-0046 10.5mm Thick Lining Cured In-Place Pipe (33 01 30 72-0015)

**33 Utilities****33 01 Operation and Maintenance of Utilities****33 01 30 Operation and Maintenance of Sewer Utilities**

MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
33 01 30 72-0047 LF 10.5mm Lining 15" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP) .....	190.36	
For Vinylster Resin, Add	116.95	
For Epoxy Resin, Add	13.78	
For Up To >10, Add	153.41	
For >10 To 25, Add	99.99	
For >25 To 50, Add	68.35	
For >50 To 100, Add	34.17	
For >500 To 1,000, Deduct	-10.10	
For >1,000 To 2,000, Deduct	-15.44	
For >2,000 To 5,000, Deduct	-25.87	
For >5,000, Deduct	-42.73	
33 01 30 72-0048 LF 10.5mm Lining 18" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP) .....	227.74	
For Vinylster Resin, Add	141.00	
For Epoxy Resin, Add	16.62	
For Up To >10, Add	179.65	
For >10 To 25, Add	116.13	
For >25 To 50, Add	79.75	
For >50 To 100, Add	39.88	
For >500 To 1,000, Deduct	-12.04	
For >1,000 To 2,000, Deduct	-18.40	
For >2,000 To 5,000, Deduct	-30.75	
For >5,000, Deduct	-50.81	
33 01 30 72-0049 LF 10.5mm Lining 21" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP) .....	264.30	
For Vinylster Resin, Add	165.06	
For Epoxy Resin, Add	19.45	
For Up To >10, Add	203.40	
For >10 To 25, Add	130.20	
For >25 To 50, Add	89.91	
For >50 To 100, Add	44.96	
For >500 To 1,000, Deduct	-13.93	
For >1,000 To 2,000, Deduct	-21.25	
For >2,000 To 5,000, Deduct	-35.42	
For >5,000, Deduct	-58.56	
33 01 30 72-0050 LF 10.5mm Lining 24" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP) .....	301.26	
For Vinylster Resin, Add	189.11	
For Epoxy Resin, Add	22.29	
For Up To >10, Add	228.38	
For >10 To 25, Add	145.29	
For >25 To 50, Add	100.68	
For >50 To 100, Add	50.34	
For >500 To 1,000, Deduct	-15.84	
For >1,000 To 2,000, Deduct	-24.15	
For >2,000 To 5,000, Deduct	-40.19	
For >5,000, Deduct	-66.47	
33 01 30 72-0051 LF 10.5mm Lining 27" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP) .....	338.78	
For Vinylster Resin, Add	213.16	
For Epoxy Resin, Add	25.12	
For Up To >10, Add	255.04	
For >10 To 25, Add	161.78	
For >25 To 50, Add	112.29	
For >50 To 100, Add	56.15	
For >500 To 1,000, Deduct	-17.80	
For >1,000 To 2,000, Deduct	-27.12	
For >2,000 To 5,000, Deduct	-45.11	
For >5,000, Deduct	-74.61	
33 01 30 72-0052 LF 10.5mm Lining 30" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP) .....	376.98	
For Vinylster Resin, Add	237.22	
For Epoxy Resin, Add	27.96	
For Up To >10, Add	283.72	
For >10 To 25, Add	179.95	
For >25 To 50, Add	124.91	
For >50 To 100, Add	62.46	
For >500 To 1,000, Deduct	-19.80	
For >1,000 To 2,000, Deduct	-30.18	
For >2,000 To 5,000, Deduct	-50.19	
For >5,000, Deduct	-83.01	
33 01 30 72-0053 LF 10.5mm Lining 36" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP) .....	450.50	
For Vinylster Resin, Add	285.33	
For Epoxy Resin, Add	33.63	
For Up To >10, Add	332.48	
For >10 To 25, Add	209.13	
For >25 To 50, Add	145.86	
For >50 To 100, Add	72.93	
For >500 To 1,000, Deduct	-23.60	
For >1,000 To 2,000, Deduct	-35.93	
For >2,000 To 5,000, Deduct	-59.64	
For >5,000, Deduct	-98.68	

33 01 30 72-0054 12mm Thick Lining Cured In-Place Pipe (33 01 30 72-0015)



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MINOR	CS	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
33 01 30 72-0055	LF		12mm Lining 15" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP).....	213.46	
			For Vinlyester Resin, Add	133.12	
			For Epoxy Resin, Add	15.69	
			For Up To >10, Add	164.96	
			For >10 To 25, Add	105.77	
			For >25 To 50, Add	72.97	
			For >50 To 100, Add	36.48	
			For >500 To 1,000, Deduct	-11.26	
			For >1,000 To 2,000, Deduct	-17.17	
			For >2,000 To 5,000, Deduct	-28.64	
			For >5,000, Deduct	-47.35	
33 01 30 72-0056	LF		12mm Lining 18" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP).....	255.75	
			For Vinlyester Resin, Add	160.61	
			For Epoxy Resin, Add	18.93	
			For Up To >10, Add	193.65	
			For >10 To 25, Add	123.14	
			For >25 To 50, Add	85.35	
			For >50 To 100, Add	42.68	
			For >500 To 1,000, Deduct	-13.45	
			For >1,000 To 2,000, Deduct	-20.50	
			For >2,000 To 5,000, Deduct	-34.11	
			For >5,000, Deduct	-56.41	
33 01 30 72-0057	LF		12mm Lining 21" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP).....	297.21	
			For Vinlyester Resin, Add	188.10	
			For Epoxy Resin, Add	22.17	
			For Up To >10, Add	219.86	
			For >10 To 25, Add	138.43	
			For >25 To 50, Add	96.49	
			For >50 To 100, Add	48.25	
			For >500 To 1,000, Deduct	-15.57	
			For >1,000 To 2,000, Deduct	-23.72	
			For >2,000 To 5,000, Deduct	-39.37	
			For >5,000, Deduct	-65.14	
33 01 30 72-0058	LF		12mm Lining 24" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP).....	339.08	
			For Vinlyester Resin, Add	215.59	
			For Epoxy Resin, Add	25.41	
			For Up To >10, Add	247.29	
			For >10 To 25, Add	154.75	
			For >25 To 50, Add	108.25	
			For >50 To 100, Add	54.12	
			For >500 To 1,000, Deduct	-17.73	
			For >1,000 To 2,000, Deduct	-26.99	
			For >2,000 To 5,000, Deduct	-44.73	
			For >5,000, Deduct	-74.04	
33 01 30 72-0059	LF		12mm Lining 27" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP).....	381.51	
			For Vinlyester Resin, Add	243.08	
			For Epoxy Resin, Add	28.65	
			For Up To >10, Add	276.41	
			For >10 To 25, Add	172.46	
			For >25 To 50, Add	120.84	
			For >50 To 100, Add	60.42	
			For >500 To 1,000, Deduct	-19.93	
			For >1,000 To 2,000, Deduct	-30.33	
			For >2,000 To 5,000, Deduct	-50.24	
			For >5,000, Deduct	-83.15	
33 01 30 72-0060	LF		12mm Lining 30" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP).....	424.61	
			For Vinlyester Resin, Add	270.56	
			For Epoxy Resin, Add	31.89	
			For Up To >10, Add	307.53	
			For >10 To 25, Add	191.86	
			For >25 To 50, Add	134.44	
			For >50 To 100, Add	67.22	
			For >500 To 1,000, Deduct	-22.18	
			For >1,000 To 2,000, Deduct	-33.75	
			For >2,000 To 5,000, Deduct	-55.90	
			For >5,000, Deduct	-92.54	
33 01 30 72-0061	LF		12mm Lining 36" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP).....	507.96	
			For Vinlyester Resin, Add	325.55	
			For Epoxy Resin, Add	38.37	
			For Up To >10, Add	361.21	
			For >10 To 25, Add	223.49	
			For >25 To 50, Add	157.35	
			For >50 To 100, Add	78.67	
			For >500 To 1,000, Deduct	-26.47	
			For >1,000 To 2,000, Deduct	-40.24	
			For >2,000 To 5,000, Deduct	-66.53	
			For >5,000, Deduct	-110.17	

**33 Utilities****33 01 Operation and Maintenance of Utilities****33 01 30 Operation and Maintenance of Sewer Utilities**

MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
33 01 30 72-0062 LF 12mm Lining 42" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP) .....	592.52	
For Vinylster Resin, Add	380.53	
For Epoxy Resin, Add	44.85	
For Up To >10, Add	418.54	
For >10 To 25, Add	258.18	
For >25 To 50, Add	182.09	
For >50 To 100, Add	91.04	
For >500 To 1,000, Deduct	-30.85	
For >1,000 To 2,000, Deduct	-46.88	
For >2,000 To 5,000, Deduct	-77.46	
For >5,000, Deduct	-128.29	
33 01 30 72-0063 LF 12mm Lining 48" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP) .....	679.28	
For Vinylster Resin, Add	435.51	
For Epoxy Resin, Add	51.33	
For Up To >10, Add	482.47	
For >10 To 25, Add	298.36	
For >25 To 50, Add	210.13	
For >50 To 100, Add	105.06	
For >500 To 1,000, Deduct	-35.39	
For >1,000 To 2,000, Deduct	-53.80	
For >2,000 To 5,000, Deduct	-88.94	
For >5,000, Deduct	-147.28	
<b>33 01 30 72-0064 13.5mm Thick Lining Cured In-Place Pipe (33 01 30 72-0015) .....</b>	<b>236.36</b>	
33 01 30 72-0065 LF 13.5mm Lining 15" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP) .....	236.36	
For Vinylster Resin, Add	149.15	
For Epoxy Resin, Add	17.58	
For Up To >10, Add	176.41	
For >10 To 25, Add	111.49	
For >25 To 50, Add	77.55	
For >50 To 100, Add	38.77	
For >500 To 1,000, Deduct	-12.40	
For >1,000 To 2,000, Deduct	-18.89	
For >2,000 To 5,000, Deduct	-31.39	
For >5,000, Deduct	-51.93	
33 01 30 72-0066 LF 13.5mm Lining 18" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP) .....	283.57	
For Vinylster Resin, Add	180.08	
For Epoxy Resin, Add	21.22	
For Up To >10, Add	207.56	
For >10 To 25, Add	130.09	
For >25 To 50, Add	90.92	
For >50 To 100, Add	45.46	
For >500 To 1,000, Deduct	-14.84	
For >1,000 To 2,000, Deduct	-22.58	
For >2,000 To 5,000, Deduct	-37.45	
For >5,000, Deduct	-61.98	
33 01 30 72-0067 LF 13.5mm Lining 21" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP) .....	329.93	
For Vinylster Resin, Add	211.00	
For Epoxy Resin, Add	24.87	
For Up To >10, Add	236.22	
For >10 To 25, Add	146.61	
For >25 To 50, Add	103.04	
For >50 To 100, Add	51.52	
For >500 To 1,000, Deduct	-17.21	
For >1,000 To 2,000, Deduct	-26.17	
For >2,000 To 5,000, Deduct	-43.30	
For >5,000, Deduct	-71.69	
33 01 30 72-0068 LF 13.5mm Lining 24" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP) .....	376.71	
For Vinylster Resin, Add	241.93	
For Epoxy Resin, Add	28.51	
For Up To >10, Add	266.11	
For >10 To 25, Add	164.15	
For >25 To 50, Add	115.77	
For >50 To 100, Add	57.89	
For >500 To 1,000, Deduct	-19.61	
For >1,000 To 2,000, Deduct	-29.81	
For >2,000 To 5,000, Deduct	-49.25	
For >5,000, Deduct	-81.56	
33 01 30 72-0069 LF 13.5mm Lining 27" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP) .....	424.05	
For Vinylster Resin, Add	272.85	
For Epoxy Resin, Add	32.16	
For Up To >10, Add	297.68	
For >10 To 25, Add	183.10	
For >25 To 50, Add	129.35	
For >50 To 100, Add	64.67	
For >500 To 1,000, Deduct	-22.06	
For >1,000 To 2,000, Deduct	-33.52	
For >2,000 To 5,000, Deduct	-55.34	
For >5,000, Deduct	-91.66	



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		Operation and Maintenance of Utilities	33 01	
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MINOR	CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
33 01 30 72-0070	LF		13.5mm Lining 30" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP).....	472.06	
			For Vinlyester Resin, Add	303.78	
			For Epoxy Resin, Add	35.80	
			For Up To >10, Add	331.26	
			For >10 To 25, Add	203.72	
			For >25 To 50, Add	143.93	
			For >50 To 100, Add	71.96	
			For >500 To 1,000, Deduct	-24.56	
			For >1,000 To 2,000, Deduct	-37.31	
			For >2,000 To 5,000, Deduct	-61.60	
			For >5,000, Deduct	-102.03	
33 01 30 72-0071	LF		13.5mm Lining 36" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP).....	565.22	
			For Vinlyester Resin, Add	365.63	
			For Epoxy Resin, Add	43.09	
			For Up To >10, Add	389.84	
			For >10 To 25, Add	237.81	
			For >25 To 50, Add	168.80	
			For >50 To 100, Add	84.40	
			For >500 To 1,000, Deduct	-29.33	
			For >1,000 To 2,000, Deduct	-44.54	
			For >2,000 To 5,000, Deduct	-73.40	
			For >5,000, Deduct	-121.62	
33 01 30 72-0072	LF		13.5mm Lining 42" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP).....	659.60	
			For Vinlyester Resin, Add	427.48	
			For Epoxy Resin, Add	50.38	
			For Up To >10, Add	452.08	
			For >10 To 25, Add	274.95	
			For >25 To 50, Add	195.50	
			For >50 To 100, Add	97.75	
			For >500 To 1,000, Deduct	-34.20	
			For >1,000 To 2,000, Deduct	-51.92	
			For >2,000 To 5,000, Deduct	-85.51	
			For >5,000, Deduct	-141.70	
33 01 30 72-0073	LF		13.5mm Lining 48" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP).....	756.18	
			For Vinlyester Resin, Add	489.34	
			For Epoxy Resin, Add	57.67	
			For Up To >10, Add	520.92	
			For >10 To 25, Add	317.59	
			For >25 To 50, Add	225.51	
			For >50 To 100, Add	112.75	
			For >500 To 1,000, Deduct	-39.24	
			For >1,000 To 2,000, Deduct	-59.57	
			For >2,000 To 5,000, Deduct	-98.17	
			For >5,000, Deduct	-162.66	
33 01 30 72-0074			15mm Thick Lining Cured In-Place Pipe <small>(33 01 30 72-0015)</small> .....	259.07	
33 01 30 72-0075	LF		15mm Lining 15" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP).....	259.07	
			For Vinlyester Resin, Add	165.05	
			For Epoxy Resin, Add	19.45	
			For Up To >10, Add	187.76	
			For >10 To 25, Add	117.17	
			For >25 To 50, Add	82.09	
			For >50 To 100, Add	41.05	
			For >500 To 1,000, Deduct	-13.54	
			For >1,000 To 2,000, Deduct	-20.59	
			For >2,000 To 5,000, Deduct	-34.12	
			For >5,000, Deduct	-56.47	
33 01 30 72-0076	LF		15mm Lining 18" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP).....	311.18	
			For Vinlyester Resin, Add	199.41	
			For Epoxy Resin, Add	23.50	
			For Up To >10, Add	221.37	
			For >10 To 25, Add	136.99	
			For >25 To 50, Add	96.44	
			For >50 To 100, Add	48.22	
			For >500 To 1,000, Deduct	-16.22	
			For >1,000 To 2,000, Deduct	-24.65	
			For >2,000 To 5,000, Deduct	-40.76	
			For >5,000, Deduct	-67.50	
33 01 30 72-0077	LF		15mm Lining 21" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP).....	362.46	
			For Vinlyester Resin, Add	233.77	
			For Epoxy Resin, Add	27.55	
			For Up To >10, Add	252.48	
			For >10 To 25, Add	154.74	
			For >25 To 50, Add	109.54	
			For >50 To 100, Add	54.77	
			For >500 To 1,000, Deduct	-18.84	
			For >1,000 To 2,000, Deduct	-28.61	
			For >2,000 To 5,000, Deduct	-47.20	
			For >5,000, Deduct	-78.19	

**33 Utilities****33 01 Operation and Maintenance of Utilities****33 01 30 Operation and Maintenance of Sewer Utilities**

MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
33 01 30 72-0078 LF 15mm Lining 24" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP) .....	414.15	
For Vinylster Resin, Add	268.14	
For Epoxy Resin, Add	31.60	
For Up To >10, Add	284.83	
For >10 To 25, Add	173.51	
For >25 To 50, Add	123.26	
For >50 To 100, Add	61.63	
For >500 To 1,000, Deduct	-21.49	
For >1,000 To 2,000, Deduct	-32.62	
For >2,000 To 5,000, Deduct	-53.74	
For >5,000, Deduct	-89.05	
33 01 30 72-0079 LF 15mm Lining 27" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP) .....	466.40	
For Vinylster Resin, Add	302.50	
For Epoxy Resin, Add	35.65	
For Up To >10, Add	318.85	
For >10 To 25, Add	193.69	
For >25 To 50, Add	137.82	
For >50 To 100, Add	68.91	
For >500 To 1,000, Deduct	-24.18	
For >1,000 To 2,000, Deduct	-36.69	
For >2,000 To 5,000, Deduct	-60.42	
For >5,000, Deduct	-100.13	
33 01 30 72-0080 LF 15mm Lining 30" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP) .....	519.31	
For Vinylster Resin, Add	336.85	
For Epoxy Resin, Add	39.70	
For Up To >10, Add	354.88	
For >10 To 25, Add	215.53	
For >25 To 50, Add	153.38	
For >50 To 100, Add	76.69	
For >500 To 1,000, Deduct	-26.92	
For >1,000 To 2,000, Deduct	-40.85	
For >2,000 To 5,000, Deduct	-67.27	
For >5,000, Deduct	-111.48	
33 01 30 72-0081 LF 15mm Lining 36" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP) .....	622.29	
For Vinylster Resin, Add	405.58	
For Epoxy Resin, Add	47.80	
For Up To >10, Add	418.37	
For >10 To 25, Add	252.08	
For >25 To 50, Add	180.22	
For >50 To 100, Add	90.11	
For >500 To 1,000, Deduct	-32.19	
For >1,000 To 2,000, Deduct	-48.82	
For >2,000 To 5,000, Deduct	-80.25	
For >5,000, Deduct	-133.04	
33 01 30 72-0082 LF 15mm Lining 42" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP) .....	726.49	
For Vinylster Resin, Add	474.31	
For Epoxy Resin, Add	55.90	
For Up To >10, Add	485.52	
For >10 To 25, Add	291.67	
For >25 To 50, Add	208.88	
For >50 To 100, Add	104.44	
For >500 To 1,000, Deduct	-37.55	
For >1,000 To 2,000, Deduct	-56.93	
For >2,000 To 5,000, Deduct	-93.54	
For >5,000, Deduct	-155.08	
33 01 30 72-0083 LF 15mm Lining 48" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP) .....	832.89	
For Vinylster Resin, Add	543.03	
For Epoxy Resin, Add	64.00	
For Up To >10, Add	559.27	
For >10 To 25, Add	336.77	
For >25 To 50, Add	240.85	
For >50 To 100, Add	120.42	
For >500 To 1,000, Deduct	-43.07	
For >1,000 To 2,000, Deduct	-65.32	
For >2,000 To 5,000, Deduct	-107.37	
For >5,000, Deduct	-178.00	
<b>33 01 30 72-0084 16.5mm Thick Lining Cured In-Place Pipe (33 01 30 72-0015)</b> .....		
33 01 30 72-0085 LF 16.5mm Lining 18" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP) .....	338.60	
For Vinylster Resin, Add	218.60	
For Epoxy Resin, Add	25.76	
For Up To >10, Add	235.08	
For >10 To 25, Add	143.85	
For >25 To 50, Add	101.92	
For >50 To 100, Add	50.96	
For >500 To 1,000, Deduct	-17.59	
For >1,000 To 2,000, Deduct	-26.71	
For >2,000 To 5,000, Deduct	-44.05	
For >5,000, Deduct	-72.98	





		<b>Utilities</b>	<b>33</b>	<b>CS</b>
		<b>Operation and Maintenance of Utilities</b>	<b>33 01</b>	
		<b>Operation and Maintenance of Sewer Utilities</b>	<b>33 01 30</b>	

MINOR CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
33 01 30 72-0086	LF	16.5mm Lining 21" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP).....	394.79	
		For Vinlyester Resin, Add	256.40	
		For Epoxy Resin, Add	30.22	
		For Up To >10, Add	268.65	
		For >10 To 25, Add	162.82	
		For >25 To 50, Add	116.01	
		For >50 To 100, Add	58.00	
		For >500 To 1,000, Deduct	-20.45	
		For >1,000 To 2,000, Deduct	-31.03	
		For >2,000 To 5,000, Deduct	-51.08	
		For >5,000, Deduct	-84.66	
33 01 30 72-0087	LF	16.5mm Lining 24" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP).....	451.39	
		For Vinlyester Resin, Add	294.20	
		For Epoxy Resin, Add	34.67	
		For Up To >10, Add	303.45	
		For >10 To 25, Add	182.82	
		For >25 To 50, Add	130.71	
		For >50 To 100, Add	65.35	
		For >500 To 1,000, Deduct	-23.35	
		For >1,000 To 2,000, Deduct	-35.41	
		For >2,000 To 5,000, Deduct	-58.21	
		For >5,000, Deduct	-96.50	
33 01 30 72-0088	LF	16.5mm Lining 27" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP).....	508.55	
		For Vinlyester Resin, Add	332.00	
		For Epoxy Resin, Add	39.13	
		For Up To >10, Add	339.93	
		For >10 To 25, Add	204.22	
		For >25 To 50, Add	146.25	
		For >50 To 100, Add	73.12	
		For >500 To 1,000, Deduct	-26.28	
		For >1,000 To 2,000, Deduct	-39.85	
		For >2,000 To 5,000, Deduct	-65.48	
		For >5,000, Deduct	-108.56	
33 01 30 72-0089	LF	16.5mm Lining 30" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP).....	566.37	
		For Vinlyester Resin, Add	369.80	
		For Epoxy Resin, Add	43.58	
		For Up To >10, Add	378.41	
		For >10 To 25, Add	227.30	
		For >25 To 50, Add	162.79	
		For >50 To 100, Add	81.40	
		For >500 To 1,000, Deduct	-29.27	
		For >1,000 To 2,000, Deduct	-44.38	
		For >2,000 To 5,000, Deduct	-72.92	
		For >5,000, Deduct	-120.89	
33 01 30 72-0090	LF	16.5mm Lining 36" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP).....	679.17	
		For Vinlyester Resin, Add	445.40	
		For Epoxy Resin, Add	52.49	
		For Up To >10, Add	446.81	
		For >10 To 25, Add	266.30	
		For >25 To 50, Add	191.59	
		For >50 To 100, Add	95.80	
		For >500 To 1,000, Deduct	-35.03	
		For >1,000 To 2,000, Deduct	-53.08	
		For >2,000 To 5,000, Deduct	-87.08	
		For >5,000, Deduct	-144.41	
33 01 30 72-0091	LF	16.5mm Lining 42" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP).....	793.18	
		For Vinlyester Resin, Add	520.99	
		For Epoxy Resin, Add	61.40	
		For Up To >10, Add	518.87	
		For >10 To 25, Add	308.34	
		For >25 To 50, Add	222.22	
		For >50 To 100, Add	111.11	
		For >500 To 1,000, Deduct	-40.88	
		For >1,000 To 2,000, Deduct	-61.93	
		For >2,000 To 5,000, Deduct	-101.54	
		For >5,000, Deduct	-168.42	
33 01 30 72-0092	LF	16.5mm Lining 48" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP).....	909.40	
		For Vinlyester Resin, Add	596.59	
		For Epoxy Resin, Add	70.31	
		For Up To >10, Add	597.53	
		For >10 To 25, Add	355.89	
		For >25 To 50, Add	256.15	
		For >50 To 100, Add	128.07	
		For >500 To 1,000, Deduct	-46.90	
		For >1,000 To 2,000, Deduct	-71.06	
		For >2,000 To 5,000, Deduct	-116.55	
		For >5,000, Deduct	-193.31	

**33 Utilities****33 01 Operation and Maintenance of Utilities****33 01 30 Operation and Maintenance of Sewer Utilities**

MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
33 01 30 72-0093 LF 16.5mm Lining 54" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP) .....	1,024.67	
For Vinylster Resin, Add	672.19	
For Epoxy Resin, Add	79.22	
For Up To >10, Add	673.34	
For >10 To 25, Add	401.07	
For >25 To 50, Add	288.65	
For >50 To 100, Add	144.33	
For >500 To 1,000, Deduct	-52.84	
For >1,000 To 2,000, Deduct	-80.07	
For >2,000 To 5,000, Deduct	-131.33	
For >5,000, Deduct	-217.81	
<b>33 01 30 72-0094 18mm Thick Lining Cured In-Place Pipe (33 01 30 72-0015) .....</b>	<b>366.51</b>	
33 01 30 72-0095 LF 18mm Lining 18" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP) .....	427.75	
For Vinylster Resin, Add	237.66	
For Epoxy Resin, Add	28.01	
For Up To >10, Add	250.73	
For >10 To 25, Add	152.36	
For >25 To 50, Add	108.39	
For >50 To 100, Add	54.19	
For >500 To 1,000, Deduct	-19.00	
For >1,000 To 2,000, Deduct	-28.84	
For >2,000 To 5,000, Deduct	-47.49	
For >5,000, Deduct	-78.70	
33 01 30 72-0096 LF 18mm Lining 21" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP) .....	427.75	
For Vinylster Resin, Add	278.90	
For Epoxy Resin, Add	32.87	
For Up To >10, Add	287.18	
For >10 To 25, Add	172.91	
For >25 To 50, Add	123.67	
For >50 To 100, Add	61.83	
For >500 To 1,000, Deduct	-22.12	
For >1,000 To 2,000, Deduct	-33.55	
For >2,000 To 5,000, Deduct	-55.14	
For >5,000, Deduct	-91.41	
33 01 30 72-0097 LF 18mm Lining 24" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP) .....	489.27	
For Vinylster Resin, Add	320.14	
For Epoxy Resin, Add	37.73	
For Up To >10, Add	324.46	
For >10 To 25, Add	194.16	
For >25 To 50, Add	139.36	
For >50 To 100, Add	69.68	
For >500 To 1,000, Deduct	-25.26	
For >1,000 To 2,000, Deduct	-38.29	
For >2,000 To 5,000, Deduct	-62.86	
For >5,000, Deduct	-104.24	
33 01 30 72-0098 LF 18mm Lining 27" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP) .....	551.46	
For Vinylster Resin, Add	361.38	
For Epoxy Resin, Add	42.59	
For Up To >10, Add	363.76	
For >10 To 25, Add	217.09	
For >25 To 50, Add	156.07	
For >50 To 100, Add	78.03	
For >500 To 1,000, Deduct	-28.45	
For >1,000 To 2,000, Deduct	-43.12	
For >2,000 To 5,000, Deduct	-70.75	
For >5,000, Deduct	-117.33	
33 01 30 72-0099 LF 18mm Lining 30" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP) .....	614.20	
For Vinylster Resin, Add	402.61	
For Epoxy Resin, Add	47.45	
For Up To >10, Add	404.73	
For >10 To 25, Add	241.41	
For >25 To 50, Add	173.61	
For >50 To 100, Add	86.80	
For >500 To 1,000, Deduct	-31.69	
For >1,000 To 2,000, Deduct	-48.02	
For >2,000 To 5,000, Deduct	-78.78	
For >5,000, Deduct	-130.65	
33 01 30 72-0100 LF 18mm Lining 36" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP) .....	737.90	
For Vinylster Resin, Add	485.07	
For Epoxy Resin, Add	57.17	
For Up To >10, Add	481.30	
For >10 To 25, Add	285.59	
For >25 To 50, Add	206.00	
For >50 To 100, Add	103.00	
For >500 To 1,000, Deduct	-38.02	
For >1,000 To 2,000, Deduct	-57.59	
For >2,000 To 5,000, Deduct	-94.39	
For >5,000, Deduct	-156.57	



		Utilities	33	CS
		Operation and Maintenance of Utilities	33 01	
		Operation and Maintenance of Sewer Utilities	33 01 30	

MINOR	CS	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
33 01 30 72-0101	LF		18mm Lining 42" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP).....	862.16	
			For Vinylester Resin, Add	567.55	
			For Epoxy Resin, Add	66.89	
			For Up To >10, Add	559.53	
			For >10 To 25, Add	331.15	
			For >25 To 50, Add	239.23	
			For >50 To 100, Add	119.61	
			For >500 To 1,000, Deduct	-44.39	
			For >1,000 To 2,000, Deduct	-67.23	
			For >2,000 To 5,000, Deduct	-110.14	
			For >5,000, Deduct	-182.71	
33 01 30 72-0102	LF		18mm Lining 48" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP).....	988.61	
			For Vinylester Resin, Add	650.01	
			For Epoxy Resin, Add	76.61	
			For Up To >10, Add	644.36	
			For >10 To 25, Add	382.20	
			For >25 To 50, Add	275.75	
			For >50 To 100, Add	137.87	
			For >500 To 1,000, Deduct	-50.93	
			For >1,000 To 2,000, Deduct	-77.15	
			For >2,000 To 5,000, Deduct	-126.44	
			For >5,000, Deduct	-209.73	
33 01 30 72-0103	LF		18mm Lining 54" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP).....	1,114.09	
			For Vinylester Resin, Add	732.48	
			For Epoxy Resin, Add	86.33	
			For Up To >10, Add	726.27	
			For >10 To 25, Add	430.83	
			For >25 To 50, Add	310.82	
			For >50 To 100, Add	155.41	
			For >500 To 1,000, Deduct	-57.40	
			For >1,000 To 2,000, Deduct	-86.94	
			For >2,000 To 5,000, Deduct	-142.49	
			For >5,000, Deduct	-236.36	
33 01 30 72-0104	LF		18mm Lining 60" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP).....	1,239.43	
			For Vinylester Resin, Add	814.95	
			For Epoxy Resin, Add	96.05	
			For Up To >10, Add	807.77	
			For >10 To 25, Add	479.10	
			For >25 To 50, Add	345.67	
			For >50 To 100, Add	172.84	
			For >500 To 1,000, Deduct	-63.85	
			For >1,000 To 2,000, Deduct	-96.72	
			For >2,000 To 5,000, Deduct	-158.51	
			For >5,000, Deduct	-262.93	
33 01 30 72-0105	LF		18mm Lining 66" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP).....	1,365.34	
			For Vinylester Resin, Add	897.42	
			For Epoxy Resin, Add	105.77	
			For Up To >10, Add	890.95	
			For >10 To 25, Add	528.78	
			For >25 To 50, Add	381.37	
			For >50 To 100, Add	190.69	
			For >500 To 1,000, Deduct	-70.35	
			For >1,000 To 2,000, Deduct	-106.57	
			For >2,000 To 5,000, Deduct	-174.67	
			For >5,000, Deduct	-289.73	
33 01 30 72-0106	LF		18mm Lining 72" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP).....	1,490.83	
			For Vinylester Resin, Add	979.89	
			For Epoxy Resin, Add	115.49	
			For Up To >10, Add	972.89	
			For >10 To 25, Add	577.44	
			For >25 To 50, Add	416.45	
			For >50 To 100, Add	208.23	
			For >500 To 1,000, Deduct	-76.82	
			For >1,000 To 2,000, Deduct	-116.36	
			For >2,000 To 5,000, Deduct	-190.73	
			For >5,000, Deduct	-316.36	
33 01 30 72-0107			19.5mm Thick Lining Cured In-Place Pipe (33 01 30 72-0015).....	394.65	
33 01 30 72-0108	LF		19.5mm Lining 18" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP).....	394.65	
			For Vinylester Resin, Add	256.59	
			For Epoxy Resin, Add	30.24	
			For Up To >10, Add	267.55	
			For >10 To 25, Add	161.87	
			For >25 To 50, Add	115.45	
			For >50 To 100, Add	57.72	
			For >500 To 1,000, Deduct	-20.43	
			For >1,000 To 2,000, Deduct	-31.00	
			For >2,000 To 5,000, Deduct	-51.01	
			For >5,000, Deduct	-84.55	

**33 Utilities****33 01 Operation and Maintenance of Utilities****33 01 30 Operation and Maintenance of Sewer Utilities**

MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
33 01 30 72-0109 LF 19.5mm Lining 21" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP) .....	460.80	
For Vinylster Resin, Add	301.27	
For Epoxy Resin, Add	35.51	
For Up To >10, Add	306.45	
For >10 To 25, Add	183.65	
For >25 To 50, Add	131.71	
For >50 To 100, Add	65.85	
For >500 To 1,000, Deduct	-23.80	
For >1,000 To 2,000, Deduct	-36.08	
For >2,000 To 5,000, Deduct	-59.25	
For >5,000, Deduct	-98.24	
33 01 30 72-0110 LF 19.5mm Lining 24" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP) .....	527.35	
For Vinylster Resin, Add	345.93	
For Epoxy Resin, Add	40.77	
For Up To >10, Add	346.58	
For >10 To 25, Add	206.45	
For >25 To 50, Add	148.58	
For >50 To 100, Add	74.29	
For >500 To 1,000, Deduct	-27.20	
For >1,000 To 2,000, Deduct	-41.21	
For >2,000 To 5,000, Deduct	-67.59	
For >5,000, Deduct	-112.10	
33 01 30 72-0111 LF 19.5mm Lining 27" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP) .....	594.18	
For Vinylster Resin, Add	390.61	
For Epoxy Resin, Add	46.04	
For Up To >10, Add	387.52	
For >10 To 25, Add	229.93	
For >25 To 50, Add	165.86	
For >50 To 100, Add	82.93	
For >500 To 1,000, Deduct	-30.61	
For >1,000 To 2,000, Deduct	-46.37	
For >2,000 To 5,000, Deduct	-76.00	
For >5,000, Deduct	-126.07	
33 01 30 72-0112 LF 19.5mm Lining 30" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP) .....	662.11	
For Vinylster Resin, Add	435.27	
For Epoxy Resin, Add	51.30	
For Up To >10, Add	431.78	
For >10 To 25, Add	256.18	
For >25 To 50, Add	184.80	
For >50 To 100, Add	92.40	
For >500 To 1,000, Deduct	-34.11	
For >1,000 To 2,000, Deduct	-51.67	
For >2,000 To 5,000, Deduct	-84.69	
For >5,000, Deduct	-140.48	
33 01 30 72-0113 LF 19.5mm Lining 36" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP) .....	796.86	
For Vinylster Resin, Add	524.62	
For Epoxy Resin, Add	61.83	
For Up To >10, Add	516.96	
For >10 To 25, Add	305.89	
For >25 To 50, Add	221.01	
For >50 To 100, Add	110.50	
For >500 To 1,000, Deduct	-41.03	
For >1,000 To 2,000, Deduct	-62.14	
For >2,000 To 5,000, Deduct	-101.79	
For >5,000, Deduct	-168.85	
33 01 30 72-0114 LF 19.5mm Lining 42" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP) .....	932.03	
For Vinylster Resin, Add	613.96	
For Epoxy Resin, Add	72.36	
For Up To >10, Add	603.39	
For >10 To 25, Add	356.65	
For >25 To 50, Add	257.84	
For >50 To 100, Add	128.92	
For >500 To 1,000, Deduct	-47.98	
For >1,000 To 2,000, Deduct	-72.65	
For >2,000 To 5,000, Deduct	-118.99	
For >5,000, Deduct	-197.40	
33 01 30 72-0115 LF 19.5mm Lining 48" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP) .....	1,068.16	
For Vinylster Resin, Add	703.30	
For Epoxy Resin, Add	82.89	
For Up To >10, Add	692.68	
For >10 To 25, Add	409.78	
For >25 To 50, Add	296.10	
For >50 To 100, Add	148.05	
For >500 To 1,000, Deduct	-54.99	
For >1,000 To 2,000, Deduct	-83.28	
For >2,000 To 5,000, Deduct	-136.43	
For >5,000, Deduct	-226.32	



	Utilities	33	
	Operation and Maintenance of Utilities	33 01	
	Operation and Maintenance of Sewer Utilities	33 01 30	

MINOR CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
33 01 30 72-0116	LF	19.5mm Lining 54" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP).....	1,203.87	
		For Vinlyester Resin, Add	792.64	
		For Epoxy Resin, Add	93.42	
		For Up To >10, Add	780.76	
		For >10 To 25, Add	461.91	
		For >25 To 50, Add	333.76	
		For >50 To 100, Add	166.88	
		For >500 To 1,000, Deduct	-61.98	
		For >1,000 To 2,000, Deduct	-93.87	
		For >2,000 To 5,000, Deduct	-153.76	
		For >5,000, Deduct	-255.08	
33 01 30 72-0117	LF	19.5mm Lining 60" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP).....	1,339.58	
		For Vinlyester Resin, Add	881.98	
		For Epoxy Resin, Add	103.95	
		For Up To >10, Add	868.82	
		For >10 To 25, Add	514.02	
		For >25 To 50, Add	371.41	
		For >50 To 100, Add	185.70	
		For >500 To 1,000, Deduct	-68.97	
		For >1,000 To 2,000, Deduct	-104.45	
		For >2,000 To 5,000, Deduct	-171.10	
		For >5,000, Deduct	-283.84	
33 01 30 72-0118	LF	19.5mm Lining 66" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP).....	1,476.95	
		For Vinlyester Resin, Add	971.33	
		For Epoxy Resin, Add	114.48	
		For Up To >10, Add	961.83	
		For >10 To 25, Add	570.25	
		For >25 To 50, Add	411.53	
		For >50 To 100, Add	205.77	
		For >500 To 1,000, Deduct	-76.08	
		For >1,000 To 2,000, Deduct	-115.24	
		For >2,000 To 5,000, Deduct	-188.85	
		For >5,000, Deduct	-313.26	
33 01 30 72-0119	LF	19.5mm Lining 72" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP).....	1,612.79	
		For Vinlyester Resin, Add	1,060.66	
		For Epoxy Resin, Add	125.01	
		For Up To >10, Add	1,050.30	
		For >10 To 25, Add	622.71	
		For >25 To 50, Add	449.39	
		For >50 To 100, Add	224.69	
		For >500 To 1,000, Deduct	-83.08	
		For >1,000 To 2,000, Deduct	-125.84	
		For >2,000 To 5,000, Deduct	-206.22	
		For >5,000, Deduct	-342.07	
33 01 30 72-0120		21mm Thick Lining Cured In-Place Pipe <small>(33 01 30 72-0015)</small> .....	422.45	
33 01 30 72-0121	LF	21mm Lining 18" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP).....	422.45	
		For Vinlyester Resin, Add	275.38	
		For Epoxy Resin, Add	32.46	
		For Up To >10, Add	283.85	
		For >10 To 25, Add	170.98	
		For >25 To 50, Add	122.26	
		For >50 To 100, Add	61.13	
		For >500 To 1,000, Deduct	-21.85	
		For >1,000 To 2,000, Deduct	-33.14	
		For >2,000 To 5,000, Deduct	-54.47	
		For >5,000, Deduct	-90.30	
33 01 30 72-0122	LF	21mm Lining 21" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP).....	493.64	
		For Vinlyester Resin, Add	323.49	
		For Epoxy Resin, Add	38.13	
		For Up To >10, Add	325.60	
		For >10 To 25, Add	194.31	
		For >25 To 50, Add	139.69	
		For >50 To 100, Add	69.85	
		For >500 To 1,000, Deduct	-25.47	
		For >1,000 To 2,000, Deduct	-38.60	
		For >2,000 To 5,000, Deduct	-63.33	
		For >5,000, Deduct	-105.03	
33 01 30 72-0123	LF	21mm Lining 24" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP).....	565.25	
		For Vinlyester Resin, Add	371.60	
		For Epoxy Resin, Add	43.80	
		For Up To >10, Add	368.60	
		For >10 To 25, Add	218.69	
		For >25 To 50, Add	157.76	
		For >50 To 100, Add	78.88	
		For >500 To 1,000, Deduct	-29.12	
		For >1,000 To 2,000, Deduct	-44.11	
		For >2,000 To 5,000, Deduct	-72.30	
		For >5,000, Deduct	-119.93	

**33 Utilities****33 01 Operation and Maintenance of Utilities****33 01 30 Operation and Maintenance of Sewer Utilities**

MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
33 01 30 72-0124 LF 21mm Lining 27" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP) .....	636.71	
For Vinylster Resin, Add	419.71	
For Epoxy Resin, Add	49.47	
For Up To >10, Add	411.18	
For >10 To 25, Add	242.72	
For >25 To 50, Add	175.61	
For >50 To 100, Add	87.81	
For >500 To 1,000, Deduct	-32.76	
For >1,000 To 2,000, Deduct	-49.61	
For >2,000 To 5,000, Deduct	-81.23	
For >5,000, Deduct	-134.77	
33 01 30 72-0125 LF 21mm Lining 30" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP) .....	709.68	
For Vinylster Resin, Add	467.81	
For Epoxy Resin, Add	55.13	
For Up To >10, Add	458.29	
For >10 To 25, Add	270.53	
For >25 To 50, Add	195.73	
For >50 To 100, Add	97.87	
For >500 To 1,000, Deduct	-36.52	
For >1,000 To 2,000, Deduct	-55.30	
For >2,000 To 5,000, Deduct	-90.54	
For >5,000, Deduct	-150.21	
33 01 30 72-0126 LF 21mm Lining 36" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP) .....	855.62	
For Vinylster Resin, Add	564.03	
For Epoxy Resin, Add	66.47	
For Up To >10, Add	552.49	
For >10 To 25, Add	326.11	
For >25 To 50, Add	235.96	
For >50 To 100, Add	117.98	
For >500 To 1,000, Deduct	-44.03	
For >1,000 To 2,000, Deduct	-66.67	
For >2,000 To 5,000, Deduct	-109.16	
For >5,000, Deduct	-181.10	
33 01 30 72-0127 LF 21mm Lining 42" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP) .....	1,001.58	
For Vinylster Resin, Add	660.24	
For Epoxy Resin, Add	77.81	
For Up To >10, Add	646.74	
For >10 To 25, Add	381.75	
For >25 To 50, Add	276.21	
For >50 To 100, Add	138.11	
For >500 To 1,000, Deduct	-51.54	
For >1,000 To 2,000, Deduct	-78.04	
For >2,000 To 5,000, Deduct	-127.78	
For >5,000, Deduct	-211.99	
33 01 30 72-0128 LF 21mm Lining 48" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP) .....	1,147.52	
For Vinylster Resin, Add	756.46	
For Epoxy Resin, Add	89.15	
For Up To >10, Add	740.94	
For >10 To 25, Add	437.34	
For >25 To 50, Add	316.44	
For >50 To 100, Add	158.22	
For >500 To 1,000, Deduct	-59.05	
For >1,000 To 2,000, Deduct	-89.41	
For >2,000 To 5,000, Deduct	-146.40	
For >5,000, Deduct	-242.88	
33 01 30 72-0129 LF 21mm Lining 54" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP) .....	1,293.45	
For Vinylster Resin, Add	852.66	
For Epoxy Resin, Add	100.49	
For Up To >10, Add	835.13	
For >10 To 25, Add	492.92	
For >25 To 50, Add	356.66	
For >50 To 100, Add	178.33	
For >500 To 1,000, Deduct	-66.56	
For >1,000 To 2,000, Deduct	-100.78	
For >2,000 To 5,000, Deduct	-165.01	
For >5,000, Deduct	-273.76	
33 01 30 72-0130 LF 21mm Lining 60" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP) .....	1,439.40	
For Vinylster Resin, Add	948.88	
For Epoxy Resin, Add	111.83	
For Up To >10, Add	929.35	
For >10 To 25, Add	548.54	
For >25 To 50, Add	396.90	
For >50 To 100, Add	198.45	
For >500 To 1,000, Deduct	-74.07	
For >1,000 To 2,000, Deduct	-112.15	
For >2,000 To 5,000, Deduct	-183.63	
For >5,000, Deduct	-304.65	



		<b>Utilities</b>	<b>33</b>	<b>CS</b>
		<b>Operation and Maintenance of Utilities</b>	<b>33 01</b>	
		<b>Operation and Maintenance of Sewer Utilities</b>	<b>33 01 30</b>	

MINOR CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
33 01 30 72-0131	LF	21mm Lining 66" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP).....	1,588.37	
		For Vinlyester Resin, Add	1,045.10	
		For Epoxy Resin, Add	123.17	
		For Up To >10, Add	1,032.61	
		For >10 To 25, Add	611.68	
		For >25 To 50, Add	441.66	
		For >50 To 100, Add	220.83	
		For >500 To 1,000, Deduct	-81.80	
		For >1,000 To 2,000, Deduct	-123.90	
		For >2,000 To 5,000, Deduct	-203.00	
		For >5,000, Deduct	-336.75	
33 01 30 72-0132	LF	21mm Lining 72" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP).....	1,734.58	
		For Vinlyester Resin, Add	1,141.31	
		For Epoxy Resin, Add	134.51	
		For Up To >10, Add	1,127.64	
		For >10 To 25, Add	667.96	
		For >25 To 50, Add	482.30	
		For >50 To 100, Add	241.15	
		For >500 To 1,000, Deduct	-89.33	
		For >1,000 To 2,000, Deduct	-135.30	
		For >2,000 To 5,000, Deduct	-221.69	
		For >5,000, Deduct	-367.74	
<b>33 01 30 72-0133 22.5mm Thick Lining Cured In-Place Pipe (33 01 30 72-0015)</b>				
33 01 30 72-0134	LF	22.5mm Lining 18" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP).....	449.93	
		For Vinlyester Resin, Add	294.04	
		For Epoxy Resin, Add	34.65	
		For Up To >10, Add	299.64	
		For >10 To 25, Add	179.69	
		For >25 To 50, Add	128.82	
		For >50 To 100, Add	64.41	
		For >500 To 1,000, Deduct	-23.24	
		For >1,000 To 2,000, Deduct	-35.24	
		For >2,000 To 5,000, Deduct	-57.87	
		For >5,000, Deduct	-95.96	
33 01 30 72-0135	LF	22.5mm Lining 21" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP).....	526.03	
		For Vinlyester Resin, Add	345.58	
		For Epoxy Resin, Add	40.73	
		For Up To >10, Add	343.87	
		For >10 To 25, Add	204.27	
		For >25 To 50, Add	147.25	
		For >50 To 100, Add	73.62	
		For >500 To 1,000, Deduct	-27.11	
		For >1,000 To 2,000, Deduct	-41.07	
		For >2,000 To 5,000, Deduct	-67.33	
		For >5,000, Deduct	-111.67	
33 01 30 72-0136	LF	22.5mm Lining 24" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP).....	602.96	
		For Vinlyester Resin, Add	397.13	
		For Epoxy Resin, Add	46.80	
		For Up To >10, Add	390.56	
		For >10 To 25, Add	230.91	
		For >25 To 50, Add	166.91	
		For >50 To 100, Add	83.46	
		For >500 To 1,000, Deduct	-31.04	
		For >1,000 To 2,000, Deduct	-47.00	
		For >2,000 To 5,000, Deduct	-76.99	
		For >5,000, Deduct	-127.72	
33 01 30 72-0137	LF	22.5mm Lining 27" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP).....	680.28	
		For Vinlyester Resin, Add	448.67	
		For Epoxy Resin, Add	52.88	
		For Up To >10, Add	438.44	
		For >10 To 25, Add	258.54	
		For >25 To 50, Add	187.17	
		For >50 To 100, Add	93.59	
		For >500 To 1,000, Deduct	-35.00	
		For >1,000 To 2,000, Deduct	-52.99	
		For >2,000 To 5,000, Deduct	-86.75	
		For >5,000, Deduct	-143.92	
33 01 30 72-0138	LF	22.5mm Lining 30" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP).....	758.44	
		For Vinlyester Resin, Add	500.21	
		For Epoxy Resin, Add	58.95	
		For Up To >10, Add	488.85	
		For >10 To 25, Add	288.27	
		For >25 To 50, Add	208.69	
		For >50 To 100, Add	104.35	
		For >500 To 1,000, Deduct	-39.02	
		For >1,000 To 2,000, Deduct	-59.08	
		For >2,000 To 5,000, Deduct	-96.71	
		For >5,000, Deduct	-160.46	

**33 Utilities****33 01 Operation and Maintenance of Utilities****33 01 30 Operation and Maintenance of Sewer Utilities**

MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
33 01 30 72-0139 LF 22.5mm Lining 36" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP) .....	914.74	
For Vinylster Resin, Add	603.30	
For Epoxy Resin, Add	71.10	
For Up To >10, Add	589.60	
For >10 To 25, Add	347.69	
For >25 To 50, Add	251.71	
For >50 To 100, Add	125.85	
For >500 To 1,000, Deduct	-47.06	
For >1,000 To 2,000, Deduct	-71.25	
For >2,000 To 5,000, Deduct	-116.64	
For >5,000, Deduct	-193.53	
33 01 30 72-0140 LF 22.5mm Lining 42" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP) .....	1,071.06	
For Vinylster Resin, Add	706.38	
For Epoxy Resin, Add	83.25	
For Up To >10, Add	690.38	
For >10 To 25, Add	407.13	
For >25 To 50, Add	294.73	
For >50 To 100, Add	147.37	
For >500 To 1,000, Deduct	-55.10	
For >1,000 To 2,000, Deduct	-83.43	
For >2,000 To 5,000, Deduct	-136.58	
For >5,000, Deduct	-226.60	
33 01 30 72-0141 LF 22.5mm Lining 48" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP) .....	1,227.36	
For Vinylster Resin, Add	809.47	
For Epoxy Resin, Add	95.40	
For Up To >10, Add	791.11	
For >10 To 25, Add	466.52	
For >25 To 50, Add	337.73	
For >50 To 100, Add	168.87	
For >500 To 1,000, Deduct	-63.14	
For >1,000 To 2,000, Deduct	-95.60	
For >2,000 To 5,000, Deduct	-156.51	
For >5,000, Deduct	-259.67	
33 01 30 72-0142 LF 22.5mm Lining 54" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP) .....	1,383.67	
For Vinylster Resin, Add	912.56	
For Epoxy Resin, Add	107.55	
For Up To >10, Add	891.89	
For >10 To 25, Add	525.96	
For >25 To 50, Add	380.76	
For >50 To 100, Add	190.38	
For >500 To 1,000, Deduct	-71.18	
For >1,000 To 2,000, Deduct	-107.78	
For >2,000 To 5,000, Deduct	-176.44	
For >5,000, Deduct	-292.74	
33 01 30 72-0143 LF 22.5mm Lining 60" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP) .....	1,539.98	
For Vinylster Resin, Add	1,015.64	
For Epoxy Resin, Add	119.70	
For Up To >10, Add	992.64	
For >10 To 25, Add	585.38	
For >25 To 50, Add	423.77	
For >50 To 100, Add	211.89	
For >500 To 1,000, Deduct	-79.23	
For >1,000 To 2,000, Deduct	-119.95	
For >2,000 To 5,000, Deduct	-196.38	
For >5,000, Deduct	-325.81	
33 01 30 72-0144 LF 22.5mm Lining 66" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP) .....	1,699.45	
For Vinylster Resin, Add	1,118.73	
For Epoxy Resin, Add	131.85	
For Up To >10, Add	1,102.88	
For >10 To 25, Add	652.70	
For >25 To 50, Add	471.53	
For >50 To 100, Add	235.76	
For >500 To 1,000, Deduct	-87.50	
For >1,000 To 2,000, Deduct	-132.52	
For >2,000 To 5,000, Deduct	-217.10	
For >5,000, Deduct	-360.14	
33 01 30 72-0145 LF 22.5mm Lining 72" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP) .....	1,856.03	
For Vinylster Resin, Add	1,221.82	
For Epoxy Resin, Add	144.00	
For Up To >10, Add	1,204.47	
For >10 To 25, Add	712.81	
For >25 To 50, Add	514.96	
For >50 To 100, Add	257.48	
For >500 To 1,000, Deduct	-95.57	
For >1,000 To 2,000, Deduct	-144.73	
For >2,000 To 5,000, Deduct	-237.10	
For >5,000, Deduct	-393.32	

33 01 30 72-0146 24mm Thick Lining Cured In-Place Pipe (33 01 30 72-0015)





		<b>Utilities</b>	<b>33</b>	<b>CS</b>
		<b>Operation and Maintenance of Utilities</b>	<b>33 01</b>	
		<b>Operation and Maintenance of Sewer Utilities</b>	<b>33 01 30</b>	

MINOR	CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
33 01 30 72-0147	LF		24mm Lining 18" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP).....	477.06	
			For Vinlyester Resin, Add	312.56	
			For Epoxy Resin, Add	36.84	
			For Up To >10, Add	314.91	
			For >10 To 25, Add	188.00	
			For >25 To 50, Add	135.13	
			For >50 To 100, Add	67.56	
			For >500 To 1,000, Deduct	-24.62	
			For >1,000 To 2,000, Deduct	-37.31	
			For >2,000 To 5,000, Deduct	-61.22	
			For >5,000, Deduct	-101.52	
33 01 30 72-0148	LF		24mm Lining 21" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP).....	558.09	
			For Vinlyester Resin, Add	367.54	
			For Epoxy Resin, Add	43.32	
			For Up To >10, Add	361.62	
			For >10 To 25, Add	213.84	
			For >25 To 50, Add	154.56	
			For >50 To 100, Add	77.28	
			For >500 To 1,000, Deduct	-28.73	
			For >1,000 To 2,000, Deduct	-43.51	
			For >2,000 To 5,000, Deduct	-71.26	
			For >5,000, Deduct	-118.22	
33 01 30 72-0149	LF		24mm Lining 24" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP).....	640.32	
			For Vinlyester Resin, Add	422.52	
			For Epoxy Resin, Add	49.80	
			For Up To >10, Add	411.96	
			For >10 To 25, Add	242.70	
			For >25 To 50, Add	175.80	
			For >50 To 100, Add	87.90	
			For >500 To 1,000, Deduct	-32.93	
			For >1,000 To 2,000, Deduct	-49.86	
			For >2,000 To 5,000, Deduct	-81.61	
			For >5,000, Deduct	-135.41	
33 01 30 72-0150	LF		24mm Lining 27" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP).....	723.66	
			For Vinlyester Resin, Add	477.50	
			For Epoxy Resin, Add	56.28	
			For Up To >10, Add	465.63	
			For >10 To 25, Add	274.34	
			For >25 To 50, Add	198.71	
			For >50 To 100, Add	99.35	
			For >500 To 1,000, Deduct	-37.22	
			For >1,000 To 2,000, Deduct	-56.35	
			For >2,000 To 5,000, Deduct	-92.24	
			For >5,000, Deduct	-153.04	
33 01 30 72-0151	LF		24mm Lining 30" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP).....	806.99	
			For Vinlyester Resin, Add	532.48	
			For Epoxy Resin, Add	62.76	
			For Up To >10, Add	519.27	
			For >10 To 25, Add	305.95	
			For >25 To 50, Add	221.60	
			For >50 To 100, Add	110.80	
			For >500 To 1,000, Deduct	-41.51	
			For >1,000 To 2,000, Deduct	-62.84	
			For >2,000 To 5,000, Deduct	-102.86	
			For >5,000, Deduct	-170.66	
33 01 30 72-0152	LF		24mm Lining 36" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP).....	973.67	
			For Vinlyester Resin, Add	642.44	
			For Epoxy Resin, Add	75.72	
			For Up To >10, Add	626.59	
			For >10 To 25, Add	369.19	
			For >25 To 50, Add	267.40	
			For >50 To 100, Add	133.70	
			For >500 To 1,000, Deduct	-50.08	
			For >1,000 To 2,000, Deduct	-75.82	
			For >2,000 To 5,000, Deduct	-124.11	
			For >5,000, Deduct	-205.91	
33 01 30 72-0153	LF		24mm Lining 42" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP).....	1,181.34	
			For Vinlyester Resin, Add	781.19	
			For Epoxy Resin, Add	92.07	
			For Up To >10, Add	754.07	
			For >10 To 25, Add	442.40	
			For >25 To 50, Add	321.24	
			For >50 To 100, Add	160.62	
			For >500 To 1,000, Deduct	-60.70	
			For >1,000 To 2,000, Deduct	-91.87	
			For >2,000 To 5,000, Deduct	-150.26	
			For >5,000, Deduct	-249.34	

**33 Utilities****33 01 Operation and Maintenance of Utilities****33 01 30 Operation and Maintenance of Sewer Utilities**

MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
33 01 30 72-0154 LF 24mm Lining 48" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP) .....	1,306.88	
For Vinylester Resin, Add	862.35	
For Epoxy Resin, Add	101.63	
For Up To >10, Add	840.82	
For >10 To 25, Add	495.36	
For >25 To 50, Add	358.81	
For >50 To 100, Add	179.41	
For >500 To 1,000, Deduct	-67.22	
For >1,000 To 2,000, Deduct	-101.76	
For >2,000 To 5,000, Deduct	-166.57	
For >5,000, Deduct	-276.37	
33 01 30 72-0155 LF 24mm Lining 54" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP) .....	1,473.56	
For Vinylester Resin, Add	972.31	
For Epoxy Resin, Add	114.59	
For Up To >10, Add	948.13	
For >10 To 25, Add	558.61	
For >25 To 50, Add	404.61	
For >50 To 100, Add	202.31	
For >500 To 1,000, Deduct	-75.79	
For >1,000 To 2,000, Deduct	-114.74	
For >2,000 To 5,000, Deduct	-187.82	
For >5,000, Deduct	-311.62	
33 01 30 72-0156 LF 24mm Lining 60" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP) .....	1,640.24	
For Vinylester Resin, Add	1,082.27	
For Epoxy Resin, Add	127.55	
For Up To >10, Add	1,055.47	
For >10 To 25, Add	621.88	
For >25 To 50, Add	450.43	
For >50 To 100, Add	225.22	
For >500 To 1,000, Deduct	-84.37	
For >1,000 To 2,000, Deduct	-127.73	
For >2,000 To 5,000, Deduct	-209.07	
For >5,000, Deduct	-346.88	
33 01 30 72-0157 LF 24mm Lining 66" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP) .....	1,810.20	
For Vinylester Resin, Add	1,192.23	
For Epoxy Resin, Add	140.51	
For Up To >10, Add	1,172.65	
For >10 To 25, Add	693.35	
For >25 To 50, Add	501.17	
For >50 To 100, Add	250.58	
For >500 To 1,000, Deduct	-93.19	
For >1,000 To 2,000, Deduct	-141.12	
For >2,000 To 5,000, Deduct	-231.14	
For >5,000, Deduct	-383.44	
33 01 30 72-0158 LF 24mm Lining 72" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP) .....	1,977.15	
For Vinylester Resin, Add	1,302.19	
For Epoxy Resin, Add	153.47	
For Up To >10, Add	1,280.78	
For >10 To 25, Add	757.27	
For >25 To 50, Add	547.37	
For >50 To 100, Add	273.69	
For >500 To 1,000, Deduct	-101.78	
For >1,000 To 2,000, Deduct	-154.13	
For >2,000 To 5,000, Deduct	-252.45	
For >5,000, Deduct	-418.81	
33 01 30 72-0159 LF 24mm Lining 78" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP) .....	2,144.10	
For Vinylester Resin, Add	1,412.15	
For Epoxy Resin, Add	166.43	
For Up To >10, Add	1,388.93	
For >10 To 25, Add	821.21	
For >25 To 50, Add	593.60	
For >50 To 100, Add	296.80	
For >500 To 1,000, Deduct	-110.37	
For >1,000 To 2,000, Deduct	-167.15	
For >2,000 To 5,000, Deduct	-273.77	
For >5,000, Deduct	-454.17	
33 01 30 72-0160 LF 24mm Lining 84" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP) .....	2,311.05	
For Vinylester Resin, Add	1,522.11	
For Epoxy Resin, Add	179.39	
For Up To >10, Add	1,497.05	
For >10 To 25, Add	885.14	
For >25 To 50, Add	639.80	
For >50 To 100, Add	319.90	
For >500 To 1,000, Deduct	-118.97	
For >1,000 To 2,000, Deduct	-180.16	
For >2,000 To 5,000, Deduct	-295.09	
For >5,000, Deduct	-489.53	

33 01 30 72-0161 25.5mm Thick Lining Cured In-Place Pipe (33 01 30 72-0015)



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MINOR CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
33 01 30 72-0162	LF	25.5mm Lining 21" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP).....	590.35	
		For Vinylester Resin, Add	389.36	
		For Epoxy Resin, Add	45.89	
		For Up To >10, Add	380.48	
		For >10 To 25, Add	224.36	
		For >25 To 50, Add	162.43	
		For >50 To 100, Add	81.21	
		For >500 To 1,000, Deduct	-30.37	
		For >1,000 To 2,000, Deduct	-45.98	
		For >2,000 To 5,000, Deduct	-75.28	
		For >5,000, Deduct	-124.89	
33 01 30 72-0163	LF	25.5mm Lining 24" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP).....	678.32	
		For Vinylester Resin, Add	447.78	
		For Epoxy Resin, Add	52.77	
		For Up To >10, Add	435.76	
		For >10 To 25, Add	256.52	
		For >25 To 50, Add	185.90	
		For >50 To 100, Add	92.95	
		For >500 To 1,000, Deduct	-34.88	
		For >1,000 To 2,000, Deduct	-52.81	
		For >2,000 To 5,000, Deduct	-86.42	
		For >5,000, Deduct	-143.39	
33 01 30 72-0164	LF	25.5mm Lining 27" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP).....	766.84	
		For Vinylester Resin, Add	506.19	
		For Epoxy Resin, Add	59.66	
		For Up To >10, Add	492.70	
		For >10 To 25, Add	290.06	
		For >25 To 50, Add	210.19	
		For >50 To 100, Add	105.10	
		For >500 To 1,000, Deduct	-39.43	
		For >1,000 To 2,000, Deduct	-59.70	
		For >2,000 To 5,000, Deduct	-97.70	
		For >5,000, Deduct	-162.11	
33 01 30 72-0165	LF	25.5mm Lining 30" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP).....	855.22	
		For Vinylester Resin, Add	564.61	
		For Epoxy Resin, Add	66.54	
		For Up To >10, Add	549.21	
		For >10 To 25, Add	323.25	
		For >25 To 50, Add	234.28	
		For >50 To 100, Add	117.14	
		For >500 To 1,000, Deduct	-43.98	
		For >1,000 To 2,000, Deduct	-66.57	
		For >2,000 To 5,000, Deduct	-108.95	
		For >5,000, Deduct	-180.77	
33 01 30 72-0166	LF	25.5mm Lining 36" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP).....	1,032.26	
		For Vinylester Resin, Add	681.44	
		For Epoxy Resin, Add	80.31	
		For Up To >10, Add	663.08	
		For >10 To 25, Add	390.32	
		For >25 To 50, Add	282.87	
		For >50 To 100, Add	141.43	
		For >500 To 1,000, Deduct	-53.08	
		For >1,000 To 2,000, Deduct	-80.36	
		For >2,000 To 5,000, Deduct	-131.51	
		For >5,000, Deduct	-218.21	
33 01 30 72-0167	LF	25.5mm Lining 42" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP).....	1,209.18	
		For Vinylester Resin, Add	798.27	
		For Epoxy Resin, Add	94.08	
		For Up To >10, Add	776.57	
		For >10 To 25, Add	457.07	
		For >25 To 50, Add	331.26	
		For >50 To 100, Add	165.63	
		For >500 To 1,000, Deduct	-62.18	
		For >1,000 To 2,000, Deduct	-94.13	
		For >2,000 To 5,000, Deduct	-154.04	
		For >5,000, Deduct	-255.59	
33 01 30 72-0168	LF	25.5mm Lining 48" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP).....	1,386.21	
		For Vinylester Resin, Add	915.10	
		For Epoxy Resin, Add	107.85	
		For Up To >10, Add	890.41	
		For >10 To 25, Add	524.12	
		For >25 To 50, Add	379.84	
		For >50 To 100, Add	189.92	
		For >500 To 1,000, Deduct	-71.28	
		For >1,000 To 2,000, Deduct	-107.91	
		For >2,000 To 5,000, Deduct	-176.60	
		For >5,000, Deduct	-293.03	

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MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
33 01 30 72-0169 LF 25.5mm Lining 54" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP) .....	1,563.12	
For Vinylster Resin, Add	1,031.93	
For Epoxy Resin, Add	121.62	
For Up To >10, Add	1,003.89	
For >10 To 25, Add	590.87	
For >25 To 50, Add	428.23	
For >50 To 100, Add	214.12	
For >500 To 1,000, Deduct	-80.38	
For >1,000 To 2,000, Deduct	-121.68	
For >2,000 To 5,000, Deduct	-199.14	
For >5,000, Deduct	-330.41	
33 01 30 72-0170 LF 25.5mm Lining 60" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP) .....	1,740.16	
For Vinylster Resin, Add	1,148.76	
For Epoxy Resin, Add	135.39	
For Up To >10, Add	1,117.76	
For >10 To 25, Add	657.95	
For >25 To 50, Add	476.82	
For >50 To 100, Add	238.41	
For >500 To 1,000, Deduct	-89.48	
For >1,000 To 2,000, Deduct	-135.47	
For >2,000 To 5,000, Deduct	-221.70	
For >5,000, Deduct	-367.85	
33 01 30 72-0171 LF 25.5mm Lining 66" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP) .....	1,921.58	
For Vinylster Resin, Add	1,265.59	
For Epoxy Resin, Add	149.16	
For Up To >10, Add	1,244.77	
For >10 To 25, Add	735.97	
For >25 To 50, Add	531.98	
For >50 To 100, Add	265.99	
For >500 To 1,000, Deduct	-98.92	
For >1,000 To 2,000, Deduct	-149.80	
For >2,000 To 5,000, Deduct	-245.36	
For >5,000, Deduct	-407.03	
33 01 30 72-0172 LF 25.5mm Lining 72" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP) .....	2,099.04	
For Vinylster Resin, Add	1,382.43	
For Epoxy Resin, Add	162.93	
For Up To >10, Add	1,359.87	
For >10 To 25, Add	804.08	
For >25 To 50, Add	581.19	
For >50 To 100, Add	290.60	
For >500 To 1,000, Deduct	-108.06	
For >1,000 To 2,000, Deduct	-163.64	
For >2,000 To 5,000, Deduct	-268.02	
For >5,000, Deduct	-444.64	
33 01 30 72-0173 LF 25.5mm Lining 78" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP) .....	2,276.35	
For Vinylster Resin, Add	1,499.26	
For Epoxy Resin, Add	176.70	
For Up To >10, Add	1,474.55	
For >10 To 25, Add	871.83	
For >25 To 50, Add	630.19	
For >50 To 100, Add	315.09	
For >500 To 1,000, Deduct	-117.18	
For >1,000 To 2,000, Deduct	-177.45	
For >2,000 To 5,000, Deduct	-290.65	
For >5,000, Deduct	-482.18	
33 01 30 72-0174 LF 25.5mm Lining 84" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP) .....	2,453.81	
For Vinylster Resin, Add	1,616.09	
For Epoxy Resin, Add	190.47	
For Up To >10, Add	1,589.68	
For >10 To 25, Add	939.95	
For >25 To 50, Add	679.41	
For >50 To 100, Add	339.70	
For >500 To 1,000, Deduct	-126.32	
For >1,000 To 2,000, Deduct	-191.29	
For >2,000 To 5,000, Deduct	-313.32	
For >5,000, Deduct	-519.78	
<b>33 01 30 72-0175 27mm Thick Lining Cured In-Place Pipe (33 01 30 72-0015) .....</b>	<b>622.28</b>	
33 01 30 72-0176 LF 27mm Lining 21" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP) .....		
For Vinylster Resin, Add	411.05	
For Epoxy Resin, Add	48.44	
For Up To >10, Add	398.82	
For >10 To 25, Add	234.48	
For >25 To 50, Add	170.05	
For >50 To 100, Add	85.02	
For >500 To 1,000, Deduct	-31.99	
For >1,000 To 2,000, Deduct	-48.42	
For >2,000 To 5,000, Deduct	-79.23	
For >5,000, Deduct	-131.47	



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		<b>Operation and Maintenance of Utilities</b>	<b>33 01</b>	
		<b>Operation and Maintenance of Sewer Utilities</b>	<b>33 01 30</b>	

MINOR CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
33 01 30 72-0177	LF	27mm Lining 24" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP).....	715.99	
		For Vinlyester Resin, Add	472.90	
		For Epoxy Resin, Add	55.73	
		For Up To >10, Add	459.05	
		For >10 To 25, Add	269.94	
		For >25 To 50, Add	195.74	
		For >50 To 100, Add	97.87	
		For >500 To 1,000, Deduct	-36.81	
		For >1,000 To 2,000, Deduct	-55.72	
		For >2,000 To 5,000, Deduct	-91.17	
		For >5,000, Deduct	-151.28	
33 01 30 72-0178	LF	27mm Lining 27" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP).....	809.70	
		For Vinlyester Resin, Add	534.75	
		For Epoxy Resin, Add	63.02	
		For Up To >10, Add	519.28	
		For >10 To 25, Add	305.41	
		For >25 To 50, Add	221.44	
		For >50 To 100, Add	110.72	
		For >500 To 1,000, Deduct	-41.63	
		For >1,000 To 2,000, Deduct	-63.02	
		For >2,000 To 5,000, Deduct	-103.11	
		For >5,000, Deduct	-171.09	
33 01 30 72-0179	LF	27mm Lining 30" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP).....	903.26	
		For Vinlyester Resin, Add	596.60	
		For Epoxy Resin, Add	70.31	
		For Up To >10, Add	579.06	
		For >10 To 25, Add	340.50	
		For >25 To 50, Add	246.91	
		For >50 To 100, Add	123.46	
		For >500 To 1,000, Deduct	-46.44	
		For >1,000 To 2,000, Deduct	-70.29	
		For >2,000 To 5,000, Deduct	-115.02	
		For >5,000, Deduct	-190.85	
33 01 30 72-0180	LF	27mm Lining 36" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP).....	1,090.53	
		For Vinlyester Resin, Add	720.31	
		For Epoxy Resin, Add	84.89	
		For Up To >10, Add	699.07	
		For >10 To 25, Add	411.05	
		For >25 To 50, Add	298.08	
		For >50 To 100, Add	149.04	
		For >500 To 1,000, Deduct	-56.06	
		For >1,000 To 2,000, Deduct	-84.87	
		For >2,000 To 5,000, Deduct	-138.86	
		For >5,000, Deduct	-230.41	
33 01 30 72-0181	LF	27mm Lining 42" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP).....	1,277.94	
		For Vinlyester Resin, Add	844.00	
		For Epoxy Resin, Add	99.47	
		For Up To >10, Add	819.52	
		For >10 To 25, Add	481.98	
		For >25 To 50, Add	349.47	
		For >50 To 100, Add	174.74	
		For >500 To 1,000, Deduct	-65.70	
		For >1,000 To 2,000, Deduct	-99.46	
		For >2,000 To 5,000, Deduct	-162.74	
		For >5,000, Deduct	-270.03	
33 01 30 72-0182	LF	27mm Lining 48" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP).....	1,465.22	
		For Vinlyester Resin, Add	967.72	
		For Epoxy Resin, Add	114.05	
		For Up To >10, Add	939.54	
		For >10 To 25, Add	552.54	
		For >25 To 50, Add	400.65	
		For >50 To 100, Add	200.32	
		For >500 To 1,000, Deduct	-75.33	
		For >1,000 To 2,000, Deduct	-114.03	
		For >2,000 To 5,000, Deduct	-186.59	
		For >5,000, Deduct	-309.60	
33 01 30 72-0183	LF	27mm Lining 54" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP).....	1,652.48	
		For Vinlyester Resin, Add	1,091.42	
		For Epoxy Resin, Add	128.63	
		For Up To >10, Add	1,059.52	
		For >10 To 25, Add	623.07	
		For >25 To 50, Add	451.80	
		For >50 To 100, Add	225.90	
		For >500 To 1,000, Deduct	-84.96	
		For >1,000 To 2,000, Deduct	-128.60	
		For >2,000 To 5,000, Deduct	-210.43	
		For >5,000, Deduct	-349.16	

**33 Utilities****33 01 Operation and Maintenance of Utilities****33 01 30 Operation and Maintenance of Sewer Utilities**

MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
33 01 30 72-0184 LF 27mm Lining 60" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP) .....	1,839.74	
For Vinylster Resin, Add	1,215.12	
For Epoxy Resin, Add	143.21	
For Up To >10, Add	1,179.52	
For >10 To 25, Add	693.62	
For >25 To 50, Add	502.97	
For >50 To 100, Add	251.48	
For >500 To 1,000, Deduct	-94.58	
For >1,000 To 2,000, Deduct	-143.17	
For >2,000 To 5,000, Deduct	-234.27	
For >5,000, Deduct	-388.72	
33 01 30 72-0185 LF 27mm Lining 66" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP) .....	2,032.78	
For Vinylster Resin, Add	1,338.83	
For Epoxy Resin, Add	157.79	
For Up To >10, Add	1,316.82	
For >10 To 25, Add	778.58	
For >25 To 50, Add	562.78	
For >50 To 100, Add	281.39	
For >500 To 1,000, Deduct	-104.64	
For >1,000 To 2,000, Deduct	-158.47	
For >2,000 To 5,000, Deduct	-259.56	
For >5,000, Deduct	-430.59	
33 01 30 72-0186 LF 27mm Lining 72" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP) .....	2,220.59	
For Vinylster Resin, Add	1,462.52	
For Epoxy Resin, Add	172.37	
For Up To >10, Add	1,438.47	
For >10 To 25, Add	850.51	
For >25 To 50, Add	614.77	
For >50 To 100, Add	307.38	
For >500 To 1,000, Deduct	-114.31	
For >1,000 To 2,000, Deduct	-173.11	
For >2,000 To 5,000, Deduct	-283.54	
For >5,000, Deduct	-470.37	
33 01 30 72-0187 LF 27mm Lining 78" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP) .....	2,408.40	
For Vinylster Resin, Add	1,586.23	
For Epoxy Resin, Add	186.95	
For Up To >10, Add	1,560.10	
For >10 To 25, Add	922.41	
For >25 To 50, Add	666.75	
For >50 To 100, Add	333.37	
For >500 To 1,000, Deduct	-123.98	
For >1,000 To 2,000, Deduct	-187.75	
For >2,000 To 5,000, Deduct	-307.51	
For >5,000, Deduct	-510.15	
33 01 30 72-0188 LF 27mm Lining 84" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP) .....	2,596.23	
For Vinylster Resin, Add	1,709.93	
For Epoxy Resin, Add	201.53	
For Up To >10, Add	1,681.79	
For >10 To 25, Add	994.37	
For >25 To 50, Add	718.76	
For >50 To 100, Add	359.38	
For >500 To 1,000, Deduct	-133.65	
For >1,000 To 2,000, Deduct	-202.39	
For >2,000 To 5,000, Deduct	-331.50	
For >5,000, Deduct	-549.94	
<b>33 01 30 72-0189 28.5mm Thick Lining Cured In-Place Pipe (33 01 30 72-0015)</b>		
33 01 30 72-0190 LF 28.5mm Lining 24" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP) .....	753.19	
For Vinylster Resin, Add	497.88	
For Epoxy Resin, Add	58.68	
For Up To >10, Add	481.42	
For >10 To 25, Add	282.64	
For >25 To 50, Add	205.15	
For >50 To 100, Add	102.57	
For >500 To 1,000, Deduct	-38.71	
For >1,000 To 2,000, Deduct	-58.59	
For >2,000 To 5,000, Deduct	-95.83	
For >5,000, Deduct	-159.02	
33 01 30 72-0191 LF 28.5mm Lining 27" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP) .....	852.08	
For Vinylster Resin, Add	563.17	
For Epoxy Resin, Add	66.37	
For Up To >10, Add	544.92	
For >10 To 25, Add	320.01	
For >25 To 50, Add	232.23	
For >50 To 100, Add	116.12	
For >500 To 1,000, Deduct	-43.79	
For >1,000 To 2,000, Deduct	-66.28	
For >2,000 To 5,000, Deduct	-108.43	
For >5,000, Deduct	-179.93	



		<b>Utilities</b>	<b>33</b>	<b>CS</b>
		<b>Operation and Maintenance of Utilities</b>	<b>33 01</b>	
		<b>Operation and Maintenance of Sewer Utilities</b>	<b>33 01 30</b>	

MINOR CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
33 01 30 72-0192	LF	28.5mm Lining 30" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP).....	950.83	
		For Vinlyester Resin, Add	628.46	
		For Epoxy Resin, Add	74.07	
		For Up To >10, Add	607.99	
		For >10 To 25, Add	357.03	
		For >25 To 50, Add	259.11	
		For >50 To 100, Add	129.55	
		For >500 To 1,000, Deduct	-48.87	
		For >1,000 To 2,000, Deduct	-73.96	
		For >2,000 To 5,000, Deduct	-120.99	
		For >5,000, Deduct	-200.77	
33 01 30 72-0193	LF	28.5mm Lining 36" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP).....	1,203.46	
		For Vinlyester Resin, Add	797.63	
		For Epoxy Resin, Add	94.01	
		For Up To >10, Add	761.71	
		For >10 To 25, Add	444.84	
		For >25 To 50, Add	323.88	
		For >50 To 100, Add	161.94	
		For >500 To 1,000, Deduct	-61.77	
		For >1,000 To 2,000, Deduct	-93.46	
		For >2,000 To 5,000, Deduct	-152.73	
		For >5,000, Deduct	-253.49	
33 01 30 72-0194	LF	28.5mm Lining 42" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP).....	1,345.96	
		For Vinlyester Resin, Add	889.61	
		For Epoxy Resin, Add	104.85	
		For Up To >10, Add	860.71	
		For >10 To 25, Add	505.44	
		For >25 To 50, Add	366.81	
		For >50 To 100, Add	183.40	
		For >500 To 1,000, Deduct	-69.18	
		For >1,000 To 2,000, Deduct	-104.70	
		For >2,000 To 5,000, Deduct	-171.28	
		For >5,000, Deduct	-284.21	
33 01 30 72-0195	LF	28.5mm Lining 48" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP).....	1,543.47	
		For Vinlyester Resin, Add	1,020.19	
		For Epoxy Resin, Add	120.24	
		For Up To >10, Add	986.86	
		For >10 To 25, Add	579.48	
		For >25 To 50, Add	420.56	
		For >50 To 100, Add	210.28	
		For >500 To 1,000, Deduct	-79.32	
		For >1,000 To 2,000, Deduct	-120.06	
		For >2,000 To 5,000, Deduct	-196.40	
		For >5,000, Deduct	-325.90	
33 01 30 72-0196	LF	28.5mm Lining 54" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP).....	1,740.96	
		For Vinlyester Resin, Add	1,150.77	
		For Epoxy Resin, Add	135.63	
		For Up To >10, Add	1,113.01	
		For >10 To 25, Add	653.51	
		For >25 To 50, Add	474.31	
		For >50 To 100, Add	237.15	
		For >500 To 1,000, Deduct	-89.47	
		For >1,000 To 2,000, Deduct	-135.42	
		For >2,000 To 5,000, Deduct	-221.53	
		For >5,000, Deduct	-367.59	
33 01 30 72-0197	LF	28.5mm Lining 60" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP).....	1,938.46	
		For Vinlyester Resin, Add	1,281.34	
		For Epoxy Resin, Add	151.02	
		For Up To >10, Add	1,239.16	
		For >10 To 25, Add	727.55	
		For >25 To 50, Add	528.05	
		For >50 To 100, Add	264.03	
		For >500 To 1,000, Deduct	-99.62	
		For >1,000 To 2,000, Deduct	-150.78	
		For >2,000 To 5,000, Deduct	-246.65	
		For >5,000, Deduct	-409.29	
33 01 30 72-0198	LF	28.5mm Lining 66" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP).....	2,141.99	
		For Vinlyester Resin, Add	1,411.92	
		For Epoxy Resin, Add	166.40	
		For Up To >10, Add	1,383.40	
		For >10 To 25, Add	816.66	
		For >25 To 50, Add	590.85	
		For >50 To 100, Add	295.42	
		For >500 To 1,000, Deduct	-110.22	
		For >1,000 To 2,000, Deduct	-166.90	
		For >2,000 To 5,000, Deduct	-273.28	
		For >5,000, Deduct	-453.39	

**33 Utilities****33 01 Operation and Maintenance of Utilities****33 01 30 Operation and Maintenance of Sewer Utilities**

MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
33 01 30 72-0199 LF 28.5mm Lining 72" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP) .....	2,340.03	
For Vinylester Resin, Add	1,542.49	
For Epoxy Resin, Add	181.79	
For Up To >10, Add	1,511.19	
For >10 To 25, Add	892.07	
For >25 To 50, Add	645.42	
For >50 To 100, Add	322.71	
For >500 To 1,000, Deduct	-120.41	
For >1,000 To 2,000, Deduct	-182.33	
For >2,000 To 5,000, Deduct	-298.54	
For >5,000, Deduct	-495.30	
33 01 30 72-0200 LF 28.5mm Lining 78" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP) .....	2,538.22	
For Vinylester Resin, Add	1,673.07	
For Epoxy Resin, Add	197.18	
For Up To >10, Add	1,639.41	
For >10 To 25, Add	967.83	
For >25 To 50, Add	700.20	
For >50 To 100, Add	350.10	
For >500 To 1,000, Deduct	-130.61	
For >1,000 To 2,000, Deduct	-197.77	
For >2,000 To 5,000, Deduct	-323.84	
For >5,000, Deduct	-537.27	
33 01 30 72-0201 LF 28.5mm Lining 84" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP) .....	2,736.27	
For Vinylester Resin, Add	1,803.65	
For Epoxy Resin, Add	212.57	
For Up To >10, Add	1,767.21	
For >10 To 25, Add	1,043.24	
For >25 To 50, Add	754.77	
For >50 To 100, Add	377.39	
For >500 To 1,000, Deduct	-140.80	
For >1,000 To 2,000, Deduct	-213.20	
For >2,000 To 5,000, Deduct	-349.10	
For >5,000, Deduct	-579.18	
<b>33 01 30 72-0202 30mm Thick Lining Cured In-Place Pipe (33 01 30 72-0015)</b>		
33 01 30 72-0203 LF 30mm Lining 24" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP) .....	790.21	
For Vinylester Resin, Add	522.74	
For Epoxy Resin, Add	61.61	
For Up To >10, Add	503.71	
For >10 To 25, Add	295.29	
For >25 To 50, Add	214.51	
For >50 To 100, Add	107.26	
For >500 To 1,000, Deduct	-40.60	
For >1,000 To 2,000, Deduct	-61.44	
For >2,000 To 5,000, Deduct	-100.47	
For >5,000, Deduct	-166.73	
33 01 30 72-0204 LF 30mm Lining 27" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP) .....	894.15	
For Vinylester Resin, Add	591.47	
For Epoxy Resin, Add	69.71	
For Up To >10, Add	570.08	
For >10 To 25, Add	334.24	
For >25 To 50, Add	242.79	
For >50 To 100, Add	121.40	
For >500 To 1,000, Deduct	-45.94	
For >1,000 To 2,000, Deduct	-69.52	
For >2,000 To 5,000, Deduct	-113.69	
For >5,000, Deduct	-188.67	
33 01 30 72-0205 LF 30mm Lining 30" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP) .....	998.07	
For Vinylester Resin, Add	660.18	
For Epoxy Resin, Add	77.81	
For Up To >10, Add	636.41	
For >10 To 25, Add	373.16	
For >25 To 50, Add	271.05	
For >50 To 100, Add	135.52	
For >500 To 1,000, Deduct	-51.28	
For >1,000 To 2,000, Deduct	-77.60	
For >2,000 To 5,000, Deduct	-126.91	
For >5,000, Deduct	-210.60	
33 01 30 72-0206 LF 30mm Lining 36" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP) .....	1,205.78	
For Vinylester Resin, Add	797.63	
For Epoxy Resin, Add	94.01	
For Up To >10, Add	768.67	
For >10 To 25, Add	450.64	
For >25 To 50, Add	327.36	
For >50 To 100, Add	163.68	
For >500 To 1,000, Deduct	-61.95	
For >1,000 To 2,000, Deduct	-93.75	
For >2,000 To 5,000, Deduct	-153.31	
For >5,000, Deduct	-254.42	





		<b>Utilities</b>	<b>33</b>	<b>CS</b>
		<b>Operation and Maintenance of Utilities</b>	<b>33 01</b>	
		<b>Operation and Maintenance of Sewer Utilities</b>	<b>33 01 30</b>	

MINOR	CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
33 01 30 72-0207	LF		30mm Lining 42" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP).....	1,413.66	
			For Vinlyester Resin, Add	935.08	
			For Epoxy Resin, Add	110.21	
			For Up To >10, Add	901.41	
			For >10 To 25, Add	528.53	
			For >25 To 50, Add	383.91	
			For >50 To 100, Add	191.96	
			For >500 To 1,000, Deduct	-72.63	
			For >1,000 To 2,000, Deduct	-109.92	
			For >2,000 To 5,000, Deduct	-179.76	
			For >5,000, Deduct	-298.30	
33 01 30 72-0208	LF		30mm Lining 48" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP).....	1,621.39	
			For Vinlyester Resin, Add	1,072.53	
			For Epoxy Resin, Add	126.41	
			For Up To >10, Add	1,033.70	
			For >10 To 25, Add	606.05	
			For >25 To 50, Add	440.24	
			For >50 To 100, Add	220.12	
			For >500 To 1,000, Deduct	-83.30	
			For >1,000 To 2,000, Deduct	-126.06	
			For >2,000 To 5,000, Deduct	-206.16	
			For >5,000, Deduct	-342.12	
33 01 30 72-0209	LF		30mm Lining 54" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP).....	1,829.25	
			For Vinlyester Resin, Add	1,209.98	
			For Epoxy Resin, Add	142.60	
			For Up To >10, Add	1,166.40	
			For >10 To 25, Add	683.91	
			For >25 To 50, Add	496.77	
			For >50 To 100, Add	248.39	
			For >500 To 1,000, Deduct	-93.98	
			For >1,000 To 2,000, Deduct	-142.23	
			For >2,000 To 5,000, Deduct	-232.60	
			For >5,000, Deduct	-385.99	
33 01 30 72-0210	LF		30mm Lining 60" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP).....	2,036.98	
			For Vinlyester Resin, Add	1,347.43	
			For Epoxy Resin, Add	158.80	
			For Up To >10, Add	1,298.69	
			For >10 To 25, Add	761.43	
			For >25 To 50, Add	553.10	
			For >50 To 100, Add	276.55	
			For >500 To 1,000, Deduct	-104.65	
			For >1,000 To 2,000, Deduct	-158.38	
			For >2,000 To 5,000, Deduct	-259.01	
			For >5,000, Deduct	-429.81	
33 01 30 72-0211	LF		30mm Lining 66" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP).....	2,251.01	
			For Vinlyester Resin, Add	1,484.88	
			For Epoxy Resin, Add	175.00	
			For Up To >10, Add	1,449.91	
			For >10 To 25, Add	854.71	
			For >25 To 50, Add	618.89	
			For >50 To 100, Add	309.45	
			For >500 To 1,000, Deduct	-115.79	
			For >1,000 To 2,000, Deduct	-175.31	
			For >2,000 To 5,000, Deduct	-286.99	
			For >5,000, Deduct	-476.15	
33 01 30 72-0212	LF		30mm Lining 72" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP).....	2,459.29	
			For Vinlyester Resin, Add	1,622.33	
			For Epoxy Resin, Add	191.20	
			For Up To >10, Add	1,583.85	
			For >10 To 25, Add	933.60	
			For >25 To 50, Add	676.04	
			For >50 To 100, Add	338.02	
			For >500 To 1,000, Deduct	-126.51	
			For >1,000 To 2,000, Deduct	-191.53	
			For >2,000 To 5,000, Deduct	-313.53	
			For >5,000, Deduct	-520.19	
33 01 30 72-0213	LF		30mm Lining 78" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP).....	2,667.70	
			For Vinlyester Resin, Add	1,759.77	
			For Epoxy Resin, Add	207.40	
			For Up To >10, Add	1,718.20	
			For >10 To 25, Add	1,012.84	
			For >25 To 50, Add	733.40	
			For >50 To 100, Add	366.70	
			For >500 To 1,000, Deduct	-137.23	
			For >1,000 To 2,000, Deduct	-207.76	
			For >2,000 To 5,000, Deduct	-340.11	
			For >5,000, Deduct	-564.29	

**33 Utilities****33 01 Operation and Maintenance of Utilities****33 01 30 Operation and Maintenance of Sewer Utilities**

MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
33 01 30 72-0214 LF 30mm Lining 84" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP) .....	2,876.12	
For Vinylester Resin, Add	1,897.22	
For Epoxy Resin, Add	223.60	
For Up To >10, Add	1,852.56	
For >10 To 25, Add	1,092.08	
For >25 To 50, Add	790.76	
For >50 To 100, Add	395.38	
For >500 To 1,000, Deduct	-147.95	
For >1,000 To 2,000, Deduct	-224.00	
For >2,000 To 5,000, Deduct	-366.69	
For >5,000, Deduct	-608.38	
33 01 30 72-0215 LF 30mm Lining 90" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP) .....	3,084.39	
For Vinylester Resin, Add	2,034.67	
For Epoxy Resin, Add	239.80	
For Up To >10, Add	1,986.50	
For >10 To 25, Add	1,170.97	
For >25 To 50, Add	847.91	
For >50 To 100, Add	423.96	
For >500 To 1,000, Deduct	-158.66	
For >1,000 To 2,000, Deduct	-240.22	
For >2,000 To 5,000, Deduct	-393.23	
For >5,000, Deduct	-652.42	
33 01 30 72-0216 LF 30mm Lining 96" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP) .....	3,292.80	
For Vinylester Resin, Add	2,172.12	
For Epoxy Resin, Add	256.00	
For Up To >10, Add	2,120.83	
For >10 To 25, Add	1,250.18	
For >25 To 50, Add	905.26	
For >50 To 100, Add	452.63	
For >500 To 1,000, Deduct	-169.38	
For >1,000 To 2,000, Deduct	-256.45	
For >2,000 To 5,000, Deduct	-419.81	
For >5,000, Deduct	-696.51	
<b>33 01 30 72-0217 31.5mm Thick Lining Cured In-Place Pipe (33 01 30 72-0015)</b>		
33 01 30 72-0218 LF 31.5mm Lining 24" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP) .....	827.02	
For Vinylester Resin, Add	547.46	
For Epoxy Resin, Add	64.52	
For Up To >10, Add	525.86	
For >10 To 25, Add	307.87	
For >25 To 50, Add	223.83	
For >50 To 100, Add	111.91	
For >500 To 1,000, Deduct	-42.47	
For >1,000 To 2,000, Deduct	-64.27	
For >2,000 To 5,000, Deduct	-105.08	
For >5,000, Deduct	-174.39	
33 01 30 72-0219 LF 31.5mm Lining 27" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP) .....	936.01	
For Vinylester Resin, Add	619.62	
For Epoxy Resin, Add	73.03	
For Up To >10, Add	595.11	
For >10 To 25, Add	348.39	
For >25 To 50, Add	253.29	
For >50 To 100, Add	126.65	
For >500 To 1,000, Deduct	-48.07	
For >1,000 To 2,000, Deduct	-72.74	
For >2,000 To 5,000, Deduct	-118.93	
For >5,000, Deduct	-197.37	
33 01 30 72-0220 LF 31.5mm Lining 30" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP) .....	1,044.98	
For Vinylester Resin, Add	691.78	
For Epoxy Resin, Add	81.53	
For Up To >10, Add	664.32	
For >10 To 25, Add	388.89	
For >25 To 50, Add	282.75	
For >50 To 100, Add	141.37	
For >500 To 1,000, Deduct	-53.67	
For >1,000 To 2,000, Deduct	-81.21	
For >2,000 To 5,000, Deduct	-132.77	
For >5,000, Deduct	-220.34	
33 01 30 72-0221 LF 31.5mm Lining 36" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP) .....	1,263.06	
For Vinylester Resin, Add	836.09	
For Epoxy Resin, Add	98.54	
For Up To >10, Add	803.13	
For >10 To 25, Add	470.21	
For >25 To 50, Add	341.84	
For >50 To 100, Add	170.92	
For >500 To 1,000, Deduct	-64.87	
For >1,000 To 2,000, Deduct	-98.16	
For >2,000 To 5,000, Deduct	-160.49	
For >5,000, Deduct	-266.34	



Utilities		33	CS
Operation and Maintenance of Utilities		33 01	
Operation and Maintenance of Sewer Utilities		33 01 30	

MINOR CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
33 01 30 72-0222	LF	31.5mm Lining 42" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP).....	1,481.04	
		For Vinlyester Resin, Add	980.42	
		For Epoxy Resin, Add	115.55	
		For Up To >10, Add	941.62	
		For >10 To 25, Add	551.25	
		For >25 To 50, Add	400.78	
		For >50 To 100, Add	200.39	
		For >500 To 1,000, Deduct	-76.06	
		For >1,000 To 2,000, Deduct	-115.10	
		For >2,000 To 5,000, Deduct	-188.18	
		For >5,000, Deduct	-312.30	
33 01 30 72-0223	LF	31.5mm Lining 48" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP).....	1,699.12	
		For Vinlyester Resin, Add	1,124.74	
		For Epoxy Resin, Add	132.56	
		For Up To >10, Add	1,080.44	
		For >10 To 25, Add	632.57	
		For >25 To 50, Add	459.88	
		For >50 To 100, Add	229.94	
		For >500 To 1,000, Deduct	-87.26	
		For >1,000 To 2,000, Deduct	-132.05	
		For >2,000 To 5,000, Deduct	-215.90	
		For >5,000, Deduct	-358.29	
33 01 30 72-0224	LF	31.5mm Lining 54" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP).....	1,917.08	
		For Vinlyester Resin, Add	1,269.06	
		For Epoxy Resin, Add	149.57	
		For Up To >10, Add	1,218.89	
		For >10 To 25, Add	713.59	
		For >25 To 50, Add	518.80	
		For >50 To 100, Add	259.40	
		For >500 To 1,000, Deduct	-98.46	
		For >1,000 To 2,000, Deduct	-148.99	
		For >2,000 To 5,000, Deduct	-243.59	
		For >5,000, Deduct	-404.24	
33 01 30 72-0225	LF	31.5mm Lining 60" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP).....	2,135.03	
		For Vinlyester Resin, Add	1,413.38	
		For Epoxy Resin, Add	166.58	
		For Up To >10, Add	1,357.32	
		For >10 To 25, Add	794.58	
		For >25 To 50, Add	577.70	
		For >50 To 100, Add	288.85	
		For >500 To 1,000, Deduct	-109.65	
		For >1,000 To 2,000, Deduct	-165.92	
		For >2,000 To 5,000, Deduct	-271.27	
		For >5,000, Deduct	-450.19	
33 01 30 72-0226	LF	31.5mm Lining 66" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP).....	2,359.57	
		For Vinlyester Resin, Add	1,557.70	
		For Epoxy Resin, Add	183.59	
		For Up To >10, Add	1,515.49	
		For >10 To 25, Add	892.02	
		For >25 To 50, Add	646.48	
		For >50 To 100, Add	323.24	
		For >500 To 1,000, Deduct	-121.34	
		For >1,000 To 2,000, Deduct	-183.68	
		For >2,000 To 5,000, Deduct	-300.60	
		For >5,000, Deduct	-498.77	
33 01 30 72-0227	LF	31.5mm Lining 72" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP).....	2,594.96	
		For Vinlyester Resin, Add	1,713.65	
		For Epoxy Resin, Add	201.97	
		For Up To >10, Add	1,664.71	
		For >10 To 25, Add	979.24	
		For >25 To 50, Add	709.95	
		For >50 To 100, Add	354.97	
		For >500 To 1,000, Deduct	-133.42	
		For >1,000 To 2,000, Deduct	-201.97	
		For >2,000 To 5,000, Deduct	-330.49	
		For >5,000, Deduct	-548.37	
33 01 30 72-0228	LF	31.5mm Lining 78" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP).....	2,796.72	
		For Vinlyester Resin, Add	1,846.34	
		For Epoxy Resin, Add	217.60	
		For Up To >10, Add	1,796.09	
		For >10 To 25, Add	1,057.13	
		For >25 To 50, Add	766.16	
		For >50 To 100, Add	383.08	
		For >500 To 1,000, Deduct	-143.81	
		For >1,000 To 2,000, Deduct	-217.71	
		For >2,000 To 5,000, Deduct	-356.29	
		For >5,000, Deduct	-591.16	

**33 Utilities****33 01 Operation and Maintenance of Utilities****33 01 30 Operation and Maintenance of Sewer Utilities**

MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
33 01 30 72-0229 LF 31.5mm Lining 84" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP) .....	3,015.36	
For Vinylester Resin, Add	1,990.66	
For Epoxy Resin, Add	234.61	
For Up To >10, Add	1,936.58	
For >10 To 25, Add	1,139.85	
For >25 To 50, Add	826.10	
For >50 To 100, Add	413.05	
For >500 To 1,000, Deduct	-155.06	
For >1,000 To 2,000, Deduct	-234.73	
For >2,000 To 5,000, Deduct	-384.15	
For >5,000, Deduct	-637.38	
33 01 30 72-0230 LF 31.5mm Lining 90" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP) .....	3,233.86	
For Vinylester Resin, Add	2,134.99	
For Epoxy Resin, Add	251.62	
For Up To >10, Add	2,076.63	
For >10 To 25, Add	1,222.20	
For >25 To 50, Add	885.82	
For >50 To 100, Add	442.91	
For >500 To 1,000, Deduct	-166.29	
For >1,000 To 2,000, Deduct	-251.73	
For >2,000 To 5,000, Deduct	-411.97	
For >5,000, Deduct	-683.55	
33 01 30 72-0231 LF 31.5mm Lining 96" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP) .....	3,452.50	
For Vinylester Resin, Add	2,279.31	
For Epoxy Resin, Add	268.63	
For Up To >10, Add	2,217.13	
For >10 To 25, Add	1,304.91	
For >25 To 50, Add	945.76	
For >50 To 100, Add	472.88	
For >500 To 1,000, Deduct	-177.53	
For >1,000 To 2,000, Deduct	-268.76	
For >2,000 To 5,000, Deduct	-439.83	
For >5,000, Deduct	-729.77	
<b>33 01 30 72-0232 33mm Thick Lining Cured In-Place Pipe (33 01 30 72-0015)</b>		
33 01 30 72-0233 LF 33mm Lining 24" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP) .....	863.51	
For Vinylester Resin, Add	572.04	
For Epoxy Resin, Add	67.42	
For Up To >10, Add	547.53	
For >10 To 25, Add	320.08	
For >25 To 50, Add	232.91	
For >50 To 100, Add	116.45	
For >500 To 1,000, Deduct	-44.33	
For >1,000 To 2,000, Deduct	-67.08	
For >2,000 To 5,000, Deduct	-109.64	
For >5,000, Deduct	-181.96	
33 01 30 72-0234 LF 33mm Lining 27" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP) .....	977.66	
For Vinylester Resin, Add	647.63	
For Epoxy Resin, Add	76.33	
For Up To >10, Add	620.03	
For >10 To 25, Add	362.50	
For >25 To 50, Add	263.76	
For >50 To 100, Add	131.88	
For >500 To 1,000, Deduct	-50.20	
For >1,000 To 2,000, Deduct	-75.95	
For >2,000 To 5,000, Deduct	-124.14	
For >5,000, Deduct	-206.03	
33 01 30 72-0235 LF 33mm Lining 30" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP) .....	1,091.69	
For Vinylester Resin, Add	723.23	
For Epoxy Resin, Add	85.24	
For Up To >10, Add	692.12	
For >10 To 25, Add	404.57	
For >25 To 50, Add	294.40	
For >50 To 100, Add	147.20	
For >500 To 1,000, Deduct	-56.05	
For >1,000 To 2,000, Deduct	-84.80	
For >2,000 To 5,000, Deduct	-138.61	
For >5,000, Deduct	-230.04	
33 01 30 72-0236 LF 33mm Lining 36" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP) .....	1,320.02	
For Vinylester Resin, Add	874.43	
For Epoxy Resin, Add	103.06	
For Up To >10, Add	837.11	
For >10 To 25, Add	489.40	
For >25 To 50, Add	356.10	
For >50 To 100, Add	178.05	
For >500 To 1,000, Deduct	-67.77	
For >1,000 To 2,000, Deduct	-102.54	
For >2,000 To 5,000, Deduct	-167.61	
For >5,000, Deduct	-278.17	



	<b>Utilities</b>	<b>33</b>	
	<b>Operation and Maintenance of Utilities</b>	<b>33 01</b>	
	<b>Operation and Maintenance of Sewer Utilities</b>	<b>33 01 30</b>	

MINOR CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
33 01 30 72-0237	LF	33mm Lining 42" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP).....	1,548.20	
		For Vinlyester Resin, Add	1,025.61	
		For Epoxy Resin, Add	120.88	
		For Up To >10, Add	981.70	
		For >10 To 25, Add	573.89	
		For >25 To 50, Add	417.59	
		For >50 To 100, Add	208.80	
		For >500 To 1,000, Deduct	-79.49	
		For >1,000 To 2,000, Deduct	-120.27	
		For >2,000 To 5,000, Deduct	-196.58	
		For >5,000, Deduct	-326.25	
33 01 30 72-0238	LF	33mm Lining 48" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP).....	1,776.53	
		For Vinlyester Resin, Add	1,176.81	
		For Epoxy Resin, Add	138.70	
		For Up To >10, Add	1,126.69	
		For >10 To 25, Add	658.72	
		For >25 To 50, Add	479.29	
		For >50 To 100, Add	239.64	
		For >500 To 1,000, Deduct	-91.21	
		For >1,000 To 2,000, Deduct	-138.01	
		For >2,000 To 5,000, Deduct	-225.58	
		For >5,000, Deduct	-374.38	
33 01 30 72-0239	LF	33mm Lining 54" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP).....	2,004.70	
		For Vinlyester Resin, Add	1,328.00	
		For Epoxy Resin, Add	156.51	
		For Up To >10, Add	1,271.25	
		For >10 To 25, Add	743.19	
		For >25 To 50, Add	540.77	
		For >50 To 100, Add	270.38	
		For >500 To 1,000, Deduct	-102.92	
		For >1,000 To 2,000, Deduct	-155.73	
		For >2,000 To 5,000, Deduct	-254.55	
		For >5,000, Deduct	-422.45	
33 01 30 72-0240	LF	33mm Lining 60" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP).....	2,232.90	
		For Vinlyester Resin, Add	1,479.20	
		For Epoxy Resin, Add	174.33	
		For Up To >10, Add	1,415.85	
		For >10 To 25, Add	827.69	
		For >25 To 50, Add	602.27	
		For >50 To 100, Add	301.13	
		For >500 To 1,000, Deduct	-114.64	
		For >1,000 To 2,000, Deduct	-173.46	
		For >2,000 To 5,000, Deduct	-283.52	
		For >5,000, Deduct	-470.53	
33 01 30 72-0241	LF	33mm Lining 66" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP).....	2,467.79	
		For Vinlyester Resin, Add	1,630.38	
		For Epoxy Resin, Add	192.15	
		For Up To >10, Add	1,580.57	
		For >10 To 25, Add	928.96	
		For >25 To 50, Add	673.83	
		For >50 To 100, Add	336.91	
		For >500 To 1,000, Deduct	-126.86	
		For >1,000 To 2,000, Deduct	-192.02	
		For >2,000 To 5,000, Deduct	-314.16	
		For >5,000, Deduct	-521.29	
33 01 30 72-0242	LF	33mm Lining 72" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP).....	2,697.08	
		For Vinlyester Resin, Add	1,781.58	
		For Epoxy Resin, Add	209.97	
		For Up To >10, Add	1,728.44	
		For >10 To 25, Add	1,016.18	
		For >25 To 50, Add	736.96	
		For >50 To 100, Add	368.48	
		For >500 To 1,000, Deduct	-138.65	
		For >1,000 To 2,000, Deduct	-209.88	
		For >2,000 To 5,000, Deduct	-343.40	
		For >5,000, Deduct	-569.81	
33 01 30 72-0243	LF	33mm Lining 78" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP).....	2,925.40	
		For Vinlyester Resin, Add	1,932.78	
		For Epoxy Resin, Add	227.79	
		For Up To >10, Add	1,873.43	
		For >10 To 25, Add	1,101.00	
		For >25 To 50, Add	798.66	
		For >50 To 100, Add	399.33	
		For >500 To 1,000, Deduct	-150.38	
		For >1,000 To 2,000, Deduct	-227.62	
		For >2,000 To 5,000, Deduct	-372.41	
		For >5,000, Deduct	-617.94	

**33 Utilities****33 01 Operation and Maintenance of Utilities****33 01 30 Operation and Maintenance of Sewer Utilities**

MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
33 01 30 72-0244 LF 33mm Lining 84" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP) .....	3,154.27	
For Vinylester Resin, Add	2,083.97	
For Epoxy Resin, Add	245.61	
For Up To >10, Add	2,020.06	
For >10 To 25, Add	1,187.20	
For >25 To 50, Add	861.18	
For >50 To 100, Add	430.59	
For >500 To 1,000, Deduct	-162.14	
For >1,000 To 2,000, Deduct	-245.43	
For >2,000 To 5,000, Deduct	-401.54	
For >5,000, Deduct	-666.29	
33 01 30 72-0245 LF 33mm Lining 90" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP) .....	3,383.14	
For Vinylester Resin, Add	2,235.16	
For Epoxy Resin, Add	263.43	
For Up To >10, Add	2,166.70	
For >10 To 25, Add	1,273.40	
For >25 To 50, Add	923.69	
For >50 To 100, Add	461.85	
For >500 To 1,000, Deduct	-173.91	
For >1,000 To 2,000, Deduct	-263.24	
For >2,000 To 5,000, Deduct	-430.68	
For >5,000, Deduct	-714.64	
33 01 30 72-0246 LF 33mm Lining 96" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP) .....	3,612.01	
For Vinylester Resin, Add	2,386.36	
For Epoxy Resin, Add	281.25	
For Up To >10, Add	2,313.33	
For >10 To 25, Add	1,359.60	
For >25 To 50, Add	986.21	
For >50 To 100, Add	493.11	
For >500 To 1,000, Deduct	-185.67	
For >1,000 To 2,000, Deduct	-281.05	
For >2,000 To 5,000, Deduct	-459.82	
For >5,000, Deduct	-762.99	
<b>33 01 30 72-0247 34.5mm Thick Lining Cured In-Place Pipe (33 01 30 72-0015)</b>		
33 01 30 72-0248 LF 34.5mm Lining 27" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP) .....	1,018.74	
For Vinylester Resin, Add	675.51	
For Epoxy Resin, Add	79.61	
For Up To >10, Add	643.67	
For >10 To 25, Add	375.56	
For >25 To 50, Add	273.58	
For >50 To 100, Add	136.79	
For >500 To 1,000, Deduct	-52.28	
For >1,000 To 2,000, Deduct	-79.09	
For >2,000 To 5,000, Deduct	-129.23	
For >5,000, Deduct	-214.49	
33 01 30 72-0249 LF 34.5mm Lining 30" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP) .....	1,137.94	
For Vinylester Resin, Add	754.54	
For Epoxy Resin, Add	88.93	
For Up To >10, Add	719.02	
For >10 To 25, Add	419.53	
For >25 To 50, Add	305.61	
For >50 To 100, Add	152.81	
For >500 To 1,000, Deduct	-58.40	
For >1,000 To 2,000, Deduct	-88.35	
For >2,000 To 5,000, Deduct	-144.36	
For >5,000, Deduct	-239.59	
33 01 30 72-0250 LF 34.5mm Lining 36" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP) .....	1,376.35	
For Vinylester Resin, Add	912.61	
For Epoxy Resin, Add	107.56	
For Up To >10, Add	869.73	
For >10 To 25, Add	507.48	
For >25 To 50, Add	369.68	
For >50 To 100, Add	184.84	
For >500 To 1,000, Deduct	-70.63	
For >1,000 To 2,000, Deduct	-106.86	
For >2,000 To 5,000, Deduct	-174.60	
For >5,000, Deduct	-289.79	
33 01 30 72-0251 LF 34.5mm Lining 42" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP) .....	1,614.63	
For Vinylester Resin, Add	1,070.68	
For Epoxy Resin, Add	126.19	
For Up To >10, Add	1,020.04	
For >10 To 25, Add	595.11	
For >25 To 50, Add	433.54	
For >50 To 100, Add	216.77	
For >500 To 1,000, Deduct	-82.86	
For >1,000 To 2,000, Deduct	-125.35	
For >2,000 To 5,000, Deduct	-204.82	
For >5,000, Deduct	-339.94	



Utilities		33	CS
Operation and Maintenance of Utilities		33 01	
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MINOR	CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
33 01 30 72-0252	LF		34.5mm Lining 48" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP).....	1,853.05	
			For Vinlyester Resin, Add	1,228.75	
			For Epoxy Resin, Add	144.82	
			For Up To >10, Add	1,170.78	
			For >10 To 25, Add	683.09	
			For >25 To 50, Add	497.62	
			For >50 To 100, Add	248.81	
			For >500 To 1,000, Deduct	-95.10	
			For >1,000 To 2,000, Deduct	-143.86	
			For >2,000 To 5,000, Deduct	-235.07	
			For >5,000, Deduct	-390.15	
33 01 30 72-0253	LF		34.5mm Lining 54" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP).....	2,091.32	
			For Vinlyester Resin, Add	1,386.81	
			For Epoxy Resin, Add	163.45	
			For Up To >10, Add	1,321.06	
			For >10 To 25, Add	770.69	
			For >25 To 50, Add	561.47	
			For >50 To 100, Add	280.74	
			For >500 To 1,000, Deduct	-107.32	
			For >1,000 To 2,000, Deduct	-162.36	
			For >2,000 To 5,000, Deduct	-265.28	
			For >5,000, Deduct	-440.30	
33 01 30 72-0254	LF		34.5mm Lining 60" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP).....	2,329.73	
			For Vinlyester Resin, Add	1,544.87	
			For Epoxy Resin, Add	182.07	
			For Up To >10, Add	1,471.79	
			For >10 To 25, Add	858.67	
			For >25 To 50, Add	625.55	
			For >50 To 100, Add	312.77	
			For >500 To 1,000, Deduct	-119.56	
			For >1,000 To 2,000, Deduct	-180.87	
			For >2,000 To 5,000, Deduct	-295.53	
			For >5,000, Deduct	-490.50	
33 01 30 72-0255	LF		34.5mm Lining 66" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP).....	2,574.86	
			For Vinlyester Resin, Add	1,702.94	
			For Epoxy Resin, Add	200.70	
			For Up To >10, Add	1,642.66	
			For >10 To 25, Add	963.42	
			For >25 To 50, Add	699.69	
			For >50 To 100, Add	349.84	
			For >500 To 1,000, Deduct	-132.30	
			For >1,000 To 2,000, Deduct	-200.22	
			For >2,000 To 5,000, Deduct	-327.45	
			For >5,000, Deduct	-543.39	
33 01 30 72-0256	LF		34.5mm Lining 72" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP).....	2,814.10	
			For Vinlyester Resin, Add	1,861.01	
			For Epoxy Resin, Add	219.33	
			For Up To >10, Add	1,795.85	
			For >10 To 25, Add	1,053.45	
			For >25 To 50, Add	765.00	
			For >50 To 100, Add	382.50	
			For >500 To 1,000, Deduct	-144.59	
			For >1,000 To 2,000, Deduct	-218.83	
			For >2,000 To 5,000, Deduct	-357.91	
			For >5,000, Deduct	-593.92	
33 01 30 72-0257	LF		34.5mm Lining 78" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP).....	3,050.60	
			For Vinlyester Resin, Add	2,019.07	
			For Epoxy Resin, Add	237.96	
			For Up To >10, Add	1,940.83	
			For >10 To 25, Add	1,136.62	
			For >25 To 50, Add	826.19	
			For >50 To 100, Add	413.10	
			For >500 To 1,000, Deduct	-156.69	
			For >1,000 To 2,000, Deduct	-237.11	
			For >2,000 To 5,000, Deduct	-387.68	
			For >5,000, Deduct	-643.36	
33 01 30 72-0258	LF		34.5mm Lining 84" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP).....	3,291.89	
			For Vinlyester Resin, Add	2,177.14	
			For Epoxy Resin, Add	256.59	
			For Up To >10, Add	2,100.17	
			For >10 To 25, Add	1,231.78	
			For >25 To 50, Add	894.58	
			For >50 To 100, Add	447.29	
			For >500 To 1,000, Deduct	-169.14	
			For >1,000 To 2,000, Deduct	-255.98	
			For >2,000 To 5,000, Deduct	-418.65	
			For >5,000, Deduct	-694.72	

**33 Utilities****33 01 Operation and Maintenance of Utilities****33 01 30 Operation and Maintenance of Sewer Utilities**

MINOR	CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
33 01 30 72-0259	LF		34.5mm Lining 90" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP) .....	3,530.85	
			For Vinylster Resin, Add	2,335.20	
			For Epoxy Resin, Add	275.22	
			For Up To >10, Add	2,252.55	
			For >10 To 25, Add	1,321.13	
			For >25 To 50, Add	959.48	
			For >50 To 100, Add	479.74	
			For >500 To 1,000, Deduct	-181.41	
			For >1,000 To 2,000, Deduct	-274.56	
			For >2,000 To 5,000, Deduct	-449.03	
			For >5,000, Deduct	-745.14	
33 01 30 72-0260	LF		34.5mm Lining 96" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP) .....	3,769.81	
			For Vinylster Resin, Add	2,493.27	
			For Epoxy Resin, Add	293.85	
			For Up To >10, Add	2,404.91	
			For >10 To 25, Add	1,410.45	
			For >25 To 50, Add	1,024.36	
			For >50 To 100, Add	512.18	
			For >500 To 1,000, Deduct	-193.69	
			For >1,000 To 2,000, Deduct	-293.14	
			For >2,000 To 5,000, Deduct	-479.42	
			For >5,000, Deduct	-795.56	
<b>33 01 30 72-0261</b>			<b>36mm Thick Lining Cured In-Place Pipe (33 01 30 72-0015)</b>		
33 01 30 72-0262	LF		36mm Lining 27" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP) .....	1,059.61	
			For Vinylster Resin, Add	703.26	
			For Epoxy Resin, Add	82.88	
			For Up To >10, Add	667.18	
			For >10 To 25, Add	388.54	
			For >25 To 50, Add	283.36	
			For >50 To 100, Add	141.68	
			For >500 To 1,000, Deduct	-54.35	
			For >1,000 To 2,000, Deduct	-82.22	
			For >2,000 To 5,000, Deduct	-134.30	
			For >5,000, Deduct	-222.91	
33 01 30 72-0263	LF		36mm Lining 30" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP) .....	1,183.85	
			For Vinylster Resin, Add	785.73	
			For Epoxy Resin, Add	92.60	
			For Up To >10, Add	745.38	
			For >10 To 25, Add	434.07	
			For >25 To 50, Add	316.56	
			For >50 To 100, Add	158.28	
			For >500 To 1,000, Deduct	-60.73	
			For >1,000 To 2,000, Deduct	-91.86	
			For >2,000 To 5,000, Deduct	-150.04	
			For >5,000, Deduct	-249.05	
33 01 30 72-0264	LF		36mm Lining 36" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP) .....	1,432.36	
			For Vinylster Resin, Add	950.67	
			For Epoxy Resin, Add	112.04	
			For Up To >10, Add	901.83	
			For >10 To 25, Add	525.18	
			For >25 To 50, Add	383.01	
			For >50 To 100, Add	191.51	
			For >500 To 1,000, Deduct	-73.47	
			For >1,000 To 2,000, Deduct	-111.14	
			For >2,000 To 5,000, Deduct	-181.54	
			For >5,000, Deduct	-301.32	
33 01 30 72-0265	LF		36mm Lining 42" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP) .....	1,680.86	
			For Vinylster Resin, Add	1,115.60	
			For Epoxy Resin, Add	131.48	
			For Up To >10, Add	1,058.28	
			For >10 To 25, Add	616.28	
			For >25 To 50, Add	449.45	
			For >50 To 100, Add	224.73	
			For >500 To 1,000, Deduct	-86.22	
			For >1,000 To 2,000, Deduct	-130.42	
			For >2,000 To 5,000, Deduct	-213.03	
			For >5,000, Deduct	-353.60	
33 01 30 72-0266	LF		36mm Lining 48" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP) .....	1,929.23	
			For Vinylster Resin, Add	1,280.55	
			For Epoxy Resin, Add	150.92	
			For Up To >10, Add	1,214.32	
			For >10 To 25, Add	707.04	
			For >25 To 50, Add	515.69	
			For >50 To 100, Add	257.85	
			For >500 To 1,000, Deduct	-98.96	
			For >1,000 To 2,000, Deduct	-149.69	
			For >2,000 To 5,000, Deduct	-244.49	
			For >5,000, Deduct	-405.82	





		<b>Utilities</b>	<b>33</b>	<b>CS</b>
		<b>Operation and Maintenance of Utilities</b>	<b>33 01</b>	
		<b>Operation and Maintenance of Sewer Utilities</b>	<b>33 01 30</b>	

MINOR	CS	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
33 01 30 72-0267	LF		36mm Lining 54" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP).....	2,177.74	
			For Vinlyester Resin, Add	1,445.48	
			For Epoxy Resin, Add	170.36	
			For Up To >10, Add	1,370.80	
			For >10 To 25, Add	798.17	
			For >25 To 50, Add	582.15	
			For >50 To 100, Add	291.07	
			For >500 To 1,000, Deduct	-111.71	
			For >1,000 To 2,000, Deduct	-168.97	
			For >2,000 To 5,000, Deduct	-275.99	
			For >5,000, Deduct	-458.10	
33 01 30 72-0268	LF		36mm Lining 60" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP).....	2,426.25	
			For Vinlyester Resin, Add	1,610.42	
			For Epoxy Resin, Add	189.80	
			For Up To >10, Add	1,527.25	
			For >10 To 25, Add	889.28	
			For >25 To 50, Add	648.60	
			For >50 To 100, Add	324.30	
			For >500 To 1,000, Deduct	-124.45	
			For >1,000 To 2,000, Deduct	-188.25	
			For >2,000 To 5,000, Deduct	-307.48	
			For >5,000, Deduct	-510.38	
33 01 30 72-0269	LF		36mm Lining 66" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP).....	2,681.75	
			For Vinlyester Resin, Add	1,775.36	
			For Epoxy Resin, Add	209.24	
			For Up To >10, Add	1,704.68	
			For >10 To 25, Add	997.86	
			For >25 To 50, Add	725.53	
			For >50 To 100, Add	362.76	
			For >500 To 1,000, Deduct	-137.73	
			For >1,000 To 2,000, Deduct	-208.41	
			For >2,000 To 5,000, Deduct	-340.73	
			For >5,000, Deduct	-565.45	
33 01 30 72-0270	LF		36mm Lining 72" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP).....	2,930.94	
			For Vinlyester Resin, Add	1,940.30	
			For Epoxy Resin, Add	228.68	
			For Up To >10, Add	1,863.20	
			For >10 To 25, Add	1,090.69	
			For >25 To 50, Add	793.01	
			For >50 To 100, Add	396.50	
			For >500 To 1,000, Deduct	-150.52	
			For >1,000 To 2,000, Deduct	-227.78	
			For >2,000 To 5,000, Deduct	-372.39	
			For >5,000, Deduct	-618.01	
33 01 30 72-0271	LF		36mm Lining 78" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP).....	3,175.47	
			For Vinlyester Resin, Add	2,105.24	
			For Epoxy Resin, Add	248.12	
			For Up To >10, Add	2,007.71	
			For >10 To 25, Add	1,171.85	
			For >25 To 50, Add	853.48	
			For >50 To 100, Add	426.74	
			For >500 To 1,000, Deduct	-162.97	
			For >1,000 To 2,000, Deduct	-246.56	
			For >2,000 To 5,000, Deduct	-402.90	
			For >5,000, Deduct	-668.69	
33 01 30 72-0272	LF		36mm Lining 84" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP).....	3,429.18	
			For Vinlyester Resin, Add	2,270.17	
			For Epoxy Resin, Add	267.56	
			For Up To >10, Add	2,179.79	
			For >10 To 25, Add	1,275.98	
			For >25 To 50, Add	927.74	
			For >50 To 100, Add	463.87	
			For >500 To 1,000, Deduct	-176.11	
			For >1,000 To 2,000, Deduct	-266.49	
			For >2,000 To 5,000, Deduct	-435.69	
			For >5,000, Deduct	-723.05	
33 01 30 72-0273	LF		36mm Lining 90" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP).....	3,678.37	
			For Vinlyester Resin, Add	2,435.11	
			For Epoxy Resin, Add	287.00	
			For Up To >10, Add	2,338.29	
			For >10 To 25, Add	1,368.78	
			For >25 To 50, Add	995.21	
			For >50 To 100, Add	497.60	
			For >500 To 1,000, Deduct	-188.91	
			For >1,000 To 2,000, Deduct	-285.86	
			For >2,000 To 5,000, Deduct	-467.36	
			For >5,000, Deduct	-775.60	

**33 Utilities****33 01 Operation and Maintenance of Utilities****33 01 30 Operation and Maintenance of Sewer Utilities**

MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
33 01 30 72-0274 LF 36mm Lining 96" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP) .....	3,927.56	
For Vinylster Resin, Add	2,600.05	
For Epoxy Resin, Add	306.43	
For Up To >10, Add	2,496.81	
For >10 To 25, Add	1,461.61	
For >25 To 50, Add	1,062.69	
For >50 To 100, Add	531.34	
For >500 To 1,000, Deduct	-201.71	
For >1,000 To 2,000, Deduct	-305.23	
For >2,000 To 5,000, Deduct	-499.02	
For >5,000, Deduct	-828.15	
33 01 30 72-0275 LF 36mm Lining 102" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP) .....	4,176.61	
For Vinylster Resin, Add	2,764.99	
For Epoxy Resin, Add	325.87	
For Up To >10, Add	2,654.88	
For >10 To 25, Add	1,554.07	
For >25 To 50, Add	1,129.94	
For >50 To 100, Add	564.97	
For >500 To 1,000, Deduct	-214.50	
For >1,000 To 2,000, Deduct	-324.58	
For >2,000 To 5,000, Deduct	-530.66	
For >5,000, Deduct	-880.65	
33 01 30 72-0276 LF 36mm Lining 108" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP) .....	4,425.81	
For Vinylster Resin, Add	2,929.93	
For Epoxy Resin, Add	345.31	
For Up To >10, Add	2,813.41	
For >10 To 25, Add	1,646.90	
For >25 To 50, Add	1,197.42	
For >50 To 100, Add	598.71	
For >500 To 1,000, Deduct	-227.30	
For >1,000 To 2,000, Deduct	-343.95	
For >2,000 To 5,000, Deduct	-562.32	
For >5,000, Deduct	-933.20	
<b>33 01 30 72-0277 37.5mm Thick Lining Cured In-Place Pipe (33 01 30 72-0015)</b>		
33 01 30 72-0278 LF 37.5mm Lining 30" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP) .....	1,229.44	
For Vinylster Resin, Add	816.77	
For Epoxy Resin, Add	96.26	
For Up To >10, Add	771.27	
For >10 To 25, Add	448.26	
For >25 To 50, Add	327.29	
For >50 To 100, Add	163.65	
For >500 To 1,000, Deduct	-63.04	
For >1,000 To 2,000, Deduct	-95.34	
For >2,000 To 5,000, Deduct	-155.67	
For >5,000, Deduct	-258.41	
33 01 30 72-0279 LF 37.5mm Lining 36" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP) .....	1,488.05	
For Vinylster Resin, Add	988.59	
For Epoxy Resin, Add	116.51	
For Up To >10, Add	933.48	
For >10 To 25, Add	542.52	
For >25 To 50, Add	396.12	
For >50 To 100, Add	198.06	
For >500 To 1,000, Deduct	-76.30	
For >1,000 To 2,000, Deduct	-115.39	
For >2,000 To 5,000, Deduct	-188.42	
For >5,000, Deduct	-312.77	
33 01 30 72-0280 LF 37.5mm Lining 42" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP) .....	1,746.64	
For Vinylster Resin, Add	1,160.40	
For Epoxy Resin, Add	136.76	
For Up To >10, Add	1,095.65	
For >10 To 25, Add	636.75	
For >25 To 50, Add	464.94	
For >50 To 100, Add	232.47	
For >500 To 1,000, Deduct	-89.56	
For >1,000 To 2,000, Deduct	-135.44	
For >2,000 To 5,000, Deduct	-221.16	
For >5,000, Deduct	-367.11	
33 01 30 72-0281 LF 37.5mm Lining 48" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP) .....	2,005.24	
For Vinylster Resin, Add	1,332.21	
For Epoxy Resin, Add	157.01	
For Up To >10, Add	1,257.82	
For >10 To 25, Add	730.99	
For >25 To 50, Add	533.75	
For >50 To 100, Add	266.88	
For >500 To 1,000, Deduct	-102.81	
For >1,000 To 2,000, Deduct	-155.50	
For >2,000 To 5,000, Deduct	-253.90	
For >5,000, Deduct	-421.46	



		<b>Utilities</b>	<b>33</b>	<b>CS</b>
		<b>Operation and Maintenance of Utilities</b>	<b>33 01</b>	
		<b>Operation and Maintenance of Sewer Utilities</b>	<b>33 01 30</b>	

MINOR	CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
33 01 30 72-0282	LF		37.5mm Lining 54" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP).....	2,263.84	
			For Vinlyester Resin, Add	1,504.02	
			For Epoxy Resin, Add	177.26	
			For Up To >10, Add	1,420.02	
			For >10 To 25, Add	825.25	
			For >25 To 50, Add	602.58	
			For >50 To 100, Add	301.29	
			For >500 To 1,000, Deduct	-116.07	
			For >1,000 To 2,000, Deduct	-175.55	
			For >2,000 To 5,000, Deduct	-286.64	
			For >5,000, Deduct	-475.82	
33 01 30 72-0283	LF		37.5mm Lining 60" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP).....	2,522.43	
			For Vinlyester Resin, Add	1,675.83	
			For Epoxy Resin, Add	197.51	
			For Up To >10, Add	1,582.19	
			For >10 To 25, Add	919.49	
			For >25 To 50, Add	671.39	
			For >50 To 100, Add	335.70	
			For >500 To 1,000, Deduct	-129.33	
			For >1,000 To 2,000, Deduct	-195.60	
			For >2,000 To 5,000, Deduct	-319.38	
			For >5,000, Deduct	-530.16	
33 01 30 72-0284	LF		37.5mm Lining 66" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP).....	2,788.15	
			For Vinlyester Resin, Add	1,847.64	
			For Epoxy Resin, Add	217.76	
			For Up To >10, Add	1,765.75	
			For >10 To 25, Add	1,031.55	
			For >25 To 50, Add	750.90	
			For >50 To 100, Add	375.45	
			For >500 To 1,000, Deduct	-143.12	
			For >1,000 To 2,000, Deduct	-216.54	
			For >2,000 To 5,000, Deduct	-353.91	
			For >5,000, Deduct	-587.36	
33 01 30 72-0285	LF		37.5mm Lining 72" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP).....	3,047.44	
			For Vinlyester Resin, Add	2,019.45	
			For Epoxy Resin, Add	238.01	
			For Up To >10, Add	1,930.00	
			For >10 To 25, Add	1,127.51	
			For >25 To 50, Add	820.75	
			For >50 To 100, Add	410.38	
			For >500 To 1,000, Deduct	-156.43	
			For >1,000 To 2,000, Deduct	-236.68	
			For >2,000 To 5,000, Deduct	-386.82	
			For >5,000, Deduct	-641.99	
33 01 30 72-0286	LF		37.5mm Lining 78" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP).....	3,304.39	
			For Vinlyester Resin, Add	2,191.26	
			For Epoxy Resin, Add	258.26	
			For Up To >10, Add	2,087.25	
			For >10 To 25, Add	1,217.64	
			For >25 To 50, Add	887.10	
			For >50 To 100, Add	443.55	
			For >500 To 1,000, Deduct	-169.57	
			For >1,000 To 2,000, Deduct	-256.53	
			For >2,000 To 5,000, Deduct	-419.15	
			For >5,000, Deduct	-695.68	
33 01 30 72-0287	LF		37.5mm Lining 84" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP).....	3,566.01	
			For Vinlyester Resin, Add	2,363.07	
			For Epoxy Resin, Add	278.51	
			For Up To >10, Add	2,258.48	
			For >10 To 25, Add	1,319.43	
			For >25 To 50, Add	960.45	
			For >50 To 100, Add	480.22	
			For >500 To 1,000, Deduct	-183.06	
			For >1,000 To 2,000, Deduct	-276.96	
			For >2,000 To 5,000, Deduct	-452.65	
			For >5,000, Deduct	-751.24	
33 01 30 72-0288	LF		37.5mm Lining 90" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP).....	3,825.29	
			For Vinlyester Resin, Add	2,534.88	
			For Epoxy Resin, Add	298.75	
			For Up To >10, Add	2,422.72	
			For >10 To 25, Add	1,415.39	
			For >25 To 50, Add	1,030.30	
			For >50 To 100, Add	515.15	
			For >500 To 1,000, Deduct	-196.37	
			For >1,000 To 2,000, Deduct	-297.10	
			For >2,000 To 5,000, Deduct	-485.56	
			For >5,000, Deduct	-805.86	

**33 Utilities****33 01 Operation and Maintenance of Utilities****33 01 30 Operation and Maintenance of Sewer Utilities**

MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
33 01 30 72-0289 LF 37.5mm Lining 96" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP) .....	4,084.43	
For Vinylster Resin, Add	2,706.69	
For Epoxy Resin, Add	319.00	
For Up To >10, Add	2,586.54	
For >10 To 25, Add	1,511.00	
For >25 To 50, Add	1,099.94	
For >50 To 100, Add	549.97	
For >500 To 1,000, Deduct	-209.66	
For >1,000 To 2,000, Deduct	-317.22	
For >2,000 To 5,000, Deduct	-518.44	
For >5,000, Deduct	-860.43	
33 01 30 72-0290 LF 37.5mm Lining 102" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP) .....	4,343.71	
For Vinylster Resin, Add	2,878.51	
For Epoxy Resin, Add	339.25	
For Up To >10, Add	2,750.76	
For >10 To 25, Add	1,606.94	
For >25 To 50, Add	1,169.77	
For >50 To 100, Add	584.89	
For >500 To 1,000, Deduct	-222.97	
For >1,000 To 2,000, Deduct	-337.36	
For >2,000 To 5,000, Deduct	-551.35	
For >5,000, Deduct	-915.05	
33 01 30 72-0291 LF 37.5mm Lining 108" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP) .....	4,602.99	
For Vinylster Resin, Add	3,050.31	
For Epoxy Resin, Add	359.50	
For Up To >10, Add	2,915.00	
For >10 To 25, Add	1,702.90	
For >25 To 50, Add	1,239.62	
For >50 To 100, Add	619.81	
For >500 To 1,000, Deduct	-236.28	
For >1,000 To 2,000, Deduct	-357.49	
For >2,000 To 5,000, Deduct	-584.26	
For >5,000, Deduct	-969.68	
<b>33 01 30 72-0292 39mm Thick Lining Cured In-Place Pipe (33 01 30 72-0015)</b>		
33 01 30 72-0293 LF 39mm Lining 36" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP) .....	1,543.52	
For Vinylster Resin, Add	1,026.37	
For Epoxy Resin, Add	120.96	
For Up To >10, Add	964.96	
For >10 To 25, Add	559.76	
For >25 To 50, Add	409.17	
For >50 To 100, Add	204.58	
For >500 To 1,000, Deduct	-79.11	
For >1,000 To 2,000, Deduct	-119.63	
For >2,000 To 5,000, Deduct	-195.27	
For >5,000, Deduct	-324.16	
33 01 30 72-0294 LF 39mm Lining 42" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP) .....	1,812.22	
For Vinylster Resin, Add	1,205.06	
For Epoxy Resin, Add	142.02	
For Up To >10, Add	1,132.89	
For >10 To 25, Add	657.15	
For >25 To 50, Add	480.37	
For >50 To 100, Add	240.18	
For >500 To 1,000, Deduct	-92.88	
For >1,000 To 2,000, Deduct	-140.45	
For >2,000 To 5,000, Deduct	-229.26	
For >5,000, Deduct	-380.59	
33 01 30 72-0295 LF 39mm Lining 48" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP) .....	2,080.91	
For Vinylster Resin, Add	1,383.74	
For Epoxy Resin, Add	163.08	
For Up To >10, Add	1,300.81	
For >10 To 25, Add	754.54	
For >25 To 50, Add	551.56	
For >50 To 100, Add	275.78	
For >500 To 1,000, Deduct	-106.65	
For >1,000 To 2,000, Deduct	-161.28	
For >2,000 To 5,000, Deduct	-263.25	
For >5,000, Deduct	-437.01	
33 01 30 72-0296 LF 39mm Lining 54" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP) .....	2,349.60	
For Vinylster Resin, Add	1,562.42	
For Epoxy Resin, Add	184.14	
For Up To >10, Add	1,468.73	
For >10 To 25, Add	851.93	
For >25 To 50, Add	622.76	
For >50 To 100, Add	311.38	
For >500 To 1,000, Deduct	-120.42	
For >1,000 To 2,000, Deduct	-182.10	
For >2,000 To 5,000, Deduct	-297.24	
For >5,000, Deduct	-493.43	



		<b>Utilities</b>	<b>33</b>	<b>CS</b>
		<b>Operation and Maintenance of Utilities</b>	<b>33 01</b>	
		<b>Operation and Maintenance of Sewer Utilities</b>	<b>33 01 30</b>	

MINOR	CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
33 01 30 72-0297	LF		39mm Lining 60" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP).....	2,618.43	
			For Vinlyester Resin, Add	1,741.10	
			For Epoxy Resin, Add	205.20	
			For Up To >10, Add	1,637.07	
			For >10 To 25, Add	949.67	
			For >25 To 50, Add	694.17	
			For >50 To 100, Add	347.08	
			For >500 To 1,000, Deduct	-134.20	
			For >1,000 To 2,000, Deduct	-202.94	
			For >2,000 To 5,000, Deduct	-331.26	
			For >5,000, Deduct	-549.91	
33 01 30 72-0298	LF		39mm Lining 66" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP).....	2,894.23	
			For Vinlyester Resin, Add	1,919.79	
			For Epoxy Resin, Add	226.26	
			For Up To >10, Add	1,826.32	
			For >10 To 25, Add	1,064.84	
			For >25 To 50, Add	776.03	
			For >50 To 100, Add	388.02	
			For >500 To 1,000, Deduct	-148.50	
			For >1,000 To 2,000, Deduct	-224.65	
			For >2,000 To 5,000, Deduct	-367.03	
			For >5,000, Deduct	-609.18	
33 01 30 72-0299	LF		39mm Lining 72" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP).....	3,163.61	
			For Vinlyester Resin, Add	2,098.47	
			For Epoxy Resin, Add	247.32	
			For Up To >10, Add	1,996.31	
			For >10 To 25, Add	1,163.95	
			For >25 To 50, Add	848.26	
			For >50 To 100, Add	424.13	
			For >500 To 1,000, Deduct	-162.33	
			For >1,000 To 2,000, Deduct	-245.56	
			For >2,000 To 5,000, Deduct	-401.19	
			For >5,000, Deduct	-665.88	
33 01 30 72-0300	LF		39mm Lining 78" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP).....	3,432.98	
			For Vinlyester Resin, Add	2,277.15	
			For Epoxy Resin, Add	268.38	
			For Up To >10, Add	2,166.27	
			For >10 To 25, Add	1,263.04	
			For >25 To 50, Add	920.48	
			For >50 To 100, Add	460.24	
			For >500 To 1,000, Deduct	-176.15	
			For >1,000 To 2,000, Deduct	-266.47	
			For >2,000 To 5,000, Deduct	-435.35	
			For >5,000, Deduct	-722.58	
33 01 30 72-0301	LF		39mm Lining 84" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP).....	3,702.50	
			For Vinlyester Resin, Add	2,455.84	
			For Epoxy Resin, Add	289.44	
			For Up To >10, Add	2,336.65	
			For >10 To 25, Add	1,362.49	
			For >25 To 50, Add	992.91	
			For >50 To 100, Add	496.45	
			For >500 To 1,000, Deduct	-189.98	
			For >1,000 To 2,000, Deduct	-287.40	
			For >2,000 To 5,000, Deduct	-469.54	
			For >5,000, Deduct	-779.33	
33 01 30 72-0302	LF		39mm Lining 90" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP).....	3,971.87	
			For Vinlyester Resin, Add	2,634.52	
			For Epoxy Resin, Add	310.50	
			For Up To >10, Add	2,506.61	
			For >10 To 25, Add	1,461.58	
			For >25 To 50, Add	1,065.13	
			For >50 To 100, Add	532.56	
			For >500 To 1,000, Deduct	-203.80	
			For >1,000 To 2,000, Deduct	-308.30	
			For >2,000 To 5,000, Deduct	-503.70	
			For >5,000, Deduct	-836.03	
33 01 30 72-0303	LF		39mm Lining 96" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP).....	4,241.25	
			For Vinlyester Resin, Add	2,813.20	
			For Epoxy Resin, Add	331.56	
			For Up To >10, Add	2,676.60	
			For >10 To 25, Add	1,560.69	
			For >25 To 50, Add	1,137.36	
			For >50 To 100, Add	568.68	
			For >500 To 1,000, Deduct	-217.62	
			For >1,000 To 2,000, Deduct	-329.21	
			For >2,000 To 5,000, Deduct	-537.86	
			For >5,000, Deduct	-892.73	

**33 Utilities****33 01 Operation and Maintenance of Utilities****33 01 30 Operation and Maintenance of Sewer Utilities**

MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
33 01 30 72-0304 LF 39mm Lining 102" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP).....	4,510.62	
For Vinylster Resin, Add	2,991.88	
For Epoxy Resin, Add	352.61	
For Up To >10, Add	2,846.56	
For >10 To 25, Add	1,659.78	
For >25 To 50, Add	1,209.57	
For >50 To 100, Add	604.79	
For >500 To 1,000, Deduct	-231.44	
For >1,000 To 2,000, Deduct	-350.12	
For >2,000 To 5,000, Deduct	-572.02	
For >5,000, Deduct	-949.42	
33 01 30 72-0305 LF 39mm Lining 108" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP).....	4,779.99	
For Vinylster Resin, Add	3,170.57	
For Epoxy Resin, Add	373.67	
For Up To >10, Add	3,016.52	
For >10 To 25, Add	1,758.87	
For >25 To 50, Add	1,281.79	
For >50 To 100, Add	640.90	
For >500 To 1,000, Deduct	-245.26	
For >1,000 To 2,000, Deduct	-371.03	
For >2,000 To 5,000, Deduct	-606.18	
For >5,000, Deduct	-1,006.12	
33 01 30 72-0306 LF 39mm Lining 114" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP).....	5,049.37	
For Vinylster Resin, Add	3,349.25	
For Epoxy Resin, Add	394.73	
For Up To >10, Add	3,186.51	
For >10 To 25, Add	1,857.99	
For >25 To 50, Add	1,354.02	
For >50 To 100, Add	677.01	
For >500 To 1,000, Deduct	-259.09	
For >1,000 To 2,000, Deduct	-391.94	
For >2,000 To 5,000, Deduct	-640.34	
For >5,000, Deduct	-1,062.82	
33 01 30 72-0307 LF 39mm Lining 120" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP).....	5,318.74	
For Vinylster Resin, Add	3,527.93	
For Epoxy Resin, Add	415.79	
For Up To >10, Add	3,356.47	
For >10 To 25, Add	1,957.08	
For >25 To 50, Add	1,426.24	
For >50 To 100, Add	713.12	
For >500 To 1,000, Deduct	-272.91	
For >1,000 To 2,000, Deduct	-412.85	
For >2,000 To 5,000, Deduct	-674.50	
For >5,000, Deduct	-1,119.52	
<b>33 01 30 72-0308 40.5mm Thick Lining Cured In-Place Pipe (33 01 30 72-0015).....</b>	<b>1,877.46</b>	
33 01 30 72-0309 LF 40.5mm Lining 42" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP).....	1,249.58	
For Vinylster Resin, Add	147.27	
For Epoxy Resin, Add	1,169.61	
For Up To >10, Add	677.15	
For >10 To 25, Add	495.55	
For >25 To 50, Add	247.77	
For >50 To 100, Add	96.18	
For >500 To 1,000, Deduct	-145.43	
For >1,000 To 2,000, Deduct	-237.30	
For >2,000 To 5,000, Deduct	-393.96	
For >5,000, Deduct	-393.96	
33 01 30 72-0310 LF 40.5mm Lining 48" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP).....	2,156.25	
For Vinylster Resin, Add	1,435.13	
For Epoxy Resin, Add	169.14	
For Up To >10, Add	1,343.28	
For >10 To 25, Add	777.70	
For >25 To 50, Add	569.13	
For >50 To 100, Add	284.56	
For >500 To 1,000, Deduct	-110.46	
For >1,000 To 2,000, Deduct	-167.02	
For >2,000 To 5,000, Deduct	-272.54	
For >5,000, Deduct	-452.46	
33 01 30 72-0311 LF 40.5mm Lining 54" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP).....	2,435.03	
For Vinylster Resin, Add	1,620.69	
For Epoxy Resin, Add	191.01	
For Up To >10, Add	1,516.92	
For >10 To 25, Add	878.22	
For >25 To 50, Add	642.69	
For >50 To 100, Add	321.35	
For >500 To 1,000, Deduct	-124.75	
For >1,000 To 2,000, Deduct	-188.62	
For >2,000 To 5,000, Deduct	-307.77	
For >5,000, Deduct	-510.96	



		<b>Utilities</b>	<b>33</b>	<b>CS</b>
		<b>Operation and Maintenance of Utilities</b>	<b>33 01</b>	
		<b>Operation and Maintenance of Sewer Utilities</b>	<b>33 01 30</b>	

MINOR CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
33 01 30 72-0312	LF	40.5mm Lining 60" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP).....	2,713.81	
		For Vinlyester Resin, Add	1,806.25	
		For Epoxy Resin, Add	212.88	
		For Up To >10, Add	1,690.56	
		For >10 To 25, Add	978.74	
		For >25 To 50, Add	716.26	
		For >50 To 100, Add	358.13	
		For >500 To 1,000, Deduct	-139.03	
		For >1,000 To 2,000, Deduct	-210.21	
		For >2,000 To 5,000, Deduct	-343.01	
		For >5,000, Deduct	-569.45	
33 01 30 72-0313	LF	40.5mm Lining 66" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP).....	2,999.99	
		For Vinlyester Resin, Add	1,991.80	
		For Epoxy Resin, Add	234.75	
		For Up To >10, Add	1,886.40	
		For >10 To 25, Add	1,097.76	
		For >25 To 50, Add	800.93	
		For >50 To 100, Add	400.46	
		For >500 To 1,000, Deduct	-153.86	
		For >1,000 To 2,000, Deduct	-232.73	
		For >2,000 To 5,000, Deduct	-380.09	
		For >5,000, Deduct	-630.91	
33 01 30 72-0314	LF	40.5mm Lining 72" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP).....	3,279.45	
		For Vinlyester Resin, Add	2,177.35	
		For Epoxy Resin, Add	256.62	
		For Up To >10, Add	2,062.10	
		For >10 To 25, Add	1,200.00	
		For >25 To 50, Add	875.53	
		For >50 To 100, Add	437.76	
		For >500 To 1,000, Deduct	-168.20	
		For >1,000 To 2,000, Deduct	-254.41	
		For >2,000 To 5,000, Deduct	-415.50	
		For >5,000, Deduct	-689.68	
33 01 30 72-0315	LF	40.5mm Lining 78" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP).....	3,558.92	
		For Vinlyester Resin, Add	2,362.91	
		For Epoxy Resin, Add	278.49	
		For Up To >10, Add	2,237.81	
		For >10 To 25, Add	1,302.25	
		For >25 To 50, Add	950.13	
		For >50 To 100, Add	475.06	
		For >500 To 1,000, Deduct	-182.53	
		For >1,000 To 2,000, Deduct	-276.09	
		For >2,000 To 5,000, Deduct	-450.90	
		For >5,000, Deduct	-748.45	
33 01 30 72-0316	LF	40.5mm Lining 84" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP).....	3,838.38	
		For Vinlyester Resin, Add	2,548.46	
		For Epoxy Resin, Add	300.35	
		For Up To >10, Add	2,413.49	
		For >10 To 25, Add	1,404.47	
		For >25 To 50, Add	1,024.71	
		For >50 To 100, Add	512.36	
		For >500 To 1,000, Deduct	-196.86	
		For >1,000 To 2,000, Deduct	-297.76	
		For >2,000 To 5,000, Deduct	-486.31	
		For >5,000, Deduct	-807.22	
33 01 30 72-0317	LF	40.5mm Lining 90" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP).....	4,117.85	
		For Vinlyester Resin, Add	2,734.02	
		For Epoxy Resin, Add	322.22	
		For Up To >10, Add	2,589.20	
		For >10 To 25, Add	1,506.71	
		For >25 To 50, Add	1,099.31	
		For >50 To 100, Add	549.66	
		For >500 To 1,000, Deduct	-211.20	
		For >1,000 To 2,000, Deduct	-319.44	
		For >2,000 To 5,000, Deduct	-521.72	
		For >5,000, Deduct	-865.99	
33 01 30 72-0318	LF	40.5mm Lining 96" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP).....	4,397.32	
		For Vinlyester Resin, Add	2,919.57	
		For Epoxy Resin, Add	344.09	
		For Up To >10, Add	2,764.91	
		For >10 To 25, Add	1,608.96	
		For >25 To 50, Add	1,173.91	
		For >50 To 100, Add	586.96	
		For >500 To 1,000, Deduct	-225.53	
		For >1,000 To 2,000, Deduct	-341.12	
		For >2,000 To 5,000, Deduct	-557.12	
		For >5,000, Deduct	-924.76	

**33 Utilities****33 01 Operation and Maintenance of Utilities****33 01 30 Operation and Maintenance of Sewer Utilities**

MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
33 01 30 72-0319 LF 40.5mm Lining 102" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP) .....	4,676.79	
For Vinylster Resin, Add	3,105.13	
For Epoxy Resin, Add	365.96	
For Up To >10, Add	2,940.62	
For >10 To 25, Add	1,711.20	
For >25 To 50, Add	1,248.52	
For >50 To 100, Add	624.26	
For >500 To 1,000, Deduct	-239.86	
For >1,000 To 2,000, Deduct	-362.80	
For >2,000 To 5,000, Deduct	-592.53	
For >5,000, Deduct	-983.54	
33 01 30 72-0320 LF 40.5mm Lining 108" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP) .....	4,956.25	
For Vinylster Resin, Add	3,290.69	
For Epoxy Resin, Add	387.83	
For Up To >10, Add	3,116.30	
For >10 To 25, Add	1,813.42	
For >25 To 50, Add	1,323.10	
For >50 To 100, Add	661.55	
For >500 To 1,000, Deduct	-254.19	
For >1,000 To 2,000, Deduct	-384.48	
For >2,000 To 5,000, Deduct	-627.94	
For >5,000, Deduct	-1,042.30	
33 01 30 72-0321 LF 40.5mm Lining 114" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP) .....	5,235.72	
For Vinylster Resin, Add	3,476.24	
For Epoxy Resin, Add	409.70	
For Up To >10, Add	3,292.01	
For >10 To 25, Add	1,915.67	
For >25 To 50, Add	1,397.70	
For >50 To 100, Add	698.85	
For >500 To 1,000, Deduct	-268.53	
For >1,000 To 2,000, Deduct	-406.16	
For >2,000 To 5,000, Deduct	-663.34	
For >5,000, Deduct	-1,101.08	
33 01 30 72-0322 LF 40.5mm Lining 120" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP) .....	5,515.19	
For Vinylster Resin, Add	3,661.80	
For Epoxy Resin, Add	431.57	
For Up To >10, Add	3,467.72	
For >10 To 25, Add	2,017.91	
For >25 To 50, Add	1,472.30	
For >50 To 100, Add	736.15	
For >500 To 1,000, Deduct	-282.86	
For >1,000 To 2,000, Deduct	-427.84	
For >2,000 To 5,000, Deduct	-698.75	
For >5,000, Deduct	-1,159.85	
<b>33 01 30 72-0323 42mm Thick Lining Cured In-Place Pipe (33 01 30 72-0015) .....</b>	<b>2,231.24</b>	
33 01 30 72-0324 LF 42mm Lining 48" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP) .....	2,231.24	
For Vinylster Resin, Add	1,486.39	
For Epoxy Resin, Add	175.18	
For Up To >10, Add	1,385.20	
For >10 To 25, Add	800.43	
For >25 To 50, Add	586.43	
For >50 To 100, Add	293.21	
For >500 To 1,000, Deduct	-114.26	
For >1,000 To 2,000, Deduct	-172.73	
For >2,000 To 5,000, Deduct	-281.77	
For >5,000, Deduct	-467.81	
33 01 30 72-0325 LF 42mm Lining 54" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP) .....	2,520.12	
For Vinylster Resin, Add	1,678.82	
For Epoxy Resin, Add	197.86	
For Up To >10, Add	1,564.59	
For >10 To 25, Add	904.10	
For >25 To 50, Add	662.38	
For >50 To 100, Add	331.19	
For >500 To 1,000, Deduct	-129.05	
For >1,000 To 2,000, Deduct	-195.10	
For >2,000 To 5,000, Deduct	-318.25	
For >5,000, Deduct	-528.39	
33 01 30 72-0326 LF 42mm Lining 60" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP) .....	2,809.00	
For Vinylster Resin, Add	1,871.25	
For Epoxy Resin, Add	220.54	
For Up To >10, Add	1,743.98	
For >10 To 25, Add	1,007.78	
For >25 To 50, Add	738.33	
For >50 To 100, Add	369.16	
For >500 To 1,000, Deduct	-143.84	
For >1,000 To 2,000, Deduct	-217.46	
For >2,000 To 5,000, Deduct	-354.73	
For >5,000, Deduct	-588.96	





		<b>Utilities</b>	<b>33</b>	<b>CS</b>
		<b>Operation and Maintenance of Utilities</b>	<b>33 01</b>	
		<b>Operation and Maintenance of Sewer Utilities</b>	<b>33 01 30</b>	

MINOR CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
33 01 30 72-0327	LF	42mm Lining 66" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP).....	3,105.40	
		For Vinlyester Resin, Add	2,063.67	
		For Epoxy Resin, Add	243.22	
		For Up To >10, Add	1,945.95	
		For >10 To 25, Add	1,130.28	
		For >25 To 50, Add	825.57	
		For >50 To 100, Add	412.79	
		For >500 To 1,000, Deduct	-159.20	
		For >1,000 To 2,000, Deduct	-240.77	
		For >2,000 To 5,000, Deduct	-393.10	
		For >5,000, Deduct	-652.54	
33 01 30 72-0328	LF	42mm Lining 72" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP).....	3,394.97	
		For Vinlyester Resin, Add	2,256.11	
		For Epoxy Resin, Add	265.90	
		For Up To >10, Add	2,127.39	
		For >10 To 25, Add	1,235.65	
		For >25 To 50, Add	902.54	
		For >50 To 100, Add	451.27	
		For >500 To 1,000, Deduct	-174.05	
		For >1,000 To 2,000, Deduct	-263.22	
		For >2,000 To 5,000, Deduct	-429.75	
		For >5,000, Deduct	-713.39	
33 01 30 72-0329	LF	42mm Lining 78" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP).....	3,684.53	
		For Vinlyester Resin, Add	2,448.53	
		For Epoxy Resin, Add	288.58	
		For Up To >10, Add	2,308.84	
		For >10 To 25, Add	1,341.05	
		For >25 To 50, Add	979.53	
		For >50 To 100, Add	489.76	
		For >500 To 1,000, Deduct	-188.89	
		For >1,000 To 2,000, Deduct	-285.67	
		For >2,000 To 5,000, Deduct	-466.41	
		For >5,000, Deduct	-774.23	
33 01 30 72-0330	LF	42mm Lining 84" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP).....	3,974.08	
		For Vinlyester Resin, Add	2,640.96	
		For Epoxy Resin, Add	311.26	
		For Up To >10, Add	2,490.24	
		For >10 To 25, Add	1,446.40	
		For >25 To 50, Add	1,056.48	
		For >50 To 100, Add	528.24	
		For >500 To 1,000, Deduct	-203.74	
		For >1,000 To 2,000, Deduct	-308.12	
		For >2,000 To 5,000, Deduct	-503.06	
		For >5,000, Deduct	-835.07	
33 01 30 72-0331	LF	42mm Lining 90" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP).....	4,263.64	
		For Vinlyester Resin, Add	2,833.38	
		For Epoxy Resin, Add	333.93	
		For Up To >10, Add	2,671.70	
		For >10 To 25, Add	1,551.80	
		For >25 To 50, Add	1,133.46	
		For >50 To 100, Add	566.73	
		For >500 To 1,000, Deduct	-218.58	
		For >1,000 To 2,000, Deduct	-330.57	
		For >2,000 To 5,000, Deduct	-539.71	
		For >5,000, Deduct	-895.92	
33 01 30 72-0332	LF	42mm Lining 96" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP).....	4,553.20	
		For Vinlyester Resin, Add	3,025.81	
		For Epoxy Resin, Add	356.61	
		For Up To >10, Add	2,853.13	
		For >10 To 25, Add	1,657.17	
		For >25 To 50, Add	1,210.43	
		For >50 To 100, Add	605.22	
		For >500 To 1,000, Deduct	-233.43	
		For >1,000 To 2,000, Deduct	-353.02	
		For >2,000 To 5,000, Deduct	-576.36	
		For >5,000, Deduct	-956.76	
33 01 30 72-0333	LF	42mm Lining 102" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP).....	4,842.76	
		For Vinlyester Resin, Add	3,218.24	
		For Epoxy Resin, Add	379.29	
		For Up To >10, Add	3,034.56	
		For >10 To 25, Add	1,762.55	
		For >25 To 50, Add	1,287.40	
		For >50 To 100, Add	643.70	
		For >500 To 1,000, Deduct	-248.27	
		For >1,000 To 2,000, Deduct	-375.47	
		For >2,000 To 5,000, Deduct	-613.02	
		For >5,000, Deduct	-1,017.61	

**33 Utilities****33 01 Operation and Maintenance of Utilities****33 01 30 Operation and Maintenance of Sewer Utilities**

MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
33 01 30 72-0334 LF 42mm Lining 108" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP).....	5,132.31	
For Vinylester Resin, Add	3,410.67	
For Epoxy Resin, Add	401.97	
For Up To >10, Add	3,215.98	
For >10 To 25, Add	1,867.92	
For >25 To 50, Add	1,364.37	
For >50 To 100, Add	682.19	
For >500 To 1,000, Deduct	-263.11	
For >1,000 To 2,000, Deduct	-397.92	
For >2,000 To 5,000, Deduct	-649.67	
For >5,000, Deduct	-1,078.45	
33 01 30 72-0335 LF 42mm Lining 114" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP).....	5,421.88	
For Vinylester Resin, Add	3,603.10	
For Epoxy Resin, Add	424.65	
For Up To >10, Add	3,397.44	
For >10 To 25, Add	1,973.32	
For >25 To 50, Add	1,441.36	
For >50 To 100, Add	720.68	
For >500 To 1,000, Deduct	-277.96	
For >1,000 To 2,000, Deduct	-420.37	
For >2,000 To 5,000, Deduct	-686.32	
For >5,000, Deduct	-1,139.30	
33 01 30 72-0336 LF 42mm Lining 120" Pipe With Resin Impregnated Cured In-Place Pipe (CIPP).....	5,711.43	
For Vinylester Resin, Add	3,795.53	
For Epoxy Resin, Add	447.33	
For Up To >10, Add	3,578.84	
For >10 To 25, Add	2,078.67	
For >25 To 50, Add	1,518.31	
For >50 To 100, Add	759.16	
For >500 To 1,000, Deduct	-292.80	
For >1,000 To 2,000, Deduct	-442.82	
For >2,000 To 5,000, Deduct	-722.97	
For >5,000, Deduct	-1,200.14	
<b>33 01 30 74 Cured-in-Place Lateral Lining (33 01 30)</b>		
33 01 30 74-0001 Laterals; Cutting, Grouting And Reinstatement (33 01 30 74)		
33 01 30 74-0002 Lateral Reinstatement/Reconnection (33 01 30 74-0001)		
33 01 30 74-0003 EA Cut Liner For Laterals, Up To 4" (Robotic).....	556.48	
33 01 30 74-0004 EA Cut Liner For Laterals, 6" (Robotic) .....	601.60	
33 01 30 74-0005 EA Cut Liner For Laterals, 8" (Robotic) .....	639.19	
33 01 30 74-0006 EA Cut Liner For Laterals, 10" (Robotic).....	676.80	
33 01 30 74-0007 EA Cut Liner For Laterals, 12" (Robotic).....	714.40	
33 01 30 74-0008 Grout Lateral Service (33 01 30 74-0001)		
33 01 30 74-0009 Grout Lateral Service - Bladder (33 01 30 74-0008)		
33 01 30 74-0010 EA Grout Up To 4" Lateral Service - Bladder.....	626.39	
33 01 30 74-0011 EA Grout 6" Lateral Service - Bladder .....	717.54	
33 01 30 74-0012 EA Grout 8" Lateral Service - Bladder .....	808.68	
33 01 30 74-0013 Grout Lateral Service - Robotic Trowel Application (33 01 30 74-0008)		
33 01 30 74-0014 EA Grout 3" To 6" Lateral Service - Robotic Trowel Application.....	680.53	
33 01 30 74-0015 EA Grout 8" To 12" Lateral Service - Robotic Trowel Application.....	734.68	
33 01 30 74-0016 Lateral T-Liner (33 01 30 74-0001)		
Note: As manufactured by LMK.		
33 01 30 74-0017 EA Up To 4" Lateral T-Liner.....	781.87	
33 01 30 74-0018 EA 6" Lateral T-Liner .....	875.29	
33 01 30 74-0019 EA 8" Lateral T-Liner .....	1,016.47	
33 01 30 74-0020 Lining Lateral Pipe (33 01 30 74-0001)		
33 01 30 74-0021 Lining Lateral Pipe (33 01 30 74-0020)		
33 01 30 74-0022 LF 6mm Lining 3" Lateral Pipe With Cured In-Place Pipe (CIPP) .....	39.67	
For 7.5mm, Add	4.29	
For 9 mm, Add	8.49	
33 01 30 74-0023 LF 6mm Lining 4" Lateral Pipe With Cured In-Place Pipe (CIPP) .....	47.24	
For 7.5mm, Add	5.84	
For 9 mm, Add	11.56	
33 01 30 74-0024 LF 6mm Lining 6" Lateral Pipe With Cured In-Place Pipe (CIPP) .....	61.36	
For 7.5mm, Add	8.95	
For 9 mm, Add	17.70	
33 01 30 74-0025 Lining Manhole Drop (33 01 30 74-0020)		
33 01 30 74-0026 EA Manhole Drop Section Lining.....	852.22	



Utilities		33	CS
Operation and Maintenance of Utilities		33 01	
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MINOR CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
33 01 30 79		<b>Fold-and-Form Pipe Lining</b> (33 01 30)		
33 01 30 79-0001		<b>Form and Fold Relining Underground Pipelines</b> (33 01 30 79) Note: Excludes CCTV inspection and sewer cleaning. See CSI section 33 01 30 11-0000 for CCTV inspection, 33 01 30 41-0002 for sewer cleaning.		
33 01 30 79-0002		<b>Fold-And-Form Relining Underground Pipelines Set-Up And Reinsertion</b> (33 01 30 79-0001)		
33 01 30 79-0003	EA	Initial Set Up And Final Equipment Removal For Fold-And-Form Relining Underground Pipelines.....	5,480.90	
33 01 30 79-0004	EA	Move And Reset Up At Different Access/Location For Fold-And-Form Relining Underground Pipelines.....	2,192.36	
33 01 30 79-0005		<b>Form And Fold Polyethylene (PE) Pipeliner</b> (33 01 30 79-0001)		
33 01 30 79-0006	LF	4" Diameter Form and Fold Polyethylene Pipeliner, DR 32.5 .....	33.43	
		For DR 26 Pipe Liner, Add	5.42	
		For Up To 75, Add	21.95	
		For >75 To 150, Add	10.97	
		For >500 To 1,000, Deduct	-0.88	
		For >1,000 To 2,000, Deduct	-1.76	
		For >2,000, Deduct	-3.52	
33 01 30 79-0007	LF	6" Diameter Form and Fold Polyethylene Pipeliner, DR 32.5 .....	42.12	
		For DR 26 Pipe Liner, Add	7.37	
		For DR 35 Pipe Liner, Deduct	-3.68	
		For Up To 75, Add	24.87	
		For >75 To 150, Add	12.43	
		For >500 To 1,000, Deduct	-0.95	
		For >1,000 To 2,000, Deduct	-1.90	
		For >2,000, Deduct	-3.80	
33 01 30 79-0008	LF	8" Diameter Form and Fold Polyethylene Pipeliner, DR 32.5 .....	43.72	
		For DR 26 Pipe Liner, Add	7.51	
		For DR 35 Pipe Liner, Deduct	-3.75	
		For Up To 75, Add	26.55	
		For >75 To 150, Add	13.28	
		For >500 To 1,000, Deduct	-1.03	
		For >1,000 To 2,000, Deduct	-2.06	
		For >2,000, Deduct	-4.11	
33 01 30 79-0009	LF	10" Diameter Form and Fold Polyethylene Pipeliner, DR 32.5 .....	59.97	
		For DR 26 Pipe Liner, Add	11.26	
		For DR 35 Pipe Liner, Deduct	-5.63	
		For DR 41 Pipe Liner, Deduct	-11.26	
		For Up To 75, Add	31.43	
		For >75 To 150, Add	15.71	
		For >500 To 1,000, Deduct	-1.12	
		For >1,000 To 2,000, Deduct	-2.24	
		For >2,000, Deduct	-4.49	
33 01 30 79-0010	LF	12" Diameter Form and Fold Polyethylene Pipeliner, DR 32.5 .....	82.34	
		For DR 26 Pipe Liner, Add	16.48	
		For DR 35 Pipe Liner, Deduct	-8.24	
		For DR 41 Pipe Liner, Deduct	-16.48	
		For Up To 75, Add	37.84	
		For >75 To 150, Add	18.92	
		For >500 To 1,000, Deduct	-1.23	
		For >1,000 To 2,000, Deduct	-2.47	
		For >2,000, Deduct	-4.93	
33 01 30 79-0011	LF	15" Diameter Form and Fold Polyethylene Pipeliner, DR 32.5 .....	111.46	
		For DR 35 Pipe Liner, Deduct	-11.60	
		For DR 41 Pipe Liner, Deduct	-23.19	
		For Up To 75, Add	46.59	
		For >75 To 150, Add	23.29	
		For >500 To 1,000, Deduct	-1.40	
		For >1,000 To 2,000, Deduct	-2.80	
		For >2,000, Deduct	-5.61	
33 01 30 79-0012	LF	18" Diameter Form and Fold Polyethylene Pipeliner, DR 35 .....	155.60	
		For DR 41 Pipe Liner, Deduct	-13.45	
		For DR 50 Pipe Liner, Deduct	-26.90	
		For Up To 75, Add	58.52	
		For >75 To 150, Add	29.26	
		For >500 To 1,000, Deduct	-1.58	
		For >1,000 To 2,000, Deduct	-3.16	
		For >2,000, Deduct	-6.32	
33 01 30 79-0013	LF	21" Diameter Form and Fold Polyethylene Pipeliner, DR 47 .....	175.63	
		For DR 50 Pipe Liner, Deduct	-22.92	
		For DR 55 Pipe Liner, Deduct	-38.20	
		For Up To 75, Add	64.81	
		For >75 To 150, Add	32.40	
		For >500 To 1,000, Deduct	-1.71	
		For >1,000 To 2,000, Deduct	-3.42	
		For >2,000, Deduct	-6.85	
33 01 30 79-0014	LF	24" Diameter Form and Fold Polyethylene Pipeliner, DR 55 .....	213.20	
		For DR 60 Pipe Liner, Deduct	-28.24	
		For Up To 75, Add	75.04	
		For >75 To 150, Add	37.52	
		For >500 To 1,000, Deduct	-1.87	
		For >1,000 To 2,000, Deduct	-3.74	
		For >2,000, Deduct	-7.48	

**33 Utilities****33 01 Operation and Maintenance of Utilities****33 01 30 Operation and Maintenance of Sewer Utilities**

MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
<b>33 01 30 79-0015 Form And Fold Polyvinyl Chloride (PVC) Pipeliner</b> (33 01 30 79-0001)		
33 01 30 79-0016 LF 4" Diameter Form and Fold Polyvinyl Chloride (PVC) Pipeliner, DR 32.5.....	35.48	
For Up To 75, Add	22.36	
For >75 To 150, Add	11.18	
For >500 To 1,000, Deduct	-0.88	
For >1,000 To 2,000, Deduct	-1.76	
For >2,000, Deduct	-3.52	
For DR 26 Pipe Liner, Add	5.94	
33 01 30 79-0017 LF 6" Diameter Form and Fold Polyvinyl Chloride (PVC) Pipeliner, DR 32.5.....	42.12	
For Up To 75, Add	24.87	
For >75 To 150, Add	12.43	
For >500 To 1,000, Deduct	-0.95	
For >1,000 To 2,000, Deduct	-1.90	
For >2,000, Deduct	-3.80	
For DR 26 Pipe Liner, Add	7.37	
For DR 35 Pipe Liner, Deduct	-3.68	
33 01 30 79-0018 LF 8" Diameter Form and Fold Polyvinyl Chloride (PVC) Pipeliner, DR 32.5.....	46.44	
For Up To 75, Add	27.10	
For >75 To 150, Add	13.55	
For >500 To 1,000, Deduct	-1.03	
For >1,000 To 2,000, Deduct	-2.06	
For >2,000, Deduct	-4.11	
For DR 26 Pipe Liner, Add	8.19	
For DR 35 Pipe Liner, Deduct	-4.09	
33 01 30 79-0019 LF 10" Diameter Form and Fold Polyvinyl Chloride (PVC) Pipeliner, DR 32.5.....	64.07	
For Up To 75, Add	32.25	
For >75 To 150, Add	16.12	
For >500 To 1,000, Deduct	-1.12	
For >1,000 To 2,000, Deduct	-2.24	
For >2,000, Deduct	-4.49	
For DR 26 Pipe Liner, Add	12.28	
For DR 35 Pipe Liner, Deduct	-6.14	
For DR 41 Pipe Liner, Deduct	-12.28	
33 01 30 79-0020 LF 12" Diameter Form and Fold Polyvinyl Chloride (PVC) Pipeliner, DR 32.5.....	88.48	
For Up To 75, Add	39.07	
For >75 To 150, Add	19.53	
For >500 To 1,000, Deduct	-1.23	
For >1,000 To 2,000, Deduct	-2.47	
For >2,000, Deduct	-4.93	
For DR 26 Pipe Liner, Add	18.01	
For DR 35 Pipe Liner, Deduct	-9.01	
For DR 41 Pipe Liner, Deduct	-18.01	
33 01 30 79-0021 LF 15" Diameter Form and Fold Polyvinyl Chloride (PVC) Pipeliner, DR 32.5.....	120.20	
For Up To 75, Add	48.34	
For >75 To 150, Add	24.17	
For >500 To 1,000, Deduct	-1.40	
For >1,000 To 2,000, Deduct	-2.80	
For >2,000, Deduct	-5.61	
For DR 35 Pipe Liner, Deduct	-12.69	
For DR 41 Pipe Liner, Deduct	-25.38	
33 01 30 79-0022 LF 18" Diameter Form and Fold Polyvinyl Chloride (PVC) Pipeliner, DR 35.....	168.43	
For Up To 75, Add	61.09	
For >75 To 150, Add	30.55	
For >500 To 1,000, Deduct	-1.58	
For >1,000 To 2,000, Deduct	-3.16	
For >2,000, Deduct	-6.32	
For DR 41 Pipe Liner, Deduct	-14.74	
For DR 50 Pipe Liner, Deduct	-29.47	
33 01 30 79-0023 LF 21" Diameter Form and Fold Polyvinyl Chloride (PVC) Pipeliner, DR 47.....	189.82	
For Up To 75, Add	67.64	
For >75 To 150, Add	33.82	
For >500 To 1,000, Deduct	-1.71	
For >1,000 To 2,000, Deduct	-3.42	
For >2,000, Deduct	-6.85	
For DR 50 Pipe Liner, Deduct	-25.05	
For DR 55 Pipe Liner, Deduct	-41.75	
33 01 30 79-0024 LF 24" Diameter Form and Fold Polyvinyl Chloride (PVC) Pipeliner, DR 55.....	231.21	
For Up To 75, Add	78.64	
For >75 To 150, Add	39.32	
For >500 To 1,000, Deduct	-1.87	
For >1,000 To 2,000, Deduct	-3.74	
For >2,000, Deduct	-7.48	
For DR 60 Pipe Liner, Deduct	-30.94	

**33 01 30 81 Manhole Rehabilitation** (33 01 30)**33 01 30 81-0001 Restoration And Rehabilitation Of Manholes** (33 01 30 81)

Note: Work is in confined spaces.

**33 01 30 81-0002 Inspection And Ventilation System Set-up** (33 01 30 81-0001)

33 01 30 81-0003	EA	Inspect Manhole.....	172.48
33 01 30 81-0004	EA	36" to 60" Diameter, Up To 2600', Installation And Maintenance Of Ventilation System .....	14,018.41
Note: For internal inspection and repair of water mains.			
33 01 30 81-0005	EA	>60" to 108" Diameter, Up To 2600', Installation And Maintenance Of Ventilation System .....	19,881.01
Note: For internal inspection and repair of water mains			



Utilities		33	CS
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MINOR CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
33 01 30 81-0006		<b>Manhole Seals</b> (33 01 30 81-0001)		
33 01 30 81-0007		<b>Internal Manhole Chimney Seals</b> (33 01 30 81-0006)		
		Note: Cretex.		
33 01 30 81-0008	EA	20" Internal Manhole Chimney Seal.....	574.47	
33 01 30 81-0009	EA	22" Internal Manhole Chimney Seal.....	605.53	
33 01 30 81-0010	EA	24" Internal Manhole Chimney Seal.....	621.05	
33 01 30 81-0011	EA	26" Internal Manhole Chimney Seal.....	714.21	
33 01 30 81-0012	EA	28" Internal Manhole Chimney Seal.....	807.37	
33 01 30 81-0013	EA	30" Internal Manhole Chimney Seal.....	900.52	
33 01 30 81-0014	EA	36" Internal Manhole Chimney Seal.....	1,086.85	
33 01 30 81-0015		<b>External Manhole Encapsulation</b> (33 01 30 81-0006)		
		Note: Wrapidseal.		
33 01 30 81-0016	EA	24" External Manhole Encapsulation.....	838.42	
33 01 30 81-0017	EA	30" External Manhole Encapsulation.....	885.00	
33 01 30 81-0018	EA	36" External Manhole Encapsulation.....	947.10	
33 01 30 81-0019	EA	42" External Manhole Encapsulation.....	1,024.74	
33 01 30 81-0020	EA	48" External Manhole Encapsulation.....	1,133.44	
33 01 30 81-0021	EA	54" External Manhole Encapsulation.....	1,257.63	
33 01 30 81-0022	EA	60" External Manhole Encapsulation.....	1,412.91	
33 01 30 81-0023		<b>Manhole Crack Repair</b> (33 01 30 81-0001)		
		Note: Includes removing loose materials and cleaning.		
33 01 30 81-0024	LF	Up To 1/4" Wide, Epoxy Grout Injection, Manhole Crack Repair.....	51.86	
33 01 30 81-0025	LF	>1/4" To 1/2" Wide, Epoxy Grout Injection, Manhole Crack Repair.....	69.89	
33 01 30 81-0026	LF	Up To 1/4" Wide, Urethane Grout Injection, Manhole Crack Repair.....	49.11	
33 01 30 81-0027	LF	>1/4" To 1/2" Wide, Urethane Grout Injection, Manhole Crack Repair.....	66.69	
33 01 30 81-0028		<b>Manhole Patching</b> (33 01 30 81-0001)		
		Note: Includes removing loose materials and cleaning.		
33 01 30 81-0029	SF	Up To 1/4" Thick, Cementitious Grout, Manhole Patching.....	16.57	
33 01 30 81-0030	SF	Up To 1/4" Thick, Epoxy Grout, Manhole Patching.....	39.43	
33 01 30 81-0031		<b>Manhole Joint Restoration</b> (33 01 30 81-0001)		
		Note: Includes drilling holes at joints, fill joints with grout.		
33 01 30 81-0032	EA	3' Diameter Joint Restoration, Grout Fill Per Each Manhole.....	2,347.67	
		Note: Includes two (2) joints sections to be grouted and two (2) pipe connections.		
		For Grouting Each Additional Manhole Joint Section, Add	238.92	
33 01 30 81-0033	EA	3-1/2' Diameter Joint Restoration, Grout Fill Per Each Manhole.....	2,740.57	
		Note: Includes two (2) joints sections to be grouted and two (2) pipe connections.		
		For Grouting Each Additional Manhole Joint Section, Add	266.24	
33 01 30 81-0034	EA	4' Diameter Joint Restoration, Grout Fill Per Each Manhole.....	3,130.23	
		Note: Includes two (2) joints sections to be grouted and two (2) pipe connections.		
		For Grouting Each Additional Manhole Joint Section, Add	293.56	
33 01 30 81-0035	EA	5' Diameter Joint Restoration, Grout Fill Per Each Manhole.....	3,709.51	
		Note: Includes two (2) joints sections to be grouted and two (2) pipe connections.		
		For Grouting Each Additional Manhole Joint Section, Add	307.21	
33 01 30 81-0036	EA	6' Diameter Joint Restoration, Grout Fill Per Each Manhole.....	4,287.18	
		Note: Includes two (2) joints sections to be grouted and two (2) pipe connections.		
		For Grouting Each Additional Manhole Joint Section, Add	320.88	
33 01 30 81-0037		<b>Step Installation In Existing Manholes</b> (33 01 30 81-0001)		
		Note: Including drilling in existing concrete manhole, step and grout. Demolition cost includes removal of old step and patching holes.		
33 01 30 81-0038	EA	Drill And Grout 7" x 9" Cast Iron Manhole Steps.....	143.67	20.70
33 01 30 81-0039	EA	Drill And Grout 8" x 9" Cast Iron Manhole Steps.....	157.18	20.70
33 01 30 81-0040	EA	Drill And Grout Galvanized Steel Manhole Step.....	114.16	20.70
33 01 30 81-0041	EA	Bolt On Galvanized Steel Manhole Step.....	130.35	20.70
33 01 30 81-0042	EA	Drill And Grout Aluminum Manhole Step.....	125.23	20.70
33 01 30 81-0043	EA	Drill And Insert Polypropylene Manhole Step.....	65.36	16.56
33 01 30 81-0044		<b>Invert Restoration</b> (33 01 30 81-0001)		
		Note: Includes removal of existing defective material and installation of new material.		
33 01 30 81-0045		<b>Concrete Invert Restoration</b> (33 01 30 81-0044)		
33 01 30 81-0046	EA	2' Diameter, Concrete Invert Restoration.....	399.95	
33 01 30 81-0047	EA	3' Diameter, Concrete Invert Restoration.....	443.07	
33 01 30 81-0048	EA	4' Diameter, Concrete Invert Restoration.....	486.19	
33 01 30 81-0049	EA	5' Diameter, Concrete Invert Restoration.....	529.31	
33 01 30 81-0050	EA	6' Diameter, Concrete Invert Restoration.....	658.67	
33 01 30 81-0051	SF	Square Or Rectangular, Concrete Invert Restoration.....	38.67	
33 01 30 81-0052		<b>Brick Invert Restoration</b> (33 01 30 81-0044)		

**33 Utilities****33 01 Operation and Maintenance of Utilities****33 01 30 Operation and Maintenance of Sewer Utilities**

MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
33 01 30 81-0053 EA 2' Diameter, Brick Invert Restoration .....	552.74	
33 01 30 81-0054 EA 3' Diameter, Brick Invert Restoration .....	595.86	
33 01 30 81-0055 EA 4' Diameter, Brick Invert Restoration .....	638.98	
33 01 30 81-0056 EA 5' Diameter, Brick Invert Restoration .....	682.10	
33 01 30 81-0057 EA 6' Diameter, Brick Invert Restoration .....	725.21	
33 01 30 81-0058 SF Square Or Rectangular, Brick Invert Restoration .....	52.43	
<b>33 01 30 81-0059 Repair In-Kind Of Drainage Structures</b> (33 01 30 81)		
Note: For brick, concrete or concrete block catch basins, inlets, manholes, and other drainage structures. Includes replacing bricks or concrete blocks, concrete repair, sealing and repairing joints, excavation, backfilling, pavement removal, restoration of pavement and all tasks to perform interior and/or exterior repair in-kind. Sizes are inside dimensions. For other sizes, use closest size.		
33 01 30 81-0060 VLF 2' Diameter, Repair In-Kind Drainage Structure .....	786.30	
33 01 30 81-0061 VLF 3' Diameter, Repair In-Kind Drainage Structure .....	1,179.46	
33 01 30 81-0062 VLF 4' Diameter, Repair In-Kind Drainage Structure .....	1,572.72	
33 01 30 81-0063 VLF 5' Diameter, Repair In-Kind Drainage Structure .....	1,965.76	
33 01 30 81-0064 VLF 6' Diameter, Repair In-Kind Drainage Structure .....	2,358.92	
33 01 30 81-0065 VLF 2' x 2', Repair In-Kind Drainage Structure .....	1,001.67	
33 01 30 81-0066 VLF 2' x 3', Repair In-Kind Drainage Structure .....	1,252.08	
33 01 30 81-0067 VLF 2' x 4', Repair In-Kind Drainage Structure .....	1,502.50	
33 01 30 81-0068 VLF 3' x 4', Repair In-Kind Drainage Structure .....	1,752.91	
33 01 30 81-0069 VLF 4' x 4', Repair In-Kind Drainage Structure .....	2,003.33	
33 01 30 81-0070 VLF 4' x 5', Repair In-Kind Drainage Structure .....	2,253.75	
33 01 30 81-0071 VLF 4' x 6', Repair In-Kind Drainage Structure .....	2,504.16	
33 01 30 81-0072 VLF 4' x 8', Repair In-Kind Drainage Structure .....	3,005.00	
33 01 30 81-0073 VLF >32 GSF, Repair In-Kind Drainage Structure .....	3,505.83	
<b>33 01 30 82 Epoxy Lining for Concrete Manholes</b> (33 01 30)		
<b>33 01 30 82-0001 Epoxy Manhole Restoration, Interior</b> (33 01 30 82)		
33 01 30 82-0002 VLF 60 Mil Epoxy Restoration Of 3' Diameter Manhole Interior .....	365.63	
For 80 Mil Material, Add	42.48	
For 100 Mil Material, Add	84.96	
For 125 Mil Material, Add	132.29	
For 150 Mil Material, Add	179.63	
For 200 Mil Material, Add	258.93	
For 2 To 5 Manholes, Deduct	-25.97	
For 6 To 10 Manholes, Deduct	-42.79	
For >10 Manholes, Deduct	-85.58	
33 01 30 82-0003 VLF 60 Mil Epoxy Restoration Of 3-1/2' Diameter Manhole Interior .....	443.69	
For 80 Mil Material, Add	50.86	
For 100 Mil Material, Add	101.71	
For 125 Mil Material, Add	158.24	
For 150 Mil Material, Add	214.77	
For 200 Mil Material, Add	309.04	
For 2 To 5 Manholes, Deduct	-31.58	
For 6 To 10 Manholes, Deduct	-52.06	
For >10 Manholes, Deduct	-104.12	
33 01 30 82-0004 VLF 60 Mil Epoxy Restoration Of 4' Diameter Manhole Interior .....	487.49	
For 80 Mil Material, Add	56.63	
For 100 Mil Material, Add	113.27	
For 125 Mil Material, Add	176.38	
For 150 Mil Material, Add	239.49	
For 200 Mil Material, Add	345.22	
For 2 To 5 Manholes, Deduct	-34.62	
For 6 To 10 Manholes, Deduct	-57.05	
For >10 Manholes, Deduct	-114.10	
33 01 30 82-0005 VLF 60 Mil Epoxy Restoration Of 5' Diameter Manhole Interior .....	609.43	
For 80 Mil Material, Add	70.81	
For 100 Mil Material, Add	141.63	
For 125 Mil Material, Add	220.54	
For 150 Mil Material, Add	299.46	
For 200 Mil Material, Add	431.67	
For 2 To 5 Manholes, Deduct	-43.28	
For 6 To 10 Manholes, Deduct	-71.32	
For >10 Manholes, Deduct	-142.64	
33 01 30 82-0006 VLF 60 Mil Epoxy Restoration Of 6' Diameter Manhole Interior .....	731.30	
For 80 Mil Material, Add	84.97	
For 100 Mil Material, Add	169.95	
For 125 Mil Material, Add	264.64	
For 150 Mil Material, Add	359.33	
For 200 Mil Material, Add	517.98	
For 2 To 5 Manholes, Deduct	-51.93	
For 6 To 10 Manholes, Deduct	-85.58	
For >10 Manholes, Deduct	-171.16	
<b>33 01 30 83 Lining for Concrete Manholes</b> (33 01 30)		
<b>33 01 30 83-0001 Manhole Lining</b> (33 01 30 83)		
Note: Includes power washing and cleaning of manhole interiors.		
<b>33 01 30 83-0002 Cementitious Manhole Restoration, Interior</b> (33 01 30 83-0001)		



		<b>Utilities</b>	<b>33</b>	<b>CS</b>
		<b>Operation and Maintenance of Utilities</b>	<b>33 01</b>	
		<b>Operation and Maintenance of Sewer Utilities</b>	<b>33 01 30</b>	

MINOR CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
33 01 30 83-0003	VLF	1/2" Cementitious Restoration On 3' Diameter Manhole Interior.....	172.74	
		For Each Additional 1/2" Thick Material, Add	51.65	
		For 2 To 5 Manholes, Deduct	-11.88	
		For 6 To 10 Manholes, Deduct	-19.44	
		For >10 Manholes, Deduct	-38.89	
33 01 30 83-0004	VLF	1/2" Cementitious Restoration On 3-1/2' Diameter Manhole Interior .....	200.39	
		For Each Additional 1/2" Thick Material, Add	60.14	
		For 2 To 5 Manholes, Deduct	-13.78	
		For 6 To 10 Manholes, Deduct	-22.54	
		For >10 Manholes, Deduct	-45.08	
33 01 30 83-0005	VLF	1/2" Cementitious Restoration On 4' Diameter Manhole Interior.....	228.04	
		For Each Additional 1/2" Thick Material, Add	68.64	
		For 2 To 5 Manholes, Deduct	-15.67	
		For 6 To 10 Manholes, Deduct	-25.64	
		For >10 Manholes, Deduct	-51.28	
33 01 30 83-0006	VLF	1/2" Cementitious Restoration On 5' Diameter Manhole Interior.....	270.02	
		For Each Additional 1/2" Thick Material, Add	84.57	
		For 2 To 5 Manholes, Deduct	-18.45	
		For 6 To 10 Manholes, Deduct	-30.15	
		For >10 Manholes, Deduct	-60.31	
33 01 30 83-0007	VLF	1/2" Cementitious Restoration On 6' Diameter Manhole Interior.....	297.67	
		For Each Additional 1/2" Thick Material, Add	98.52	
		For 2 To 5 Manholes, Deduct	-20.18	
		For 6 To 10 Manholes, Deduct	-32.91	
		For >10 Manholes, Deduct	-65.82	
<b>33 01 30 83-0008 Polyurethane Manhole Restoration, Interior (33 01 30 83-0001)</b>				
33 01 30 83-0009	VLF	60 Mil Polyurethane Restoration Of 3' Diameter Manhole Interior .....	327.70	
		For 80 Mil Material, Add	29.83	
		For 100 Mil Material, Add	59.67	
		For 125 Mil Material, Add	91.20	
		For 150 Mil Material, Add	122.73	
		For 200 Mil Material, Add	170.42	
		For 2 To 5 Manholes, Deduct	-24.07	
		For 6 To 10 Manholes, Deduct	-39.95	
		For >10 Manholes, Deduct	-79.89	
33 01 30 83-0010	VLF	60 Mil Polyurethane Restoration Of 3-1/2' Diameter Manhole Interior.....	399.38	
		For 80 Mil Material, Add	36.09	
		For 100 Mil Material, Add	72.17	
		For 125 Mil Material, Add	110.24	
		For 150 Mil Material, Add	148.30	
		For 200 Mil Material, Add	205.65	
		For 2 To 5 Manholes, Deduct	-29.36	
		For 6 To 10 Manholes, Deduct	-48.74	
		For >10 Manholes, Deduct	-97.47	
33 01 30 83-0011	VLF	60 Mil Polyurethane Restoration Of 4' Diameter Manhole Interior .....	436.92	
		For 80 Mil Material, Add	39.78	
		For 100 Mil Material, Add	79.55	
		For 125 Mil Material, Add	121.59	
		For 150 Mil Material, Add	163.63	
		For 200 Mil Material, Add	227.22	
		For 2 To 5 Manholes, Deduct	-32.09	
		For 6 To 10 Manholes, Deduct	-53.26	
		For >10 Manholes, Deduct	-106.52	
33 01 30 83-0012	VLF	60 Mil Polyurethane Restoration Of 5' Diameter Manhole Interior .....	546.15	
		For 80 Mil Material, Add	49.72	
		For 100 Mil Material, Add	99.44	
		For 125 Mil Material, Add	151.99	
		For 150 Mil Material, Add	204.54	
		For 200 Mil Material, Add	284.02	
		For 2 To 5 Manholes, Deduct	-40.11	
		For 6 To 10 Manholes, Deduct	-66.57	
		For >10 Manholes, Deduct	-133.15	
33 01 30 83-0013	VLF	60 Mil Polyurethane Restoration Of 6' Diameter Manhole Interior .....	655.38	
		For 80 Mil Material, Add	59.67	
		For 100 Mil Material, Add	119.34	
		For 125 Mil Material, Add	182.39	
		For 150 Mil Material, Add	245.45	
		For 200 Mil Material, Add	340.84	
		For 2 To 5 Manholes, Deduct	-48.14	
		For 6 To 10 Manholes, Deduct	-79.89	
		For >10 Manholes, Deduct	-159.78	
<b>33 01 30 83-0014 Multiplexx™ PVCP Cured-In-Place (CIP) Lining Manhole Restoration, Interior (33 01 30 83-0001)</b>				
33 01 30 83-0015	VLF	3' Diameter, Multiplexx™ PVCP Cured-In-Place (CIP) Manhole Liner For Existing Manhole.....	550.33	
		For 2 To 5 Manholes, Deduct	-32.14	
		For 6 To 10 Manholes, Deduct	-50.52	
		For >10 Manholes, Deduct	-101.05	
33 01 30 83-0016	VLF	3-1/2' Diameter, Multiplexx™ PVCP Cured-In-Place (CIP) Manhole Liner For Existing Manhole.....	673.94	
		For 2 To 5 Manholes, Deduct	-39.35	
		For 6 To 10 Manholes, Deduct	-61.85	
		For >10 Manholes, Deduct	-123.70	

**33 Utilities****33 01 Operation and Maintenance of Utilities****33 01 30 Operation and Maintenance of Sewer Utilities**

MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
33 01 30 83-0017 VLF 4' Diameter, Multiplexx™ PVCP Cured-In-Place (CIP) Manhole Liner For Existing Manhole.....	793.18	
For 2 To 5 Manholes, Deduct	-45.83	
For 6 To 10 Manholes, Deduct	-71.82	
For >10 Manholes, Deduct	-143.64	
33 01 30 83-0018 VLF 5' Diameter, Multiplexx™ PVCP Cured-In-Place (CIP) Manhole Liner For Existing Manhole.....	994.64	
For 2 To 5 Manholes, Deduct	-57.44	
For 6 To 10 Manholes, Deduct	-90.01	
For >10 Manholes, Deduct	-180.03	
33 01 30 83-0019 VLF 6' Diameter, Multiplexx™ PVCP Cured-In-Place (CIP) Manhole Liner For Existing Manhole.....	1,196.11	
For 2 To 5 Manholes, Deduct	-69.05	
For 6 To 10 Manholes, Deduct	-108.21	
For >10 Manholes, Deduct	-216.41	

**33 01 30 86 Manhole Rim Adjustment (33 01 30)****33 01 30 86-0001 Adjustable Or Solid, Cast Iron Or Steel, Manhole Cover Risers (33 01 30 86)****33 01 30 86-0002 Up To 6" Rise, Up To 26" Diameter, Adjustable Or Solid, Cast Iron Or Steel, Manhole Cover Risers (33 01 30 86-0001)**

33 01 30 86-0003 EA Up To 2" Rise, Up To 26" Diameter, Adjustable Or Solid, Cast Iron Or Steel, Manhole Cover Riser.....	337.83
33 01 30 86-0004 EA >2" To 3" Rise, Up To 26" Diameter, Adjustable Or Solid, Cast Iron Or Steel, Manhole Cover Riser.....	379.50
33 01 30 86-0005 EA >3" To 4" Rise, Up To 26" Diameter, Adjustable Or Solid, Cast Iron Or Steel, Manhole Cover Riser.....	417.45
33 01 30 86-0006 EA >4" To 5" Rise, Up To 26" Diameter, Adjustable Or Solid, Cast Iron Or Steel, Manhole Cover Riser.....	460.42
33 01 30 86-0007 EA >5" To 6" Rise, Up To 26" Diameter, Adjustable Or Solid, Cast Iron Or Steel, Manhole Cover Riser.....	495.50

**33 01 30 86-0008 Up To 6" Rise, >26" To 32-1/2" Diameter, Adjustable Or Solid, Cast Iron Or Steel, Manhole Cover Riser (33 01 30 86-0001)**

33 01 30 86-0009 EA Up To 2" Rise, >26" To 32-1/2" Diameter, Adjustable Or Solid, Cast Iron Or Steel, Manhole Cover Riser.....	395.64
33 01 30 86-0010 EA >2 To 3" Rise, >26" To 32-1/2" Diameter, Adjustable Or Solid, Cast Iron Or Steel, Manhole Cover Riser.....	431.06
33 01 30 86-0011 EA >3" To 4" Rise, >26" To 32-1/2" Diameter, Adjustable Or Solid, Cast Iron Or Steel, Manhole Cover Riser.....	475.47
33 01 30 86-0012 EA >4" To 5" Rise, >26" To 32-1/2" Diameter, Adjustable Or Solid, Cast Iron Or Steel, Manhole Cover Riser.....	518.42
33 01 30 86-0013 EA >5" To 6" Rise, >26" To 32-1/2" Diameter, Adjustable Or Solid, Cast Iron Or Steel, Manhole Cover Riser.....	559.94

**33 01 30 86-0014 >6" To 12" Rise, >32-1/2" To 36" Diameter, Solid, Cast Iron, Manhole Cover Risers (33 01 30 86-0001)**

33 01 30 86-0015 EA >6" To 6-1/2" Rise, >32-1/2" To 36", Solid, Cast Iron, Manhole Cover Riser.....	553.09
33 01 30 86-0016 EA 7" Rise, >32-1/2" To 36", Solid, Cast Iron, Manhole Cover Riser.....	601.26
33 01 30 86-0017 EA 7-1/2" Rise, >32-1/2" To 36", Solid, Cast Iron, Manhole Cover Riser.....	650.25
33 01 30 86-0018 EA 8" Rise, >32-1/2" To 36", Solid, Cast Iron, Manhole Cover Riser.....	689.50
33 01 30 86-0019 EA 9" Rise, >32-1/2" To 36", Solid, Cast Iron, Manhole Cover Riser.....	748.94
33 01 30 86-0020 EA 10" Rise, >32-1/2" To 36", Solid, Cast Iron, Manhole Cover Riser.....	803.13
33 01 30 86-0021 EA 11" Rise, >32-1/2" To 36", Solid, Cast Iron, Manhole Cover Riser.....	856.30
33 01 30 86-0022 EA 12" Rise, >32-1/2" To 36", Solid, Cast Iron, Manhole Cover Riser.....	910.66

**33 01 30 86-0023 >12" Rise, Solid Manhole Risers (33 01 30 86)****33 01 30 86-0024 Precast Concrete Manhole Riser (33 01 30 86-0023)**

33 01 30 86-0025 VLF Up To 26" Diameter Precast Concrete Manhole Riser.....	150.37
33 01 30 86-0026 VLF >26" To 36" Diameter Precast Concrete Manhole Riser.....	178.39
33 01 30 86-0027 VLF >36" To 48" Diameter Precast Concrete Manhole Riser.....	174.39
33 01 30 86-0028 VLF >48" To 60" Diameter Precast Concrete Manhole Riser.....	357.19
33 01 30 86-0029 VLF >60" To 72" Diameter Precast Concrete Manhole Riser.....	522.94

**33 05 Common Work Results for Utilities (33)****33 05 07 Trenchless Installation of Utility Piping (33 05)****33 05 07 13 Utility Directional Drilling (33 05 07)****33 05 07 13-0001 Horizontal Augering (33 05 07 13)**

Note: Excludes starting or receiving pits, dewatering, cost of casing pipe or spoils removal.

33 05 07 13-0002 LF Up To 2" Diameter Horizontal Hand Augering.....	24.01
33 05 07 13-0003 LF 3" Diameter Horizontal Hand Augering.....	28.99
33 05 07 13-0004 LF 4" Diameter Horizontal Hand Augering.....	39.75
33 05 07 13-0005 LF 6" Diameter Horizontal Hand Augering.....	51.35
33 05 07 13-0006 LF 8" Diameter Horizontal Augering.....	93.85
33 05 07 13-0007 LF 10" Diameter Horizontal Augering.....	136.91
33 05 07 13-0008 LF 12" Diameter Horizontal Augering.....	164.51
33 05 07 13-0009 LF 16" Diameter Horizontal Augering.....	196.53
33 05 07 13-0010 LF 20" Diameter Horizontal Augering.....	340.05
33 05 07 13-0011 LF 24" Diameter Horizontal Augering.....	431.34
33 05 07 13-0012 LF 30" Diameter Horizontal Augering.....	532.03
33 05 07 13-0013 LF 36" Diameter Horizontal Augering.....	607.86
33 05 07 13-0014 LF 42" Diameter Horizontal Augering.....	803.80
33 05 07 13-0015 LF 48" Diameter Horizontal Augering.....	866.11





		<b>Utilities</b>	<b>33</b>	<b>CS</b>
		<b>Common Work Results for Utilities</b>	<b>33 05</b>	
		<b>Trenchless Installation of Utility Piping</b>	<b>33 05 07</b>	

MINOR CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
33 05 07 13-0016	EA	8" To 20" Horizontal Augering Minimum Set-up Charge..... Note: For projects where the total horizontal augering charge is less than the minimum set-up charge, use this task exclusively. This task should not be used in conjunction with any other tasks in this section.	3,974.68	
33 05 07 13-0017	EA	>20" To 36" Horizontal Augering Minimum Set-up Charge..... Note: For projects where the total horizontal augering charge is less than the minimum set-up charge, use this task exclusively. This task should not be used in conjunction with any other tasks in this section.	5,469.48	
33 05 07 13-0018	EA	>36" Horizontal Augering Minimum Set-up Charge..... Note: For projects where the total horizontal augering charge is less than the minimum set-up charge, use this task exclusively. This task should not be used in conjunction with any other tasks in this section.	8,205.57	
<b>33 05 07 13-0019 Horizontal Directional Boring (33 05 07 13)</b>				
Note: Excludes receiving pits or dewatering or cost of casing pipe.				
33 05 07 13-0020	LF	Up To 1-1/2" Diameter Directional Boring For Horizontal Pipe, Underground ..... For Horizontal Boring Through Rock, Add	12.99 9.09	
33 05 07 13-0021	LF	2" Diameter Directional Boring For Horizontal Pipe, Underground ..... For Horizontal Boring Through Rock, Add	19.48 13.64	
33 05 07 13-0022	LF	2-1/2" Diameter Directional Boring For Horizontal Pipe, Underground ..... For Horizontal Boring Through Rock, Add	27.05 18.94	
33 05 07 13-0023	LF	3" Diameter Directional Boring For Horizontal Pipe, Underground ..... For Horizontal Boring Through Rock, Add	33.54 23.48	
33 05 07 13-0024	LF	4" Diameter Directional Boring For Horizontal Pipe, Underground ..... For Horizontal Boring Through Rock, Add	40.03 28.02	
33 05 07 13-0025	LF	5" Diameter Directional Boring For Horizontal Pipe, Underground ..... For Horizontal Boring Through Rock, Add	46.53 32.57	
33 05 07 13-0026	LF	6" Diameter Directional Boring For Horizontal Pipe, Underground ..... For Horizontal Boring Through Rock, Add	54.10 37.87	
33 05 07 13-0027	LF	8" Diameter Directional Boring For Horizontal Pipe, Underground ..... For Horizontal Boring Through Rock, Add	66.25 46.38	
33 05 07 13-0028	LF	10" Diameter Directional Boring For Horizontal Pipe, Underground ..... For Horizontal Boring Through Rock, Add	71.77 50.24	
33 05 07 13-0029	LF	12" Diameter Directional Boring For Horizontal Pipe, Underground ..... For Horizontal Boring Through Rock, Add	77.29 54.10	
33 05 07 13-0030	LF	18" Diameter Directional Boring For Horizontal Pipe, Underground ..... For Horizontal Boring Through Rock, Add	160.09 112.06	
33 05 07 13-0031	LF	24" Diameter Directional Boring For Horizontal Pipe, Underground ..... For Horizontal Boring Through Rock, Add	254.83 178.38	
33 05 07 13-0032	LF	30" Diameter Directional Boring For Horizontal Pipe, Underground ..... For Horizontal Boring Through Rock, Add	388.46 271.92	
33 05 07 13-0033	LF	36" Diameter Directional Boring For Horizontal Pipe, Underground ..... For Horizontal Boring Through Rock, Add	621.54 435.08	
33 05 07 13-0034	EA	Up To 6" Horizontal Directional Boring Minimum Set-up Charge..... Note: For projects where the total horizontal directional boring charge is less than the minimum set-up charge, use this task exclusively. This task should not be used in conjunction with any other tasks in this section.	3,462.31	
33 05 07 13-0035	EA	>6" To 18" Horizontal Directional Boring Minimum Set-up Charge..... Note: For projects where the total horizontal directional boring charge is less than the minimum set-up charge, use this task exclusively. This task should not be used in conjunction with any other tasks in this section.	3,974.68	
33 05 07 13-0036	EA	>18" To 36" Horizontal Directional Boring Minimum Set-up Charge..... Note: For projects where the total horizontal directional boring charge is less than the minimum set-up charge, use this task exclusively. This task should not be used in conjunction with any other tasks in this section.	5,469.48	
<b>33 05 07 23 Utility Boring and Jacking (33 05 07)</b>				
<b>33 05 07 23-0001 Horizontal Jacking (33 05 07 23)</b>				
Note: Includes cost of steel casing pipe, excludes dewatering and excavation for jacking pit or receiving pit.				
33 05 07 23-0002	LF	Up To 2" Diameter Horizontal Jacking..... For Horizontal Jacking Through Rock, Add	62.21 30.85	
33 05 07 23-0003	LF	3" Diameter Horizontal Jacking..... For Horizontal Jacking Through Rock, Add	74.62 37.23	
33 05 07 23-0004	LF	4" Diameter Horizontal Jacking..... For Horizontal Jacking Through Rock, Add	100.96 51.05	
33 05 07 23-0005	LF	6" Diameter Horizontal Jacking..... For Horizontal Jacking Through Rock, Add	130.49 65.95	
33 05 07 23-0006	LF	8" Diameter Horizontal Jacking..... For Horizontal Jacking Through Rock, Add	176.97 90.41	
33 05 07 23-0007	LF	10" Diameter Horizontal Jacking..... For Horizontal Jacking Through Rock, Add	259.32 131.89	
33 05 07 23-0008	LF	12" Diameter Horizontal Jacking..... For Horizontal Jacking Through Rock, Add	312.15 158.49	
33 05 07 23-0009	LF	16" Diameter Horizontal Jacking..... For Horizontal Jacking Through Rock, Add	372.72 189.34	
33 05 07 23-0010	LF	20" Diameter Horizontal Jacking..... For Horizontal Jacking Through Rock, Add	586.60 328.67	
33 05 07 23-0011	LF	24" Diameter Horizontal Jacking..... For Horizontal Jacking Through Rock, Add	939.17 368.87	
33 05 07 23-0012	LF	30" Diameter Horizontal Jacking..... For Horizontal Jacking Through Rock, Add	1,095.86 455.47	
33 05 07 23-0013	LF	36" Diameter Horizontal Jacking..... For Horizontal Jacking Through Rock, Add	1,238.64 520.79	
33 05 07 23-0014	EA	Up To 6" Horizontal Jacking Minimum Set-up Charge..... Note: For projects where the total horizontal jacking charge is less than the minimum set-up charge, use this task exclusively. This task should not be used in conjunction with any other tasks in this section.	3,462.31	

**33 Utilities****33 05 Common Work Results for Utilities****33 05 07 Trenchless Installation of Utility Piping**

MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
33 05 07 23-0015 EA >6" To 20" Horizontal Jacking Minimum Set-up Charge .....	3,974.68	
Note: For projects where the total horizontal jacking charge is less than the minimum set-up charge, use this task exclusively. This task should not be used in conjunction with any other tasks in this section.		
33 05 07 23-0016 EA >20" To 36" Horizontal Jacking Minimum Set-up Charge .....	5,469.48	
Note: For projects where the total horizontal jacking charge is less than the minimum set-up charge, use this task exclusively. This task should not be used in conjunction with any other tasks in this section.		
33 05 07 23-0017 EA >36" Horizontal Jacking Minimum Set-up Charge.....	8,205.57	
Note: For projects where the total horizontal jacking charge is less than the minimum set-up charge, use this task exclusively. This task should not be used in conjunction with any other tasks in this section.		

**33 05 07 24 Casing Piping for Utility Jacking (33 05 07)**

33 05 07 24-0001	Casing Pipe (33 05 07 24)	
Note: Casing pipe is pulled back from hook on boring auger through slurry. Costs are installed costs. Excludes boring.		
33 05 07 24-0002	Steel Pipe (33 05 07 24-0001)	
33 05 07 24-0003 LF 1-1/2" Steel Pipe Pull In Place By Boring Machine .....	17.39	
Note: Includes pipe welding.		
33 05 07 24-0004 LF 2" Steel Pipe Pull In Place By Boring Machine .....	18.43	
Note: Includes pipe welding.		
33 05 07 24-0005 LF 2-1/2" Steel Pipe Pull In Place By Boring Machine .....	19.90	
Note: Includes pipe welding.		
33 05 07 24-0006 LF 3" Steel Pipe Pull In Place By Boring Machine .....	21.40	
Note: Includes pipe welding.		
33 05 07 24-0007 LF 4" Steel Pipe Pull In Place By Boring Machine .....	27.06	
Note: Includes pipe welding.		
33 05 07 24-0008 LF 5" Steel Pipe Pull In Place By Boring Machine .....	30.58	
Note: Includes pipe welding.		
33 05 07 24-0009 LF 6" Steel Pipe Pull In Place By Boring Machine .....	34.11	
Note: Includes pipe welding.		
33 05 07 24-0010	Polyethylene Pipe (33 05 07 24-0001)	
33 05 07 24-0011 LF 3/4" Polyethylene Pipe Pull In Place By Boring Machine .....	5.20	
Note: Includes pipe welding.		
33 05 07 24-0012 LF 1" Polyethylene Pipe Pull In Place By Boring Machine .....	5.73	
Note: Includes pipe welding.		
33 05 07 24-0013 LF 1-1/4" Polyethylene Pipe Pull In Place By Boring Machine .....	6.21	
Note: Includes pipe welding.		
33 05 07 24-0014 LF 1-1/2" Polyethylene Pipe Pull In Place By Boring Machine .....	6.64	
Note: Includes pipe welding.		
33 05 07 24-0015 LF 2" Polyethylene Pipe Pull In Place By Boring Machine .....	7.10	
Note: Includes pipe welding.		
33 05 07 24-0016 LF 2-1/2" Polyethylene Pipe Pull In Place By Boring Machine .....	7.58	
Note: Includes pipe welding.		
33 05 07 24-0017 LF 3" Polyethylene Pipe Pull In Place By Boring Machine .....	8.07	
Note: Includes pipe welding.		
33 05 07 24-0018 LF 4" Polyethylene Pipe Pull In Place By Boring Machine .....	9.71	
Note: Includes pipe welding.		
33 05 07 24-0019 LF 5" Polyethylene Pipe Pull In Place By Boring Machine .....	10.71	
Note: Includes pipe welding.		
33 05 07 24-0020 LF 6" Polyethylene Pipe Pull In Place By Boring Machine .....	11.71	
Note: Includes pipe welding.		
33 05 07 24-0021 LF 8" Polyethylene Pipe Pull In Place By Boring Machine .....	15.11	
Note: Includes pipe welding.		
33 05 07 24-0022 LF 10" Polyethylene Pipe Pull In Place By Boring Machine .....	20.37	
Note: Includes pipe welding.		

**33 05 09 Piping Specials for Utilities (33 05)****33 05 09 23 Adapters for Utility Piping (33 05 09)**

See CSI section 33 14 13 53-0216 for ductile iron body adapters, 33 14 13 53-0223 for steel body adapters.

**33 05 27 Corrugated Metal Utility Pipe (33 05)****33 05 27 13 Corrugated Metal Culvert Pipe (33 05 27)**

See CSI section 33 42 11 00-0311 for corrugated metal culvert pipe.

**33 05 27 23 Corrugated Metal Slotted Pipe (33 05 27)**

See CSI section 33 41 16 13-0058 for corrugated metal slotted pipe.

**33 05 27 33 Corrugated Metal Culvert Arch Pipe (33 05 27)**

See CSI section 33 42 11 00-0655 for corrugated metal culvert arch pipe.

**33 05 31 Thermoplastic Utility Pipe (33 05)****33 05 31 11 Polyvinyl Chloride Gravity Sewer Pipe (33 05 31)**

See CSI section 33 31 11 00-0000 for polyvinyl chloride gravity sewer pipe.

**33 05 31 13 Polyvinyl Chloride Pressure Pipe (33 05 31)**

See CSI section 33 14 13 23-0001 for polyvinyl chloride pressure pipe.

**33 05 33 Polyethylene Utility Pipe (33 05)**



		<b>Utilities</b>	<b>33</b>
		<b>Common Work Results for Utilities</b>	<b>33 05</b>
		<b>Polyethylene Utility Pipe</b>	<b>33 05 33</b>

MINOR CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
33 05 33 13		<b>Corrugated-Wall, Smooth Interior HDPE Gravity Pipe</b> (33 05 33) See CSI section 33 42 11 00-0052 for corrugated-wall smooth interior HDPE gravity pipe.		
33 05 33 23		<b>Polyethylene Pressure Pipe and Tubing (AWWA C901 and AWWA C906)</b> (33 05 33) See CSI section 33 14 13 23-0171 for AWWA C906 high density polyethylene pipe.		
33 05 33 33		<b>Corrugated, Perforated HDPE Drainage Pipe</b> (33 05 33) See CSI section 33 42 11 00-0074 for corrugated perforated HDPE drainage pipe.		
33 05 33 36		<b>Corrugated, Non-Perforated HDPE Drainage Pipe</b> (33 05 33) See CSI section 33 41 16 13-0002 for corrugated non-perforated HDPE drainage pipe.		
33 05 33 63		<b>HDPE Communication Duct</b> (33 05 33)		
33 05 33 63-0001		<b>ASTM F2160, UL 651-A, NEMA TC-7, Smoothwall HDPE Conduit, Pulled In Place By Boring Machine</b> (33 05 33 63) Note: Excludes boring.		
33 05 33 63-0002	LF	1" Schedule 40, ASTM F2160, UL 651-A, NEMA TC-7, Smoothwall HDPE Conduit, Pulled In Place By Boring Machine.....	3.60	
		For Up To 250, Add	0.12	
		For >250 To 500, Add	0.08	
33 05 33 63-0003	LF	1-1/4" Schedule 40, ASTM F2160, UL 651-A, NEMA TC-7, Smoothwall HDPE Conduit, Pulled In Place By Boring Machine.....	4.03	
		For Up To 250, Add	0.14	
		For >250 To 500, Add	0.10	
33 05 33 63-0004	LF	1-1/2" Schedule 40, ASTM F2160, UL 651-A, NEMA TC-7, Smoothwall HDPE Conduit, Pulled In Place By Boring Machine.....	4.38	
		For Up To 250, Add	0.16	
		For >250 To 500, Add	0.11	
33 05 33 63-0005	LF	2" Schedule 40, ASTM F2160, UL 651-A, NEMA TC-7, Smoothwall HDPE Conduit, Pulled In Place By Boring Machine.....	4.80	
		For Up To 250, Add	0.19	
		For >250 To 500, Add	0.13	
33 05 33 63-0006	LF	3" Schedule 40, ASTM F2160, UL 651-A, NEMA TC-7, Smoothwall HDPE Conduit, Pulled In Place By Boring Machine.....	6.49	
		For Up To 250, Add	0.40	
		For >250 To 500, Add	0.27	
33 05 33 63-0007	LF	4" Schedule 40, ASTM F2160, UL 651-A, NEMA TC-7, Smoothwall HDPE Conduit, Pulled In Place By Boring Machine.....	8.23	
		For Up To 250, Add	0.62	
		For >250 To 500, Add	0.41	
33 05 33 63-0008	LF	1" Schedule 80, ASTM F2160, UL 651-A, NEMA TC-7, Smoothwall HDPE Conduit, Pulled In Place By Boring Machine.....	3.68	
		For Up To 250, Add	0.13	
		For >250 To 500, Add	0.09	
33 05 33 63-0009	LF	1-1/4" Schedule 80, ASTM F2160, UL 651-A, NEMA TC-7, Smoothwall HDPE Conduit, Pulled In Place By Boring Machine.....	4.18	
		For Up To 250, Add	0.17	
		For >250 To 500, Add	0.11	
33 05 33 63-0010	LF	1-1/2" Schedule 80, ASTM F2160, UL 651-A, NEMA TC-7, Smoothwall HDPE Conduit, Pulled In Place By Boring Machine.....	4.50	
		For Up To 250, Add	0.18	
		For >250 To 500, Add	0.12	
33 05 33 63-0011	LF	2" Schedule 80, ASTM F2160, UL 651-A, NEMA TC-7, Smoothwall HDPE Conduit, Pulled In Place By Boring Machine.....	5.11	
		For Up To 250, Add	0.24	
		For >250 To 500, Add	0.16	
33 05 33 63-0012	LF	3" Schedule 80, ASTM F2160, UL 651-A, NEMA TC-7, Smoothwall HDPE Conduit, Pulled In Place By Boring Machine.....	7.18	
		For Up To 250, Add	0.51	
		For >250 To 500, Add	0.34	
33 05 33 63-0013	LF	4" Schedule 80, ASTM F2160, UL 651-A, NEMA TC-7, Smoothwall HDPE Conduit, Pulled In Place By Boring Machine.....	9.10	
		For Up To 250, Add	0.75	
		For >250 To 500, Add	0.50	
33 05 39		<b>Concrete Pipe</b> (33 05)		
33 05 39 41		<b>Reinforced Concrete Pipe for Sewers and Culverts</b> (33 05 39) See CSI section 33 42 11 00-0001 for reinforced concrete pipe.		
33 05 41		<b>Vitrified Clay Utility Pipe</b> (33 05) See CSI section 33 42 11 00-0178 for vitrified clay piping.		
33 05 61		<b>Concrete Manholes</b> (33 05)		
33 05 61 00-0001		<b>Manholes</b> (33 05 61)		
33 05 61 00-0002		<b>Precast Concrete Manholes</b> (33 05 61 00-0001) Note: Includes base, riser(s), reducer and openings. Excludes excavation, aggregate, backfill and frame/cover. See CSI section 33 05 84 00-0002 for top slabs.		
33 05 61 00-0003		<b>3' Diameter, Precast Concrete Manholes</b> (33 05 61 00-0002)		

**33 Utilities****33 05 Common Work Results for Utilities****33 05 61 Concrete Manholes**

MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
33 05 61 00-0004 EA 4' Deep, 3' Diameter, Precast Concrete Manhole .....	1,597.78	273.50
For Bitumastic Coating, Add	75.56	
For Epoxy Coating, Add	144.39	
33 05 61 00-0005 EA 6' Deep, 3' Diameter, Precast Concrete Manhole .....	2,174.51	392.84
For Bitumastic Coating, Add	113.34	
For Epoxy Coating, Add	216.59	
33 05 61 00-0006 EA 8' Deep, 3' Diameter, Precast Concrete Manhole .....	2,920.31	596.73
For Bitumastic Coating, Add	151.12	
For Epoxy Coating, Add	288.78	
33 05 61 00-0007 VLF Riser For 3' Diameter, Precast Concrete Manhole.....	308.25	69.62
Note: For depths greater than 8'.		
For Bitumastic Coating, Add	18.89	
For Epoxy Coating, Add	36.10	
33 05 61 00-0008 VLF Drop Collar For 3' Diameter, Precast Concrete Manhole.....	333.04	69.62
33 05 61 00-0009 EA Drop Base For 3' Diameter, Precast Concrete Manhole .....	539.38	69.62
33 05 61 00-0010 EA Extended Base Slab For 3' Diameter, Precast Concrete Manhole.....	428.57	69.62
33 05 61 00-0011 EA Precast Channel For 3' Diameter, Precast Concrete Manhole.....	617.30	69.62
<b>33 05 61 00-0012 4' Diameter, Precast Concrete Manholes (33 05 61 00-0002)</b>		
33 05 61 00-0013 EA 4' Deep, 4' Diameter, Precast Concrete Manhole .....	1,985.00	313.28
For Bitumastic Coating, Add	75.56	
For Epoxy Coating, Add	144.39	
33 05 61 00-0014 EA 6' Deep, 4' Diameter, Precast Concrete Manhole .....	2,651.94	427.66
For Bitumastic Coating, Add	113.34	
For Epoxy Coating, Add	216.59	
33 05 61 00-0015 EA 8' Deep, 4' Diameter, Precast Concrete Manhole .....	3,518.60	646.45
For Bitumastic Coating, Add	151.12	
For Epoxy Coating, Add	288.78	
33 05 61 00-0016 VLF Riser For 4' Diameter, Precast Concrete Manhole.....	379.46	82.05
Note: For depths greater than 8'.		
For Bitumastic Coating, Add	18.89	
For Epoxy Coating, Add	36.10	
33 05 61 00-0017 VLF Drop Collar For 4' Diameter, Precast Concrete Manhole.....	411.42	82.05
33 05 61 00-0018 EA Drop Base For 4' Diameter, Precast Concrete Manhole .....	677.34	82.05
33 05 61 00-0019 EA Extended Base Slab For 4' Diameter, Precast Concrete Manhole.....	534.54	82.05
33 05 61 00-0020 EA Precast Channel For 4' Diameter, Precast Concrete Manhole.....	777.79	82.05
<b>33 05 61 00-0021 5' Diameter, Precast Concrete Manholes (33 05 61 00-0002)</b>		
33 05 61 00-0022 EA 4' Deep, 5' Diameter, Precast Concrete Manhole .....	3,672.05	348.09
For Bitumastic Coating, Add	97.36	
For Epoxy Coating, Add	232.77	
33 05 61 00-0023 EA 6' Deep, 5' Diameter, Precast Concrete Manhole .....	4,893.17	477.38
For Bitumastic Coating, Add	146.03	
For Epoxy Coating, Add	349.16	
33 05 61 00-0024 EA 8' Deep, 5' Diameter, Precast Concrete Manhole .....	6,335.66	716.07
For Bitumastic Coating, Add	194.71	
For Epoxy Coating, Add	465.54	
33 05 61 00-0025 VLF Riser For 5' Diameter, Precast Concrete Manhole.....	661.85	89.50
Note: For depths greater than 8'.		
For Bitumastic Coating, Add	24.34	
For Epoxy Coating, Add	58.19	
<b>33 05 61 00-0026 6' Diameter, Precast Concrete Manholes (33 05 61 00-0002)</b>		
33 05 61 00-0027 EA 4' Deep, 6' Diameter, Precast Concrete Manhole .....	4,908.39	387.87
For Bitumastic Coating, Add	111.46	
For Epoxy Coating, Add	272.52	
33 05 61 00-0028 EA 6' Deep, 6' Diameter, Precast Concrete Manhole .....	6,398.83	527.11
For Bitumastic Coating, Add	167.19	
For Epoxy Coating, Add	408.77	
33 05 61 00-0029 EA 8' Deep, 6' Diameter, Precast Concrete Manhole .....	8,137.11	795.64
For Bitumastic Coating, Add	222.92	
For Epoxy Coating, Add	545.03	
33 05 61 00-0030 VLF Riser For 6' Diameter, Precast Concrete Manhole.....	801.81	99.45
Note: For depths greater than 8'.		
For Bitumastic Coating, Add	27.86	
For Epoxy Coating, Add	68.13	
<b>33 05 61 00-0031 7' Diameter, Precast Concrete Manholes (33 05 61 00-0002)</b>		
33 05 61 00-0032 EA 4' Deep, 7' Diameter, Precast Concrete Manhole .....	7,696.06	427.66
For Bitumastic Coating, Add	237.02	
For Epoxy Coating, Add	476.20	
33 05 61 00-0033 EA 6' Deep, 7' Diameter, Precast Concrete Manhole .....	9,959.10	583.30
For Bitumastic Coating, Add	355.53	
For Epoxy Coating, Add	714.30	
33 05 61 00-0034 EA 8' Deep, 7' Diameter, Precast Concrete Manhole .....	12,494.65	875.20
For Bitumastic Coating, Add	474.04	
For Epoxy Coating, Add	952.40	



		<b>Utilities</b>	<b>33</b>	<b>CS</b>
		<b>Common Work Results for Utilities</b>	<b>33 05</b>	
		<b>Concrete Manholes</b>	<b>33 05 61</b>	

MINOR CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
33 05 61 00-0035	VLF	Riser For 7' Diameter, Precast Concrete Manhole ..... Note: For depths greater than 8'. For Bitumastic Coating, Add For Epoxy Coating, Add	1,194.67  59.25 119.05	109.40
<b>33 05 61 00-0036      8' Diameter, Precast Concrete Manholes</b> (33 05 61 00-0002)				
33 05 61 00-0037	EA	4' Deep, 8' Diameter, Precast Concrete Manhole ..... For Bitumastic Coating, Add For Epoxy Coating, Add	11,108.65 280.21 580.45	492.30
33 05 61 00-0038	EA	6' Deep, 8' Diameter, Precast Concrete Manhole ..... For Bitumastic Coating, Add For Epoxy Coating, Add	14,411.53 420.31 870.67	671.32
33 05 61 00-0039	EA	8' Deep, 8' Diameter, Precast Concrete Manhole ..... For Bitumastic Coating, Add For Epoxy Coating, Add	18,027.70 560.42 1,160.89	1,006.98
33 05 61 00-0040	VLF	Riser For 8' Diameter, Precast Concrete Manhole ..... Note: For depths greater than 8'. For Bitumastic Coating, Add For Epoxy Coating, Add	1,721.06  70.05 145.11	124.32

### 33 05 63    Concrete Vaults and Chambers (33 05)

**33 05 63 00-0001    Underground Utility Vaults And Structures** (33 05 63)  
See CSI section 33 05 61 00-0001 for manholes, 33 05 81 00-0001 for frames and covers.

**33 05 63 00-0002    Precast Concrete Underground Utility Vault** (33 05 63 00-0001)  
Note: Sizes given are for inside dimensions.

**33 05 63 00-0003    6' High Precast Concrete Underground Utility Vault** (33 05 63 00-0002)

33 05 63 00-0004	EA	4' x 4' x 6' Precast Concrete Underground Utility Vault..... Note: 6" thick walls and 8" thick top.	3,134.75	
33 05 63 00-0005	EA	4' x 6' x 6' Precast Concrete Underground Utility Vault..... Note: 6" thick walls and 8" thick top.	4,086.18	
33 05 63 00-0006	EA	5' x 10' x 6' Precast Concrete Underground Utility Vault..... Note: 6" thick walls and 8" thick top.	6,741.24	
33 05 63 00-0007	EA	5' x 12' x 6' Precast Concrete Underground Utility Vault..... Note: 6" thick walls and 8" thick top.	7,783.86	
33 05 63 00-0008	EA	6' x 6' x 6' Precast Concrete Underground Utility Vault..... Note: 6" thick walls and 8" thick top.	5,221.94	
33 05 63 00-0009	EA	6' x 8' x 6' Precast Concrete Underground Utility Vault..... Note: 6" thick walls and 8" thick top.	6,356.69	
33 05 63 00-0010	EA	6' x 10' x 6' Precast Concrete Underground Utility Vault..... Note: 6" thick walls and 8" thick top.	7,492.47	
33 05 63 00-0011	EA	6' x 12' x 6' Precast Concrete Underground Utility Vault..... Note: 8" thick walls and top.	10,825.17	
33 05 63 00-0012	EA	6' x 14' x 6' Precast Concrete Underground Utility Vault..... Note: 8" thick walls and top.	10,825.17	
33 05 63 00-0013	EA	6' x 16' x 6' Precast Concrete Underground Utility Vault..... Note: 8" thick walls and top.	13,630.59	
33 05 63 00-0014	EA	8' x 8' x 6' Precast Concrete Underground Utility Vault..... Note: 6" thick walls and 8" thick top.	7,676.82	
33 05 63 00-0015	EA	8' x 10' x 6' Precast Concrete Underground Utility Vault..... Note: 6" thick walls and 8" thick top.	8,995.94	
33 05 63 00-0016	EA	8' x 12' x 6' Precast Concrete Underground Utility Vault..... Note: 8" thick walls and top.	12,858.93	
33 05 63 00-0017	EA	8' x 14' x 6' Precast Concrete Underground Utility Vault..... Note: 8" thick walls and top.	14,472.67	

**33 05 63 00-0018    7' High Precast Concrete Underground Utility Vault** (33 05 63 00-0002)

33 05 63 00-0019	EA	4' x 4' x 7' Precast Concrete Underground Utility Vault..... Note: 6" thick walls and 8" thick top.	5,186.53	
33 05 63 00-0020	EA	4' x 6' x 7' Precast Concrete Underground Utility Vault..... Note: 6" thick walls and 8" thick top.	6,734.64	
33 05 63 00-0021	EA	4' x 8' x 7' Precast Concrete Underground Utility Vault..... Note: 6" thick walls and 8" thick top.	5,511.03	
33 05 63 00-0022	EA	5' x 10' x 7' Precast Concrete Underground Utility Vault..... Note: 6" thick walls and 8" thick top.	7,333.07	
33 05 63 00-0023	EA	5' x 12' x 7' Precast Concrete Underground Utility Vault..... Note: 6" thick walls and 8" thick top.	8,455.24	
33 05 63 00-0024	EA	6' x 6' x 7' Precast Concrete Underground Utility Vault..... Note: 6" thick walls and 8" thick top.	8,559.67	
33 05 63 00-0025	EA	6' x 8' x 7' Precast Concrete Underground Utility Vault..... Note: 6" thick walls and 8" thick top.	6,909.74	
33 05 63 00-0026	EA	6' x 10' x 7' Precast Concrete Underground Utility Vault..... Note: 6" thick walls and 8" thick top.	12,209.78	
33 05 63 00-0027	EA	6' x 12' x 7' Precast Concrete Underground Utility Vault..... Note: 8" thick walls and top.	11,772.03	
33 05 63 00-0028	EA	6' x 16' x 7' Precast Concrete Underground Utility Vault..... Note: 8" thick walls and top.	14,787.99	
33 05 63 00-0029	EA	8' x 8' x 7' Precast Concrete Underground Utility Vault..... Note: 6" thick walls and 8" thick top.	8,308.39	

**33 Utilities****33 05 Common Work Results for Utilities****33 05 63 Concrete Vaults and Chambers**

MINOR CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
33 05 63 00-0030	EA	8' x 10' x 7' Precast Concrete Underground Utility Vault..... Note: 6" thick walls and 8" thick top.	9,706.10	
33 05 63 00-0031	EA	8' x 12' x 7' Precast Concrete Underground Utility Vault..... Note: 8" thick walls and top.	13,911.65	
33 05 63 00-0032	EA	8' x 14' x 7' Precast Concrete Underground Utility Vault..... Note: 8" thick walls and top.	15,629.07	
33 05 63 00-0033	EA	10' x 10' x 7' Precast Concrete Underground Utility Vault..... Note: 8" thick walls and top.	14,121.42	
<b>33 05 63 00-0034</b>		<b>8' High Precast Concrete Underground Utility Vault (33 05 63 00-0002)</b>		
33 05 63 00-0035	EA	4' x 4' x 8' Precast Concrete Underground Utility Vault..... Note: 6" thick walls and 8" thick top.	3,766.35	
33 05 63 00-0036	EA	4' x 6' x 8' Precast Concrete Underground Utility Vault..... Note: 6" thick walls and 8" thick top.	4,875.91	
33 05 63 00-0037	EA	5' x 10' x 8' Precast Concrete Underground Utility Vault..... Note: 6" thick walls and 8" thick top.	7,924.86	
33 05 63 00-0038	EA	5' x 12' x 8' Precast Concrete Underground Utility Vault..... Note: 6" thick walls and 8" thick top.	9,125.60	
33 05 63 00-0039	EA	6' x 6' x 8' Precast Concrete Underground Utility Vault..... Note: 6" thick walls and 8" thick top.	6,168.83	
33 05 63 00-0040	EA	6' x 8' x 8' Precast Concrete Underground Utility Vault..... Note: 6" thick walls and 8" thick top.	7,461.75	
33 05 63 00-0041	EA	6' x 10' x 8' Precast Concrete Underground Utility Vault..... Note: 6" thick walls and 8" thick top.	8,754.70	
33 05 63 00-0042	EA	6' x 12' x 8' Precast Concrete Underground Utility Vault..... Note: 8" thick walls and top.	12,718.89	
33 05 63 00-0043	EA	6' x 16' x 8' Precast Concrete Underground Utility Vault..... Note: 8" thick walls and top.	15,945.46	
33 05 63 00-0044	EA	8' x 8' x 8' Precast Concrete Underground Utility Vault..... Note: 6" thick walls and 8" thick top.	8,939.00	
33 05 63 00-0045	EA	8' x 10' x 8' Precast Concrete Underground Utility Vault..... Note: 6" thick walls and 8" thick top.	10,416.24	
33 05 63 00-0046	EA	8' x 12' x 8' Precast Concrete Underground Utility Vault..... Note: 8" thick walls and top.	14,963.28	
33 05 63 00-0047	EA	8' x 14' x 8' Precast Concrete Underground Utility Vault..... Note: 8" thick walls and top.	16,786.52	
33 05 63 00-0048	EA	10' x 10' x 8' Precast Concrete Underground Utility Vault..... Note: 8" thick walls and top.	15,173.81	
<b>33 05 63 00-0049</b>		<b>10' High Precast Concrete Underground Utility Vault (33 05 63 00-0002)</b>		
33 05 63 00-0050	EA	6' x 6' x 10' Precast Concrete Underground Utility Vault..... Note: 6" thick walls and 8" thick top.	6,642.29	
33 05 63 00-0051	EA	6' x 8' x 10' Precast Concrete Underground Utility Vault..... Note: 6" thick walls and 8" thick top.	8,013.76	
33 05 63 00-0052	EA	10' x 10' x 10' Precast Concrete Underground Utility Vault..... Note: 8" thick walls and top.	16,225.41	
<b>33 05 63 00-0053</b>		<b>12' High Precast Concrete Underground Utility Vault (33 05 63 00-0002)</b>		
33 05 63 00-0054	EA	6' x 6' x 12' Precast Concrete Underground Utility Vault..... Note: 6" thick walls and 8" thick top.	7,115.72	
33 05 63 00-0055	EA	6' x 8' x 12' Precast Concrete Underground Utility Vault..... Note: 6" thick walls and 8" thick top.	8,566.79	
<b>33 05 63 00-0056</b>		<b>Handhole Or Pull Box Enclosures (33 05 63 00-0001)</b>		
<b>33 05 63 00-0057</b>		<b>Polymer Concrete Handhole Enclosures (33 05 63 00-0056)</b>		
<b>33 05 63 00-0058</b>		<b>Polymer Concrete Handhole Enclosures (33 05 63 00-0057)</b>		
<b>33 05 63 00-0059</b>		<b>Flared Sides, Polymer Concrete Handhole Enclosures (33 05 63 00-0058)</b>		
<b>33 05 63 00-0060</b>		<b>Open Bottom, Flared Sides, Polymer Concrete Handhole Enclosures (33 05 63 00-0059)</b>		
33 05 63 00-0061	EA	12" x 12", 24" Depth, 15,000 LB Design Load, Open Bottom, Flared Sides, Polymer Concrete Handhole Enclosure.....	401.27	21.83
33 05 63 00-0062	EA	10" x 15", 18" Depth, 15,000 LB Design Load, Open Bottom, Flared Sides, Polymer Concrete Handhole Enclosure.....	326.81	48.49
33 05 63 00-0063	EA	13" x 24", 18" Depth, 15,000 LB Design Load, Open Bottom, Flared Sides, Polymer Concrete Handhole Enclosure.....	499.83	72.73
33 05 63 00-0064	EA	17" x 30", 18" Depth, 15,000 LB Design Load, Open Bottom, Flared Sides, Polymer Concrete Handhole Enclosure.....	588.82	72.73
33 05 63 00-0065	EA	13" x 24", 18" Depth, 22,500 LB Design Load, Open Bottom, Flared Sides, Polymer Concrete Handhole Enclosure.....	559.42	72.73
33 05 63 00-0066	EA	13" x 24", 26" Depth, 22,500 LB Design Load, Open Bottom, Flared Sides, Polymer Concrete Handhole Enclosure.....	687.77	72.73
33 05 63 00-0067	EA	17" x 30", 18" Depth, 22,500 LB Design Load, Open Bottom, Flared Sides, Polymer Concrete Handhole Enclosure.....	668.39	72.73
33 05 63 00-0068	EA	17" x 30", 26" Depth, 22,500 LB Design Load, Open Bottom, Flared Sides, Polymer Concrete Handhole Enclosure.....	928.29	72.73
33 05 63 00-0069	EA	27" Round, 36" Depth, 22,500 LB Design Load, Open Bottom, Flared Sides, Polymer Concrete Handhole Enclosure.....	1,322.68	96.97



		<b>Utilities</b>	<b>33</b>	<b>CS</b>
		<b>Common Work Results for Utilities</b>	<b>33 05</b>	
		<b>Concrete Vaults and Chambers</b>	<b>33 05 63</b>	

MINOR CSI UOM DESCRIPTION		TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
33 05 63 00-0070	EA 27" Round, 48" Depth, 22,500 LB Design Load, Open Bottom, Flared Sides, Polymer Concrete Handhole Enclosure.....	1,882.00	96.97
33 05 63 00-0071	EA 24" x 36", 18" Depth, 22,500 LB Design Load, Open Bottom, Flared Sides, Polymer Concrete Handhole Enclosure.....	1,170.78	133.34
33 05 63 00-0072	EA 24" x 36", 26" Depth, 22,500 LB Design Load, Open Bottom, Flared Sides, Polymer Concrete Handhole Enclosure.....	1,345.94	133.34
33 05 63 00-0073	EA 24" x 36", 48" Depth, 22,500 LB Design Load, Open Bottom, Flared Sides, Polymer Concrete Handhole Enclosure.....	2,257.13	133.34
33 05 63 00-0074	EA 39" Round, 18" Depth, 22,500 LB Design Load, Open Bottom, Flared Sides, Polymer Concrete Handhole Enclosure.....	1,248.21	145.46
33 05 63 00-0075	EA 39" Round, 24" Depth, 22,500 LB Design Load, Open Bottom, Flared Sides, Polymer Concrete Handhole Enclosure.....	1,821.96	145.46
33 05 63 00-0076	EA 39" Round, 36" Depth, 22,500 LB Design Load, Open Bottom, Flared Sides, Polymer Concrete Handhole Enclosure.....	2,291.14	145.46
33 05 63 00-0077	EA 39" Round, 48" Depth, 22,500 LB Design Load, Open Bottom, Flared Sides, Polymer Concrete Handhole Enclosure.....	3,400.86	145.46
33 05 63 00-0078	EA 30" x 48", 24" Depth, 22,500 LB Design Load, Open Bottom, Flared Sides, Polymer Concrete Handhole Enclosure.....	1,816.58	237.20
33 05 63 00-0079	EA 30" x 48", 48" Depth, 22,500 LB Design Load, Open Bottom, Flared Sides, Polymer Concrete Handhole Enclosure.....	2,680.10	237.20
<b>33 05 63 00-0080 Gasketed, Open Bottom, Flared Sides, Polymer Concrete Handhole Enclosures</b> (33 05 63 00-0059)			
33 05 63 00-0081	EA 12" x 12", 24" Depth, 15,000 LB Design Load, Gasketed, Open Bottom, Flared Sides, Polymer Concrete Handhole Enclosure.....	517.53	21.83
33 05 63 00-0082	EA 13" x 24", 18" Depth, 15,000 LB Design Load, Gasketed, Open Bottom, Flared Sides, Polymer Concrete Handhole Enclosure.....	638.29	72.73
33 05 63 00-0083	EA 17" x 30", 18" Depth, 15,000 LB Design Load, Gasketed, Open Bottom, Flared Sides, Polymer Concrete Handhole Enclosure.....	781.54	72.73
33 05 63 00-0084	EA 13" x 24", 18" Depth, 22,500 LB Design Load, Gasketed, Open Bottom, Flared Sides, Polymer Concrete Handhole Enclosure.....	717.42	72.73
33 05 63 00-0085	EA 13" x 24", 26" Depth, 22,500 LB Design Load, Gasketed, Open Bottom, Flared Sides, Polymer Concrete Handhole Enclosure.....	827.12	72.73
33 05 63 00-0086	EA 17" x 30", 18" Depth, 22,500 LB Design Load, Gasketed, Open Bottom, Flared Sides, Polymer Concrete Handhole Enclosure.....	855.89	72.73
33 05 63 00-0087	EA 17" x 30", 26" Depth, 22,500 LB Design Load, Gasketed, Open Bottom, Flared Sides, Polymer Concrete Handhole Enclosure.....	1,117.40	72.73
33 05 63 00-0088	EA 24" x 36", 18" Depth, 22,500 LB Design Load, Gasketed, Open Bottom, Flared Sides, Polymer Concrete Handhole Enclosure.....	1,465.23	133.34
33 05 63 00-0089	EA 24" x 36", 26" Depth, 22,500 LB Design Load, Gasketed, Open Bottom, Flared Sides, Polymer Concrete Handhole Enclosure.....	1,640.39	133.34
33 05 63 00-0090	EA 24" x 36", 48" Depth, 22,500 LB Design Load, Gasketed, Open Bottom, Flared Sides, Polymer Concrete Handhole Enclosure.....	2,551.60	133.34
33 05 63 00-0091	EA 30" x 48", 24" Depth, 22,500 LB Design Load, Gasketed, Open Bottom, Flared Sides, Polymer Concrete Handhole Enclosure.....	2,160.66	237.20
33 05 63 00-0092	EA 30" x 48", 48" Depth, 22,500 LB Design Load, Gasketed, Open Bottom, Flared Sides, Polymer Concrete Handhole Enclosure.....	3,030.75	237.20
<b>33 05 63 00-0093 Straight Sides, Polymer Concrete Handhole Enclosures</b> (33 05 63 00-0058)			
<b>33 05 63 00-0094 Open Bottom, Straight Sides, Polymer Concrete Handhole Enclosures</b> (33 05 63 00-0093)			
33 05 63 00-0095	EA 5" x 16", 12" Depth, 5,000 LB Design Load, Open Bottom, Straight Sides, Polymer Concrete Handhole Enclosure.....	667.14	21.83
33 05 63 00-0096	EA 10" x 12", 15" Depth, 5,000 LB Design Load, Open Bottom, Straight Sides, Polymer Concrete Handhole Enclosure.....	561.91	21.83
33 05 63 00-0097	EA 13" x 24", 12" Depth, 5,000 LB Design Load, Open Bottom, Straight Sides, Polymer Concrete Handhole Enclosure.....	422.17	72.73
33 05 63 00-0098	EA 17" x 30", 12" Depth, 5,000 LB Design Load, Open Bottom, Straight Sides, Polymer Concrete Handhole Enclosure.....	484.26	72.73
33 05 63 00-0099	EA 6" x 8", 6" Depth, 15,000 LB Design Load, Open Bottom, Straight Sides, Polymer Concrete Handhole Enclosure.....	146.26	21.83
33 05 63 00-0100	EA 12" x 12", 12" Depth, 15,000 LB Design Load, Open Bottom, Straight Sides, Polymer Concrete Handhole Enclosure.....	234.25	21.83
33 05 63 00-0101	EA 8" x 18", 7" Depth, 15,000 LB Design Load, Open Bottom, Straight Sides, Polymer Concrete Handhole Enclosure.....	386.98	21.83
33 05 63 00-0102	EA 8" x 18", 8" Depth, 15,000 LB Design Load, Open Bottom, Straight Sides, Polymer Concrete Handhole Enclosure.....	405.46	21.83
33 05 63 00-0103	EA 11" x 18", 12" Depth, 15,000 LB Design Load, Open Bottom, Straight Sides, Polymer Concrete Handhole Enclosure.....	320.36	48.49
33 05 63 00-0104	EA 11" x 18", 18" Depth, 15,000 LB Design Load, Open Bottom, Straight Sides, Polymer Concrete Handhole Enclosure.....	348.71	48.49
33 05 63 00-0105	EA 8" x 8", 12" Depth, 22,500 LB Design Load, Open Bottom, Straight Sides, Polymer Concrete Handhole Enclosure.....	230.47	21.83
33 05 63 00-0106	EA 8" x 8", 18" Depth, 22,500 LB Design Load, Open Bottom, Straight Sides, Polymer Concrete Handhole Enclosure.....	265.10	21.83
33 05 63 00-0107	EA 11" x 18", 12" Depth, 22,500 LB Design Load, Open Bottom, Straight Sides, Polymer Concrete Handhole Enclosure.....	345.77	48.49
33 05 63 00-0108	EA 11" x 18", 18" Depth, 22,500 LB Design Load, Open Bottom, Straight Sides, Polymer Concrete Handhole Enclosure.....	393.43	48.49
33 05 63 00-0109	EA 11" x 20", 12" Depth, 22,500 LB Design Load, Open Bottom, Straight Sides, Polymer Concrete Handhole Enclosure.....	362.58	48.49
33 05 63 00-0110	EA 13" x 24", 12" Depth, 22,500 LB Design Load, Open Bottom, Straight Sides, Polymer Concrete Handhole Enclosure.....	425.06	72.73
33 05 63 00-0111	EA 13" x 24", 18" Depth, 22,500 LB Design Load, Open Bottom, Straight Sides, Polymer Concrete Handhole Enclosure.....	471.81	72.73
33 05 63 00-0112	EA 17" x 30", 12" Depth, 22,500 LB Design Load, Open Bottom, Straight Sides, Polymer Concrete Handhole Enclosure.....	506.58	72.73

**33 Utilities****33 05 Common Work Results for Utilities****33 05 63 Concrete Vaults and Chambers**

MINOR CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
33 05 63 00-0113	EA	17" x 30", 18" Depth, 22,500 LB Design Load, Open Bottom, Straight Sides, Polymer Concrete Handhole Enclosure.....	558.94	72.73
33 05 63 00-0114	EA	17" x 30", 22" Depth, 22,500 LB Design Load, Open Bottom, Straight Sides, Polymer Concrete Handhole Enclosure.....	663.36	72.73
33 05 63 00-0115	EA	17" x 30", 24" Depth, 22,500 LB Design Load, Open Bottom, Straight Sides, Polymer Concrete Handhole Enclosure.....	726.71	72.73
33 05 63 00-0116	EA	17" x 30", 28" Depth, 22,500 LB Design Load, Open Bottom, Straight Sides, Polymer Concrete Handhole Enclosure.....	796.02	72.73
33 05 63 00-0117	EA	17" x 30", 30" Depth, 22,500 LB Design Load, Open Bottom, Straight Sides, Polymer Concrete Handhole Enclosure.....	839.60	72.73
33 05 63 00-0118	EA	24" x 24", 24" Depth, 22,500 LB Design Load, Open Bottom, Straight Sides, Polymer Concrete Handhole Enclosure.....	994.13	96.97
33 05 63 00-0119	EA	24" x 36", 18" Depth, 22,500 LB Design Load, Open Bottom, Straight Sides, Polymer Concrete Handhole Enclosure.....	981.04	133.34
33 05 63 00-0120	EA	24" x 36", 24" Depth, 22,500 LB Design Load, Open Bottom, Straight Sides, Polymer Concrete Handhole Enclosure.....	1,284.60	133.34
33 05 63 00-0121	EA	24" x 36", 30" Depth, 22,500 LB Design Load, Open Bottom, Straight Sides, Polymer Concrete Handhole Enclosure.....	1,564.90	133.34
33 05 63 00-0122	EA	24" x 36", 36" Depth, 22,500 LB Design Load, Open Bottom, Straight Sides, Polymer Concrete Handhole Enclosure.....	1,741.92	133.34
33 05 63 00-0123	EA	24" x 36", 42" Depth, 22,500 LB Design Load, Open Bottom, Straight Sides, Polymer Concrete Handhole Enclosure.....	1,917.99	133.34
33 05 63 00-0124	EA	36" x 36", 36" Depth, 22,500 LB Design Load, Open Bottom, Straight Sides, Polymer Concrete Handhole Enclosure.....	2,153.47	237.20
33 05 63 00-0125	EA	30" x 48", 18" Depth, 22,500 LB Design Load, Open Bottom, Straight Sides, Polymer Concrete Handhole Enclosure.....	1,532.92	237.20
33 05 63 00-0126	EA	30" x 48", 24" Depth, 22,500 LB Design Load, Open Bottom, Straight Sides, Polymer Concrete Handhole Enclosure.....	1,757.74	237.20
33 05 63 00-0127	EA	30" x 48", 36" Depth, 22,500 LB Design Load, Open Bottom, Straight Sides, Polymer Concrete Handhole Enclosure.....	2,187.65	237.20
33 05 63 00-0128	EA	30" x 60", 21" Depth, 22,500 LB Design Load, Open Bottom, Straight Sides, Polymer Concrete Handhole Enclosure.....	2,183.23	237.20
33 05 63 00-0129	EA	30" x 60", 30" Depth, 22,500 LB Design Load, Open Bottom, Straight Sides, Polymer Concrete Handhole Enclosure.....	2,343.71	237.20
33 05 63 00-0130	EA	30" x 60", 36" Depth, 22,500 LB Design Load, Open Bottom, Straight Sides, Polymer Concrete Handhole Enclosure.....	2,652.34	237.20
33 05 63 00-0131	EA	36" x 60", 19" Depth, 22,500 LB Design Load, Open Bottom, Straight Sides, Polymer Concrete Handhole Enclosure.....	2,420.15	254.13
33 05 63 00-0132	EA	36" x 60", 24" Depth, 22,500 LB Design Load, Open Bottom, Straight Sides, Polymer Concrete Handhole Enclosure.....	2,638.05	254.13
33 05 63 00-0133	EA	36" x 60", 31" Depth, 22,500 LB Design Load, Open Bottom, Straight Sides, Polymer Concrete Handhole Enclosure.....	2,916.24	254.13
33 05 63 00-0134	EA	36" x 60", 36" Depth, 22,500 LB Design Load, Open Bottom, Straight Sides, Polymer Concrete Handhole Enclosure.....	3,027.55	254.13
33 05 63 00-0135	EA	48" x 48", 36" Depth, 22,500 LB Design Load, Open Bottom, Straight Sides, Polymer Concrete Handhole Enclosure.....	3,066.24	254.13
33 05 63 00-0136	EA	48" x 48", 48" Depth, 22,500 LB Design Load, Open Bottom, Straight Sides, Polymer Concrete Handhole Enclosure.....	3,490.12	254.13
33 05 63 00-0137	EA	36" x 72", 21" Depth, 22,500 LB Design Load, Open Bottom, Straight Sides, Polymer Concrete Handhole Enclosure.....	2,666.93	254.13
33 05 63 00-0138	EA	36" x 72", 36" Depth, 22,500 LB Design Load, Open Bottom, Straight Sides, Polymer Concrete Handhole Enclosure.....	3,560.08	254.13
33 05 63 00-0139	EA	48" x 72", 36" Depth, 22,500 LB Design Load, Open Bottom, Straight Sides, Polymer Concrete Handhole Enclosure.....	4,015.25	271.08
33 05 63 00-0140	EA	48" x 72", 48" Depth, 22,500 LB Design Load, Open Bottom, Straight Sides, Polymer Concrete Handhole Enclosure.....	4,987.03	271.08
33 05 63 00-0141	EA	48" x 96", 48" Depth, 22,500 LB Design Load, Open Bottom, Straight Sides, Polymer Concrete Handhole Enclosure.....	6,435.27	271.08
<b>33 05 63 00-0142 Gasketed, Open Bottom, Straight Sides, Polymer Concrete Handhole Enclosures</b>				
33 05 63 00-0143	EA	13" x 24", 12" Depth, 5,000 LB Design Load, Gasketed, Open Bottom, Straight Sides, Polymer Concrete Handhole Enclosure.....	583.37	72.73
33 05 63 00-0144	EA	17" x 30", 12" Depth, 5,000 LB Design Load, Gasketed, Open Bottom, Straight Sides, Polymer Concrete Handhole Enclosure.....	675.48	72.73
33 05 63 00-0145	EA	6" x 8", 6" Depth, 15,000 LB Design Load, Gasketed, Open Bottom, Straight Sides, Polymer Concrete Handhole Enclosure.....	256.66	21.83
33 05 63 00-0146	EA	12" x 12", 12" Depth, 15,000 LB Design Load, Gasketed, Open Bottom, Straight Sides, Polymer Concrete Handhole Enclosure.....	376.92	21.83
33 05 63 00-0147	EA	8" x 18", 7" Depth, 15,000 LB Design Load, Gasketed, Open Bottom, Straight Sides, Polymer Concrete Handhole Enclosure.....	509.86	21.83
33 05 63 00-0148	EA	8" x 18", 8" Depth, 15,000 LB Design Load, Gasketed, Open Bottom, Straight Sides, Polymer Concrete Handhole Enclosure.....	528.37	21.83
33 05 63 00-0149	EA	10" x 15", 18" Depth, 15,000 LB Design Load, Gasketed, Open Bottom, Flared Sides, Polymer Concrete Handhole Enclosure.....	441.41	48.49
33 05 63 00-0150	EA	11" x 18", 12" Depth, 15,000 LB Design Load, Gasketed, Open Bottom, Straight Sides, Polymer Concrete Handhole Enclosure.....	461.14	48.49
33 05 63 00-0151	EA	11" x 18", 18" Depth, 15,000 LB Design Load, Gasketed, Open Bottom, Straight Sides, Polymer Concrete Handhole Enclosure.....	487.52	48.49
33 05 63 00-0152	EA	8" x 8", 12" Depth, 22,500 LB Design Load, Gasketed, Open Bottom, Straight Sides, Polymer Concrete Handhole Enclosure.....	350.85	21.83
33 05 63 00-0153	EA	8" x 8", 18" Depth, 22,500 LB Design Load, Gasketed, Open Bottom, Straight Sides, Polymer Concrete Handhole Enclosure.....	417.05	21.83





		<b>Utilities</b>	<b>33</b>	<b>CS</b>
		<b>Common Work Results for Utilities</b>	<b>33 05</b>	
		<b>Concrete Vaults and Chambers</b>	<b>33 05 63</b>	

MINOR				TOTAL DIRECT	DEMOLITION
CSI	UOM	DESCRIPTION	UNIT COST	UNIT COST	
33 05 63 00-0154	EA	11" x 18", 12" Depth, 22,500 LB Design Load, Gasketed, Open Bottom, Straight Sides, Polymer Concrete Handhole Enclosure .....	486.88	48.49	
33 05 63 00-0155	EA	11" x 18", 18" Depth, 22,500 LB Design Load, Gasketed, Open Bottom, Straight Sides, Polymer Concrete Handhole Enclosure .....	534.54	48.49	
33 05 63 00-0156	EA	11" x 20", 12" Depth, 22,500 LB Design Load, Gasketed, Open Bottom, Straight Sides, Polymer Concrete Handhole Enclosure .....	505.19	48.49	
33 05 63 00-0157	EA	13" x 24", 12" Depth, 22,500 LB Design Load, Gasketed, Open Bottom, Straight Sides, Polymer Concrete Handhole Enclosure .....	582.48	72.73	
33 05 63 00-0158	EA	13" x 24", 18" Depth, 22,500 LB Design Load, Gasketed, Open Bottom, Straight Sides, Polymer Concrete Handhole Enclosure .....	629.82	72.73	
33 05 63 00-0159	EA	17" x 30", 12" Depth, 22,500 LB Design Load, Gasketed, Open Bottom, Straight Sides, Polymer Concrete Handhole Enclosure .....	694.44	72.73	
33 05 63 00-0160	EA	17" x 30", 18" Depth, 22,500 LB Design Load, Gasketed, Open Bottom, Straight Sides, Polymer Concrete Handhole Enclosure .....	746.47	72.73	
33 05 63 00-0161	EA	17" x 30", 22" Depth, 22,500 LB Design Load, Gasketed, Open Bottom, Straight Sides, Polymer Concrete Handhole Enclosure .....	850.58	72.73	
33 05 63 00-0162	EA	17" x 30", 24" Depth, 22,500 LB Design Load, Gasketed, Open Bottom, Straight Sides, Polymer Concrete Handhole Enclosure .....	914.20	72.73	
33 05 63 00-0163	EA	17" x 30", 28" Depth, 22,500 LB Design Load, Gasketed, Open Bottom, Straight Sides, Polymer Concrete Handhole Enclosure .....	983.21	72.73	
33 05 63 00-0164	EA	17" x 30", 30" Depth, 22,500 LB Design Load, Gasketed, Open Bottom, Straight Sides, Polymer Concrete Handhole Enclosure .....	1,027.10	72.73	
33 05 63 00-0165	EA	24" x 24", 24" Depth, 22,500 LB Design Load, Gasketed, Open Bottom, Straight Sides, Polymer Concrete Handhole Enclosure .....	1,253.14	96.97	
33 05 63 00-0166	EA	24" x 36", 18" Depth, 22,500 LB Design Load, Gasketed, Open Bottom, Straight Sides, Polymer Concrete Handhole Enclosure .....	1,275.51	133.34	
33 05 63 00-0167	EA	24" x 36", 24" Depth, 22,500 LB Design Load, Gasketed, Open Bottom, Straight Sides, Polymer Concrete Handhole Enclosure .....	1,578.71	133.34	
33 05 63 00-0168	EA	24" x 36", 30" Depth, 22,500 LB Design Load, Gasketed, Open Bottom, Straight Sides, Polymer Concrete Handhole Enclosure .....	1,858.71	133.34	
33 05 63 00-0169	EA	24" x 36", 36" Depth, 22,500 LB Design Load, Gasketed, Open Bottom, Straight Sides, Polymer Concrete Handhole Enclosure .....	2,035.45	133.34	
33 05 63 00-0170	EA	24" x 36", 42" Depth, 22,500 LB Design Load, Gasketed, Open Bottom, Straight Sides, Polymer Concrete Handhole Enclosure .....	2,212.10	133.34	
33 05 63 00-0171	EA	30" x 48", 18" Depth, 22,500 LB Design Load, Gasketed, Open Bottom, Straight Sides, Polymer Concrete Handhole Enclosure .....	1,873.75	237.20	
33 05 63 00-0172	EA	30" x 48", 24" Depth, 22,500 LB Design Load, Gasketed, Open Bottom, Straight Sides, Polymer Concrete Handhole Enclosure .....	2,098.91	237.20	
33 05 63 00-0173	EA	30" x 48", 36" Depth, 22,500 LB Design Load, Gasketed, Open Bottom, Straight Sides, Polymer Concrete Handhole Enclosure .....	2,528.49	237.20	
33 05 63 00-0174		Solid Bottom, Straight Sides, Polymer Concrete Handhole Enclosures (33 05 63 00-0093)			
33 05 63 00-0175	EA	13" x 24", 12" Depth, 5,000 LB Design Load, Solid Bottom, Straight Sides, Polymer Concrete Handhole Enclosure .....	531.90	72.73	
33 05 63 00-0176	EA	17" x 30", 12" Depth, 5,000 LB Design Load, Solid Bottom, Straight Sides, Polymer Concrete Handhole Enclosure .....	626.57	72.73	
33 05 63 00-0177	EA	6" x 8", 6" Depth, 15,000 LB Design Load, Solid Bottom, Straight Sides, Polymer Concrete Handhole Enclosure .....	186.28	21.83	
33 05 63 00-0178	EA	12" x 12", 12" Depth, 15,000 LB Design Load, Solid Bottom, Straight Sides, Polymer Concrete Handhole Enclosure .....	315.13	21.83	
33 05 63 00-0179	EA	8" x 18", 7" Depth, 15,000 LB Design Load, Solid Bottom, Straight Sides, Polymer Concrete Handhole Enclosure .....	458.44	21.83	
33 05 63 00-0180	EA	8" x 18", 8" Depth, 15,000 LB Design Load, Solid Bottom, Straight Sides, Polymer Concrete Handhole Enclosure .....	477.28	21.83	
33 05 63 00-0181	EA	11" x 18", 12" Depth, 15,000 LB Design Load, Solid Bottom, Straight Sides, Polymer Concrete Handhole Enclosure .....	407.55	48.49	
33 05 63 00-0182	EA	11" x 18", 18" Depth, 15,000 LB Design Load, Solid Bottom, Straight Sides, Polymer Concrete Handhole Enclosure .....	462.42	48.49	
33 05 63 00-0183	EA	8" x 8", 18" Depth, 22,500 LB Design Load, Solid Bottom, Straight Sides, Polymer Concrete Handhole Enclosure .....	274.11	21.83	
33 05 63 00-0184	EA	11" x 18", 12" Depth, 22,500 LB Design Load, Solid Bottom, Straight Sides, Polymer Concrete Handhole Enclosure .....	434.51	48.49	
33 05 63 00-0185	EA	11" x 18", 18" Depth, 22,500 LB Design Load, Solid Bottom, Straight Sides, Polymer Concrete Handhole Enclosure .....	502.86	48.49	
33 05 63 00-0186	EA	11" x 20", 12" Depth, 22,500 LB Design Load, Solid Bottom, Straight Sides, Polymer Concrete Handhole Enclosure .....	452.27	48.49	
33 05 63 00-0187	EA	13" x 24", 12" Depth, 22,500 LB Design Load, Solid Bottom, Straight Sides, Polymer Concrete Handhole Enclosure .....	575.23	72.73	
33 05 63 00-0188	EA	13" x 24", 18" Depth, 22,500 LB Design Load, Solid Bottom, Straight Sides, Polymer Concrete Handhole Enclosure .....	668.67	72.73	
33 05 63 00-0189	EA	17" x 30", 12" Depth, 22,500 LB Design Load, Solid Bottom, Straight Sides, Polymer Concrete Handhole Enclosure .....	699.75	72.73	
33 05 63 00-0190	EA	17" x 30", 18" Depth, 22,500 LB Design Load, Solid Bottom, Straight Sides, Polymer Concrete Handhole Enclosure .....	773.73	72.73	
33 05 63 00-0191	EA	17" x 30", 22" Depth, 22,500 LB Design Load, Solid Bottom, Straight Sides, Polymer Concrete Handhole Enclosure .....	841.80	72.73	
33 05 63 00-0192	EA	17" x 30", 24" Depth, 22,500 LB Design Load, Solid Bottom, Straight Sides, Polymer Concrete Handhole Enclosure .....	906.06	72.73	
33 05 63 00-0193	EA	17" x 30", 28" Depth, 22,500 LB Design Load, Solid Bottom, Straight Sides, Polymer Concrete Handhole Enclosure .....	1,021.12	72.73	
33 05 63 00-0194	EA	17" x 30", 30" Depth, 22,500 LB Design Load, Solid Bottom, Straight Sides, Polymer Concrete Handhole Enclosure .....	1,037.16	72.73	
33 05 63 00-0195	EA	24" x 24", 24" Depth, 22,500 LB Design Load, Solid Bottom, Straight Sides, Polymer Concrete Handhole Enclosure .....	1,273.21	96.97	
33 05 63 00-0196	EA	24" x 36", 18" Depth, 22,500 LB Design Load, Solid Bottom, Straight Sides, Polymer Concrete Handhole Enclosure .....	1,301.52	133.34	
33 05 63 00-0197	EA	24" x 36", 24" Depth, 22,500 LB Design Load, Solid Bottom, Straight Sides, Polymer Concrete Handhole Enclosure .....	1,636.38	133.34	

**33 Utilities****33 05 Common Work Results for Utilities****33 05 63 Concrete Vaults and Chambers**

MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
33 05 63 00-0198 EA 24" x 36", 30" Depth, 22,500 LB Design Load, Solid Bottom, Straight Sides, Polymer Concrete Handhole Enclosure.....	1,967.55	133.34
33 05 63 00-0199 EA 24" x 36", 36" Depth, 22,500 LB Design Load, Solid Bottom, Straight Sides, Polymer Concrete Handhole Enclosure.....	2,187.50	133.34
33 05 63 00-0200 EA 24" x 36", 42" Depth, 22,500 LB Design Load, Solid Bottom, Straight Sides, Polymer Concrete Handhole Enclosure.....	2,407.46	133.34
33 05 63 00-0201 EA 36" x 36", 36" Depth, 22,500 LB Design Load, Solid Bottom, Straight Sides, Polymer Concrete Handhole Enclosure.....	2,563.28	237.20
33 05 63 00-0202 EA 30" x 48", 18" Depth, 22,500 LB Design Load, Solid Bottom, Straight Sides, Polymer Concrete Handhole Enclosure.....	1,942.76	237.20
33 05 63 00-0203 EA 30" x 48", 24" Depth, 22,500 LB Design Load, Solid Bottom, Straight Sides, Polymer Concrete Handhole Enclosure.....	2,185.12	237.20
33 05 63 00-0204 EA 30" x 48", 36" Depth, 22,500 LB Design Load, Solid Bottom, Straight Sides, Polymer Concrete Handhole Enclosure.....	2,614.73	237.20
33 05 63 00-0205 EA 30" x 60", 21" Depth, 22,500 LB Design Load, Solid Bottom, Straight Sides, Polymer Concrete Handhole Enclosure.....	2,804.23	237.20
33 05 63 00-0206 EA 30" x 60", 30" Depth, 22,500 LB Design Load, Solid Bottom, Straight Sides, Polymer Concrete Handhole Enclosure.....	2,863.57	237.20
33 05 63 00-0207 EA 30" x 60", 36" Depth, 22,500 LB Design Load, Solid Bottom, Straight Sides, Polymer Concrete Handhole Enclosure.....	3,439.23	237.20
33 05 63 00-0208 EA 36" x 60", 19" Depth, 22,500 LB Design Load, Solid Bottom, Straight Sides, Polymer Concrete Handhole Enclosure.....	3,173.47	254.13
33 05 63 00-0209 EA 36" x 60", 24" Depth, 22,500 LB Design Load, Solid Bottom, Straight Sides, Polymer Concrete Handhole Enclosure.....	3,286.06	254.13
33 05 63 00-0210 EA 36" x 60", 31" Depth, 22,500 LB Design Load, Solid Bottom, Straight Sides, Polymer Concrete Handhole Enclosure.....	3,605.44	254.13
33 05 63 00-0211 EA 36" x 60", 36" Depth, 22,500 LB Design Load, Solid Bottom, Straight Sides, Polymer Concrete Handhole Enclosure.....	3,847.16	254.13
33 05 63 00-0212 EA 36" x 72", 21" Depth, 22,500 LB Design Load, Solid Bottom, Straight Sides, Polymer Concrete Handhole Enclosure.....	3,524.06	254.13
33 05 63 00-0213 EA 36" x 72", 36" Depth, 22,500 LB Design Load, Solid Bottom, Straight Sides, Polymer Concrete Handhole Enclosure.....	4,388.55	254.13
33 05 63 00-0214 EA 48" x 48", 36" Depth, 22,500 LB Design Load, Solid Bottom, Straight Sides, Polymer Concrete Handhole Enclosure.....	3,793.21	254.13
33 05 63 00-0215 EA 48" x 48", 48" Depth, 22,500 LB Design Load, Solid Bottom, Straight Sides, Polymer Concrete Handhole Enclosure.....	4,181.10	254.13
33 05 63 00-0216 EA 48" x 72", 36" Depth, 22,500 LB Design Load, Solid Bottom, Straight Sides, Polymer Concrete Handhole Enclosure.....	5,082.19	271.08
33 05 63 00-0217 EA 48" x 72", 48" Depth, 22,500 LB Design Load, Solid Bottom, Straight Sides, Polymer Concrete Handhole Enclosure.....	6,054.36	271.08
33 05 63 00-0218 EA 48" x 96", 48" Depth, 22,500 LB Design Load, Solid Bottom, Straight Sides, Polymer Concrete Handhole Enclosure.....	8,211.76	271.08
<b>33 05 63 00-0219 Gasketed, Solid Bottom, Straight Sides, Polymer Concrete Handhole Enclosures</b> <small>(33 05 63 00-0093)</small>		
33 05 63 00-0220 EA 13" x 24", 12" Depth, 5,000 LB Design Load, Gasketed, Solid Bottom, Straight Sides, Polymer Concrete Handhole Enclosure.....	693.08	72.73
33 05 63 00-0221 EA 17" x 30", 12" Depth, 5,000 LB Design Load, Gasketed, Solid Bottom, Straight Sides, Polymer Concrete Handhole Enclosure.....	818.15	72.73
33 05 63 00-0222 EA 6" x 8", 6" Depth, 15,000 LB Design Load, Gasketed, Solid Bottom, Straight Sides, Polymer Concrete Handhole Enclosure.....	295.79	21.83
33 05 63 00-0223 EA 12" x 12", 12" Depth, 15,000 LB Design Load, Gasketed, Solid Bottom, Straight Sides, Polymer Concrete Handhole Enclosure.....	457.52	21.83
33 05 63 00-0224 EA 8" x 18", 7" Depth, 15,000 LB Design Load, Gasketed, Solid Bottom, Straight Sides, Polymer Concrete Handhole Enclosure.....	581.06	21.83
33 05 63 00-0225 EA 8" x 18", 8" Depth, 15,000 LB Design Load, Gasketed, Solid Bottom, Straight Sides, Polymer Concrete Handhole Enclosure.....	600.16	21.83
33 05 63 00-0226 EA 11" x 18", 12" Depth, 15,000 LB Design Load, Gasketed, Solid Bottom, Straight Sides, Polymer Concrete Handhole Enclosure.....	548.66	48.49
33 05 63 00-0227 EA 11" x 18", 18" Depth, 15,000 LB Design Load, Gasketed, Solid Bottom, Straight Sides, Polymer Concrete Handhole Enclosure.....	603.19	48.49
33 05 63 00-0228 EA 8" x 8", 18" Depth, 22,500 LB Design Load, Gasketed, Solid Bottom, Straight Sides, Polymer Concrete Handhole Enclosure.....	430.59	21.83
33 05 63 00-0229 EA 11" x 18", 12" Depth, 22,500 LB Design Load, Gasketed, Solid Bottom, Straight Sides, Polymer Concrete Handhole Enclosure.....	574.98	48.49
33 05 63 00-0230 EA 11" x 18", 18" Depth, 22,500 LB Design Load, Gasketed, Solid Bottom, Straight Sides, Polymer Concrete Handhole Enclosure.....	643.33	48.49
33 05 63 00-0231 EA 11" x 20", 12" Depth, 22,500 LB Design Load, Gasketed, Solid Bottom, Straight Sides, Polymer Concrete Handhole Enclosure.....	554.61	48.49
33 05 63 00-0232 EA 13" x 24", 12" Depth, 22,500 LB Design Load, Gasketed, Solid Bottom, Straight Sides, Polymer Concrete Handhole Enclosure.....	733.29	72.73
33 05 63 00-0233 EA 13" x 24", 18" Depth, 22,500 LB Design Load, Gasketed, Solid Bottom, Straight Sides, Polymer Concrete Handhole Enclosure.....	826.74	72.73
33 05 63 00-0234 EA 17" x 30", 12" Depth, 22,500 LB Design Load, Gasketed, Solid Bottom, Straight Sides, Polymer Concrete Handhole Enclosure.....	887.24	72.73
33 05 63 00-0235 EA 17" x 30", 18" Depth, 22,500 LB Design Load, Gasketed, Solid Bottom, Straight Sides, Polymer Concrete Handhole Enclosure.....	961.26	72.73
33 05 63 00-0236 EA 17" x 30", 22" Depth, 22,500 LB Design Load, Gasketed, Solid Bottom, Straight Sides, Polymer Concrete Handhole Enclosure.....	1,029.30	72.73
33 05 63 00-0237 EA 17" x 30", 24" Depth, 22,500 LB Design Load, Gasketed, Solid Bottom, Straight Sides, Polymer Concrete Handhole Enclosure.....	1,093.58	72.73
33 05 63 00-0238 EA 17" x 30", 28" Depth, 22,500 LB Design Load, Gasketed, Solid Bottom, Straight Sides, Polymer Concrete Handhole Enclosure.....	1,208.68	72.73



		<b>Utilities</b>	<b>33</b>	<b>CS</b>
		<b>Common Work Results for Utilities</b>	<b>33 05</b>	
		<b>Concrete Vaults and Chambers</b>	<b>33 05 63</b>	

MINOR CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
33 05 63 00-0239	EA	17" x 30", 30" Depth, 22,500 LB Design Load, Gasketed, Solid Bottom, Straight Sides, Polymer Concrete Handhole Enclosure .....	1,224.66	72.73
33 05 63 00-0240	EA	24" x 24", 24" Depth, 22,500 LB Design Load, Gasketed, Solid Bottom, Straight Sides, Polymer Concrete Handhole Enclosure .....	1,531.89	96.97
33 05 63 00-0241	EA	24" x 36", 18" Depth, 22,500 LB Design Load, Gasketed, Solid Bottom, Straight Sides, Polymer Concrete Handhole Enclosure .....	1,595.97	133.34
33 05 63 00-0242	EA	24" x 36", 24" Depth, 22,500 LB Design Load, Gasketed, Solid Bottom, Straight Sides, Polymer Concrete Handhole Enclosure .....	1,930.52	133.34
33 05 63 00-0243	EA	24" x 36", 30" Depth, 22,500 LB Design Load, Gasketed, Solid Bottom, Straight Sides, Polymer Concrete Handhole Enclosure .....	2,261.32	133.34
33 05 63 00-0244	EA	24" x 36", 36" Depth, 22,500 LB Design Load, Gasketed, Solid Bottom, Straight Sides, Polymer Concrete Handhole Enclosure .....	2,481.45	133.34
33 05 63 00-0245	EA	24" x 36", 42" Depth, 22,500 LB Design Load, Gasketed, Solid Bottom, Straight Sides, Polymer Concrete Handhole Enclosure .....	2,701.58	133.34
33 05 63 00-0246	EA	30" x 48", 18" Depth, 22,500 LB Design Load, Gasketed, Solid Bottom, Straight Sides, Polymer Concrete Handhole Enclosure .....	2,283.90	237.20
33 05 63 00-0247	EA	30" x 48", 24" Depth, 22,500 LB Design Load, Gasketed, Solid Bottom, Straight Sides, Polymer Concrete Handhole Enclosure .....	2,526.60	237.20
33 05 63 00-0248	EA	30" x 48", 36" Depth, 22,500 LB Design Load, Gasketed, Solid Bottom, Straight Sides, Polymer Concrete Handhole Enclosure .....	2,955.90	237.20
<b>33 05 63 00-0249 Footed, Straight Sides, Polymer Concrete Handhole Enclosures (33 05 63 00-0093)</b>				
33 05 63 00-0250	EA	17" x 30", 12" Depth, 5,000 LB Design Load, Footed, Straight Sides, Polymer Concrete Handhole Enclosure .....	571.20	72.73
33 05 63 00-0251	EA	11" x 18", 12" Depth, 15,000 LB Design Load, Footed, Straight Sides, Polymer Concrete Handhole Enclosure .....	386.21	48.49
33 05 63 00-0252	EA	11" x 18", 18" Depth, 15,000 LB Design Load, Footed, Straight Sides, Polymer Concrete Handhole Enclosure .....	438.90	48.49
33 05 63 00-0253	EA	13" x 24", 12" Depth, 15,000 LB Design Load, Footed, Straight Sides, Polymer Concrete Handhole Enclosure .....	502.80	72.73
33 05 63 00-0254	EA	11" x 18", 12" Depth, 22,500 LB Design Load, Footed, Straight Sides, Polymer Concrete Handhole Enclosure .....	403.47	48.49
33 05 63 00-0255	EA	11" x 18", 18" Depth, 22,500 LB Design Load, Footed, Straight Sides, Polymer Concrete Handhole Enclosure .....	453.94	48.49
<b>33 05 63 00-0256 Polymer Concrete Handhole Enclosure Extensions (33 05 63 00-0057)</b>				
33 05 63 00-0257	EA	13" x 24", 8" Extension, 22,500 LB Design Load, Straight Sides, Polymer Concrete Handhole Enclosure Extension .....	404.69	72.73
33 05 63 00-0258	EA	17" x 30", 8" Extension, 22,500 LB Design Load, Straight Sides, Polymer Concrete Handhole Enclosure Extension .....	459.61	72.73
33 05 63 00-0259	EA	24" x 24", 6" Extension, 22,500 LB Design Load, Straight Sides, Polymer Concrete Handhole Enclosure Extension .....	518.81	96.97
33 05 63 00-0260	EA	24" x 24", 12" Extension, 22,500 LB Design Load, Straight Sides, Polymer Concrete Handhole Enclosure Extension .....	572.73	96.97
33 05 63 00-0261	EA	24" x 36", 8" Extension, 22,500 LB Design Load, Straight Sides, Polymer Concrete Handhole Enclosure Extension .....	666.61	133.34
33 05 63 00-0262	EA	36" x 36", 12" Extension, 22,500 LB Design Load, Straight Sides, Polymer Concrete Handhole Enclosure Extension .....	1,213.07	237.20
33 05 63 00-0263	EA	30" x 48", 8" Extension, 22,500 LB Design Load, Straight Sides, Polymer Concrete Handhole Enclosure Extension .....	1,154.12	237.20
33 05 63 00-0264	EA	30" x 48", 11" Extension, 22,500 LB Design Load, Straight Sides, Polymer Concrete Handhole Enclosure Extension .....	1,166.98	237.20
33 05 63 00-0265	EA	36" x 60", 12" Extension, 22,500 LB Design Load, Straight Sides, Polymer Concrete Handhole Enclosure Extension .....	1,605.68	254.13
33 05 63 00-0266	EA	48" x 72", 12" Extension, 22,500 LB Design Load, Straight Sides, Polymer Concrete Handhole Enclosure Extension .....	2,611.86	271.08
33 05 63 00-0267	EA	48" x 96", 12" Extension, 22,500 LB Design Load, Straight Sides, Polymer Concrete Handhole Enclosure Extension .....	3,468.18	271.08
33 05 63 00-0268	EA	13" x 24", 8" Extension, 22,500 LB Design Load, Straight Sides, Polymer Concrete Handhole Enclosure Solid Base Extension .....	692.85	72.73
33 05 63 00-0269	EA	17" x 30", 8" Extension, 22,500 LB Design Load, Straight Sides, Polymer Concrete Handhole Enclosure Solid Base Extension .....	726.40	72.73
33 05 63 00-0270	EA	24" x 24", 6" Extension, 22,500 LB Design Load, Straight Sides, Polymer Concrete Handhole Enclosure Solid Base Extension .....	764.61	96.97
33 05 63 00-0271	EA	24" x 24", 12" Extension, 22,500 LB Design Load, Straight Sides, Polymer Concrete Handhole Enclosure Solid Base Extension .....	819.12	96.97
33 05 63 00-0272	EA	24" x 36", 8" Extension, 22,500 LB Design Load, Straight Sides, Polymer Concrete Handhole Enclosure Solid Base Extension .....	936.20	133.34
33 05 63 00-0273	EA	30" x 48", 8" Extension, 22,500 LB Design Load, Straight Sides, Polymer Concrete Handhole Enclosure Solid Base Extension .....	1,535.11	237.20
33 05 63 00-0274	EA	13" x 24", 3" Extension, 22,500 LB Design Load, Straight Sides, Polymer Concrete Handhole Enclosure Grade Adjustable Extension .....	528.84	72.73
33 05 63 00-0275	EA	17" x 30", 3" Extension, 22,500 LB Design Load, Straight Sides, Polymer Concrete Handhole Enclosure Grade Adjustable Extension .....	595.02	72.73
33 05 63 00-0276	EA	24" x 36", 4" Extension, 22,500 LB Design Load, Straight Sides, Polymer Concrete Handhole Enclosure Grade Adjustable Extension .....	761.55	133.34
33 05 63 00-0277	EA	36" x 60", 3" Extension, 22,500 LB Design Load, Straight Sides, Polymer Concrete Handhole Enclosure Grade Adjustable Extension .....	1,542.56	254.13
<b>33 05 63 00-0278 Polymer Concrete Handhole Enclosure Covers (33 05 63 00-0057)</b>				
<b>33 05 63 00-0279 Polymer Concrete Handhole Enclosure Covers (33 05 63 00-0278)</b>				
33 05 63 00-0280	EA	5" x 16", 5,000 LB Design Load, Standard Duty, Polymer Concrete Handhole Enclosure Cover .....	154.69	9.71
33 05 63 00-0281	EA	10" x 12", 5,000 LB Design Load, Standard Duty, Polymer Concrete Handhole Enclosure Cover .....	156.81	9.71
33 05 63 00-0282	EA	12" x 12", 5,000 LB Design Load, Standard Duty, Polymer Concrete Handhole Enclosure Cover .....	144.72	9.71
33 05 63 00-0283	EA	8" x 18", 5,000 LB Design Load, Standard Duty, Polymer Concrete Handhole Enclosure Cover .....	157.22	9.71

**33 Utilities****33 05 Common Work Results for Utilities****33 05 63 Concrete Vaults and Chambers**

MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
33 05 63 00-0284 EA 11" x 18", 5,000 LB Design Load, Standard Duty, Polymer Concrete Handhole Enclosure Cover .....	158.84	9.70
33 05 63 00-0285 EA 13" x 24", 5,000 LB Design Load, Standard Duty, Polymer Concrete Handhole Enclosure Cover .....	183.46	9.70
33 05 63 00-0286 EA 17" x 30", 5,000 LB Design Load, Standard Duty, Polymer Concrete Handhole Enclosure Cover .....	213.92	9.70
33 05 63 00-0287 EA 30" x 59", 5,000 LB Design Load, Standard Duty, Polymer Concrete Handhole Enclosure Cover .....	1,437.21	30.50
33 05 63 00-0288 EA 30" x 60", 5,000 LB Design Load, Standard Duty, Polymer Concrete Handhole Enclosure Cover .....	1,255.58	30.50
33 05 63 00-0289 EA 36" x 60", 5,000 LB Design Load, Standard Duty, Polymer Concrete Handhole Enclosure Cover .....	1,888.22	30.50
33 05 63 00-0290 EA 48" x 48", 5,000 LB Design Load, Standard Duty, Polymer Concrete Handhole Enclosure Cover .....	1,909.78	30.50
33 05 63 00-0291 EA 36" x 72", 5,000 LB Design Load, Standard Duty, Polymer Concrete Handhole Enclosure Cover .....	2,165.76	30.50
33 05 63 00-0292 EA 48" x 72", 5,000 LB Design Load, Standard Duty, Polymer Concrete Handhole Enclosure Cover .....	2,361.29	30.50
33 05 63 00-0293 EA 48" x 96", 5,000 LB Design Load, Standard Duty, Polymer Concrete Handhole Enclosure Cover .....	3,804.90	30.50
33 05 63 00-0294 EA 10" x 15", 8,000 LB Design Load, Standard Duty, Polymer Concrete Handhole Enclosure Cover .....	131.29	9.70
33 05 63 00-0295 EA 11" x 18", 8,000 LB Design Load, Standard Duty, Polymer Concrete Handhole Enclosure Cover .....	191.74	9.70
33 05 63 00-0296 EA 11" x 20", 8,000 LB Design Load, Standard Duty, Polymer Concrete Handhole Enclosure Cover .....	194.55	9.70
33 05 63 00-0297 EA 13" x 24", 8,000 LB Design Load, Standard Duty, Polymer Concrete Handhole Enclosure Cover .....	246.94	9.70
33 05 63 00-0298 EA 13" x 24", 8,000 LB Design Load, Standard Duty, Service Box, Polymer Concrete Handhole Enclosure Cover .....	184.24	9.70
33 05 63 00-0299 EA 17" x 30", 8,000 LB Design Load, Standard Duty, Polymer Concrete Handhole Enclosure Cover .....	293.66	9.70
33 05 63 00-0300 EA 17" x 30", 8,000 LB Design Load, Standard Duty, Service Box, Polymer Concrete Handhole Enclosure Cover .....	228.76	9.70
33 05 63 00-0301 EA 27" Round, 8,000 LB Design Load, Standard Duty, Polymer Concrete Handhole Enclosure Cover .....	478.30	9.70
33 05 63 00-0302 EA 24" x 24", 8,000 LB Design Load, Standard Duty, Polymer Concrete Handhole Enclosure Cover .....	413.85	14.55
33 05 63 00-0303 EA 24" x 36", 8,000 LB Design Load, Standard Duty, Polymer Concrete Handhole Enclosure Cover .....	521.86	14.55
33 05 63 00-0304 EA 39" Round, 8,000 LB Design Load, Standard Duty, Polymer Concrete Handhole Enclosure Cover .....	674.16	16.97
33 05 63 00-0305 EA 36" x 36", 8,000 LB Design Load, Standard Duty, Polymer Concrete Handhole Enclosure Cover .....	951.06	23.72
33 05 63 00-0306 EA 30" x 48", 8,000 LB Design Load, Standard Duty, Polymer Concrete Handhole Enclosure Cover .....	986.80	45.18
33 05 63 00-0307 EA 11" x 18", 15,000 LB Design Load, Heavy Duty, Polymer Concrete Handhole Enclosure Cover .....	250.08	9.70
33 05 63 00-0308 EA 13" x 24", 15,000 LB Design Load, Heavy Duty, Polymer Concrete Handhole Enclosure Cover .....	360.14	9.70
33 05 63 00-0309 EA 17" x 30", 15,000 LB Design Load, Heavy Duty, Polymer Concrete Handhole Enclosure Cover .....	410.95	9.70
33 05 63 00-0310 EA 27" Round, 15,000 LB Design Load, Heavy Duty, Polymer Concrete Handhole Enclosure Cover .....	688.89	9.70
33 05 63 00-0311 EA 24" x 24", 15,000 LB Design Load, Heavy Duty, Polymer Concrete Handhole Enclosure Cover .....	562.33	14.55
33 05 63 00-0312 EA 39" Round, 15,000 LB Design Load, Heavy Duty, Polymer Concrete Handhole Enclosure Cover .....	956.96	16.97
33 05 63 00-0313 EA 36" x 36", 15,000 LB Design Load, Heavy Duty, Polymer Concrete Handhole Enclosure Cover .....	1,257.40	23.72
33 05 63 00-0314 EA 30" x 59", 15,000 LB Design Load, Heavy Duty, Polymer Concrete Handhole Enclosure Cover .....	1,697.61	30.50
33 05 63 00-0315 EA 30" x 60", 15,000 LB Design Load, Heavy Duty, Polymer Concrete Handhole Enclosure Cover .....	1,507.30	30.50
33 05 63 00-0316 EA 36" x 60", 15,000 LB Design Load, Heavy Duty, Polymer Concrete Handhole Enclosure Cover .....	2,112.46	30.50
33 05 63 00-0317 EA 48" x 48", 15,000 LB Design Load, Heavy Duty, Polymer Concrete Handhole Enclosure Cover .....	2,756.05	30.50
33 05 63 00-0318 EA 36" x 72", 15,000 LB Design Load, Heavy Duty, Polymer Concrete Handhole Enclosure Cover .....	2,638.65	30.50
33 05 63 00-0319 EA 48" x 72", 15,000 LB Design Load, Heavy Duty, Polymer Concrete Handhole Enclosure Cover .....	4,014.49	30.50
33 05 63 00-0320 EA 48" x 96", 15,000 LB Design Load, Heavy Duty, Polymer Concrete Handhole Enclosure Cover .....	6,210.47	30.50
33 05 63 00-0321 EA 11" x 18", 22,500 LB Design Load, Extra Heavy Duty, Polymer Concrete Handhole Enclosure Cover .....	331.63	9.70
33 05 63 00-0322 EA 11" x 20", 22,500 LB Design Load, Extra Heavy Duty, Polymer Concrete Handhole Enclosure Cover .....	363.42	9.70
33 05 63 00-0323 EA 13" x 24", 22,500 LB Design Load, Extra Heavy Duty, Polymer Concrete Handhole Enclosure Cover .....	481.19	9.70
33 05 63 00-0324 EA 17" x 30", 22,500 LB Design Load, Extra Heavy Duty, Polymer Concrete Handhole Enclosure Cover .....	549.53	9.70
33 05 63 00-0325 EA 27" Round, 22,500 LB Design Load, Extra Heavy Duty, Polymer Concrete Handhole Enclosure Cover .....	955.96	9.70
33 05 63 00-0326 EA 24" x 24", 22,500 LB Design Load, Extra Heavy Duty, Polymer Concrete Handhole Enclosure Cover .....	688.18	14.55
33 05 63 00-0327 EA 24" x 36", 22,500 LB Design Load, Extra Heavy Duty, Polymer Concrete Handhole Enclosure Cover .....	945.49	14.55
33 05 63 00-0328 EA 39" Round, 22,500 LB Design Load, Extra Heavy Duty, Polymer Concrete Handhole Enclosure Cover .....	1,470.78	16.97
33 05 63 00-0329 EA 36" x 36", 22,500 LB Design Load, Extra Heavy Duty, Polymer Concrete Handhole Enclosure Cover .....	1,683.84	23.72
33 05 63 00-0330 EA 30" x 48", 22,500 LB Design Load, Extra Heavy Duty, Polymer Concrete Handhole Enclosure Cover .....	1,750.32	45.18
33 05 63 00-0331 EA 30" x 60", 22,500 LB Design Load, Extra Heavy Duty, Polymer Concrete Handhole Enclosure Cover .....	2,025.24	30.50
33 05 63 00-0332 EA 36" x 60", 22,500 LB Design Load, Extra Heavy Duty, Polymer Concrete Handhole Enclosure Cover .....	2,834.34	30.50
33 05 63 00-0333 EA 48" x 48", 22,500 LB Design Load, Extra Heavy Duty, Polymer Concrete Handhole Enclosure Cover .....	3,972.38	30.50
33 05 63 00-0334 EA 36" x 72", 22,500 LB Design Load, Extra Heavy Duty, Polymer Concrete Handhole Enclosure Cover .....	3,542.89	30.50
33 05 63 00-0335 EA 48" x 72", 22,500 LB Design Load, Extra Heavy Duty, Polymer Concrete Handhole Enclosure Cover .....	5,882.87	30.50
33 05 63 00-0336 EA 48" x 96", 22,500 LB Design Load, Extra Heavy Duty, Polymer Concrete Handhole Enclosure Cover .....	9,089.84	30.50
<b>33 05 63 00-0337 Polymer Concrete Handhole Enclosure Covers With Gaskets (33 05 63 00-0278)</b>		
33 05 63 00-0338 EA 12" x 12", 5,000 LB Design Load, Standard Duty, Polymer Concrete Handhole Enclosure Cover With Gasket .....	178.90	9.71
33 05 63 00-0339 EA 8" x 18", 5,000 LB Design Load, Standard Duty, Polymer Concrete Handhole Enclosure Cover With Gasket .....	189.55	9.71
33 05 63 00-0340 EA 11" x 18", 5,000 LB Design Load, Standard Duty, Polymer Concrete Handhole Enclosure Cover With Gasket .....	193.02	9.70
33 05 63 00-0341 EA 13" x 24", 5,000 LB Design Load, Standard Duty, Polymer Concrete Handhole Enclosure Cover With Gasket .....	194.33	9.70
33 05 63 00-0342 EA 17" x 30", 5,000 LB Design Load, Standard Duty, Polymer Concrete Handhole Enclosure Cover With Gasket .....	225.54	9.70
33 05 63 00-0343 EA 10" x 15", 8,000 LB Design Load, Standard Duty, Polymer Concrete Handhole Enclosure Cover With Gasket .....	141.10	9.70
33 05 63 00-0344 EA 11" x 18", 8,000 LB Design Load, Standard Duty, Polymer Concrete Handhole Enclosure Cover With Gasket .....	201.80	9.70
33 05 63 00-0345 EA 11" x 20", 8,000 LB Design Load, Standard Duty, Polymer Concrete Handhole Enclosure Cover With Gasket .....	203.75	9.70
33 05 63 00-0346 EA 13" x 24", 8,000 LB Design Load, Standard Duty, Polymer Concrete Handhole Enclosure Cover With Gasket .....	257.31	9.70
33 05 63 00-0347 EA 13" x 24", 8,000 LB Design Load, Standard Duty, Service Box, Polymer Concrete Handhole Enclosure Cover With Gasket .....	195.52	9.70
33 05 63 00-0348 EA 17" x 30", 8,000 LB Design Load, Standard Duty, Service Box, Polymer Concrete Handhole Enclosure Cover With Gasket .....	240.69	9.70
33 05 63 00-0349 EA 17" x 30", 8,000 LB Design Load, Standard Duty, Polymer Concrete Handhole Enclosure Cover With Gasket .....	304.64	9.70
33 05 63 00-0350 EA 24" x 24", 8,000 LB Design Load, Standard Duty, Polymer Concrete Handhole Enclosure Cover With Gasket .....	421.22	14.55
33 05 63 00-0351 EA 24" x 36", 8,000 LB Design Load, Standard Duty, Polymer Concrete Handhole Enclosure Cover With Gasket .....	533.17	14.55
33 05 63 00-0352 EA 30" x 48", 8,000 LB Design Load, Standard Duty, Polymer Concrete Handhole Enclosure Cover With Gasket .....	998.42	45.18
33 05 63 00-0353 EA 6" x 8", 15,000 LB Design Load, Heavy Duty, Polymer Concrete Handhole Enclosure Cover With Gasket .....	116.14	9.71
33 05 63 00-0354 EA 8" x 8", 15,000 LB Design Load, Heavy Duty, Polymer Concrete Handhole Enclosure Cover With Gasket .....	186.21	9.71
33 05 63 00-0355 EA 8" x 18", 15,000 LB Design Load, Heavy Duty, Polymer Concrete Handhole Enclosure Cover With Gasket .....	208.06	9.71
33 05 63 00-0356 EA 12" x 12", 15,000 LB Design Load, Heavy Duty, Polymer Concrete Handhole Enclosure Cover With Gasket .....	198.36	9.71
33 05 63 00-0357 EA 10" x 15", 15,000 LB Design Load, Heavy Duty, Polymer Concrete Handhole Enclosure Cover With Gasket .....	161.98	9.70
33 05 63 00-0358 EA 11" x 18", 15,000 LB Design Load, Heavy Duty, Polymer Concrete Handhole Enclosure Cover With Gasket .....	260.12	9.70
33 05 63 00-0359 EA 11" x 20", 15,000 LB Design Load, Heavy Duty, Polymer Concrete Handhole Enclosure Cover With Gasket .....	282.79	9.70
33 05 63 00-0360 EA 13" x 24", 15,000 LB Design Load, Heavy Duty, Polymer Concrete Handhole Enclosure Cover With Gasket .....	370.82	9.70



		<b>Utilities</b>	<b>33</b>	<b>CS</b>
		<b>Common Work Results for Utilities</b>	<b>33 05</b>	
		<b>Concrete Vaults and Chambers</b>	<b>33 05 63</b>	

MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
33 05 63 00-0361 EA 17" x 30", 15,000 LB Design Load, Heavy Duty, Polymer Concrete Handhole Enclosure Cover With Gasket.....	422.54	9.70
33 05 63 00-0362 EA 24" x 24", 15,000 LB Design Load, Heavy Duty, Polymer Concrete Handhole Enclosure Cover With Gasket.....	572.69	14.55
33 05 63 00-0363 EA 24" x 36", 15,000 LB Design Load, Heavy Duty, Polymer Concrete Handhole Enclosure Cover With Gasket.....	718.14	14.55
33 05 63 00-0364 EA 30" x 48", 15,000 LB Design Load, Heavy Duty, Polymer Concrete Handhole Enclosure Cover With Gasket.....	1,319.80	45.18
<b>33 05 63 00-0365 Polymer Concrete Handhole Enclosure Covers Without Bolts (33 05 63 00-0278)</b>		
33 05 63 00-0366 EA 6" x 9", 5,000 LB Design Load, Standard Duty, Polymer Concrete Handhole Enclosure Cover Without Bolts.....	92.05	9.71
33 05 63 00-0367 EA 7" x 13", 5,000 LB Design Load, Standard Duty, Polymer Concrete Handhole Enclosure Cover Without Bolts.....	110.89	9.71
33 05 63 00-0368 EA 12" x 12", 5,000 LB Design Load, Standard Duty, Polymer Concrete Handhole Enclosure Cover Without Bolts.....	136.27	9.71
33 05 63 00-0369 EA 8" x 18", 5,000 LB Design Load, Standard Duty, Polymer Concrete Handhole Enclosure Cover Without Bolts.....	147.55	9.71
33 05 63 00-0370 EA 11" x 18", 5,000 LB Design Load, Standard Duty, Polymer Concrete Handhole Enclosure Cover Without Bolts.....	147.25	9.70
33 05 63 00-0371 EA 13" x 24", 5,000 LB Design Load, Standard Duty, Polymer Concrete Handhole Enclosure Cover Without Bolts.....	176.15	9.70
33 05 63 00-0372 EA 17" x 30", 5,000 LB Design Load, Standard Duty, Polymer Concrete Handhole Enclosure Cover Without Bolts.....	204.56	9.70
33 05 63 00-0373 EA 24" x 36", 5,000 LB Design Load, Standard Duty, Polymer Concrete Handhole Enclosure Cover Without Bolts.....	503.35	14.55
33 05 63 00-0374 EA 30" x 48", 5,000 LB Design Load, Standard Duty, Polymer Concrete Handhole Enclosure Cover Without Bolts.....	944.50	45.18
33 05 63 00-0375 EA 30" x 59", 5,000 LB Design Load, Standard Duty, Polymer Concrete Handhole Enclosure Cover Without Bolts.....	1,421.34	30.50
33 05 63 00-0376 EA 30" x 60", 5,000 LB Design Load, Standard Duty, Polymer Concrete Handhole Enclosure Cover Without Bolts.....	1,237.65	30.50
33 05 63 00-0377 EA 48" x 48", 5,000 LB Design Load, Standard Duty, Polymer Concrete Handhole Enclosure Cover Without Bolts.....	1,858.73	30.50
33 05 63 00-0378 EA 36" x 60", 5,000 LB Design Load, Standard Duty, Polymer Concrete Handhole Enclosure Cover Without Bolts.....	1,793.05	30.50
33 05 63 00-0379 EA 36" x 72", 5,000 LB Design Load, Standard Duty, Polymer Concrete Handhole Enclosure Cover Without Bolts.....	2,148.64	30.50
33 05 63 00-0380 EA 48" x 72", 5,000 LB Design Load, Standard Duty, Polymer Concrete Handhole Enclosure Cover Without Bolts.....	2,298.03	30.50
33 05 63 00-0381 EA 48" x 96", 5,000 LB Design Load, Standard Duty, Polymer Concrete Handhole Enclosure Cover Without Bolts.....	3,683.33	30.50
33 05 63 00-0382 EA 10" x 15", 8,000 LB Design Load, Standard Duty, Polymer Concrete Handhole Enclosure Cover Without Bolts.....	125.93	9.70
33 05 63 00-0383 EA 10" x 16", 8,000 LB Design Load, Standard Duty, Polymer Concrete Handhole Enclosure Cover Without Bolts.....	122.79	9.70
33 05 63 00-0384 EA 11" x 20", 8,000 LB Design Load, Standard Duty, Polymer Concrete Handhole Enclosure Cover Without Bolts.....	184.96	9.70
33 05 63 00-0385 EA 11" x 21", 8,000 LB Design Load, Standard Duty, Polymer Concrete Handhole Enclosure Cover Without Bolts.....	204.00	9.70
33 05 63 00-0386 EA 13" x 24", 8,000 LB Design Load, Standard Duty, Polymer Concrete Handhole Enclosure Cover Without Bolts.....	231.90	9.70
33 05 63 00-0387 EA 13" x 24", 8,000 LB Design Load, Standard Duty, Service Box, Polymer Concrete Handhole Enclosure Cover Without Bolts.....	174.51	9.70
33 05 63 00-0388 EA 18" x 19", 8,000 LB Design Load, Standard Duty, Polymer Concrete Handhole Enclosure Cover Without Bolts.....	195.52	9.70
33 05 63 00-0389 EA 17" x 30", 8,000 LB Design Load, Standard Duty, Polymer Concrete Handhole Enclosure Cover Without Bolts.....	280.49	9.70
33 05 63 00-0390 EA 24" x 24", 8,000 LB Design Load, Standard Duty, Polymer Concrete Handhole Enclosure Cover Without Bolts.....	405.32	14.55
33 05 63 00-0391 EA 20" x 42", 8,000 LB Design Load, Standard Duty, Polymer Concrete Handhole Enclosure Cover Without Bolts.....	509.21	14.55
33 05 63 00-0392 EA 24" x 36", 8,000 LB Design Load, Standard Duty, Polymer Concrete Handhole Enclosure Cover Without Bolts.....	503.04	14.55
33 05 63 00-0393 EA 36" x 36", 8,000 LB Design Load, Standard Duty, Polymer Concrete Handhole Enclosure Cover Without Bolts.....	912.48	23.72
33 05 63 00-0394 EA 30" x 48", 8,000 LB Design Load, Standard Duty, Polymer Concrete Handhole Enclosure Cover Without Bolts.....	944.50	27.10
<b>33 05 63 00-0395 Overlapping, Polymer Concrete Handhole Enclosure Covers (33 05 63 00-0278)</b>		
33 05 63 00-0396 EA 30" x 60", 5,000 LB Design Load, Standard Duty, Overlapping, Polymer Concrete Handhole Enclosure Cover.....	1,480.51	30.50
33 05 63 00-0397 EA 36" x 60", 5,000 LB Design Load, Standard Duty, Overlapping, Polymer Concrete Handhole Enclosure Cover.....	2,150.84	30.50
33 05 63 00-0398 EA 30" x 48", 8,000 LB Design Load, Standard Duty, Overlapping, Polymer Concrete Handhole Enclosure Cover.....	1,241.39	45.18
33 05 63 00-0399 EA 30" x 48", 15,000 LB Design Load, Heavy Duty, Overlapping, Polymer Concrete Handhole Enclosure Cover.....	1,650.60	45.18
33 05 63 00-0400 EA 30" x 60", 15,000 LB Design Load, Heavy Duty, Overlapping, Polymer Concrete Handhole Enclosure Cover.....	1,761.98	30.50
33 05 63 00-0401 EA 36" x 60", 15,000 LB Design Load, Heavy Duty, Overlapping, Polymer Concrete Handhole Enclosure Cover.....	2,407.12	30.50
<b>33 05 63 00-0402 Split, Polymer Concrete Handhole Enclosure Covers (33 05 63 00-0278)</b>		
33 05 63 00-0403 EA 24" x 36", 8,000 LB Design Load, Standard Duty, Split, Polymer Concrete Handhole Enclosure Cover.....	572.89	14.55
33 05 63 00-0404 EA 36" x 36", 8,000 LB Design Load, Standard Duty, Split, Polymer Concrete Handhole Enclosure Cover.....	1,071.80	23.72
33 05 63 00-0405 EA 30" x 48", 8,000 LB Design Load, Standard Duty, Split, Polymer Concrete Handhole Enclosure Cover.....	1,119.46	45.18
33 05 63 00-0406 EA 6" x 8", 15,000 LB Design Load, Heavy Duty, Split, Polymer Concrete Handhole Enclosure Cover.....	86.79	9.71
33 05 63 00-0407 EA 8" x 8", 15,000 LB Design Load, Heavy Duty, Split, Polymer Concrete Handhole Enclosure Cover.....	148.55	9.71
33 05 63 00-0408 EA 12" x 12", 15,000 LB Design Load, Heavy Duty, Split, Polymer Concrete Handhole Enclosure Cover.....	164.17	9.71
33 05 63 00-0409 EA 8" x 18", 15,000 LB Design Load, Heavy Duty, Split, Polymer Concrete Handhole Enclosure Cover.....	174.51	9.71
33 05 63 00-0410 EA 10" x 15", 15,000 LB Design Load, Heavy Duty, Split, Polymer Concrete Handhole Enclosure Cover.....	152.25	9.70
33 05 63 00-0411 EA 11" x 20", 15,000 LB Design Load, Heavy Duty, Split, Polymer Concrete Handhole Enclosure Cover.....	273.60	9.70
33 05 63 00-0412 EA 24" x 36", 15,000 LB Design Load, Heavy Duty, Split, Polymer Concrete Handhole Enclosure Cover.....	771.28	14.55
33 05 63 00-0413 EA 36" x 36", 15,000 LB Design Load, Heavy Duty, Split, Polymer Concrete Handhole Enclosure Cover.....	1,429.59	23.72
33 05 63 00-0414 EA 30" x 48", 15,000 LB Design Load, Heavy Duty, Split, Polymer Concrete Handhole Enclosure Cover.....	1,496.98	45.18
<b>33 05 63 00-0415 Precast Concrete Handholes With Steel Cover (33 05 63 00-0056)</b>		
Note: 8000 To 12000 pound traffic rated top. Includes cover stamped with utility (Electrical, Sewer, Water, Etc.).		
33 05 63 00-0416 EA 12" x 12" x 12" Precast Concrete Handholes With Steel Cover.....	842.88	243.10
Note: 8000 To 12000 pound traffic rated top.		
For 15,000 to 22,500 Pound Traffic Rated Top, Add		
33 05 63 00-0417 EA 12" x 24" x 21" Precast Concrete Handholes With Steel Cover.....	1,409.63	364.66
Note: 8000 To 12000 pound traffic rated top.		
For 15,000 to 22,500 Pound Traffic Rated Top, Add		
33 05 63 00-0418 EA 18" x 30" x 18" Precast Concrete Handholes With Steel Cover.....	1,715.96	486.21
Note: 8000 To 12000 pound traffic rated top.		
For 15,000 to 22,500 Pound Traffic Rated Top, Add		
33 05 63 00-0419 EA 24" x 24" x 24" Precast Concrete Handholes With Steel Cover.....	1,779.42	486.21
Note: 8000 To 12000 pound traffic rated top.		
For 15,000 to 22,500 Pound Traffic Rated Top, Add		
33 05 63 00-0420 EA 24" x 24" x 30" Precast Concrete Handholes With Steel Cover.....	2,097.82	607.75
Note: 8000 To 12000 pound traffic rated top.		
For 15,000 to 22,500 Pound Traffic Rated Top, Add		

**33 Utilities****33 05 Common Work Results for Utilities****33 05 63 Concrete Vaults and Chambers**

MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
33 05 63 00-0421 EA 30" x 36" x 30" Precast Concrete Handholes With Steel Cover ..... Note: 8000 To 12000 pound traffic rated top.	2,203.46	607.75
For 15,000 to 22,500 Pound Traffic Rated Top, Add	314.26	
33 05 63 00-0422 EA 36" x 36" x 48" Precast Concrete Handholes With Steel Cover ..... Note: 8000 To 12000 pound traffic rated top.	2,550.25	729.30
For 15,000 to 22,500 Pound Traffic Rated Top, Add	367.14	
33 05 63 00-0423 EA 48" x 48" x 48" Precast Concrete Handholes With Steel Cover ..... Note: 8000 To 12000 pound traffic rated top.	2,930.37	850.86
For 15,000 to 22,500 Pound Traffic Rated Top, Add	513.37	
33 05 63 00-0424 EA 48" x 72" x 36" Precast Concrete Handholes With Steel Cover ..... Note: 8000 To 12000 pound traffic rated top.	2,863.18	729.30
For 15,000 to 22,500 Pound Traffic Rated Top, Add	556.46	
33 05 63 00-0425 EA 54" x 38" x 24" Precast Concrete Handholes With Steel Cover ..... Note: 8000 To 12000 pound traffic rated top.	2,890.10	729.30
For 15,000 to 22,500 Pound Traffic Rated Top, Add	386.26	
33 05 63 00-0426 EA 6" Diameter Precast Concrete Handholes With Steel Cover ..... Note: 8000 To 12000 pound traffic rated top.	670.60	243.10
For 15,000 to 22,500 Pound Traffic Rated Top, Add	15.00	
33 05 63 00-0427 EA 9" Diameter Precast Concrete Handholes With Steel Cover ..... Note: 8000 To 12000 pound traffic rated top.	788.06	273.49
For 15,000 to 22,500 Pound Traffic Rated Top, Add	15.00	
33 05 63 00-0428 EA 12" Diameter Precast Concrete Handholes With Steel Cover ..... Note: 8000 To 12000 pound traffic rated top.	962.19	303.88
For 15,000 to 22,500 Pound Traffic Rated Top, Add	15.00	

**33 05 81 Metallic Castings for Utility Structures (33 05)****33 05 81 00-0001 Manhole Covers And Frames (33 05 81)**

Note: Includes moisture-tight masonry joints and waterproof grouting.

**33 05 81 00-0002 Regular Manhole Covers And Frames (33 05 81 00-0001)**

33 05 81 00-0003 EA 24" Square, Gray Iron, Manhole Cover With Frame .....	1,665.74	110.40
33 05 81 00-0004 EA 24" Diameter REXUF D400, Ductile Iron Manhole Cover And Frame, County Standard .....	1,250.79	110.40

**33 05 81 00-0005 Removal And Reinstallation Of Manhole Cover And Frame (33 05 81 00-0001)**

Note: Includes surrounding asphalt removal and repair. Excludes saw cutting.

33 05 81 00-0006 EA Removal And Reinstallation Of Manhole Cover And Frame .....	398.75	
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**33 05 81 00-0007 Rainguard Inflow Protectors (33 05 81 00-0001)**

33 05 81 00-0008 EA 18" Diameter Acrylonitrile Butadiene Styrene (ABS) Rainguard Inflow Protectors .....	128.31	20.70
33 05 81 00-0009 EA 22" Diameter Acrylonitrile Butadiene Styrene (ABS) Rainguard Inflow Protectors .....	150.62	20.70
33 05 81 00-0010 EA 24" Diameter Acrylonitrile Butadiene Styrene (ABS) Rainguard Inflow Protectors .....	180.04	24.85
33 05 81 00-0011 EA 26" Diameter Acrylonitrile Butadiene Styrene (ABS) Rainguard Inflow Protectors .....	194.14	24.85
33 05 81 00-0012 EA 30" Diameter Acrylonitrile Butadiene Styrene (ABS) Rainguard Inflow Protectors .....	242.11	28.99
33 05 81 00-0013 EA 32" Diameter Acrylonitrile Butadiene Styrene (ABS) Rainguard Inflow Protectors .....	259.42	28.99

**33 05 84 Accessories for Utility Structures (33 05)**

See CSI section 31 23 16 00-0000 for excavation, 31 23 16 36-0016 for backfill.

**33 05 84 00-0001 Manhole Accessories (33 05 84)****33 05 84 00-0002 Precast Concrete Manhole Tops (33 05 84 00-0001)****33 05 84 00-0003 Precast Concrete Manhole Slab Tops (33 05 84 00-0002)**

33 05 84 00-0004 EA 3' Diameter x 8" Thick Precast Manhole Top Slab .....	574.15	74.59
33 05 84 00-0005 EA 4' Diameter x 8" Thick Precast Manhole Top Slab .....	813.32	80.56
33 05 84 00-0006 EA 5' Diameter x 8" Thick Precast Manhole Top Slab .....	1,110.65	86.53
33 05 84 00-0007 EA 6' Diameter x 8" Thick Precast Manhole Top Slab .....	1,334.67	92.49

**33 05 84 00-0008 Precast Concrete Manhole Cone Tops (33 05 84 00-0002)**

33 05 84 00-0009 EA 3' Diameter x 8" Thick Precast Manhole Top Cone .....	924.53	93.24
33 05 84 00-0010 EA 3'-6" Diameter x 8" Thick Precast Manhole Top Cone .....	1,031.37	96.97
33 05 84 00-0011 EA 4' Diameter x 8" Thick Precast Manhole Top Cone .....	1,138.24	100.70
33 05 84 00-0012 EA 5' Diameter x 8" Thick Precast Manhole Top Cone .....	1,346.95	106.92
33 05 84 00-0013 EA 6' Diameter x 8" Thick Precast Manhole Top Cone .....	1,560.65	114.37
33 05 84 00-0014 EA 7' Diameter x 8" Thick Precast Manhole Top Cone .....	2,499.22	121.83
33 05 84 00-0015 EA 8' Diameter x 10" Thick Precast Manhole Top Cone .....	3,147.06	134.27

**33 05 84 00-0016 Precast Concrete Manhole Reducer Slabs (33 05 84 00-0002)**

33 05 84 00-0017 EA 5' Diameter To 4' Diameter, Precast Concrete Manhole Reducer Slab .....	1,229.75	86.53
33 05 84 00-0018 EA 6' Diameter To 4' Diameter, Precast Concrete Manhole Reducer Slab .....	1,591.90	92.49
33 05 84 00-0019 EA 7' Diameter To 4' Diameter, Precast Concrete Manhole Reducer Slab .....	2,114.83	92.49
33 05 84 00-0020 EA 8' Diameter To 4' Diameter, Precast Concrete Manhole Reducer Slab .....	3,371.27	92.49
33 05 84 00-0021 EA 10' Diameter To 4' Diameter, Precast Concrete Manhole Reducer Slab .....	4,348.74	92.49
33 05 84 00-0022 EA 12' Diameter To 4' Diameter, Precast Concrete Manhole Reducer Slab .....	6,317.10	92.49



		<b>Utilities</b>	<b>33</b>	<b>CS</b>
		<b>Common Work Results for Utilities</b>	<b>33 05</b>	
		<b>Accessories for Utility Structures</b>	<b>33 05 84</b>	

MINOR CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
33 05 84 00-0023		Pipe To Manhole Connector (33 05 84 00-0001)		
33 05 84 00-0024		Ethylene Propylene Diene Monomer (EPDM) Pipe To Manhole Boot Connectors (33 05 84 00-0023)		
33 05 84 00-0025	EA	4" Ethylene Propylene Diene Monomer (EPDM) Pipe To Manhole Boot Connector .....	94.52	
33 05 84 00-0026	EA	6" Ethylene Propylene Diene Monomer (EPDM) Pipe To Manhole Boot Connector .....	133.47	
33 05 84 00-0027	EA	8" Ethylene Propylene Diene Monomer (EPDM) Pipe To Manhole Boot Connector .....	150.75	
33 05 84 00-0028	EA	10" Ethylene Propylene Diene Monomer (EPDM) Pipe To Manhole Boot Connector .....	219.13	
33 05 84 00-0029	EA	12" Ethylene Propylene Diene Monomer (EPDM) Pipe To Manhole Boot Connector .....	302.57	
33 05 84 00-0030	EA	15" Ethylene Propylene Diene Monomer (EPDM) Pipe To Manhole Boot Connector .....	403.87	
33 05 84 00-0031	EA	18" Ethylene Propylene Diene Monomer (EPDM) Pipe To Manhole Boot Connector .....	706.49	
33 05 84 00-0032	EA	21" Ethylene Propylene Diene Monomer (EPDM) Pipe To Manhole Boot Connector .....	976.10	
33 05 84 00-0033	EA	24" Ethylene Propylene Diene Monomer (EPDM) Pipe To Manhole Boot Connector .....	1,514.67	
33 05 84 00-0034	EA	27" Ethylene Propylene Diene Monomer (EPDM) Pipe To Manhole Boot Connector .....	1,791.12	
33 05 84 00-0035		Elastomeric Polyvinyl Chloride (PVC) Flexible Manhole Adapter And Grout (33 05 84 00-0023) Note: Fernco CMA.		
33 05 84 00-0036	EA	4" Elastomeric Polyvinyl Chloride (PVC) Flexible Manhole Adapter And Grout.....	105.55	
33 05 84 00-0037	EA	6" Elastomeric Polyvinyl Chloride (PVC) Flexible Manhole Adapter And Grout.....	146.92	
33 05 84 00-0038	EA	8" Elastomeric Polyvinyl Chloride (PVC) Flexible Manhole Adapter And Grout.....	185.75	
33 05 84 00-0039	EA	10" Elastomeric Polyvinyl Chloride (PVC) Flexible Manhole Adapter And Grout.....	224.37	
33 05 84 00-0040	EA	12" Elastomeric Polyvinyl Chloride (PVC) Flexible Manhole Adapter And Grout.....	260.23	
33 05 84 00-0041		Brick And Grout Pipe To Manhole Connector (33 05 84 00-0023)		
33 05 84 00-0042	EA	Seal Gap Between Pipe And Structure With Brick And Grout .....	273.20	
33 05 84 00-0043		Inverts For Manholes (33 05 84 00-0001)		
33 05 84 00-0044	EA	Single Channel Concrete Invert For Manholes.....	477.63	
33 05 84 00-0045	EA	Double Channel Concrete Invert For Manholes.....	678.29	
33 05 84 00-0046	EA	Triple Channel Concrete Invert For Manholes.....	917.22	
33 05 84 00-0047	EA	Quad Channel Concrete Invert For Manholes.....	1,156.06	
33 05 84 00-0048	EA	Single Channel Brick Invert For Manholes.....	616.78	
33 05 84 00-0049	EA	Double Channel Brick Invert For Manholes.....	923.47	
33 05 84 00-0050	EA	Triple Channel Brick Invert For Manholes.....	1,235.45	
33 05 84 00-0051	EA	Quad Channel Brick Invert For Manholes.....	1,543.78	
33 05 84 00-0052		Protective Coating For New Manholes (33 05 84 00-0001)		
33 05 84 00-0053		Polyurethane Protective Coating For New Manholes (33 05 84 00-0052)		
33 05 84 00-0054	VLF	60 Mil Polyurethane Coating Of 3' Diameter Manhole Interior .....	211.95	
		For 80 Mil Material, Add .....	30.95	
		For 100 Mil Material, Add .....	61.90	
		For 125 Mil Material, Add .....	97.71	
		For 150 Mil Material, Add .....	133.52	
		For 200 Mil Material, Add .....	197.45	
		For 2 To 5 Manholes, Deduct .....	-14.44	
		For 6 To 10 Manholes, Deduct .....	-23.58	
		For >10 Manholes, Deduct .....	-47.16	
33 05 84 00-0055	VLF	60 Mil Polyurethane Coating Of 3-1/2' Diameter Manhole Interior.....	255.88	
		For 80 Mil Material, Add .....	36.77	
		For 100 Mil Material, Add .....	73.54	
		For 125 Mil Material, Add .....	115.98	
		For 150 Mil Material, Add .....	158.42	
		For 200 Mil Material, Add .....	233.92	
		For 2 To 5 Manholes, Deduct .....	-17.49	
		For 6 To 10 Manholes, Deduct .....	-28.58	
		For >10 Manholes, Deduct .....	-57.17	
33 05 84 00-0056	VLF	60 Mil Polyurethane Coating Of 4' Diameter Manhole Interior .....	282.59	
		For 80 Mil Material, Add .....	41.27	
		For 100 Mil Material, Add .....	82.53	
		For 125 Mil Material, Add .....	130.27	
		For 150 Mil Material, Add .....	178.02	
		For 200 Mil Material, Add .....	263.26	
		For 2 To 5 Manholes, Deduct .....	-19.25	
		For 6 To 10 Manholes, Deduct .....	-31.44	
		For >10 Manholes, Deduct .....	-62.88	
33 05 84 00-0057	VLF	60 Mil Polyurethane Coating Of 5' Diameter Manhole Interior.....	353.31	
		For 80 Mil Material, Add .....	51.61	
		For 100 Mil Material, Add .....	103.21	
		For 125 Mil Material, Add .....	162.92	
		For 150 Mil Material, Add .....	222.62	
		For 200 Mil Material, Add .....	329.22	
		For 2 To 5 Manholes, Deduct .....	-24.07	
		For 6 To 10 Manholes, Deduct .....	-39.30	
		For >10 Manholes, Deduct .....	-78.61	

**33 Utilities****33 05 Common Work Results for Utilities****33 05 84 Accessories for Utility Structures**

MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
33 05 84 00-0058 VLF 60 Mil Polyurethane Coating Of 6' Diameter Manhole Interior ..... For 80 Mil Material, Add ..... For 100 Mil Material, Add ..... For 125 Mil Material, Add ..... For 150 Mil Material, Add ..... For 200 Mil Material, Add ..... For 2 To 5 Manholes, Deduct ..... For 6 To 10 Manholes, Deduct ..... For >10 Manholes, Deduct .....	410.30 60.90 121.80 192.42 263.03 389.58 -27.86 -45.46 -90.91	
<b>33 05 84 00-0059 Polyvinyl Chloride (PVC) Liner</b> (33 05 84 00-0052) Note: For new manholes and shop applied.		
33 05 84 00-0060 VLF 3' Diameter Polyvinyl Chloride (PVC) Liner For New Manhole .....	274.01	
33 05 84 00-0061 VLF 3-1/2' Diameter Polyvinyl Chloride (PVC) Liner For New Manhole .....	335.89	
33 05 84 00-0062 VLF 4' Diameter Polyvinyl Chloride (PVC) Liner For New Manhole .....	409.90	
33 05 84 00-0063 VLF 5' Diameter Polyvinyl Chloride (PVC) Liner For New Manhole .....	514.76	
33 05 84 00-0064 VLF 6' Diameter Polyvinyl Chloride (PVC) Liner For New Manhole .....	619.61	
33 05 84 00-0065 SF Polyvinyl Chloride (PVC) Liner At Structures .....	37.09	
<b>33 05 84 00-0066 Concrete Grade Extensions/Grade Rings</b> (33 05 84 00-0001)		
<b>33 05 84 00-0067 18" Diameter, Concrete Grade Extensions/Grade Rings</b> (33 05 84 00-0066)		
33 05 84 00-0068 EA 4" Rise, 18" Diameter, Concrete Grade Extensions/Grade Rings.....	84.48	
33 05 84 00-0069 EA 6" Rise, 18" Diameter, Concrete Grade Extensions/Grade Ring.....	92.43	
33 05 84 00-0070 EA 8" Rise, 18" Diameter, Concrete Grade Extensions/Grade Ring.....	100.38	
33 05 84 00-0071 EA 10" Rise, 18" Diameter, Concrete Grade Extensions/Grade Ring.....	108.33	
<b>33 05 84 00-0072 24" Diameter, Concrete Grade Extensions/Grade Rings</b> (33 05 84 00-0066)		
33 05 84 00-0073 EA 4" Rise, 24" Diameter, Concrete Grade Extensions/Grade Ring.....	94.89	
33 05 84 00-0074 EA 6" Rise, 24" Diameter, Concrete Grade Extensions/Grade Ring.....	103.92	
33 05 84 00-0075 EA 8" Rise, 24" Diameter, Concrete Grade Extensions/Grade Ring.....	112.95	
33 05 84 00-0076 EA 10" Rise, 24" Diameter, Concrete Grade Extensions/Grade Ring.....	121.98	
<b>33 05 84 00-0077 30" Diameter, Concrete Grade Extensions/Grade Rings</b> (33 05 84 00-0066)		
33 05 84 00-0078 EA 4" Rise, 30" Diameter, Concrete Grade Extensions/Grade Ring.....	105.05	
33 05 84 00-0079 EA 6" Rise, 30" Diameter, Concrete Grade Extensions/Grade Ring.....	115.12	
33 05 84 00-0080 EA 8" Rise, 30" Diameter, Concrete Grade Extensions/Grade Ring.....	125.19	
33 05 84 00-0081 EA 10" Rise, 30" Diameter, Concrete Grade Extensions/Grade Ring.....	135.26	
<b>33 05 84 00-0082 Waste Water Collection System Taps</b> (33 05 84) Note: For tapping existing structures only. Includes grout.		
<b>33 05 84 00-0083 Brick Manhole Taps</b> (33 05 84 00-0082)		
33 05 84 00-0084 EA 4" Tap In 6" Brick Manhole.....	507.06	
33 05 84 00-0085 EA 6" Tap In 6" Brick Manhole.....	566.70	
33 05 84 00-0086 EA 8" Tap In 6" Brick Manhole.....	625.28	
33 05 84 00-0087 EA 10" Tap In 6" Brick Manhole.....	683.75	
33 05 84 00-0088 EA 12" Tap In 6" Brick Manhole.....	754.03	
33 05 84 00-0089 EA 15" Tap In 6" Brick Manhole.....	812.37	
<b>33 05 84 00-0090 Precast Concrete Manhole Tap</b> (33 05 84 00-0082)		
33 05 84 00-0091 EA 4" Tap In Existing Precast Concrete Manhole.....	747.92	
33 05 84 00-0092 EA 6" Tap In Existing Precast Concrete Manhole.....	837.39	
33 05 84 00-0093 EA 8" Tap In Existing Precast Concrete Manhole.....	937.12	
33 05 84 00-0094 EA 10" Tap In Existing Precast Concrete Manhole.....	1,024.83	
33 05 84 00-0095 EA 12" Tap In Existing Precast Concrete Manhole.....	1,112.35	
33 05 84 00-0096 EA 15" Tap In Existing Precast Concrete Manhole.....	1,201.99	
33 05 84 00-0097 EA 18" Tap In Existing Precast Concrete Manhole.....	1,386.21	
33 05 84 00-0098 EA 24" Tap In Existing Precast Concrete Manhole.....	1,783.74	
<b>33 05 97 Identification and Signage for Utilities</b> (33 05)		
<b>33 05 97 16 Markers for Utility Identification</b> (33 05 97)		
<b>33 05 97 16-0001 Reflective Sheeting Delineators</b> (33 05 97 16)		
33 05 97 16-0002 EA Delineator, Single Unit One Way On Post, 3" Diameter or 3" x 3" Square.....	41.79	
33 05 97 16-0003 EA Delineator, Single Unit Back To Back On Post, 3" Diameter or 3" x 3" Square.....	44.01	
33 05 97 16-0004 EA Delineator, Single Unit Two Way On Post, 3" Diameter or 3" x 3" Square.....	48.44	
33 05 97 16-0005 EA Delineator, Single Unit Three Way On Post, 3" Diameter or 3" x 3" Square .....	50.66	
33 05 97 16-0006 EA Delineator, Single Unit Four Way On Post, 3" Diameter or 3" x 3" Square .....	52.87	
33 05 97 16-0007 EA Delineator, Double Unit On Post, 3" Diameter or 3" x 3" Square .....	46.78	
33 05 97 16-0008 EA Delineator, Single Unit Band Or Bracket Mounted, 3" Diameter or 3" x 3" Square .....	42.35	
33 05 97 16-0009 EA Delineator, Double Unit Band Or Bracket Mounted, 3" Diameter or 3" x 3" Square .....	44.56	
33 05 97 16-0010 EA Delineator, Single Unit, Back To Back, Band Or Bracket Mounted, 3" Diameter or 3" x 3" Square .....	44.56	
33 05 97 16-0011 EA Delineator, Single Unit, Two Way, Band Or Bracket Mounted, 3" Diameter or 3" x 3" Square .....	46.78	





		<b>Utilities</b>	<b>33</b>	<b>CS</b>
		<b>Common Work Results for Utilities</b>	<b>33 05</b>	
		<b>Identification and Signage for Utilities</b>	<b>33 05 97</b>	

MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
33 05 97 16-0012 EA Delineator, Single Unit, Three Way, Band Or Bracket Mounted, 3" Diameter or 3" x 3" Square.....	49.00	
33 05 97 16-0013 EA Delineator, Single Unit, Four Way, Band Or Bracket Mounted, 3" Diameter or 3" x 3" Square.....	51.21	
33 05 97 16-0014 EA Delineator, White, Single Unit, One Way On 48" Ground Mounted (Driven) Flexible Post Or 30" Surface Mounted, 3" Diameter or 3" x 3" Square.....	71.16	
33 05 97 16-0015 EA Delineator, Single Unit Three Way On 48" Ground Mounted (Driven) Flexible Post Or 30" Surface Mounted, 3" Diameter or 3" x 3" Square.....	50.66	
33 05 97 16-0016 EA Delineator, White, Double Unit On 48" Ground Mounted (Driven) Flexible Post Or 30" Surface Mounted, 3" Diameter or 3" x 3" Square.....	73.93	
33 05 97 16-0017 EA Delineator, Yellow, Single Unit, One Way On 48" Ground Mounted (Driven) Flexible Post Or 30" Surface Mounted, 3" Diameter or 3" x 3" Square.....	71.16	
33 05 97 16-0018 EA Delineator, Yellow, Single Unit, Back To Back On 48" Ground Mounted (Driven) Flexible Post Or 30" Surface Mounted, 3" Diameter or 3" x 3" Square.....	73.38	
33 05 97 16-0019 EA Delineator, Yellow, Double Unit, On 48" Ground Mounted (Driven) Flexible Post Or 30" Surface Mounted, 3" Diameter or 3" x 3" Square.....	73.93	
33 05 97 16-0020 EA Relocate Delineator .....	55.52	
<b>33 05 97 16-0021 Reference Markers</b> (33 05 97 16)		
33 05 97 16-0022 EA Reference Marker, 4' Mounting Height .....	93.84	
33 05 97 16-0023 EA Reference Marker, 7' Mounting Height .....	118.33	
33 05 97 16-0024 EA Reference Marker, Band Or Bracket Mounted.....	111.18	
33 05 97 16-0025 EA Reference Marker, Furnish Panel Only.....	105.10	
33 05 97 16-0026 EA Relocate Reference Marker .....	55.52	
<b>33 05 97 16-0027 Object Markers</b> (33 05 97 16)		
33 05 97 16-0028 EA Object Marker, Type L-1 .....	88.18	
33 05 97 16-0029 EA Object Marker, Type L-2 .....	81.04	
33 05 97 16-0030 EA Object Marker, Type K-1.....	93.89	
33 05 97 16-0031 EA Object Marker, Type K-2.....	86.75	
33 05 97 16-0032 EA Object Marker, Type Q .....	58.20	

## 33 10 Water Utilities (33)

### 33 14 Water Utility Transmission and Distribution (33 10)

#### 33 14 11 Water Utility Transmission Piping (33 14)

See CSI section 33 14 13 00-0000 for water utility transmission piping.

#### 33 14 13 Public Water Utility Distribution Piping (33 14)

Note: Piping includes hydrostatic testing, disinfecting and warning tape. Excludes excavation and backfill. See CSI section 31 23 16 00-0000 for excavation, 31 23 16 36-0016 for backfill.

#### 33 14 13 23 Plastic Public Water Utility Distribution Piping (33 14 13)

##### 33 14 13 23-0001 Class 200, SDR 21 Polyvinyl Chloride (PVC) Pressure Piping (33 14 13 23)

##### 33 14 13 23-0002 Class 200, SDR 21 Polyvinyl Chloride (PVC) Pressure Pipe (33 14 13 23-0001)

33 14 13 23-0003 LF 3/4" Class 200, SDR 21 Polyvinyl Chloride (PVC) Pressure Pipe .....	2.59	0.94
For >1,000, Deduct .....	-0.13	
For Coloring Of Polyvinyl Chloride (PVC) Pipe For Reclaimed Water Identification, Add .....	0.04	
33 14 13 23-0004 LF 1" Class 200, SDR 21 Polyvinyl Chloride (PVC) Pressure Pipe .....	2.85	1.00
For >1,000, Deduct .....	-0.14	
For Coloring Of Polyvinyl Chloride (PVC) Pipe For Reclaimed Water Identification, Add .....	0.05	
33 14 13 23-0005 LF 1-1/4" Class 200, SDR 21 Polyvinyl Chloride (PVC) Pressure Pipe .....	3.27	1.10
For >1,000, Deduct .....	-0.16	
For Coloring Of Polyvinyl Chloride (PVC) Pipe For Reclaimed Water Identification, Add .....	0.08	
33 14 13 23-0006 LF 1-1/2" Class 200, SDR 21 Polyvinyl Chloride (PVC) Pressure Pipe .....	3.75	1.21
For >1,000, Deduct .....	-0.19	
For Coloring Of Polyvinyl Chloride (PVC) Pipe For Reclaimed Water Identification, Add .....	0.11	
33 14 13 23-0007 LF 2" Class 200, SDR 21 Polyvinyl Chloride (PVC) Pressure Pipe .....	4.70	1.36
For >1,000, Deduct .....	-0.24	
For Coloring Of Polyvinyl Chloride (PVC) Pipe For Reclaimed Water Identification, Add .....	0.20	
33 14 13 23-0008 LF 2-1/2" Class 200, SDR 21 Polyvinyl Chloride (PVC) Pressure Pipe .....	5.94	1.55
For >1,000, Deduct .....	-0.30	
For Coloring Of Polyvinyl Chloride (PVC) Pipe For Reclaimed Water Identification, Add .....	0.31	
33 14 13 23-0009 LF 3" Class 200, SDR 21 Polyvinyl Chloride (PVC) Pressure Pipe .....	6.95	1.64
For >1,000, Deduct .....	-0.35	
For Coloring Of Polyvinyl Chloride (PVC) Pipe For Reclaimed Water Identification, Add .....	0.43	
33 14 13 23-0010 LF 4" Class 200, SDR 21 Polyvinyl Chloride (PVC) Pressure Pipe .....	9.70	2.03
For >1,000, Deduct .....	-0.49	
For Coloring Of Polyvinyl Chloride (PVC) Pipe For Reclaimed Water Identification, Add .....	0.70	
33 14 13 23-0011 LF 6" Class 200, SDR 21 Polyvinyl Chloride (PVC) Pressure Pipe .....	16.55	2.57
For >1,000, Deduct .....	-0.83	
For Coloring Of Polyvinyl Chloride (PVC) Pipe For Reclaimed Water Identification, Add .....	1.52	
33 14 13 23-0012 LF 8" Class 200, SDR 21 Polyvinyl Chloride (PVC) Pressure Pipe .....	26.80	3.86
For >1,000, Deduct .....	-1.34	
For Coloring Of Polyvinyl Chloride (PVC) Pipe For Reclaimed Water Identification, Add .....	2.57	
33 14 13 23-0013 LF 10" Class 200, SDR 21 Polyvinyl Chloride (PVC) Pressure Pipe .....	39.57	5.16
For >1,000, Deduct .....	-1.98	
For Coloring Of Polyvinyl Chloride (PVC) Pipe For Reclaimed Water Identification, Add .....	4.00	

**33 Utilities****33 10 Water Utilities****33 14 Water Utility Transmission and Distribution**

MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
33 14 13 23-0014 LF 12" Class 200, SDR 21 Polyvinyl Chloride (PVC) Pressure Pipe..... For >1,000, Deduct For Coloring Of Polyvinyl Chloride (PVC) Pipe For Reclaimed Water Identification, Add	54.93 -2.75 5.64	6.93
<b>33 14 13 23-0015 90 Degree Elbows, Class 200, SDR 21 Polyvinyl Chloride (PVC) (33 14 13 23-0001)</b>		
33 14 13 23-0016 EA 3/4", Class 200, SDR 21 Polyvinyl Chloride (PVC) 90 Degree Elbow.....	28.35	11.23
33 14 13 23-0017 EA 1", Class 200, SDR 21 Polyvinyl Chloride (PVC) 90 Degree Elbow.....	35.78	14.04
33 14 13 23-0018 EA 1-1/4", Class 200, SDR 21 Polyvinyl Chloride (PVC) 90 Degree Elbow .....	44.97	17.54
33 14 13 23-0019 EA 1-1/2", Class 200, SDR 21 Polyvinyl Chloride (PVC) 90 Degree Elbow .....	63.34	19.42
33 14 13 23-0020 EA 2", Class 200, SDR 21 Polyvinyl Chloride (PVC) 90 Degree Elbow.....	68.95	21.76
33 14 13 23-0021 EA 2-1/2", Class 200, SDR 21 Polyvinyl Chloride (PVC) 90 Degree Elbow .....	81.00	24.68
33 14 13 23-0022 EA 3", Class 200, SDR 21 Polyvinyl Chloride (PVC) 90 Degree Elbow.....	87.43	26.35
33 14 13 23-0023 EA 4", Class 200, SDR 21 Polyvinyl Chloride (PVC) 90 Degree Elbow.....	119.22	32.35
33 14 13 23-0024 EA 6", Class 200, SDR 21 Polyvinyl Chloride (PVC) 90 Degree Elbow.....	168.85	41.11
33 14 13 23-0025 EA 8", Class 200, SDR 21 Polyvinyl Chloride (PVC) 90 Degree Elbow.....	266.88	53.96
33 14 13 23-0026 EA 10", Class 200, SDR 21 Polyvinyl Chloride (PVC) 90 Degree Elbow.....	331.18	72.20
33 14 13 23-0027 EA 12", Class 200, SDR 21 Polyvinyl Chloride (PVC) 90 Degree Elbow.....	438.68	97.18
<b>33 14 13 23-0028 45 Degree Elbows, Class 200, SDR 21 Polyvinyl Chloride (PVC) (33 14 13 23-0001)</b>		
33 14 13 23-0029 EA 3/4" 45 Degree Elbow, Class 200, SDR 21 Polyvinyl Chloride (PVC).....	28.75	11.23
33 14 13 23-0030 EA 1" 45 Degree Elbow, Class 200, SDR 21 Polyvinyl Chloride (PVC).....	36.06	14.04
33 14 13 23-0031 EA 1-1/4" 45 Degree Elbow, Class 200, SDR 21 Polyvinyl Chloride (PVC).....	45.14	17.54
33 14 13 23-0032 EA 1-1/2" 45 Degree Elbow, Class 200, SDR 21 Polyvinyl Chloride (PVC).....	58.15	19.42
33 14 13 23-0033 EA 2" 45 Degree Elbow, Class 200, SDR 21 Polyvinyl Chloride (PVC).....	69.43	21.76
33 14 13 23-0034 EA 2-1/2" 45 Degree Elbow, Class 200, SDR 21 Polyvinyl Chloride (PVC).....	82.95	24.68
33 14 13 23-0035 EA 3" 45 Degree Elbow, Class 200, SDR 21 Polyvinyl Chloride (PVC).....	86.61	26.35
33 14 13 23-0036 EA 4" 45 Degree Elbow, Class 200, SDR 21 Polyvinyl Chloride (PVC).....	117.44	32.35
33 14 13 23-0037 EA 6" 45 Degree Elbow, Class 200, SDR 21 Polyvinyl Chloride (PVC).....	165.25	41.11
33 14 13 23-0038 EA 8" 45 Degree Elbow, Class 200, SDR 21 Polyvinyl Chloride (PVC).....	260.02	53.96
33 14 13 23-0039 EA 10" 45 Degree Elbow, Class 200, SDR 21 Polyvinyl Chloride (PVC).....	302.76	72.20
33 14 13 23-0040 EA 12" 45 Degree Elbow, Class 200, SDR 21 Polyvinyl Chloride (PVC).....	399.36	97.18
<b>33 14 13 23-0041 Tees Or Wyes, Class 200, SDR 21 Polyvinyl Chloride (PVC) (33 14 13 23-0001)</b>		
33 14 13 23-0042 EA 3/4" Tees Or Wyes, Class 200 SDR 21 Polyvinyl Chloride (PVC) .....	42.51	16.84
33 14 13 23-0043 EA 1" Tees Or Wyes, Class 200 SDR 21 Polyvinyl Chloride (PVC) .....	53.59	21.17
33 14 13 23-0044 EA 1-1/4" Tees Or Wyes, Class 200 SDR 21 Polyvinyl Chloride (PVC) .....	67.11	26.43
33 14 13 23-0045 EA 1-1/2" Tees Or Wyes, Class 200 SDR 21 Polyvinyl Chloride (PVC) .....	88.64	29.25
33 14 13 23-0046 EA 2" Tees Or Wyes, Class 200 SDR 21 Polyvinyl Chloride (PVC) .....	100.48	32.52
33 14 13 23-0047 EA 2-1/2" Tees Or Wyes, Class 200 SDR 21 Polyvinyl Chloride (PVC) .....	116.44	37.09
33 14 13 23-0048 EA 3" Tees Or Wyes, Class 200 SDR 21 Polyvinyl Chloride (PVC) .....	133.36	39.41
33 14 13 23-0049 EA 4" Tees Or Wyes, Class 200 SDR 21 Polyvinyl Chloride (PVC) .....	173.55	48.58
33 14 13 23-0050 EA 6" Tees Or Wyes, Class 200 SDR 21 Polyvinyl Chloride (PVC) .....	278.10	61.76
33 14 13 23-0051 EA 8" Tees Or Wyes, Class 200 SDR 21 Polyvinyl Chloride (PVC) .....	410.86	80.95
33 14 13 23-0052 EA 10" Tees Or Wyes, Class 200 SDR 21 Polyvinyl Chloride (PVC) .....	519.59	123.69
33 14 13 23-0053 EA 12" Tees Or Wyes, Class 200 SDR 21 Polyvinyl Chloride (PVC) .....	657.65	166.44
<b>33 14 13 23-0054 Couplings, Class 200, SDR 21 Polyvinyl Chloride (PVC) (33 14 13 23-0001)</b>		
33 14 13 23-0055 EA 3/4" Coupling, Class 200 SDR 21 Polyvinyl Chloride (PVC).....	18.96	7.49
33 14 13 23-0056 EA 1" Coupling, Class 200 SDR 21 Polyvinyl Chloride (PVC) .....	25.58	10.06
33 14 13 23-0057 EA 1-1/4" Coupling, Class 200 SDR 21 Polyvinyl Chloride (PVC).....	34.01	13.22
33 14 13 23-0058 EA 1-1/2" Coupling, Class 200 SDR 21 Polyvinyl Chloride (PVC).....	45.14	14.62
33 14 13 23-0059 EA 2" Coupling, Class 200 SDR 21 Polyvinyl Chloride (PVC) .....	49.89	16.26
33 14 13 23-0060 EA 2-1/2" Coupling, Class 200 SDR 21 Polyvinyl Chloride (PVC).....	56.75	18.48
33 14 13 23-0061 EA 3" Coupling, Class 200 SDR 21 Polyvinyl Chloride (PVC) .....	62.35	19.71
33 14 13 23-0062 EA 4" Coupling, Class 200 SDR 21 Polyvinyl Chloride (PVC) .....	84.17	24.24
33 14 13 23-0063 EA 6" Coupling, Class 200 SDR 21 Polyvinyl Chloride (PVC) .....	118.37	30.88
33 14 13 23-0064 EA 8" Coupling, Class 200 SDR 21 Polyvinyl Chloride (PVC) .....	195.10	40.47
33 14 13 23-0065 EA 10" Coupling, Class 200 SDR 21 Polyvinyl Chloride (PVC).....	248.64	61.91
33 14 13 23-0066 EA 12" Coupling, Class 200 SDR 21 Polyvinyl Chloride (PVC).....	319.83	83.23
<b>33 14 13 23-0067 Schedule 40 Polyvinyl Chloride (PVC) Pipe And Fittings (33 14 13 23)</b>		
<b>33 14 13 23-0068 Schedule 40 Polyvinyl Chloride (PVC) Pipe (33 14 13 23-0067)</b>		
33 14 13 23-0069 LF 3/4" Schedule 40 Polyvinyl Chloride (PVC) Pipe .....	2.79	0.94
For >1,000, Deduct	-0.14	
For Coloring Of Polyvinyl Chloride (PVC) Pipe For Reclaimed Water Identification, Add	0.07	
33 14 13 23-0070 LF 1" Schedule 40 Polyvinyl Chloride (PVC) Pipe .....	3.23	1.00
For >1,000, Deduct	-0.16	
For Coloring Of Polyvinyl Chloride (PVC) Pipe For Reclaimed Water Identification, Add	0.11	
33 14 13 23-0071 LF 1-1/2" Schedule 40 Polyvinyl Chloride (PVC) Pipe .....	4.10	1.21
For >1,000, Deduct	-0.21	
For Coloring Of Polyvinyl Chloride (PVC) Pipe For Reclaimed Water Identification, Add	0.16	
33 14 13 23-0072 LF 2" Schedule 40 Polyvinyl Chloride (PVC) Pipe .....	4.84	1.36
For >1,000, Deduct	-0.24	
For Coloring Of Polyvinyl Chloride (PVC) Pipe For Reclaimed Water Identification, Add	0.22	



		<b>Utilities</b>	<b>33</b>	<b>CS</b>
		<b>Water Utilities</b>	<b>33 10</b>	
		<b>Water Utility Transmission and Distribution</b>	<b>33 14</b>	

MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
33 14 13 23-0073 LF 2-1/2" Schedule 40 Polyvinyl Chloride (PVC) Pipe..... For >1,000, Deduct For Coloring Of Polyvinyl Chloride (PVC) Pipe For Reclaimed Water Identification, Add	6.15 -0.31 0.34	1.55
33 14 13 23-0074 LF 3" Schedule 40 Polyvinyl Chloride (PVC) Pipe..... For >1,000, Deduct For Coloring Of Polyvinyl Chloride (PVC) Pipe For Reclaimed Water Identification, Add	7.08 -0.35 0.45	1.64
33 14 13 23-0075 LF 4" Schedule 40 Polyvinyl Chloride (PVC) Pipe..... For >1,000, Deduct For Coloring Of Polyvinyl Chloride (PVC) Pipe For Reclaimed Water Identification, Add	9.33 -0.47 0.64	2.03
33 14 13 23-0076 LF 6" Schedule 40 Polyvinyl Chloride (PVC) Pipe..... For >1,000, Deduct For Coloring Of Polyvinyl Chloride (PVC) Pipe For Reclaimed Water Identification, Add	13.91 -0.70 1.12	2.57
<b>33 14 13 23-0077 Schedule 40 Polyvinyl Chloride (PVC) 90 Degree Elbows (33 14 13 23-0067)</b>		
33 14 13 23-0078 EA 3/4" 90 Degree Elbow, Schedule 40 Polyvinyl Chloride (PVC).....	28.50	11.23
33 14 13 23-0079 EA 1" 90 Degree Elbow, Schedule 40 Polyvinyl Chloride (PVC).....	35.86	14.04
33 14 13 23-0080 EA 1-1/2" 90 Degree Elbow, Schedule 40 Polyvinyl Chloride (PVC).....	49.79	19.42
33 14 13 23-0081 EA 2" 90 Degree Elbow, Schedule 40 Polyvinyl Chloride (PVC).....	56.08	21.76
33 14 13 23-0082 EA 2-1/2" 90 Degree Elbow, Schedule 40 Polyvinyl Chloride (PVC).....	66.55	24.68
33 14 13 23-0083 EA 3" 90 Degree Elbow, Schedule 40 Polyvinyl Chloride (PVC).....	71.62	26.35
33 14 13 23-0084 EA 4" 90 Degree Elbow, Schedule 40 Polyvinyl Chloride (PVC).....	92.76	32.35
33 14 13 23-0085 EA 6" 90 Degree Elbow, Schedule 40 Polyvinyl Chloride (PVC).....	140.52	41.11
<b>33 14 13 23-0086 Schedule 40 Polyvinyl Chloride (PVC) 45 Degree Elbows (33 14 13 23-0067)</b>		
33 14 13 23-0087 EA 3/4" 45 Degree Elbow, Schedule 40 Polyvinyl Chloride (PVC).....	28.46	11.23
33 14 13 23-0088 EA 1" 45 Degree Elbow, Schedule 40 Polyvinyl Chloride (PVC).....	35.83	14.04
33 14 13 23-0089 EA 1-1/2" 45 Degree Elbow, Schedule 40 Polyvinyl Chloride (PVC).....	49.81	19.42
33 14 13 23-0090 EA 2" 45 Degree Elbow, Schedule 40 Polyvinyl Chloride (PVC).....	55.95	21.76
33 14 13 23-0091 EA 2-1/2" 45 Degree Elbow, Schedule 40 Polyvinyl Chloride (PVC).....	66.18	24.68
33 14 13 23-0092 EA 3" 45 Degree Elbow, Schedule 40 Polyvinyl Chloride (PVC).....	71.19	26.35
33 14 13 23-0093 EA 4" 45 Degree Elbow, Schedule 40 Polyvinyl Chloride (PVC).....	91.89	32.35
33 14 13 23-0094 EA 6" 45 Degree Elbow, Schedule 40 Polyvinyl Chloride (PVC).....	137.73	41.11
<b>33 14 13 23-0095 Schedule 40 Polyvinyl Chloride (PVC) Tees Or Wyes (33 14 13 23-0067)</b>		
33 14 13 23-0096 EA 3/4" Tees Or Wyes, Schedule 40 Polyvinyl Chloride (PVC).....	42.66	16.84
33 14 13 23-0097 EA 1" Tees Or Wyes, Schedule 40 Polyvinyl Chloride (PVC).....	53.70	21.17
33 14 13 23-0098 EA 1-1/2" Tees Or Wyes, Schedule 40 Polyvinyl Chloride (PVC).....	74.53	29.25
33 14 13 23-0099 EA 2" Tees Or Wyes, Schedule 40 Polyvinyl Chloride (PVC).....	83.65	32.52
33 14 13 23-0100 EA 2-1/2" Tees Or Wyes, Schedule 40 Polyvinyl Chloride (PVC).....	100.03	37.09
33 14 13 23-0101 EA 3" Tees Or Wyes, Schedule 40 Polyvinyl Chloride (PVC).....	109.22	39.41
33 14 13 23-0102 EA 4" Tees Or Wyes, Schedule 40 Polyvinyl Chloride (PVC).....	135.58	48.58
33 14 13 23-0103 EA 6" Tees Or Wyes, Schedule 40 Polyvinyl Chloride (PVC).....	213.44	61.76
<b>33 14 13 23-0104 Schedule 40 Polyvinyl Chloride (PVC) Couplings (33 14 13 23-0067)</b>		
33 14 13 23-0105 EA 3/4" Coupling, Schedule 40 Polyvinyl Chloride (PVC).....	19.03	7.49
33 14 13 23-0106 EA 1" Coupling, Schedule 40 Polyvinyl Chloride (PVC).....	25.63	10.06
33 14 13 23-0107 EA 1-1/2" Coupling, Schedule 40 Polyvinyl Chloride (PVC).....	37.18	14.62
33 14 13 23-0108 EA 2" Coupling, Schedule 40 Polyvinyl Chloride (PVC).....	41.81	16.26
33 14 13 23-0109 EA 2-1/2" Coupling, Schedule 40 Polyvinyl Chloride (PVC).....	48.73	18.48
33 14 13 23-0110 EA 3" Coupling, Schedule 40 Polyvinyl Chloride (PVC).....	53.06	19.71
33 14 13 23-0111 EA 4" Coupling, Schedule 40 Polyvinyl Chloride (PVC).....	65.67	24.24
33 14 13 23-0112 EA 6" Coupling, Schedule 40 Polyvinyl Chloride (PVC).....	94.32	30.88
<b>33 14 13 23-0113 Crosses, Schedule 40 Polyvinyl Chloride (PVC) (33 14 13 23-0067)</b>		
33 14 13 23-0114 EA 3/4" Cross, Schedule 40 Polyvinyl Chloride (PVC).....	57.00	22.46
33 14 13 23-0115 EA 1" Cross, Schedule 40 Polyvinyl Chloride (PVC).....	71.51	28.19
33 14 13 23-0116 EA 1-1/2" Cross, Schedule 40 Polyvinyl Chloride (PVC).....	99.36	38.96
33 14 13 23-0117 EA 2" Cross, Schedule 40 Polyvinyl Chloride (PVC).....	111.53	43.40
33 14 13 23-0118 EA 2-1/2" Cross, Schedule 40 Polyvinyl Chloride (PVC).....	133.34	49.37
33 14 13 23-0119 EA 3" Cross, Schedule 40 Polyvinyl Chloride (PVC).....	145.57	52.59
33 14 13 23-0120 EA 4" Cross, Schedule 40 Polyvinyl Chloride (PVC).....	180.69	64.71
33 14 13 23-0121 EA 6" Cross, Schedule 40 Polyvinyl Chloride (PVC).....	284.25	82.32
<b>33 14 13 23-0122 Schedule 80 Polyvinyl Chloride (PVC) Pipe And Fittings (33 14 13 23)</b>		
<b>33 14 13 23-0123 Schedule 80 Polyvinyl Chloride (PVC) Pipe (33 14 13 23-0122)</b>		
33 14 13 23-0124 LF 1" Schedule 80 Polyvinyl Chloride (PVC) Pipe..... For >1,000, Deduct For Coloring Of Polyvinyl Chloride (PVC) Pipe For Reclaimed Water Identification, Add	3.45 -0.17 0.14	1.00
33 14 13 23-0125 LF 1-1/2" Schedule 80 Polyvinyl Chloride (PVC) Pipe..... For >1,000, Deduct For Coloring Of Polyvinyl Chloride (PVC) Pipe For Reclaimed Water Identification, Add	4.54 -0.23 0.23	1.21
33 14 13 23-0126 LF 2" Schedule 80 Polyvinyl Chloride (PVC) Pipe..... For >1,000, Deduct For Coloring Of Polyvinyl Chloride (PVC) Pipe For Reclaimed Water Identification, Add	5.57 -0.28 0.33	1.36

**33 Utilities****33 10 Water Utilities****33 14 Water Utility Transmission and Distribution**

MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
33 14 13 23-0127 LF 2-1/2" Schedule 80 Polyvinyl Chloride (PVC) Pipe ..... For >1,000, Deduct ..... For Coloring Of Polyvinyl Chloride (PVC) Pipe For Reclaimed Water Identification, Add .....	7.11 -0.36 0.49	1.55
33 14 13 23-0128 LF 3" Schedule 80 Polyvinyl Chloride (PVC) Pipe ..... For >1,000, Deduct ..... For Coloring Of Polyvinyl Chloride (PVC) Pipe For Reclaimed Water Identification, Add .....	8.42 -0.42 0.65	1.64
33 14 13 23-0129 LF 4" Schedule 80 Polyvinyl Chloride (PVC) Pipe ..... For >1,000, Deduct ..... For Coloring Of Polyvinyl Chloride (PVC) Pipe For Reclaimed Water Identification, Add .....	11.38 -0.57 0.95	2.03
33 14 13 23-0130 LF 6" Schedule 80 Polyvinyl Chloride (PVC) Pipe ..... For >1,000, Deduct ..... For Coloring Of Polyvinyl Chloride (PVC) Pipe For Reclaimed Water Identification, Add .....	18.46 -0.92 1.80	2.57
<b>33 14 13 23-0131 Schedule 80 Polyvinyl Chloride (PVC) 90 Degree Elbows (33 14 13 23-0122)</b>		
33 14 13 23-0132 EA 1" 90 Degree Elbow, Schedule 80 Polyvinyl Chloride (PVC) .....	36.99	14.04
33 14 13 23-0133 EA 1-1/2" 90 Degree Elbow, Schedule 80 Polyvinyl Chloride (PVC) .....	49.79	19.42
33 14 13 23-0134 EA 2" 90 Degree Elbow, Schedule 80 Polyvinyl Chloride (PVC) .....	57.22	21.76
33 14 13 23-0135 EA 2-1/2" 90 Degree Elbow, Schedule 80 Polyvinyl Chloride (PVC) .....	68.96	24.68
33 14 13 23-0136 EA 3" Schedule 80 Polyvinyl Chloride (PVC) 90 Degree Elbow .....	73.86	26.35
33 14 13 23-0137 EA 4" Schedule 80 Polyvinyl Chloride (PVC) 90 Degree Elbow .....	93.30	32.35
33 14 13 23-0138 EA 6" Schedule 80 Polyvinyl Chloride (PVC) 90 Degree Elbow .....	137.97	41.11
<b>33 14 13 23-0139 Schedule 80 Polyvinyl Chloride (PVC) 45 Degree Elbows (33 14 13 23-0122)</b>		
33 14 13 23-0140 EA 1" Schedule 80 Polyvinyl Chloride (PVC) 45 Degree Elbow .....	41.64	14.04
33 14 13 23-0141 EA 1-1/2" Schedule 80 Polyvinyl Chloride (PVC) 45 Degree Elbow .....	54.27	19.42
33 14 13 23-0142 EA 2" Schedule 80 Polyvinyl Chloride (PVC) 45 Degree Elbow .....	61.52	21.76
33 14 13 23-0143 EA 2-1/2" Schedule 80 Polyvinyl Chloride (PVC) 45 Degree Elbow .....	77.03	24.68
33 14 13 23-0144 EA 3" Schedule 80 Polyvinyl Chloride (PVC) 45 Degree Elbow .....	84.37	26.35
33 14 13 23-0145 EA 4" Schedule 80 Polyvinyl Chloride (PVC) 45 Degree Elbow .....	114.43	32.35
33 14 13 23-0146 EA 6" Schedule 80 Polyvinyl Chloride (PVC) 45 Degree Elbow .....	136.55	41.11
<b>33 14 13 23-0147 Schedule 80 Polyvinyl Chloride (PVC) Tees Or Wyes (33 14 13 23-0122)</b>		
33 14 13 23-0148 EA 1" Schedule 80 Polyvinyl Chloride (PVC) Tees Or Wyes.....	56.08	21.17
33 14 13 23-0149 EA 1-1/2" Schedule 80 Polyvinyl Chloride (PVC) Tees Or Wyes.....	81.75	29.25
33 14 13 23-0150 EA 2" Schedule 80 Polyvinyl Chloride (PVC) Tees Or Wyes.....	92.26	32.52
33 14 13 23-0151 EA 2-1/2" Schedule 80 Polyvinyl Chloride (PVC) Tees Or Wyes.....	104.59	37.09
33 14 13 23-0152 EA 3" Schedule 80 Polyvinyl Chloride (PVC) Tees Or Wyes.....	113.58	39.41
33 14 13 23-0153 EA 4" Schedule 80 Polyvinyl Chloride (PVC) Tees Or Wyes.....	138.73	48.58
33 14 13 23-0154 EA 6" Schedule 80 Polyvinyl Chloride (PVC) Tees Or Wyes.....	213.32	61.76
<b>33 14 13 23-0155 Schedule 80 Polyvinyl Chloride (PVC) Couplings (33 14 13 23-0122)</b>		
33 14 13 23-0156 EA 1" Schedule 80 Polyvinyl Chloride (PVC) Coupling .....	27.33	10.06
33 14 13 23-0157 EA 1-1/2" Schedule 80 Polyvinyl Chloride (PVC) Coupling .....	40.10	14.62
33 14 13 23-0158 EA 2" Schedule 80 Polyvinyl Chloride (PVC) Coupling .....	44.56	16.26
33 14 13 23-0159 EA 2-1/2" Schedule 80 Polyvinyl Chloride (PVC) Coupling .....	55.78	18.48
33 14 13 23-0160 EA 3" Schedule 80 Polyvinyl Chloride (PVC) Coupling .....	60.17	19.71
33 14 13 23-0161 EA 4" Schedule 80 Polyvinyl Chloride (PVC) Coupling .....	74.31	24.24
33 14 13 23-0162 EA 6" Schedule 80 Polyvinyl Chloride (PVC) Coupling .....	106.38	30.88
<b>33 14 13 23-0163 Crosses, Schedule 80 Polyvinyl Chloride (PVC) (33 14 13 23-0122)</b>		
33 14 13 23-0164 EA 1" Schedule 80 Polyvinyl Chloride (PVC) Cross .....	74.67	28.19
33 14 13 23-0165 EA 1-1/2" Schedule 80 Polyvinyl Chloride (PVC) Cross .....	108.95	38.96
33 14 13 23-0166 EA 2" Schedule 80 Polyvinyl Chloride (PVC) Cross .....	122.96	43.40
33 14 13 23-0167 EA 2-1/2" Schedule 80 Polyvinyl Chloride (PVC) Cross .....	139.40	49.37
33 14 13 23-0168 EA 3" Schedule 80 Polyvinyl Chloride (PVC) Cross .....	151.36	52.59
33 14 13 23-0169 EA 4" Schedule 80 Polyvinyl Chloride (PVC) Cross .....	184.87	64.71
33 14 13 23-0170 EA 6" Schedule 80 Polyvinyl Chloride (PVC) Cross .....	284.10	82.32
<b>33 14 13 23-0171 AWWA C906, High Density Polyethylene (HDPE) Pressure Piping (33 14 13 23)</b>		
Note: ASTM D3350 pipe, ASTM D2657 heat fusion.		
<b>33 14 13 23-0172 High Density Polyethylene (HDPE) Pressure Pipe (33 14 13 23-0171)</b>		
33 14 13 23-0173 LF 3" DR 21, Butt Fusion Joint High Density Polyethylene (HDPE) Pressure Pipe ..... For SDR 19, Add ..... For SDR 17, Add ..... For SDR 15.5, Add ..... For SDR 13.5, Add ..... For SDR 11, Add .....	7.07 0.13 0.32 0.47 0.73 1.18	2.78
33 14 13 23-0174 LF 4" DR 21, Butt Fusion Joint High Density Polyethylene (HDPE) Pressure Pipe ..... For SDR 26, Deduct ..... For SDR 19, Add ..... For SDR 17, Add ..... For SDR 15.5, Add ..... For SDR 13.5, Add ..... For SDR 11, Add .....	9.05 -0.36 0.18 0.44 0.64 1.00 1.61	3.54



		<b>Utilities</b>	<b>33</b>	<b>CS</b>
		<b>Water Utilities</b>	<b>33 10</b>	
		<b>Water Utility Transmission and Distribution</b>	<b>33 14</b>	

MINOR CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
33 14 13 23-0175	LF	6" DR 21, Butt Fusion Joint High Density Polyethylene (HDPE) Pressure Pipe .....	12.83	4.29
		For SDR 26, Deduct	-0.78	
		For SDR 19, Add	0.38	
		For SDR 17, Add	0.94	
		For SDR 15.5, Add	1.38	
		For SDR 13.5, Add	2.16	
		For SDR 11, Add	3.47	
33 14 13 23-0176	LF	8" DR 21, Butt Fusion Joint High Density Polyethylene (HDPE) Pressure Pipe .....	16.88	4.82
		For SDR 26, Deduct	-1.32	
		For SDR 19, Add	0.65	
		For SDR 17, Add	1.60	
		For SDR 15.5, Add	2.35	
		For SDR 13.5, Add	3.67	
		For SDR 11, Add	5.90	
33 14 13 23-0177	LF	10" DR 21, Butt Fusion Joint High Density Polyethylene (HDPE) Pressure Pipe .....	21.95	5.36
		For SDR 26, Deduct	-2.06	
		For SDR 19, Add	1.01	
		For SDR 17, Add	2.49	
		For SDR 15.5, Add	3.65	
		For SDR 13.5, Add	5.70	
		For SDR 11, Add	9.17	
33 14 13 23-0178	LF	12" DR 21, Butt Fusion Joint High Density Polyethylene (HDPE) Pressure Pipe .....	28.09	60.06
		For SDR 26, Deduct	-2.97	
		For SDR 19, Add	1.46	
		For SDR 17, Add	3.60	
		For SDR 15.5, Add	5.26	
		For SDR 13.5, Add	8.22	
		For SDR 11, Add	13.23	
33 14 13 23-0179	LF	14" DR 21, Butt Fusion Joint High Density Polyethylene (HDPE) Pressure Pipe .....	32.43	6.76
		For SDR 26, Deduct	-3.49	
		For SDR 19, Add	1.71	
		For SDR 17, Add	4.23	
		For SDR 15.5, Add	6.19	
		For SDR 13.5, Add	9.66	
		For SDR 11, Add	15.55	
33 14 13 23-0180	LF	16" DR 21, Butt Fusion Joint High Density Polyethylene (HDPE) Pressure Pipe .....	39.87	7.50
		For SDR 26, Deduct	-4.56	
		For SDR 19, Add	2.24	
		For SDR 17, Add	5.52	
		For SDR 15.5, Add	8.09	
		For SDR 13.5, Add	12.62	
		For SDR 11, Add	20.31	
33 14 13 23-0181	LF	18" DR 21, Butt Fusion Joint High Density Polyethylene (HDPE) Pressure Pipe .....	49.47	9.01
		For SDR 26, Deduct	-5.76	
		For SDR 19, Add	2.83	
		For SDR 17, Add	6.98	
		For SDR 15.5, Add	10.22	
		For SDR 13.5, Add	15.95	
		For SDR 11, Add	25.67	
33 14 13 23-0182	LF	20" DR 21, Butt Fusion Joint High Density Polyethylene (HDPE) Pressure Pipe .....	67.84	10.73
		For SDR 26, Deduct	-8.50	
		For SDR 19, Add	4.18	
		For SDR 17, Add	10.31	
		For SDR 15.5, Add	15.10	
		For SDR 13.5, Add	23.56	
		For SDR 11, Add	37.92	
33 14 13 23-0183	LF	24" DR 21, Butt Fusion Joint High Density Polyethylene (HDPE) Pressure Pipe .....	81.61	12.87
		For SDR 26, Deduct	-10.24	
		For SDR 19, Add	5.03	
		For SDR 17, Add	12.41	
		For SDR 15.5, Add	18.18	
		For SDR 13.5, Add	28.38	
		For SDR 11, Add	45.67	
<b>33 14 13 23-0184 90 Degree Elbows, High Density Polyethylene (HDPE) Pressure Piping</b> <sup>(33 14 13 23-0171)</sup>				
33 14 13 23-0185	EA	3" 90 Degree Elbow, DR 21 High Density Polyethylene (HDPE) Pressure Piping.....	63.33	17.54
		For SDR 26, Deduct	-1.96	
		For SDR 19, Add	0.96	
		For SDR 17, Add	2.38	
		For SDR 15.5, Add	3.48	
		For SDR 13.5, Add	5.43	
		For SDR 11, Add	8.74	
33 14 13 23-0186	EA	4" 90 Degree Elbow, DR 21 High Density Polyethylene (HDPE) Pressure Piping.....	71.23	19.51
		For SDR 26, Deduct	-2.34	
		For SDR 19, Add	1.15	
		For SDR 17, Add	2.83	
		For SDR 15.5, Add	4.15	
		For SDR 13.5, Add	6.47	
		For SDR 11, Add	10.41	

**33 Utilities****33 10 Water Utilities****33 14 Water Utility Transmission and Distribution**

MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
33 14 13 23-0187 EA 6" 90 Degree Elbow, DR 21 High Density Polyethylene (HDPE) Pressure Piping.....	100.69	22.29
For SDR 26, Deduct	-6.21	
For SDR 19, Add	3.05	
For SDR 17, Add	7.53	
For SDR 15.5, Add	11.03	
For SDR 13.5, Add	17.21	
For SDR 11, Add	27.71	
33 14 13 23-0188 EA 8" 90 Degree Elbow, DR 21 High Density Polyethylene (HDPE) Pressure Piping.....	148.84	26.02
For SDR 26, Deduct	-12.98	
For SDR 19, Add	6.37	
For SDR 17, Add	15.74	
For SDR 15.5, Add	23.05	
For SDR 13.5, Add	35.97	
For SDR 11, Add	57.90	
33 14 13 23-0189 EA 10" 90 Degree Elbow, DR 21 High Density Polyethylene (HDPE) Pressure Piping.....	222.22	34.74
For SDR 26, Deduct	-21.67	
For SDR 19, Add	10.64	
For SDR 17, Add	26.27	
For SDR 15.5, Add	38.47	
For SDR 13.5, Add	60.05	
For SDR 11, Add	96.65	
33 14 13 23-0190 EA 12" 90 Degree Elbow, DR 21 High Density Polyethylene (HDPE) Pressure Piping.....	329.05	52.00
For SDR 26, Deduct	-31.73	
For SDR 19, Add	15.58	
For SDR 17, Add	38.47	
For SDR 15.5, Add	56.34	
For SDR 13.5, Add	87.93	
For SDR 11, Add	141.53	
33 14 13 23-0191 EA 14" 90 Degree Elbow, DR 21 High Density Polyethylene (HDPE) Pressure Piping.....	414.46	69.39
For SDR 26, Deduct	-37.83	
For SDR 19, Add	18.58	
For SDR 17, Add	45.86	
For SDR 15.5, Add	67.16	
For SDR 13.5, Add	104.83	
For SDR 11, Add	168.72	
33 14 13 23-0192 EA 16" 90 Degree Elbow, DR 21 High Density Polyethylene (HDPE) Pressure Piping.....	559.00	103.99
For SDR 26, Deduct	-45.30	
For SDR 19, Add	22.24	
For SDR 17, Add	54.92	
For SDR 15.5, Add	80.43	
For SDR 13.5, Add	125.53	
For SDR 11, Add	202.05	
33 14 13 23-0193 EA 18" 90 Degree Elbow, DR 21 High Density Polyethylene (HDPE) Pressure Piping.....	687.29	116.97
For SDR 26, Deduct	-61.65	
For SDR 19, Add	30.27	
For SDR 17, Add	74.73	
For SDR 15.5, Add	109.45	
For SDR 13.5, Add	170.83	
For SDR 11, Add	274.96	
33 14 13 23-0194 EA 20" 90 Degree Elbow, DR 21 High Density Polyethylene (HDPE) Pressure Piping.....	908.16	132.76
For SDR 26, Deduct	-92.71	
For SDR 19, Add	45.52	
For SDR 17, Add	112.38	
For SDR 15.5, Add	164.58	
For SDR 13.5, Add	256.89	
For SDR 11, Add	413.48	
33 14 13 23-0195 EA 24" 90 Degree Elbow, DR 21 High Density Polyethylene (HDPE) Pressure Piping.....	1,143.12	156.04
For SDR 26, Deduct	-123.77	
For SDR 19, Add	60.77	
For SDR 17, Add	150.03	
For SDR 15.5, Add	219.72	
For SDR 13.5, Add	342.94	
For SDR 11, Add	551.99	
<b>33 14 13 23-0196 Tees, High Density Polyethylene (HDPE) Pressure Piping (33 14 13 23-0171)</b>		
33 14 13 23-0197 EA 3" Tee, DR 21 High Density Polyethylene (HDPE) Pressure Piping.....	68.96	18.36
For SDR 26, Deduct	-2.56	
For SDR 19, Add	1.26	
For SDR 17, Add	3.11	
For SDR 15.5, Add	4.55	
For SDR 13.5, Add	7.10	
For SDR 11, Add	11.43	
33 14 13 23-0198 EA 4" Tee, DR 21 High Density Polyethylene (HDPE) Pressure Piping.....	78.82	20.80
For SDR 26, Deduct	-3.02	
For SDR 19, Add	1.48	
For SDR 17, Add	3.66	
For SDR 15.5, Add	5.36	
For SDR 13.5, Add	8.36	
For SDR 11, Add	13.46	
33 14 13 23-0199 EA 6" Tee, DR 21 High Density Polyethylene (HDPE) Pressure Piping.....	114.98	24.01
For SDR 26, Deduct	-7.89	
For SDR 19, Add	3.87	
For SDR 17, Add	9.56	
For SDR 15.5, Add	14.00	
For SDR 13.5, Add	21.85	
For SDR 11, Add	35.18	



		<b>Utilities</b>	<b>33</b>	<b>CS</b>
		<b>Water Utilities</b>	<b>33 10</b>	
		<b>Water Utility Transmission and Distribution</b>	<b>33 14</b>	

MINOR CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
33 14 13 23-0200	EA	8" Tee, DR 21 High Density Polyethylene (HDPE) Pressure Piping.....	194.20	28.37
		For SDR 26, Deduct	-20.01	
		For SDR 19, Add	9.82	
		For SDR 17, Add	24.26	
		For SDR 15.5, Add	35.52	
		For SDR 13.5, Add	55.44	
		For SDR 11, Add	89.24	
33 14 13 23-0201	EA	10" Tee, DR 21 High Density Polyethylene (HDPE) Pressure Piping.....	268.60	41.65
		For SDR 26, Deduct	-26.36	
		For SDR 19, Add	12.94	
		For SDR 17, Add	31.95	
		For SDR 15.5, Add	46.80	
		For SDR 13.5, Add	73.04	
		For SDR 11, Add	117.56	
33 14 13 23-0202	EA	12" Tee, DR 21 High Density Polyethylene (HDPE) Pressure Piping.....	383.57	62.47
		For SDR 26, Deduct	-35.99	
		For SDR 19, Add	17.67	
		For SDR 17, Add	43.63	
		For SDR 15.5, Add	63.90	
		For SDR 13.5, Add	99.74	
		For SDR 11, Add	160.53	
33 14 13 23-0203	EA	14" Tee, DR 21 High Density Polyethylene (HDPE) Pressure Piping.....	464.97	78.03
		For SDR 26, Deduct	-42.35	
		For SDR 19, Add	20.79	
		For SDR 17, Add	51.33	
		For SDR 15.5, Add	75.17	
		For SDR 13.5, Add	117.34	
		For SDR 11, Add	188.86	
33 14 13 23-0204	EA	16" Tee, DR 21 High Density Polyethylene (HDPE) Pressure Piping.....	625.43	116.97
		For SDR 26, Deduct	-50.29	
		For SDR 19, Add	24.69	
		For SDR 17, Add	60.96	
		For SDR 15.5, Add	89.27	
		For SDR 13.5, Add	139.34	
		For SDR 11, Add	224.27	
33 14 13 23-0205	EA	18" Tee, DR 21 High Density Polyethylene (HDPE) Pressure Piping.....	789.94	136.27
		For SDR 26, Deduct	-69.87	
		For SDR 19, Add	34.31	
		For SDR 17, Add	84.70	
		For SDR 15.5, Add	124.04	
		For SDR 13.5, Add	193.60	
		For SDR 11, Add	311.61	
33 14 13 23-0206	EA	20" Tee, DR 21 High Density Polyethylene (HDPE) Pressure Piping.....	1,075.95	160.96
		For SDR 26, Deduct	-107.72	
		For SDR 19, Add	52.89	
		For SDR 17, Add	130.58	
		For SDR 15.5, Add	191.22	
		For SDR 13.5, Add	298.47	
		For SDR 11, Add	480.41	
33 14 13 23-0207	EA	24" Tee, DR 21 High Density Polyethylene (HDPE) Pressure Piping.....	1,379.01	195.12
		For SDR 26, Deduct	-145.56	
		For SDR 19, Add	71.47	
		For SDR 17, Add	176.46	
		For SDR 15.5, Add	258.41	
		For SDR 13.5, Add	403.34	
		For SDR 11, Add	649.20	

### 33 14 13 43 Public Water Utility Distribution Piping Coatings and Wraps (33 14 13)

33 14 13 43-0001	8 Mil Polyethylene Encasement Tubing <small>(33 14 13 43)</small>			
Note: ANSI/AWWA C105/A21.5-99 section 4.2.				
33 14 13 43-0002	LF	3" To 8" Diameter, 8 Mil Polyethylene Encasement Tubing.....	0.94	
33 14 13 43-0003	LF	10" To 12" Diameter, 8 Mil Polyethylene Encasement Tubing.....	1.59	
33 14 13 43-0004	LF	14" To 16" Diameter, 8 Mil Polyethylene Encasement Tubing.....	2.03	
33 14 13 43-0005	LF	18" To 20" Diameter, 8 Mil Polyethylene Encasement Tubing.....	2.59	
33 14 13 43-0006	LF	24" Diameter, 8 Mil Polyethylene Encasement Tubing.....	3.62	
33 14 13 43-0007	LF	30" Diameter, 8 Mil Polyethylene Encasement Tubing.....	4.69	
33 14 13 43-0008	LF	36" To 42" Diameter, 8 Mil Polyethylene Encasement Tubing.....	5.95	
33 14 13 43-0009	LF	48" Diameter, 8 Mil Polyethylene Encasement Tubing.....	7.10	
33 14 13 43-0010	LF	54" Diameter, 8 Mil Polyethylene Encasement Tubing.....	8.50	
33 14 13 43-0011	LF	60" Diameter, 8 Mil Polyethylene Encasement Tubing.....	9.58	

### 33 14 13 53 Public Water Utility Distribution Piping Saddles And Adapters (33 14 13)

33 14 13 53-0001		Double Stud Stainless Steel Service Saddles <small>(33 14 13 53)</small>		
Note: 1/2" listed taps are compression, 3/4" to 2" are either compression or NPT.				
33 14 13 53-0002	EA	4" Diameter x 1/2", 3/4" Or 1" Tap Double Stud Stainless Steel Service Saddle (Smith-Blair 372) .....	274.89	
33 14 13 53-0003	EA	4" Diameter x 1-1/4" Or 1-1/2" Tap Double Stud Stainless Steel Service Saddle (Smith-Blair 372) .....	380.88	
33 14 13 53-0004	EA	4" Diameter x 2" Tap Double Stud Stainless Steel Service Saddle (Smith-Blair 372).....	394.02	
33 14 13 53-0005	EA	6" Diameter x 1/2", 3/4" Or 1" Tap Double Stud Stainless Steel Service Saddle (Smith-Blair 372) .....	327.16	
33 14 13 53-0006	EA	6" Diameter x 1-1/4", 1-1/2" Or 2" Tap Double Stud Stainless Steel Service Saddle (Smith-Blair 372) .....	409.19	
33 14 13 53-0007	EA	8" Diameter x 1/2", 3/4" Or 1" Tap Double Stud Stainless Steel Service Saddle (Smith-Blair 372) .....	342.23	
33 14 13 53-0008	EA	8" Diameter x 1-1/4", 1-1/2" Or 2" Tap Double Stud Stainless Steel Service Saddle (Smith-Blair 372) .....	428.72	
33 14 13 53-0009	EA	10" Diameter x 1/2", 3/4" Or 1" Tap Double Stud Stainless Steel Service Saddle (Smith-Blair 372) .....	384.23	

**33 Utilities****33 10 Water Utilities****33 14 Water Utility Transmission and Distribution**

MINOR CSI UOM DESCRIPTION				TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
33 14 13 53-0010	EA	10" Diameter x 1-1/4", 1-1/2" Or 2" Tap Double Stud Stainless Steel Service Saddle (Smith-Blair 372)	.....	451.68	
33 14 13 53-0011	EA	12" Diameter x 1/2", 3/4" Or 1" Tap Double Stud Stainless Steel Service Saddle (Smith-Blair 372)	.....	401.00	
33 14 13 53-0012	EA	12" Diameter x 1-1/4", 1-1/2" Or 2" Tap Double Stud Stainless Steel Service Saddle (Smith-Blair 372)	.....	463.03	
<b>33 14 13 53-0013 Double Bale Epoxy Coated Ductile Iron Body Service Saddles</b> <small>(33 14 13 53)</small>					
Note: Electro-galvanized steel bales. 5/8" listed taps are compression. 3/4" to 2" are either compression or NPT. 2-1/2", 3" or 4" are NPT.					
33 14 13 53-0014	EA	1-1/4" To 1-1/2" Diameter x 5/8" To 1" Tap Double Bale Epoxy Coated Ductile Iron Body Service Saddle (Smith-Blair 313)	.....	233.78	
33 14 13 53-0015	EA	2" Diameter x 5/8" To 1" Tap Double Bale Epoxy Coated Ductile Iron Body Service Saddle (Smith-Blair 313)	.....	233.93	
33 14 13 53-0016	EA	2" Diameter x 1-1/4" To 1-1/2" Tap Double Bale Epoxy Coated Ductile Iron Body Service Saddle (Smith-Blair 313)	.....	248.93	
33 14 13 53-0017	EA	2-1/2" Diameter x 5/8" To 1" Tap Double Bale Epoxy Coated Ductile Iron Body Service Saddle (Smith-Blair 313)	.....	237.54	
33 14 13 53-0018	EA	3" Diameter x 5/8" To 1" Tap Double Bale Epoxy Coated Ductile Iron Body Service Saddle (Smith-Blair 313)	.....	254.09	
33 14 13 53-0019	EA	3" Diameter x 1-1/4" To 1-1/2" Tap Double Bale Epoxy Coated Ductile Iron Body Service Saddle (Smith-Blair 313)	.....	280.22	
33 14 13 53-0020	EA	3" Diameter x 2" Tap Double Bale Epoxy Coated Ductile Iron Body Service Saddle (Smith-Blair 313)	.....	297.93	
33 14 13 53-0021	EA	4" Diameter x 5/8" To 1" Tap Double Bale Epoxy Coated Ductile Iron Body Service Saddle (Smith-Blair 313)	.....	273.12	
33 14 13 53-0022	EA	4" Diameter x 1-1/4" To 1-1/2" Tap Double Bale Epoxy Coated Ductile Iron Body Service Saddle (Smith-Blair 313)	.....	299.46	
33 14 13 53-0023	EA	4" Diameter x 2" To 2-1/2" Tap Double Bale Epoxy Coated Ductile Iron Body Service Saddle (Smith-Blair 313)	.....	314.77	
33 14 13 53-0024	EA	5" Diameter x 5/8" To 1" Tap Double Bale Epoxy Coated Ductile Iron Body Service Saddle (Smith-Blair 313)	.....	288.25	
33 14 13 53-0025	EA	5" Diameter x 1-1/4" To 1-1/2" Tap Double Bale Epoxy Coated Ductile Iron Body Service Saddle (Smith-Blair 313)	.....	315.39	
33 14 13 53-0026	EA	5" Diameter x 2" To 2-1/2" Tap Double Bale Epoxy Coated Ductile Iron Body Service Saddle (Smith-Blair 313)	.....	330.63	
33 14 13 53-0027	EA	6" Diameter x 5/8" To 1" Tap Double Bale Epoxy Coated Ductile Iron Body Service Saddle (Smith-Blair 313)	.....	303.86	
33 14 13 53-0028	EA	6" Diameter x 1-1/4" To 1-1/2" Tap Double Bale Epoxy Coated Ductile Iron Body Service Saddle (Smith-Blair 313)	.....	330.25	
33 14 13 53-0029	EA	6" Diameter x 2" To 2-1/2" Tap Double Bale Epoxy Coated Ductile Iron Body Service Saddle (Smith-Blair 313)	.....	345.31	
33 14 13 53-0030	EA	6" Diameter x 3" Tap Double Bale Epoxy Coated Ductile Iron Body Service Saddle (Smith-Blair 313)	.....	494.58	
33 14 13 53-0031	EA	6" Diameter x 4" Tap Double Bale Epoxy Coated Ductile Iron Body Service Saddle (Smith-Blair 313)	.....	507.73	
33 14 13 53-0032	EA	8" Diameter x 5/8" To 1" Tap Double Bale Epoxy Coated Ductile Iron Body Service Saddle (Smith-Blair 313)	.....	328.33	
33 14 13 53-0033	EA	8" Diameter x 1-1/4" To 1-1/2" Tap Double Bale Epoxy Coated Ductile Iron Body Service Saddle (Smith-Blair 313)	.....	359.96	
33 14 13 53-0034	EA	8" Diameter x 2" To 2-1/2" Tap Double Bale Epoxy Coated Ductile Iron Body Service Saddle (Smith-Blair 313)	.....	374.01	
33 14 13 53-0035	EA	8" Diameter x 3" To 4" Tap Double Bale Epoxy Coated Ductile Iron Body Service Saddle (Smith-Blair 313)	.....	582.98	
33 14 13 53-0036	EA	10" Diameter x 5/8" To 1" Tap Double Bale Epoxy Coated Ductile Iron Body Service Saddle (Smith-Blair 313)	.....	365.84	
33 14 13 53-0037	EA	10" Diameter x 1-1/4" To 1-1/2" Tap Double Bale Epoxy Coated Ductile Iron Body Service Saddle (Smith-Blair 313)	.....	403.52	
33 14 13 53-0038	EA	10" Diameter x 3" To 4" Tap Double Bale Epoxy Coated Ductile Iron Body Service Saddle (Smith-Blair 313)	.....	648.69	
33 14 13 53-0039	EA	12" Diameter x 5/8" To 1" Tap Double Bale Epoxy Coated Ductile Iron Body Service Saddle (Smith-Blair 313)	.....	396.91	
33 14 13 53-0040	EA	12" Diameter x 1-1/4" To 1-1/2" Tap Double Bale Epoxy Coated Ductile Iron Body Service Saddle (Smith-Blair 313)	.....	436.71	
33 14 13 53-0041	EA	12" Diameter x 2" To 2-1/2" Tap Double Bale Epoxy Coated Ductile Iron Body Service Saddle (Smith-Blair 313)	.....	452.57	
33 14 13 53-0042	EA	12" Diameter x 3" To 4" Tap Double Bale Epoxy Coated Ductile Iron Body Service Saddle (Smith-Blair 313)	.....	721.57	
33 14 13 53-0043	EA	14" Diameter x 5/8" To 1" Tap Double Bale Epoxy Coated Ductile Iron Body Service Saddle (Smith-Blair 313)	.....	459.84	
33 14 13 53-0044	EA	14" Diameter x 1-1/4" To 1-1/2" Tap Double Bale Epoxy Coated Ductile Iron Body Service Saddle (Smith-Blair 313)	.....	491.29	
33 14 13 53-0045	EA	14" Diameter x 2" To 2-1/2" Tap Double Bale Epoxy Coated Ductile Iron Body Service Saddle (Smith-Blair 313)	.....	527.91	
33 14 13 53-0046	EA	14" Diameter x 3" To 4" Tap Double Bale Epoxy Coated Ductile Iron Body Service Saddle (Smith-Blair 313)	.....	880.49	
33 14 13 53-0047	EA	15" Diameter x 5/8" To 1" Tap Double Bale Epoxy Coated Ductile Iron Body Service Saddle (Smith-Blair 313)	.....	472.98	
33 14 13 53-0048	EA	15" Diameter x 1-1/4" To 1-1/2" Tap Double Bale Epoxy Coated Ductile Iron Body Service Saddle (Smith-Blair 313)	.....	535.53	
33 14 13 53-0049	EA	15" Diameter x 2" To 2-1/2" Tap Double Bale Epoxy Coated Ductile Iron Body Service Saddle (Smith-Blair 313)	.....	557.77	
33 14 13 53-0050	EA	15" Diameter x 3" To 4" Tap Double Bale Epoxy Coated Ductile Iron Body Service Saddle (Smith-Blair 313)	.....	945.02	
33 14 13 53-0051	EA	16" Diameter x 5/8" To 1" Tap Double Bale Epoxy Coated Ductile Iron Body Service Saddle (Smith-Blair 313)	.....	494.10	
33 14 13 53-0052	EA	16" Diameter x 1-1/4" To 1-1/2" Tap Double Bale Epoxy Coated Ductile Iron Body Service Saddle (Smith-Blair 313)	.....	558.91	
33 14 13 53-0053	EA	16" Diameter x 2" To 2-1/2" Tap Double Bale Epoxy Coated Ductile Iron Body Service Saddle (Smith-Blair 313)	.....	581.70	
33 14 13 53-0054	EA	16" Diameter x 3" To 4" Tap Double Bale Epoxy Coated Ductile Iron Body Service Saddle (Smith-Blair 313)	.....	983.24	
33 14 13 53-0055	EA	18" Diameter x 5/8" To 1" Tap Double Bale Epoxy Coated Ductile Iron Body Service Saddle (Smith-Blair 313)	.....	544.76	
33 14 13 53-0056	EA	18" Diameter x 1-1/4" To 2" Tap Double Bale Epoxy Coated Ductile Iron Body Service Saddle (Smith-Blair 313)	.....	627.22	
33 14 13 53-0057	EA	20" Diameter x 5/8" To 1" Tap Double Bale Epoxy Coated Ductile Iron Body Service Saddle (Smith-Blair 313)	.....	617.45	
33 14 13 53-0058	EA	20" Diameter x 1-1/4" To 2-1/2" Tap Double Bale Epoxy Coated Ductile Iron Body Service Saddle (Smith-Blair 313)	.....	682.36	
33 14 13 53-0059	EA	24" Diameter x 5/8" To 1" Tap Double Bale Epoxy Coated Ductile Iron Body Service Saddle (Smith-Blair 313)	.....	644.60	
33 14 13 53-0060	EA	24" Diameter x 1-1/4" To 2-1/2" Tap Double Bale Epoxy Coated Ductile Iron Body Service Saddle (Smith-Blair 313)	.....	725.63	
<b>33 14 13 53-0061 Double Bale Bronze Service Saddles</b> <small>(33 14 13 53)</small>					
33 14 13 53-0062	EA	4" Diameter x 3/4" To 1" Tap Double Bale Bronze Service Saddle (Mueller BR2B)	.....	318.67	
33 14 13 53-0063	EA	4" Diameter x 1-1/4" To 2" Tap Double Bale Bronze Service Saddle (Mueller BR2B)	.....	347.66	
33 14 13 53-0064	EA	6" Diameter x 3/4" To 1" Tap Double Bale Bronze Service Saddle (Mueller BR2B)	.....	361.88	
33 14 13 53-0065	EA	6" Diameter x 1-1/4" To 2" Tap Double Bale Bronze Service Saddle (Mueller BR2B)	.....	391.13	
33 14 13 53-0066	EA	8" Diameter x 3/4" To 1" Tap Double Bale Bronze Service Saddle (Mueller BR2B)	.....	401.74	
33 14 13 53-0067	EA	8" Diameter x 1-1/4" To 2" Tap Double Bale Bronze Service Saddle (Mueller BR2B)	.....	422.20	
33 14 13 53-0068	EA	10" Diameter x 3/4" To 1" Tap Double Bale Bronze Service Saddle (Mueller BR2B)	.....	391.47	
33 14 13 53-0069	EA	10" Diameter x 1-1/4" To 2" Tap Double Bale Bronze Service Saddle (Mueller BR2B)	.....	415.93	
33 14 13 53-0070	EA	12" Diameter x 3/4" To 1" Tap Double Bale Bronze Service Saddle (Mueller BR2B)	.....	490.59	
33 14 13 53-0071	EA	12" Diameter x 1-1/4" To 2" Tap Double Bale Bronze Service Saddle (Mueller BR2B)	.....	529.51	
33 14 13 53-0072	EA	14" Diameter x 3/4" To 1" Tap Double Bale Bronze Service Saddle (Mueller BR2B)	.....	724.84	
33 14 13 53-0073	EA	14" Diameter x 1-1/4" To 2" Tap Double Bale Bronze Service Saddle (Mueller BR2B)	.....	816.24	
33 14 13 53-0074	EA	16" Diameter x 3/4" To 1" Tap Double Bale Bronze Service Saddle (Mueller BR2B)	.....	840.68	
33 14 13 53-0075	EA	16" Diameter x 1-1/4" To 2" Tap Double Bale Bronze Service Saddle (Mueller BR2B)	.....	935.88	





<b>Utilities</b>			<b>33</b>	<b>CS</b>
<b>Water Utilities</b>			<b>33 10</b>	
<b>Water Utility Transmission and Distribution</b>			<b>33 14</b>	

MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
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**33 14 13 53-0076****Stainless Steel Double Straps, Bronze Body Service Saddle** (33 14 13 53)

Note: Taps are compression or NPT.

33 14 13 53-0077	EA	4" Diameter x 3/4" To 1" Tap Stainless Steel Double Straps, Bronze Body Service Saddle (Mueller BR2S)	333.74
33 14 13 53-0078	EA	4" Diameter x 1-1/4" To 2" Tap Stainless Steel Double Straps, Bronze Body Service Saddle (Mueller BR2S)	366.68
33 14 13 53-0079	EA	6" Diameter x 3/4" To 1" Tap Stainless Steel Double Straps, Bronze Body Service Saddle (Mueller BR2S)	379.68
33 14 13 53-0080	EA	6" Diameter x 1-1/4" To 2" Tap Stainless Steel Double Straps, Bronze Body Service Saddle (Mueller BR2S)	411.46
33 14 13 53-0081	EA	8" Diameter x 3/4" To 1" Tap Stainless Steel Double Straps, Bronze Body Service Saddle (Mueller BR2S)	423.74
33 14 13 53-0082	EA	8" Diameter x 1-1/4" To 2" Tap Stainless Steel Double Straps, Bronze Body Service Saddle (Mueller BR2S)	445.38
33 14 13 53-0083	EA	10" Diameter x 3/4" To 1" Tap Stainless Steel Double Straps, Bronze Body Service Saddle (Mueller BR2S)	475.34
33 14 13 53-0084	EA	10" Diameter x 1-1/4" To 2" Tap Stainless Steel Double Straps, Bronze Body Service Saddle (Mueller BR2S)	508.08
33 14 13 53-0085	EA	12" Diameter x 3/4" To 1" Tap Stainless Steel Double Straps, Bronze Body Service Saddle (Mueller BR2S)	510.75
33 14 13 53-0086	EA	12" Diameter x 1-1/4" To 2" Tap Stainless Steel Double Straps, Bronze Body Service Saddle (Mueller BR2S)	552.27
33 14 13 53-0087	EA	14" Diameter x 3/4" To 1" Tap Stainless Steel Double Straps, Bronze Body Service Saddle (Mueller BR2S)	774.80
33 14 13 53-0088	EA	14" Diameter x 1-1/4" To 2" Tap Stainless Steel Double Straps, Bronze Body Service Saddle (Mueller BR2S)	886.89
33 14 13 53-0089	EA	16" Diameter x 3/4" To 1" Tap Stainless Steel Double Straps, Bronze Body Service Saddle (Mueller BR2S)	899.96
33 14 13 53-0090	EA	16" Diameter x 1-1/4" To 2" Tap Stainless Steel Double Straps, Bronze Body Service Saddle (Mueller BR2S)	978.90

**33 14 13 53-0091****Ductile Iron Mechanical Joint Tapping Sleeve** (33 14 13 53)

33 14 13 53-0092	EA	4" Diameter x 4" Tap Ductile Iron Mechanical Joint Tapping Sleeve (Mueller H-615)	1,459.99
33 14 13 53-0093	EA	6" Diameter x 4" Or 6" Tap Ductile Iron Mechanical Joint Tapping Sleeve (Mueller H-615)	1,764.37
33 14 13 53-0094	EA	8" Diameter x 4" Or 6" Tap Ductile Iron Mechanical Joint Tapping Sleeve (Mueller H-615)	2,106.54
33 14 13 53-0095	EA	8" Diameter x 8" Tap Ductile Iron Mechanical Joint Tapping Sleeve (Mueller H-615)	2,226.36
33 14 13 53-0096	EA	10" Diameter x 4" Or 6" Tap Ductile Iron Mechanical Joint Tapping Sleeve (Mueller H-615)	3,347.04
33 14 13 53-0097	EA	10" Diameter x 8" Tap Ductile Iron Mechanical Joint Tapping Sleeve (Mueller H-615)	3,513.67
33 14 13 53-0098	EA	10" Diameter x 10" Tap Ductile Iron Mechanical Joint Tapping Sleeve (Mueller H-615)	3,586.64
33 14 13 53-0099	EA	12" Diameter x 4" Or 6" Tap Ductile Iron Mechanical Joint Tapping Sleeve (Mueller H-615)	3,544.12
33 14 13 53-0100	EA	12" Diameter x 8" Tap Ductile Iron Mechanical Joint Tapping Sleeve (Mueller H-615)	3,710.10
33 14 13 53-0101	EA	12" Diameter x 10" Tap Ductile Iron Mechanical Joint Tapping Sleeve (Mueller H-615)	4,110.81
33 14 13 53-0102	EA	12" Diameter x 12" Tap Ductile Iron Mechanical Joint Tapping Sleeve (Mueller H-615)	4,214.46
33 14 13 53-0103	EA	14" Diameter x 6" Tap Ductile Iron Mechanical Joint Tapping Sleeve (Mueller H-615)	6,979.45
33 14 13 53-0104	EA	14" Diameter x 8" Tap Ductile Iron Mechanical Joint Tapping Sleeve (Mueller H-615)	7,166.65
33 14 13 53-0105	EA	14" Diameter x 10" Tap Ductile Iron Mechanical Joint Tapping Sleeve (Mueller H-615)	7,252.27
33 14 13 53-0106	EA	14" Diameter x 12" Tap Ductile Iron Mechanical Joint Tapping Sleeve (Mueller H-615)	7,290.55
33 14 13 53-0107	EA	14" Diameter x 14" Tap Ductile Iron Mechanical Joint Tapping Sleeve (Mueller H-615)	7,557.56
33 14 13 53-0108	EA	16" Diameter x 4" Tap Ductile Iron Mechanical Joint Tapping Sleeve (Mueller H-615)	7,549.75
33 14 13 53-0109	EA	16" Diameter x 6" Tap Ductile Iron Mechanical Joint Tapping Sleeve (Mueller H-615)	7,576.04
33 14 13 53-0110	EA	16" Diameter x 8" Tap Ductile Iron Mechanical Joint Tapping Sleeve (Mueller H-615)	7,784.94
33 14 13 53-0111	EA	16" Diameter x 10" Tap Ductile Iron Mechanical Joint Tapping Sleeve (Mueller H-615)	7,836.19
33 14 13 53-0112	EA	16" Diameter x 12" Tap Ductile Iron Mechanical Joint Tapping Sleeve (Mueller H-615)	7,892.32
33 14 13 53-0113	EA	16" Diameter x 14" Tap Ductile Iron Mechanical Joint Tapping Sleeve (Mueller H-615)	12,023.92
33 14 13 53-0114	EA	16" Diameter x 16" Tap Ductile Iron Mechanical Joint Tapping Sleeve (Mueller H-615)	8,279.77
33 14 13 53-0115	EA	18" Diameter x 4" Tap Ductile Iron Mechanical Joint Tapping Sleeve (Mueller H-615)	10,471.79
33 14 13 53-0116	EA	18" Diameter x 6" Tap Ductile Iron Mechanical Joint Tapping Sleeve (Mueller H-615)	10,940.22
33 14 13 53-0117	EA	18" Diameter x 8", 10", 12" Or 16" Tap Ductile Iron Mechanical Joint Tapping Sleeve (Mueller H-615)	11,079.27
33 14 13 53-0118	EA	18" Diameter x 18" Tap Ductile Iron Mechanical Joint Tapping Sleeve (Mueller H-615)	11,491.94
33 14 13 53-0119	EA	20" Diameter x 4" Tap Ductile Iron Mechanical Joint Tapping Sleeve (Mueller H-615)	9,834.54
33 14 13 53-0120	EA	20" Diameter x 6" Tap Ductile Iron Mechanical Joint Tapping Sleeve (Mueller H-615)	9,483.27
33 14 13 53-0121	EA	20" Diameter x 8" Tap Ductile Iron Mechanical Joint Tapping Sleeve (Mueller H-615)	9,663.54
33 14 13 53-0122	EA	20" Diameter x 10" Tap Ductile Iron Mechanical Joint Tapping Sleeve (Mueller H-615)	9,735.52
33 14 13 53-0123	EA	20" Diameter x 12" Tap Ductile Iron Mechanical Joint Tapping Sleeve (Mueller H-615)	10,083.76
33 14 13 53-0124	EA	20" Diameter x 14" Tap Ductile Iron Mechanical Joint Tapping Sleeve (Mueller H-615)	13,569.91
33 14 13 53-0125	EA	20" Diameter x 16", 18" Or 20" Tap Ductile Iron Mechanical Joint Tapping Sleeve (Mueller H-615)	13,839.82
33 14 13 53-0126	EA	24" Diameter x 4", 6" Or 8" Tap Ductile Iron Mechanical Joint Tapping Sleeve (Mueller H-615)	11,868.74
33 14 13 53-0127	EA	24" Diameter x 10" Tap Ductile Iron Mechanical Joint Tapping Sleeve (Mueller H-615)	12,034.60
33 14 13 53-0128	EA	24" Diameter x 12" Tap Ductile Iron Mechanical Joint Tapping Sleeve (Mueller H-615)	12,083.27
33 14 13 53-0129	EA	24" Diameter x 14" Tap Ductile Iron Mechanical Joint Tapping Sleeve (Mueller H-615)	16,653.90
33 14 13 53-0130	EA	24" Diameter x 16" Tap Ductile Iron Mechanical Joint Tapping Sleeve (Mueller H-615)	16,870.40
33 14 13 53-0131	EA	24" Diameter x 18" Tap Ductile Iron Mechanical Joint Tapping Sleeve (Mueller H-615)	16,922.96
33 14 13 53-0132	EA	24" Diameter x 20" Tap Ductile Iron Mechanical Joint Tapping Sleeve (Mueller H-615)	17,385.38
33 14 13 53-0133	EA	24" Diameter x 24" Tap Ductile Iron Mechanical Joint Tapping Sleeve (Mueller H-615)	17,607.79

**33 14 13 53-0134****Carbon Steel Epoxy Coated Flange, Stainless Steel Tapping Sleeve** (33 14 13 53)

33 14 13 53-0135	EA	4" Diameter x 4" Epoxy Coated Carbon Steel Flange, Stainless Steel Tapping Sleeve (Smith-Blair 662)	1,202.45
33 14 13 53-0136	EA	6" Diameter x 4" Epoxy Coated Carbon Steel Flange, Stainless Steel Tapping Sleeve (Smith-Blair 662)	1,282.35
33 14 13 53-0137	EA	6" Diameter x 6" Epoxy Coated Carbon Steel Flange, Stainless Steel Tapping Sleeve (Smith-Blair 662)	1,399.43
33 14 13 53-0138	EA	8" Diameter x 4" Epoxy Coated Carbon Steel Flange, Stainless Steel Tapping Sleeve (Smith-Blair 662)	1,444.28
33 14 13 53-0139	EA	8" Diameter x 6" Epoxy Coated Carbon Steel Flange, Stainless Steel Tapping Sleeve (Smith-Blair 662)	1,503.85
33 14 13 53-0140	EA	8" Diameter x 8" Epoxy Coated Carbon Steel Flange, Stainless Steel Tapping Sleeve (Smith-Blair 662)	1,720.48
33 14 13 53-0141	EA	10" Diameter x 4" Epoxy Coated Carbon Steel Flange, Stainless Steel Tapping Sleeve (Smith-Blair 662)	1,578.90
33 14 13 53-0142	EA	10" Diameter x 6" Epoxy Coated Carbon Steel Flange, Stainless Steel Tapping Sleeve (Smith-Blair 662)	1,636.94
33 14 13 53-0143	EA	10" Diameter x 8" Epoxy Coated Carbon Steel Flange, Stainless Steel Tapping Sleeve (Smith-Blair 662)	1,827.67
33 14 13 53-0144	EA	10" Diameter x 10" Epoxy Coated Carbon Steel Flange, Stainless Steel Tapping Sleeve (Smith-Blair 662)	2,499.65
33 14 13 53-0145	EA	12" Diameter x 4" Epoxy Coated Carbon Steel Flange, Stainless Steel Tapping Sleeve (Smith-Blair 662)	1,778.75
33 14 13 53-0146	EA	12" Diameter x 6" Epoxy Coated Carbon Steel Flange, Stainless Steel Tapping Sleeve (Smith-Blair 662)	1,862.79
33 14 13 53-0147	EA	12" Diameter x 8" Epoxy Coated Carbon Steel Flange, Stainless Steel Tapping Sleeve (Smith-Blair 662)	2,050.51
33 14 13 53-0148	EA	12" Diameter x 10" Epoxy Coated Carbon Steel Flange, Stainless Steel Tapping Sleeve (Smith-Blair 662)	2,652.75
33 14 13 53-0149	EA	12" Diameter x 12" Epoxy Coated Carbon Steel Flange, Stainless Steel Tapping Sleeve (Smith-Blair 662)	2,887.51

**33 Utilities****33 10 Water Utilities****33 14 Water Utility Transmission and Distribution**MINOR  
CSI UOM DESCRIPTIONTOTAL DIRECT DEMOLITION  
UNIT COST UNIT COST

33 14 13 53-0150	EA	14" Diameter x 4" Epoxy Coated Carbon Steel Flange, Stainless Steel Tapping Sleeve (Smith-Blair 662).....	2,325.45	
33 14 13 53-0151	EA	14" Diameter x 6" Epoxy Coated Carbon Steel Flange, Stainless Steel Tapping Sleeve (Smith-Blair 662).....	2,395.39	
33 14 13 53-0152	EA	14" Diameter x 8" Epoxy Coated Carbon Steel Flange, Stainless Steel Tapping Sleeve (Smith-Blair 662).....	2,795.51	
33 14 13 53-0153	EA	14" Diameter x 10" Epoxy Coated Carbon Steel Flange, Stainless Steel Tapping Sleeve (Smith-Blair 662).....	3,291.03	
33 14 13 53-0154	EA	14" Diameter x 12" Epoxy Coated Carbon Steel Flange, Stainless Steel Tapping Sleeve (Smith-Blair 662).....	3,614.07	
33 14 13 53-0155	EA	16" Diameter x 4" Epoxy Coated Carbon Steel Flange, Stainless Steel Tapping Sleeve (Smith-Blair 662).....	2,756.58	
33 14 13 53-0156	EA	16" Diameter x 6" Epoxy Coated Carbon Steel Flange, Stainless Steel Tapping Sleeve (Smith-Blair 662).....	2,828.69	
33 14 13 53-0157	EA	16" Diameter x 8" Epoxy Coated Carbon Steel Flange, Stainless Steel Tapping Sleeve (Smith-Blair 662).....	3,094.37	
33 14 13 53-0158	EA	16" Diameter x 10" Epoxy Coated Carbon Steel Flange, Stainless Steel Tapping Sleeve (Smith-Blair 662).....	3,802.08	
33 14 13 53-0159	EA	16" Diameter x 12" Epoxy Coated Carbon Steel Flange, Stainless Steel Tapping Sleeve (Smith-Blair 662).....	3,971.13	
33 14 13 53-0160	EA	18" Diameter x 4" Epoxy Coated Carbon Steel Flange, Stainless Steel Tapping Sleeve (Smith-Blair 662).....	2,932.22	
33 14 13 53-0161	EA	18" Diameter x 6" Epoxy Coated Carbon Steel Flange, Stainless Steel Tapping Sleeve (Smith-Blair 662).....	3,060.97	
33 14 13 53-0162	EA	18" Diameter x 8" Epoxy Coated Carbon Steel Flange, Stainless Steel Tapping Sleeve (Smith-Blair 662).....	3,238.93	
33 14 13 53-0163	EA	18" Diameter x 10" Epoxy Coated Carbon Steel Flange, Stainless Steel Tapping Sleeve (Smith-Blair 662).....	4,071.30	
33 14 13 53-0164	EA	18" Diameter x 12" Epoxy Coated Carbon Steel Flange, Stainless Steel Tapping Sleeve (Smith-Blair 662).....	4,240.15	
33 14 13 53-0165	EA	20" Diameter x 4" Epoxy Coated Carbon Steel Flange, Stainless Steel Tapping Sleeve (Smith-Blair 662).....	3,530.57	
33 14 13 53-0166	EA	20" Diameter x 6" Epoxy Coated Carbon Steel Flange, Stainless Steel Tapping Sleeve (Smith-Blair 662).....	3,602.53	
33 14 13 53-0167	EA	20" Diameter x 8" Epoxy Coated Carbon Steel Flange, Stainless Steel Tapping Sleeve (Smith-Blair 662).....	3,998.98	
33 14 13 53-0168	EA	20" Diameter x 10" Epoxy Coated Carbon Steel Flange, Stainless Steel Tapping Sleeve (Smith-Blair 662).....	4,667.72	
33 14 13 53-0169	EA	20" Diameter x 12" Epoxy Coated Carbon Steel Flange, Stainless Steel Tapping Sleeve (Smith-Blair 662).....	4,952.82	
33 14 13 53-0170	EA	24" Diameter x 4" Epoxy Coated Carbon Steel Flange, Stainless Steel Tapping Sleeve (Smith-Blair 662).....	3,815.29	
33 14 13 53-0171	EA	24" Diameter x 6" Epoxy Coated Carbon Steel Flange, Stainless Steel Tapping Sleeve (Smith-Blair 662).....	3,970.21	
33 14 13 53-0172	EA	24" Diameter x 8" Epoxy Coated Carbon Steel Flange, Stainless Steel Tapping Sleeve (Smith-Blair 662).....	4,178.60	
33 14 13 53-0173	EA	24" Diameter x 10" Epoxy Coated Carbon Steel Flange, Stainless Steel Tapping Sleeve (Smith-Blair 662).....	5,126.79	
33 14 13 53-0174	EA	24" Diameter x 12" Epoxy Coated Carbon Steel Flange, Stainless Steel Tapping Sleeve (Smith-Blair 662).....	5,302.75	

**33 14 13 53-0175 Stainless Steel Flange, Stainless Steel Tapping Sleeve (33 14 13 53)**

33 14 13 53-0176	EA	4" Diameter x 4" Stainless Steel Flange, Stainless Steel Tapping Sleeve (Smith-Blair 663).....	1,383.50	
33 14 13 53-0177	EA	6" Diameter x 4" Stainless Steel Flange, Stainless Steel Tapping Sleeve (Smith-Blair 663).....	1,511.02	
33 14 13 53-0178	EA	6" Diameter x 6" Stainless Steel Flange, Stainless Steel Tapping Sleeve (Smith-Blair 663).....	1,598.69	
33 14 13 53-0179	EA	8" Diameter x 4" Stainless Steel Flange, Stainless Steel Tapping Sleeve (Smith-Blair 663).....	1,635.56	
33 14 13 53-0180	EA	8" Diameter x 6" Stainless Steel Flange, Stainless Steel Tapping Sleeve (Smith-Blair 663).....	1,736.21	
33 14 13 53-0181	EA	8" Diameter x 8" Stainless Steel Flange, Stainless Steel Tapping Sleeve (Smith-Blair 663).....	2,032.20	
33 14 13 53-0182	EA	10" Diameter x 4" Stainless Steel Flange, Stainless Steel Tapping Sleeve (Smith-Blair 663).....	1,875.03	
33 14 13 53-0183	EA	10" Diameter x 6" Stainless Steel Flange, Stainless Steel Tapping Sleeve (Smith-Blair 663).....	1,986.36	
33 14 13 53-0184	EA	10" Diameter x 8" Stainless Steel Flange, Stainless Steel Tapping Sleeve (Smith-Blair 663).....	2,251.92	
33 14 13 53-0185	EA	10" Diameter x 10" Stainless Steel Flange, Stainless Steel Tapping Sleeve (Smith-Blair 663).....	3,017.98	
33 14 13 53-0186	EA	12" Diameter x 4" Stainless Steel Flange, Stainless Steel Tapping Sleeve (Smith-Blair 663).....	2,142.29	
33 14 13 53-0187	EA	12" Diameter x 6" Stainless Steel Flange, Stainless Steel Tapping Sleeve (Smith-Blair 663).....	2,293.21	
33 14 13 53-0188	EA	12" Diameter x 8" Stainless Steel Flange, Stainless Steel Tapping Sleeve (Smith-Blair 663).....	2,643.27	
33 14 13 53-0189	EA	12" Diameter x 10" Stainless Steel Flange, Stainless Steel Tapping Sleeve (Smith-Blair 663).....	3,098.64	
33 14 13 53-0190	EA	12" Diameter x 12" Stainless Steel Flange, Stainless Steel Tapping Sleeve (Smith-Blair 663).....	3,447.32	
33 14 13 53-0191	EA	14" Diameter x 4" Stainless Steel Flange, Stainless Steel Tapping Sleeve (Smith-Blair 663).....	2,445.23	
33 14 13 53-0192	EA	14" Diameter x 6" Stainless Steel Flange, Stainless Steel Tapping Sleeve (Smith-Blair 663).....	2,629.85	
33 14 13 53-0193	EA	14" Diameter x 8" Stainless Steel Flange, Stainless Steel Tapping Sleeve (Smith-Blair 663).....	3,023.71	
33 14 13 53-0194	EA	14" Diameter x 10" Stainless Steel Flange, Stainless Steel Tapping Sleeve (Smith-Blair 663).....	3,479.52	
33 14 13 53-0195	EA	14" Diameter x 12" Stainless Steel Flange, Stainless Steel Tapping Sleeve (Smith-Blair 663).....	3,721.69	
33 14 13 53-0196	EA	16" Diameter x 4" Stainless Steel Flange, Stainless Steel Tapping Sleeve (Smith-Blair 663).....	2,974.16	
33 14 13 53-0197	EA	16" Diameter x 6" Stainless Steel Flange, Stainless Steel Tapping Sleeve (Smith-Blair 663).....	3,225.67	
33 14 13 53-0198	EA	16" Diameter x 8" Stainless Steel Flange, Stainless Steel Tapping Sleeve (Smith-Blair 663).....	3,417.89	
33 14 13 53-0199	EA	16" Diameter x 10" Stainless Steel Flange, Stainless Steel Tapping Sleeve (Smith-Blair 663).....	3,907.80	
33 14 13 53-0200	EA	16" Diameter x 12" Stainless Steel Flange, Stainless Steel Tapping Sleeve (Smith-Blair 663).....	4,240.90	
33 14 13 53-0201	EA	18" Diameter x 4" Stainless Steel Flange, Stainless Steel Tapping Sleeve (Smith-Blair 663).....	3,283.41	
33 14 13 53-0202	EA	18" Diameter x 6" Stainless Steel Flange, Stainless Steel Tapping Sleeve (Smith-Blair 663).....	3,658.18	
33 14 13 53-0203	EA	18" Diameter x 8" Stainless Steel Flange, Stainless Steel Tapping Sleeve (Smith-Blair 663).....	3,858.69	
33 14 13 53-0204	EA	18" Diameter x 10" Stainless Steel Flange, Stainless Steel Tapping Sleeve (Smith-Blair 663).....	4,289.48	
33 14 13 53-0205	EA	18" Diameter x 12" Stainless Steel Flange, Stainless Steel Tapping Sleeve (Smith-Blair 663).....	4,858.67	
33 14 13 53-0206	EA	20" Diameter x 4" Stainless Steel Flange, Stainless Steel Tapping Sleeve (Smith-Blair 663).....	3,551.31	
33 14 13 53-0207	EA	20" Diameter x 6" Stainless Steel Flange, Stainless Steel Tapping Sleeve (Smith-Blair 663).....	3,925.11	
33 14 13 53-0208	EA	20" Diameter x 8" Stainless Steel Flange, Stainless Steel Tapping Sleeve (Smith-Blair 663).....	4,088.46	
33 14 13 53-0209	EA	20" Diameter x 10" Stainless Steel Flange, Stainless Steel Tapping Sleeve (Smith-Blair 663).....	4,888.11	
33 14 13 53-0210	EA	20" Diameter x 12" Stainless Steel Flange, Stainless Steel Tapping Sleeve (Smith-Blair 663).....	5,334.23	
33 14 13 53-0211	EA	24" Diameter x 4" Stainless Steel Flange, Stainless Steel Tapping Sleeve (Smith-Blair 663).....	4,198.30	
33 14 13 53-0212	EA	24" Diameter x 6" Stainless Steel Flange, Stainless Steel Tapping Sleeve (Smith-Blair 663).....	4,253.48	
33 14 13 53-0213	EA	24" Diameter x 8" Stainless Steel Flange, Stainless Steel Tapping Sleeve (Smith-Blair 663).....	4,448.90	
33 14 13 53-0214	EA	24" Diameter x 10" Stainless Steel Flange, Stainless Steel Tapping Sleeve (Smith-Blair 663).....	5,402.95	
33 14 13 53-0215	EA	24" Diameter x 12" Stainless Steel Flange, Stainless Steel Tapping Sleeve (Smith-Blair 663).....	5,913.25	

**33 14 13 53-0216 Ductile Iron Body, Flanged Coupling Adapter (33 14 13 53)**

33 14 13 53-0217	EA	3" Ductile Iron Body, Flanged Coupling Adapter (Smith-Blair 912).....	366.37	78.55
33 14 13 53-0218	EA	4" Ductile Iron Body, Flanged Coupling Adapter (Smith-Blair 912).....	459.33	99.03
33 14 13 53-0219	EA	6" Ductile Iron Body, Flanged Coupling Adapter (Smith-Blair 912).....	606.87	136.60
33 14 13 53-0220	EA	8" Ductile Iron Body, Flanged Coupling Adapter (Smith-Blair 912).....	778.98	160.51
33 14 13 53-0221	EA	10" Ductile Iron Body, Flanged Coupling Adapter (Smith-Blair 912).....	1,191.07	181.00
33 14 13 53-0222	EA	12" Ductile Iron Body, Flanged Coupling Adapter (Smith-Blair 912).....	1,331.83	204.91

**33 14 13 53-0223 Steel Body, Flanged Coupling Adapter (33 14 13 53)**

33 14 13 53-0224	EA	3" Steel Body, Flanged Coupling Adapter (Smith-Blair 913).....	518.23	78.55
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		<b>Utilities</b>	<b>33</b>	<b>CS</b>
		<b>Water Utilities</b>	<b>33 10</b>	
		<b>Water Utility Transmission and Distribution</b>	<b>33 14</b>	

MINOR CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
33 14 13 53-0225	EA	4" Steel Body, Flanged Coupling Adapter (Smith-Blair 913).....	615.59	99.03
33 14 13 53-0226	EA	6" Steel Body, Flanged Coupling Adapter (Smith-Blair 913).....	823.93	136.60
33 14 13 53-0227	EA	8" Steel Body, Flanged Coupling Adapter (Smith-Blair 913).....	1,004.89	160.51
33 14 13 53-0228	EA	10" Steel Body, Flanged Coupling Adapter (Smith-Blair 913).....	1,220.05	181.00
33 14 13 53-0229	EA	12" Steel Body, Flanged Coupling Adapter (Smith-Blair 913).....	1,418.98	204.91
33 14 13 53-0230	EA	14" Steel Body, Flanged Coupling Adapter (Smith-Blair 913).....	1,677.66	225.40
33 14 13 53-0231	EA	16" Steel Body, Flanged Coupling Adapter (Smith-Blair 913).....	1,977.37	245.89
33 14 13 53-0232	EA	18" Steel Body, Flanged Coupling Adapter (Smith-Blair 913).....	2,326.18	270.48
33 14 13 53-0233	EA	20" Steel Body, Flanged Coupling Adapter (Smith-Blair 913).....	2,738.86	297.52
<b>33 14 13 53-0234 Steel Body, Flanged-Lock Restrained Coupling Adapters (33 14 13 53)</b>				
33 14 13 53-0235	EA	4" Steel Body, Flanged-Lock Restrained Coupling Adapter (Smith-Blair 911).....	469.49	99.03
33 14 13 53-0236	EA	6" Steel Body, Flanged-Lock Restrained Coupling Adapter (Smith-Blair 911).....	631.94	136.60
33 14 13 53-0237	EA	8" Steel Body, Flanged-Lock Restrained Coupling Adapter (Smith-Blair 911).....	703.96	160.51
33 14 13 53-0238	EA	10" Steel Body, Flanged-Lock Restrained Coupling Adapter (Smith-Blair 911).....	1,003.51	181.00
33 14 13 53-0239	EA	12" Steel Body, Flanged-Lock Restrained Coupling Adapter (Smith-Blair 911).....	1,266.44	204.91
33 14 13 53-0240	EA	14" Steel Body, Flanged-Lock Restrained Coupling Adapter (Smith-Blair 911).....	1,418.43	225.40
33 14 13 53-0241	EA	16" Steel Body, Flanged-Lock Restrained Coupling Adapter (Smith-Blair 911).....	1,658.65	245.89
33 14 13 53-0242	EA	18" Steel Body, Flanged-Lock Restrained Coupling Adapter (Smith-Blair 911).....	1,858.90	270.48
33 14 13 53-0243	EA	20" Steel Body, Flanged-Lock Restrained Coupling Adapter (Smith-Blair 911).....	2,221.46	297.52
33 14 13 53-0244	EA	24" Steel Body, Flanged-Lock Restrained Coupling Adapter (Smith-Blair 911).....	2,661.77	327.31
33 14 13 53-0245	EA	30" Steel Body, Flanged-Lock Restrained Coupling Adapter (Smith-Blair 911).....	5,397.22	359.95
33 14 13 53-0246	EA	36" Steel Body, Flanged-Lock Restrained Coupling Adapter (Smith-Blair 911).....	7,243.11	396.01
<b>33 14 13 53-0247 Ductile Iron Body, Omni Coupling System (33 14 13 53)</b>				
33 14 13 53-0248	EA	2" Ductile Iron Body, Omni Coupling System (Smith-Blair 441).....	174.37	54.64
33 14 13 53-0249	EA	2-1/2" Ductile Iron Body, Omni Coupling System (Smith-Blair 441).....	213.94	64.89
33 14 13 53-0250	EA	3" Ductile Iron Body, Omni Coupling System (Smith-Blair 441).....	264.04	78.55
33 14 13 53-0251	EA	4" Ductile Iron Body, Omni Coupling System (Smith-Blair 441).....	331.77	99.03
33 14 13 53-0252	EA	6" Ductile Iron Body, Omni Coupling System (Smith-Blair 441).....	444.68	136.60
33 14 13 53-0253	EA	8" Ductile Iron Body, Omni Coupling System (Smith-Blair 441).....	537.76	160.51
33 14 13 53-0254	EA	10" Ductile Iron Body, Omni Coupling System (Smith-Blair 441).....	662.93	181.00
33 14 13 53-0255	EA	12" Ductile Iron Body, Omni Coupling System (Smith-Blair 441).....	772.17	204.91
33 14 13 53-0256	EA	14" Ductile Iron Body, Omni Coupling System (Smith-Blair 441).....	1,056.98	225.40
33 14 13 53-0257	EA	16" Ductile Iron Body, Omni Coupling System (Smith-Blair 441).....	1,302.44	245.89
<b>33 14 19 Valves and Hydrants for Water Utility Service (33 14)</b>				
Note: Flanged valves excludes bolt and gasket set.				
33 14 19 00-0001		<b>Water Utility Distribution Valves (33 14 19)</b>		
33 14 19 00-0002		<b>Angle Valves (33 14 19 00-0001)</b>		
Note: For connecting meters to water service.				
33 14 19 00-0003		<b>Threaded, Class 150, Bronze Angle Valve (33 14 19 00-0002)</b>		
Note: Nibco T-335Y				
33 14 19 00-0004	EA	1/2" Threaded, Class 150, Bronze Angle Valve.....	109.04	23.65
33 14 19 00-0005	EA	3/4" Threaded, Class 150, Bronze Angle Valve.....	147.03	31.78
33 14 19 00-0006	EA	1" Threaded, Class 150, Bronze Angle Valve.....	195.62	39.17
33 14 19 00-0007	EA	1-1/4" Threaded, Class 150, Bronze Angle Valve.....	251.43	49.22
33 14 19 00-0008	EA	1-1/2" Threaded, Class 150, Bronze Angle Valve.....	311.38	56.91
33 14 19 00-0009	EA	2" Threaded, Class 150, Bronze Angle Valve.....	454.75	66.52
33 14 19 00-0010	EA	2-1/2" Threaded, Class 150, Bronze Angle Valve.....	718.97	90.77
33 14 19 00-0011	EA	3" Threaded, Class 150, Bronze Angle Valve.....	1,073.09	104.79
33 14 19 00-0012		<b>Butterfly Valves (33 14 19 00-0001)</b>		
33 14 19 00-0013		<b>Lug Type Flanged, Cast Iron Disc, Butterfly Valves (33 14 19 00-0012)</b>		
Note: ANSI Class 125, Cast Iron Body, Acrylonitrile-Butadiene Packing, Acrylonitrile-Butadiene Seat, Class AWWA C-504, 304 Stainless Steel Pin				
33 14 19 00-0014	EA	3" Handwheel Operated, Flanged, ANSI Class 125, Cast Iron Body, Acrylonitrile-Butadiene Packing, Acrylonitrile-Butadiene Seat, Class AWWA C-504, Cast Iron Disc, 304 Stainless Steel Pin, Butterfly Valve (DeZurik BAW, 3,F1,CI,NBRN-NBR, 150B, CI-S2*GS-6B-HDB).....	1,884.51	251.30
33 14 19 00-0015	EA	3" Chainwheel Operated, Flanged, ANSI Class 125, Cast Iron Body, Acrylonitrile-Butadiene Packing, Acrylonitrile-Butadiene Seat, Class AWWA C-504, Cast Iron Disc, 304 Stainless Steel Pin, Butterfly Valve (DeZurik BAW, 3,F1,CI,NBRN-NBR, 150B, CI-S2*GS-6B-CW8).....	2,084.51	251.30
33 14 19 00-0016	EA	4" Handwheel Operated, Flanged, ANSI Class 125, Cast Iron Body, Acrylonitrile-Butadiene Packing, Acrylonitrile-Butadiene Seat, Class AWWA C-504, Cast Iron Disc, 304 Stainless Steel Pin, Butterfly Valve (DeZurik BAW, 4,F1,CI,NBRN-NBR, 150B, CI-S2*GS-6B-HDB).....	2,075.05	388.83
33 14 19 00-0017	EA	4" Chainwheel Operated, Flanged, ANSI Class 125, Cast Iron Body, Acrylonitrile-Butadiene Packing, Acrylonitrile-Butadiene Seat, Class AWWA C-504, Cast Iron Disc, 304 Stainless Steel Pin, Butterfly Valve (DeZurik BAW, 4,F1,CI,NBRN-NBR, 150B, CI-S2*GS-6B-CW8).....	2,275.05	388.83
33 14 19 00-0018	EA	6" Handwheel Operated, Flanged, ANSI Class 125, Cast Iron Body, Acrylonitrile-Butadiene Packing, Acrylonitrile-Butadiene Seat, Class AWWA C-504, Cast Iron Disc, 304 Stainless Steel Pin, Butterfly Valve (DeZurik BAW, 6,F1,CI,NBRN-NBR, 150B, CI-S2*GS-6B-HDB).....	2,354.86	433.54
33 14 19 00-0019	EA	6" Chainwheel Operated, Flanged, ANSI Class 125, Cast Iron Body, Acrylonitrile-Butadiene Packing, Acrylonitrile-Butadiene Seat, Class AWWA C-504, Cast Iron Disc, 304 Stainless Steel Pin, Butterfly Valve (DeZurik BAW, 6,F1,CI,NBRN-NBR, 150B, CI-S2*GS-6B-CW8).....	2,554.86	433.54

**33 Utilities****33 10 Water Utilities****33 14 Water Utility Transmission and Distribution**

MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
33 14 19 00-0020 EA 8" Handwheel Operated, Flanged, ANSI Class 125, Cast Iron Body, Acrylonitrile-Butadiene Packing, Acrylonitrile-Butadiene Seat, Class AWWA C-504, Cast Iron Disc, 304 Stainless Steel Pin, Butterfly Valve (DeZurik BAW,8,F1,Ci,NBRN-NBR,150B,Ci-S2*GS-6B-HD8) .....	2,682.14	553.96
33 14 19 00-0021 EA 8" Chainwheel Operated, Flanged, ANSI Class 125, Cast Iron Body, Acrylonitrile-Butadiene Packing, Acrylonitrile-Butadiene Seat, Class AWWA C-504, Cast Iron Disc, 304 Stainless Steel Pin, Butterfly Valve (DeZurik BAW,8,F1,Ci,NBRN-NBR,150B,Ci-S2*GS-6B-CW8) .....	2,881.14	553.96
33 14 19 00-0022 EA 10" Handwheel Operated, Flanged, ANSI Class 125, Cast Iron Body, Acrylonitrile-Butadiene Packing, Acrylonitrile-Butadiene Seat, Class AWWA C-504, Cast Iron Disc, 304 Stainless Steel Pin, Butterfly Valve (DeZurik BAW,10,F1,Ci,NBRN-NBR,150B,Ci-S2*GS-6B-HD8) .....	3,357.97	674.39
33 14 19 00-0023 EA 10" Chainwheel Operated, Flanged, ANSI Class 125, Cast Iron Body, Acrylonitrile-Butadiene Packing, Acrylonitrile-Butadiene Seat, Class AWWA C-504, Cast Iron Disc, 304 Stainless Steel Pin, Butterfly Valve (DeZurik BAW,10,F1,Ci,NBRN-NBR,150B,Ci-S2*GS-6B-CW8) .....	4,783.80	674.39
33 14 19 00-0024 EA 12" Handwheel Operated, Flanged, ANSI Class 125, Cast Iron Body, Acrylonitrile-Butadiene Packing, Acrylonitrile-Butadiene Seat, Class AWWA C-504, Cast Iron Disc, 304 Stainless Steel Pin, Butterfly Valve (DeZurik BAW,12,F1,Ci,NBRN-NBR,150B,Ci-S2*GS-6B-HD8) .....	3,859.78	817.42
33 14 19 00-0025 EA 12" Chainwheel Operated, Flanged, ANSI Class 125, Cast Iron Body, Acrylonitrile-Butadiene Packing, Acrylonitrile-Butadiene Seat, Class AWWA C-504, Cast Iron Disc, 304 Stainless Steel Pin, Butterfly Valve (DeZurik BAW,12,F1,Ci,NBRN-NBR,150B,Ci-S2*GS-6B-CW8) .....	4,059.78	817.42
33 14 19 00-0026 EA 14" Handwheel Operated, Flanged, ANSI Class 125, Cast Iron Body, Acrylonitrile-Butadiene Packing, Acrylonitrile-Butadiene Seat, Class AWWA C-504, Cast Iron Disc, 304 Stainless Steel Pin, Butterfly Valve (DeZurik BAW,14,F1,Ci,NBRN-NBR,150B,Ci-S2*GS-6B-HD12) .....	5,122.52	1,094.01
33 14 19 00-0027 EA 14" Chainwheel Operated, Flanged, ANSI Class 125, Cast Iron Body, Acrylonitrile-Butadiene Packing, Acrylonitrile-Butadiene Seat, Class AWWA C-504, Cast Iron Disc, 304 Stainless Steel Pin, Butterfly Valve (DeZurik BAW,14,F1,Ci,NBRN-NBR,150B,Ci-S2*GS-6B-CW12) .....	5,645.52	1,094.01
33 14 19 00-0028 EA 16" Handwheel Operated, Flanged, ANSI Class 125, Cast Iron Body, Acrylonitrile-Butadiene Packing, Acrylonitrile-Butadiene Seat, Class AWWA C-504, Cast Iron Disc, 304 Stainless Steel Pin, Butterfly Valve (DeZurik BAW,16,F1,Ci,NBRN-NBR,150B,Ci-S2*GS-6B-HD16) .....	5,945.26	1,203.41
33 14 19 00-0029 EA 16" Chainwheel Operated, Flanged, ANSI Class 125, Cast Iron Body, Acrylonitrile-Butadiene Packing, Acrylonitrile-Butadiene Seat, Class AWWA C-504, Cast Iron Disc, 304 Stainless Steel Pin, Butterfly Valve (DeZurik BAW,16,F1,Ci,NBRN-NBR,150B,Ci-S2*GS-6B-CW20) .....	6,587.26	1,203.41
33 14 19 00-0030 EA 18" Handwheel Operated, Flanged, ANSI Class 125, Cast Iron Body, Acrylonitrile-Butadiene Packing, Acrylonitrile-Butadiene Seat, Class AWWA C-504, Cast Iron Disc, 304 Stainless Steel Pin, Butterfly Valve (DeZurik BAW,18,F1,Ci,NBRN-NBR,150B,Ci-S2*GS-6B-HD24) .....	7,402.36	1,334.69
33 14 19 00-0031 EA 18" Chainwheel Operated, Flanged, ANSI Class 125, Cast Iron Body, Acrylonitrile-Butadiene Packing, Acrylonitrile-Butadiene Seat, Class AWWA C-504, Cast Iron Disc, 304 Stainless Steel Pin, Butterfly Valve (DeZurik BAW,18,F1,Ci,NBRN-NBR,150B,Ci-S2*GS-6B-CW24) .....	8,082.36	1,334.69
33 14 19 00-0032 EA 20" Handwheel Operated, Flanged, ANSI Class 125, Cast Iron Body, Acrylonitrile-Butadiene Packing, Acrylonitrile-Butadiene Seat, Class AWWA C-504, Cast Iron Disc, 304 Stainless Steel Pin, Butterfly Valve (DeZurik BAW,20,F1,Ci,NBRN-NBR,150B,Ci-S2*GS-6B-HD24) .....	8,475.33	1,504.26
33 14 19 00-0033 EA 20" Chainwheel Operated, Flanged, ANSI Class 125, Cast Iron Body, Acrylonitrile-Butadiene Packing, Acrylonitrile-Butadiene Seat, Class AWWA C-504, Cast Iron Disc, 304 Stainless Steel Pin, Butterfly Valve (DeZurik BAW,20,F1,Ci,NBRN-NBR,150B,Ci-S2*GS-6B-CW24) .....	9,154.33	1,504.26
<b>33 14 19 00-0034 Check Valves (33 14 19 00-0001)</b>		
<b>33 14 19 00-0035 Flanged, Swing Type Gravity Operated Check Valves (33 14 19 00-0034)</b>		
Note: AWWA C508. Bronze disc facing. Mueller A-2600-6.		
33 14 19 00-0036 EA 2-1/2" Flanged, Swing Type Gravity Operated Check Valve.....	915.92	197.33
33 14 19 00-0037 EA 3" Flanged, Swing Type Gravity Operated Check Valve.....	958.04	231.36
33 14 19 00-0038 EA 4" Flanged, Swing Type Gravity Operated Check Valve.....	1,405.53	292.60
33 14 19 00-0039 EA 4" x 6" Flanged, Swing Type Gravity Operated Check Valve.....	1,841.42	440.26
33 14 19 00-0040 EA 4" x 8" Flanged, Swing Type Gravity Operated Check Valve.....	1,931.99	491.69
33 14 19 00-0041 EA 6" Flanged, Swing Type Gravity Operated Check Valve.....	1,854.85	489.94
33 14 19 00-0042 EA 6" x 8" Flanged, Swing Type Gravity Operated Check Valve.....	2,375.78	556.91
33 14 19 00-0043 EA 6" x 10" Flanged, Swing Type Gravity Operated Check Valve.....	2,502.48	626.03
33 14 19 00-0044 EA 8" Flanged, Swing Type Gravity Operated Check Valve.....	2,593.01	626.03
33 14 19 00-0045 EA 10" Flanged, Swing Type Gravity Operated Check Valve.....	4,209.88	762.12
33 14 19 00-0046 EA 12" Flanged, Swing Type Gravity Operated Check Valve.....	6,241.90	571.59
33 14 19 00-0047 EA 14" Flanged, Swing Type Gravity Operated Check Valve.....	8,579.12	1,094.01
33 14 19 00-0048 EA 16" Flanged, Swing Type Gravity Operated Check Valve.....	11,278.31	1,203.41
33 14 19 00-0049 EA 18" Flanged, Swing Type Gravity Operated Check Valve.....	16,144.81	1,334.69
33 14 19 00-0050 EA 20" Flanged, Swing Type Gravity Operated Check Valve.....	18,770.60	1,504.26
<b>33 14 19 00-0051 Gate Valve, AWWA C500 And C509 (33 14 19 00-0001)</b>		
<b>33 14 19 00-0052 Gate Valve, Flanged (33 14 19 00-0051)</b>		
Note: Mueller A-2380-6.		
33 14 19 00-0053 EA 2" Gate Valve, Flanged.....	603.97	181.41
33 14 19 00-0054 EA 2-1/2" Gate Valve, Flanged.....	697.78	197.33
33 14 19 00-0055 EA 3" Gate Valve, Flanged.....	823.99	231.36
33 14 19 00-0056 EA 4" Gate Valve, Flanged.....	1,176.96	289.88
33 14 19 00-0057 EA 6" Gate Valve, Flanged.....	1,412.96	489.94
33 14 19 00-0058 EA 8" Gate Valve, Flanged.....	2,025.24	626.03
33 14 19 00-0059 EA 10" Gate Valve, Flanged.....	2,935.16	762.12
33 14 19 00-0060 EA 12" Gate Valve, Flanged.....	3,536.79	571.59
33 14 19 00-0061 EA 14" Gate Valve, Flanged.....	7,084.05	1,094.01
33 14 19 00-0062 EA 16" Gate Valve, Flanged.....	9,143.23	1,203.41
33 14 19 00-0063 EA 18" Gate Valve, Flanged.....	14,172.03	1,334.69
33 14 19 00-0064 EA 20" Gate Valve, Flanged.....	16,897.48	1,504.26



<b>Utilities</b>			<b>33</b>	<b>CS</b>
<b>Water Utilities</b>			<b>33 10</b>	
<b>Water Utility Transmission and Distribution</b>			<b>33 14</b>	

MINOR CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
33 14 19 00-0065		<b>Resilient Wedge Gate Valve, Flanged</b> (33 14 19 00-0051) Note: Mueller A-2360-6.		
33 14 19 00-0066	EA	2" Resilient Wedge Gate Valve, Flanged.....	582.64	181.41
33 14 19 00-0067	EA	2-1/2" Resilient Wedge Gate Valve, Flanged.....	672.29	197.33
33 14 19 00-0068	EA	3" Resilient Wedge Gate Valve, Flanged.....	793.74	231.36
33 14 19 00-0069	EA	4" Resilient Wedge Gate Valve, Flanged.....	1,143.15	289.88
33 14 19 00-0070	EA	6" Resilient Wedge Gate Valve, Flanged.....	1,367.76	489.94
33 14 19 00-0071	EA	8" Resilient Wedge Gate Valve, Flanged.....	1,954.63	626.03
33 14 19 00-0072	EA	10" Resilient Wedge Gate Valve, Flanged.....	2,822.95	762.12
33 14 19 00-0073	EA	12" Resilient Wedge Gate Valve, Flanged.....	3,401.31	571.59
33 14 19 00-0074		<b>Gate Valve, Mechanical Joint</b> (33 14 19 00-0051) Note: Mueller A-2380-20.		
33 14 19 00-0075	EA	2" Gate Valve, Mechanical Joint.....	720.17	144.94
33 14 19 00-0076	EA	2-1/2" Gate Valve, Mechanical Joint.....	805.03	181.68
33 14 19 00-0077	EA	3" Gate Valve, Mechanical Joint.....	1,002.96	219.79
33 14 19 00-0078	EA	4" Gate Valve, Mechanical Joint.....	1,224.17	289.88
33 14 19 00-0079	EA	6" Gate Valve, Mechanical Joint.....	1,514.63	340.23
33 14 19 00-0080	EA	8" Gate Valve, Mechanical Joint.....	2,114.29	408.28
33 14 19 00-0081	EA	10" Gate Valve, Mechanical Joint.....	2,969.40	476.32
33 14 19 00-0082	EA	12" Gate Valve, Mechanical Joint.....	3,692.28	571.59
33 14 19 00-0083	EA	14" Gate Valve, Mechanical Joint.....	7,480.78	670.08
33 14 19 00-0084	EA	16" Gate Valve, Mechanical Joint.....	9,577.68	752.13
33 14 19 00-0085	EA	18" Gate Valve, Mechanical Joint.....	14,950.63	834.19
33 14 19 00-0086	EA	20" Gate Valve, Mechanical Joint.....	17,737.11	940.16
33 14 19 00-0087		<b>Resilient Wedge Gate Valve, Mechanical Joint</b> (33 14 19 00-0051) Note: Mueller A-2360-20.		
33 14 19 00-0088	EA	2" Resilient Wedge Gate Valve, Mechanical Joint.....	695.81	144.94
33 14 19 00-0089	EA	3" Resilient Wedge Gate Valve, Mechanical Joint.....	971.07	219.79
33 14 19 00-0090	EA	4" Resilient Wedge Gate Valve, Mechanical Joint.....	1,187.69	289.88
33 14 19 00-0091	EA	6" Resilient Wedge Gate Valve, Mechanical Joint.....	1,467.42	340.23
33 14 19 00-0092	EA	8" Resilient Wedge Gate Valve, Mechanical Joint.....	2,040.85	408.28
33 14 19 00-0093	EA	10" Resilient Wedge Gate Valve, Mechanical Joint.....	2,855.25	476.32
33 14 19 00-0094	EA	12" Resilient Wedge Gate Valve, Mechanical Joint.....	3,547.97	571.59
33 14 19 00-0095		<b>Resilient Wedge Gate Valve, Mechanical Joint X Flange Joint</b> (33 14 19 00-0051) Note: Mueller A-2361.		
33 14 19 00-0096	EA	14" Resilient Wedge Gate Valve, Mechanical Joint X Flanged Joint.....	7,981.80	1,094.01
33 14 19 00-0097	EA	16" Resilient Wedge Gate Valve, Mechanical Joint X Flanged Joint.....	8,680.33	1,203.41
33 14 19 00-0098	EA	18" Resilient Wedge Gate Valve, Mechanical Joint X Flanged Joint.....	13,412.40	1,334.69
33 14 19 00-0099	EA	20" Resilient Wedge Gate Valve, Mechanical Joint X Flanged Joint.....	15,988.43	1,504.26
33 14 19 00-0100	EA	24" Resilient Wedge Gate Valve, Mechanical Joint X Flanged Joint.....	22,643.68	1,846.14
33 14 19 00-0101		<b>Gate Valve, Threaded, WW-V-51 Class A, Type 1</b> (33 14 19 00-0051) Note: NIBCO T-113.		
33 14 19 00-0102	EA	1/4" Gate Valve, Bronze, Threaded.....	67.78	23.80
33 14 19 00-0103	EA	3/8" Gate Valve, Bronze, Threaded.....	70.04	23.80
33 14 19 00-0104	EA	1/2" Gate Valve, Bronze, Threaded.....	70.09	23.80
33 14 19 00-0105	EA	3/4" Gate Valve, Bronze, Threaded.....	90.94	32.15
33 14 19 00-0106	EA	1" Gate Valve, Bronze, Threaded.....	111.79	38.88
33 14 19 00-0107	EA	1-1/4" Gate Valve, Bronze, Threaded.....	150.16	49.22
33 14 19 00-0108	EA	1-1/2" Gate Valve, Bronze, Threaded.....	174.08	56.91
33 14 19 00-0109	EA	2" Gate Valve, Bronze, Threaded.....	210.33	66.52
33 14 19 00-0110	EA	2-1/2" Gate Valve, Bronze, Threaded.....	385.95	90.77
33 14 19 00-0111	EA	3" Gate Valve, Bronze, Threaded.....	460.60	104.11
33 14 19 00-0112		<b>Globe Valve, AWWA</b> (33 14 19 00-0001)		
33 14 19 00-0113		<b>Globe Valve, Threaded, WW-V-51 Class B, Type 1</b> (33 14 19 00-0112) Note: NIBCO T-235.		
33 14 19 00-0114	EA	1/8" Globe Valve, Threaded.....	92.58	23.80
33 14 19 00-0115	EA	1/4" Globe Valve, Threaded.....	88.02	23.80
33 14 19 00-0116	EA	3/8" Globe Valve, Threaded.....	90.28	23.80
33 14 19 00-0117	EA	1/2" Globe Valve, Threaded.....	92.58	23.80
33 14 19 00-0118	EA	3/4" Globe Valve, Threaded.....	125.65	32.15
33 14 19 00-0119	EA	1" Globe Valve, Threaded.....	173.19	38.88
33 14 19 00-0120	EA	1-1/4" Globe Valve, Threaded.....	249.38	49.22
33 14 19 00-0121	EA	1-1/2" Globe Valve, Threaded.....	296.74	56.91
33 14 19 00-0122	EA	2" Globe Valve, Threaded.....	407.63	66.52
33 14 19 00-0123	EA	2-1/2" Globe Valve, Threaded.....	732.56	90.77
33 14 19 00-0124	EA	3" Globe Valve, Threaded.....	993.18	104.66
33 14 19 00-0125		<b>Tapping Valve, AWWA C500 And C509</b> (33 14 19 00-0001)		

**33 Utilities****33 10 Water Utilities****33 14 Water Utility Transmission and Distribution**

MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
<b>33 14 19 00-0126 Tapping Valve, AWWA C500 And C509</b> (33 14 19 00-0125) Note: Flanged inlet X mechanical joint, Mueller H-667.		
33 14 19 00-0127 EA 2" Resilient Wedge Tapping Gate Valve, Mechanical Joint X Flanged Joint.....	807.31	181.41
33 14 19 00-0128 EA 3" Resilient Wedge Tapping Gate Valve, Mechanical Joint X Flanged Joint.....	1,038.85	231.36
33 14 19 00-0129 EA 4" Resilient Wedge Tapping Gate Valve, Mechanical Joint X Flanged Joint.....	1,384.50	289.88
33 14 19 00-0130 EA 6" Resilient Wedge Tapping Gate Valve, Mechanical Joint X Flanged Joint.....	1,730.10	489.94
33 14 19 00-0131 EA 8" Resilient Wedge Tapping Gate Valve, Mechanical Joint X Flanged Joint.....	2,431.98	626.03
33 14 19 00-0132 EA 10" Resilient Wedge Tapping Gate Valve, Mechanical Joint X Flanged Joint.....	3,429.44	762.12
33 14 19 00-0133 EA 12" Resilient Wedge Tapping Gate Valve, Mechanical Joint X Flanged Joint.....	4,928.60	571.59
33 14 19 00-0134 EA 14" Resilient Wedge Tapping Gate Valve, Mechanical Joint X Flanged Joint.....	8,515.66	1,094.01
33 14 19 00-0135 EA 16" Resilient Wedge Tapping Gate Valve, Mechanical Joint X Flanged Joint.....	10,659.19	1,203.41
33 14 19 00-0136 EA 18" Resilient Wedge Tapping Gate Valve, Mechanical Joint X Flanged Joint.....	16,860.07	1,334.69
<b>33 14 19 00-0137 Fire Hydrants</b> (33 14 19) Note: Breakaway type.		
<b>33 14 19 00-0138 Three Way, Standard (Traditional) Model Fire Hydrant</b> (33 14 19 00-0137) Note: Mechanical joint shoe. Includes shoe, lower barrel and upper barrel (hydrant).		
33 14 19 00-0139 EA 1-1/2" Burial Section, 4-1/2" Valve, Three Way, Standard Type (Traditional) Fire Hydrant.....	3,618.10	337.19
33 14 19 00-0140 EA 2" Burial Section, 4-1/2" Valve, Three Way, Standard Type (Traditional) Fire Hydrant.....	3,684.61	337.19
33 14 19 00-0141 EA 2-1/2" Burial Section, 4-1/2" Valve, Three Way, Standard Type (Traditional) Fire Hydrant.....	3,751.29	337.19
33 14 19 00-0142 EA 3" Burial Section, 4-1/2" Valve, Three Way, Standard Type (Traditional) Fire Hydrant.....	3,841.73	361.27
33 14 19 00-0143 EA 3-1/2" Burial Section, 4-1/2" Valve, Three Way, Standard Type (Traditional) Fire Hydrant.....	3,908.31	361.27
33 14 19 00-0144 EA 4" Burial Section, 4-1/2" Valve, Three Way, Standard Type (Traditional) Fire Hydrant.....	4,005.06	391.38
33 14 19 00-0145 EA 4-1/2" Burial Section, 4-1/2" Valve, Three Way, Standard Type (Traditional) Fire Hydrant.....	4,071.53	391.38
33 14 19 00-0146 EA 5" Burial Section, 4-1/2" Valve, Three Way, Standard Type (Traditional) Fire Hydrant.....	4,168.30	421.49
33 14 19 00-0147 EA 5-1/2" Burial Section, 4-1/2" Valve, Three Way, Standard Type (Traditional) Fire Hydrant.....	4,234.87	421.49
33 14 19 00-0148 EA 6" Burial Section, 4-1/2" Valve, Three Way, Standard Type (Traditional) Fire Hydrant.....	4,331.44	451.59
33 14 19 00-0149 EA 6-1/2" Burial Section, 4-1/2" Valve, Three Way, Standard Type (Traditional) Fire Hydrant.....	4,428.10	481.70
33 14 19 00-0150 EA 7" Burial Section, 4-1/2" Valve, Three Way, Standard Type (Traditional) Fire Hydrant.....	4,554.76	541.91
33 14 19 00-0151 EA 1-1/2" Burial Section, 5-1/4" Valve, Three Way, Standard Type (Traditional) Fire Hydrant.....	3,678.80	337.19
33 14 19 00-0152 EA 2" Burial Section, 5-1/4" Valve, Three Way, Standard Type (Traditional) Fire Hydrant.....	3,765.11	337.19
33 14 19 00-0153 EA 2-1/2" Burial Section, 5-1/4" Valve, Three Way, Standard Type (Traditional) Fire Hydrant.....	3,851.21	337.19
33 14 19 00-0154 EA 3" Burial Section, 5-1/4" Valve, Three Way, Standard Type (Traditional) Fire Hydrant.....	3,961.39	361.27
33 14 19 00-0155 EA 3-1/2" Burial Section, 5-1/4" Valve, Three Way, Standard Type (Traditional) Fire Hydrant.....	4,047.49	361.27
33 14 19 00-0156 EA 4" Burial Section, 5-1/4" Valve, Three Way, Standard Type (Traditional) Fire Hydrant.....	4,164.02	391.38
33 14 19 00-0157 EA 4-1/2" Burial Section, 5-1/4" Valve, Three Way, Standard Type (Traditional) Fire Hydrant.....	4,250.01	391.38
33 14 19 00-0158 EA 5" Burial Section, 5-1/4" Valve, Three Way, Standard Type (Traditional) Fire Hydrant.....	4,366.31	421.49
33 14 19 00-0159 EA 5-1/2" Burial Section, 5-1/4" Valve, Three Way, Standard Type (Traditional) Fire Hydrant.....	4,452.39	421.49
33 14 19 00-0160 EA 6" Burial Section, 5-1/4" Valve, Three Way, Standard Type (Traditional) Fire Hydrant.....	4,568.44	451.59
33 14 19 00-0161 EA 6-1/2" Burial Section, 5-1/4" Valve, Three Way, Standard Type (Traditional) Fire Hydrant.....	4,684.86	481.70
33 14 19 00-0162 EA 7" Burial Section, 5-1/4" Valve, Three Way, Standard Type (Traditional) Fire Hydrant.....	4,831.02	541.91
<b>33 14 19 00-0163 Two Way, Standard (Traditional) Model Fire Hydrant</b> (33 14 19 00-0137) Note: Mechanical joint shoe. Includes shoe, lower barrel and upper barrel (hydrant).		
33 14 19 00-0164 EA 1-1/2" Burial Section, 4-1/2" Valve, Two Way, Standard Type (Traditional) Fire Hydrant.....	3,253.02	337.19
33 14 19 00-0165 EA 2" Burial Section, 4-1/2" Valve, Two Way, Standard Type (Traditional) Fire Hydrant.....	3,319.30	337.19
33 14 19 00-0166 EA 2-1/2" Burial Section, 4-1/2" Valve, Two Way, Standard Type (Traditional) Fire Hydrant.....	3,385.96	337.19
33 14 19 00-0167 EA 3" Burial Section, 4-1/2" Valve, Two Way, Standard Type (Traditional) Fire Hydrant.....	3,476.68	361.27
33 14 19 00-0168 EA 3-1/2" Burial Section, 4-1/2" Valve, Two Way, Standard Type (Traditional) Fire Hydrant.....	3,543.04	361.27
33 14 19 00-0169 EA 4" Burial Section, 4-1/2" Valve, Two Way, Standard Type (Traditional) Fire Hydrant.....	3,639.64	391.38
33 14 19 00-0170 EA 4-1/2" Burial Section, 4-1/2" Valve, Two Way, Standard Type (Traditional) Fire Hydrant.....	3,706.21	391.38
33 14 19 00-0171 EA 5" Burial Section, 4-1/2" Valve, Two Way, Standard Type (Traditional) Fire Hydrant.....	3,803.04	421.49
33 14 19 00-0172 EA 5-1/2" Burial Section, 4-1/2" Valve, Two Way, Standard Type (Traditional) Fire Hydrant.....	3,869.47	421.49
33 14 19 00-0173 EA 6" Burial Section, 4-1/2" Valve, Two Way, Standard Type (Traditional) Fire Hydrant.....	3,966.40	451.59
33 14 19 00-0174 EA 6-1/2" Burial Section, 4-1/2" Valve, Two Way, Standard Type (Traditional) Fire Hydrant.....	4,062.64	481.70
33 14 19 00-0175 EA 7" Burial Section, 4-1/2" Valve, Two Way, Standard Type (Traditional) Fire Hydrant.....	4,189.44	541.91
33 14 19 00-0176 EA 1-1/2" Burial Section, 5-1/4" Valve, Two Way, Standard Type (Traditional) Fire Hydrant.....	3,346.78	337.19
33 14 19 00-0177 EA 2" Burial Section, 5-1/4" Valve, Two Way, Standard Type (Traditional) Fire Hydrant.....	3,432.90	337.19
33 14 19 00-0178 EA 2-1/2" Burial Section, 5-1/4" Valve, Two Way, Standard Type (Traditional) Fire Hydrant.....	3,518.89	337.19
33 14 19 00-0179 EA 3" Burial Section, 5-1/4" Valve, Two Way, Standard Type (Traditional) Fire Hydrant.....	3,629.29	361.27
33 14 19 00-0180 EA 3-1/2" Burial Section, 5-1/4" Valve, Two Way, Standard Type (Traditional) Fire Hydrant.....	3,715.17	361.27
33 14 19 00-0181 EA 4" Burial Section, 5-1/4" Valve, Two Way, Standard Type (Traditional) Fire Hydrant.....	3,831.55	391.38
33 14 19 00-0182 EA 4-1/2" Burial Section, 5-1/4" Valve, Two Way, Standard Type (Traditional) Fire Hydrant.....	3,917.48	391.38
33 14 19 00-0183 EA 5" Burial Section, 5-1/4" Valve, Two Way, Standard Type (Traditional) Fire Hydrant.....	4,034.06	421.49
33 14 19 00-0184 EA 5-1/2" Burial Section, 5-1/4" Valve, Two Way, Standard Type (Traditional) Fire Hydrant.....	4,119.94	421.49
33 14 19 00-0185 EA 6" Burial Section, 5-1/4" Valve, Two Way, Standard Type (Traditional) Fire Hydrant.....	4,236.29	451.59
33 14 19 00-0186 EA 6-1/2" Burial Section, 5-1/4" Valve, Two Way, Standard Type (Traditional) Fire Hydrant.....	4,352.29	481.70
33 14 19 00-0187 EA 7" Burial Section, 5-1/4" Valve, Two Way, Standard Type (Traditional) Fire Hydrant.....	4,498.92	541.91
<b>33 14 19 00-0188 Three Way, Modern Model Fire Hydrant</b> (33 14 19 00-0137) Note: Mechanical joint shoe. Includes shoe, lower barrel and upper barrel (hydrant).		
33 14 19 00-0189 EA 1-1/2" Burial Section, Three Way, Modern Type Fire Hydrant.....	3,773.32	337.19
33 14 19 00-0190 EA 2" Burial Section, Three Way, Modern Type Fire Hydrant.....	3,859.31	337.19
33 14 19 00-0191 EA 2-1/2" Burial Section, Three Way, Modern Type Fire Hydrant.....	3,945.56	337.19
33 14 19 00-0192 EA 3" Burial Section, Three Way, Modern Type Fire Hydrant.....	4,055.79	361.27
33 14 19 00-0193 EA 3-1/2" Burial Section, Three Way, Modern Type Fire Hydrant.....	4,141.84	361.27
33 14 19 00-0194 EA 4" Burial Section, Three Way, Modern Type Fire Hydrant.....	4,258.05	391.38



		<b>Utilities</b>	<b>33</b>	<b>CS</b>
		<b>Water Utilities</b>	<b>33 10</b>	
		<b>Water Utility Transmission and Distribution</b>	<b>33 14</b>	

MINOR CSI UOM DESCRIPTION		TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
33 14 19 00-0195	EA 4-1/2' Burial Section, Three Way, Modern Type Fire Hydrant.....	4,344.22	391.38
33 14 19 00-0196	EA 5' Burial Section, Three Way, Modern Type Fire Hydrant.....	4,460.45	421.49
33 14 19 00-0197	EA 5-1/2' Burial Section, Three Way, Modern Type Fire Hydrant.....	4,546.53	421.49
33 14 19 00-0198	EA 6' Burial Section, Three Way, Modern Type Fire Hydrant.....	4,662.73	421.49
33 14 19 00-0199	EA 6-1/2' Burial Section, Three Way, Modern Type Fire Hydrant.....	4,779.20	481.70
33 14 19 00-0200	EA 7' Burial Section, Three Way, Modern Type Fire Hydrant.....	4,924.46	481.70
<b>33 14 19 00-0201 Two Way, Modern Model Fire Hydrant</b> (33 14 19 00-0137)			
Note: Mechanical joint shoe. Includes shoe, lower barrel and upper barrel (hydrant).			
33 14 19 00-0202	EA 1-1/2' Burial Section, Two Way, Modern Type Fire Hydrant.....	2,695.06	337.19
33 14 19 00-0203	EA 2' Burial Section, Two Way, Modern Type Fire Hydrant.....	2,760.50	337.19
33 14 19 00-0204	EA 2-1/2' Burial Section, Two Way, Modern Type Fire Hydrant.....	2,826.67	337.19
33 14 19 00-0205	EA 3' Burial Section, Two Way, Modern Type Fire Hydrant.....	2,915.42	361.27
33 14 19 00-0206	EA 3-1/2' Burial Section, Two Way, Modern Type Fire Hydrant.....	2,980.84	361.27
33 14 19 00-0207	EA 4' Burial Section, Two Way, Modern Type Fire Hydrant.....	3,076.37	391.38
33 14 19 00-0208	EA 4-1/2' Burial Section, Two Way, Modern Type Fire Hydrant.....	3,141.77	391.38
33 14 19 00-0209	EA 5' Burial Section, Two Way, Modern Type Fire Hydrant.....	3,237.38	421.49
33 14 19 00-0210	EA 5-1/2' Burial Section, Two Way, Modern Type Fire Hydrant.....	3,302.61	421.49
33 14 19 00-0211	EA 6' Burial Section, Two Way, Modern Type Fire Hydrant.....	3,398.15	451.59
33 14 19 00-0212	EA 6-1/2' Burial Section, Two Way, Modern Type Fire Hydrant.....	3,493.77	481.70
33 14 19 00-0213	EA 7' Burial Section, Two Way, Modern Type Fire Hydrant.....	3,618.59	541.91
<b>33 14 19 00-0214 Safetop Model With Breakable Section</b> (33 14 19 00-0137)			
Note: Prices listed are for mechanical joint. Includes shoe, lower barrel and upper barrel (hydrant).			
33 14 19 00-0215	EA 4' Safetop Model Fire Hydrant Breakable With 5' Burial Section.....	3,205.86	481.70
33 14 19 00-0216	EA 6' Safetop Model Fire Hydrant Breakable With 5' Burial Section.....	3,338.70	481.70
33 14 19 00-0217	EA 8' Safetop Model Fire Hydrant Breakable With 5' Burial Section.....	3,543.54	481.70
<b>33 14 19 00-0218 Removal And Reinstallation Of Standard Fire Hydrant</b> (33 14 19 00-0137)			
Note: Includes all necessary fittings for resetting, storage and cleaning. Excludes excavation, backfill and thrust blocking around fire hydrant.			
33 14 19 00-0219	EA >5' Burial Section, Removal And Reinstallation Of Fire Hydrant.....	1,404.96	
33 14 19 00-0220	EA Reset Fire Hydrant Upper Barrel.....	1,185.02	
Note: Includes Safety Repair Kit			
<b>33 14 19 00-0221 Yard Hydrants</b> (33 14 19)			
Note: With 3/4" hose thread outlet.			
33 14 19 00-0222	EA 2' Bury Depth Yard Hydrant, 3/4" Galvanized Column And 3/4" Threaded Hose Outlet.....	389.23	44.35
33 14 19 00-0223	EA 4' Bury Depth Yard Hydrant, 3/4" Galvanized Column And 3/4" Threaded Hose Outlet.....	415.74	44.35
33 14 19 00-0224	EA 6' Bury Depth Yard Hydrant, 3/4" Galvanized Column And 3/4" Threaded Hose Outlet.....	442.25	44.35
33 14 19 00-0225	EA 2' Bury Depth Yard Hydrant, 1" Galvanized Column And 3/4" Threaded Hose Outlet.....	356.63	56.17
33 14 19 00-0226	EA 4' Bury Depth Yard Hydrant, 1" Galvanized Column And 3/4" Threaded Hose Outlet.....	371.28	56.17
33 14 19 00-0227	EA 6' Bury Depth Yard Hydrant, 1" Galvanized Column And 3/4" Threaded Hose Outlet.....	385.93	56.17
<b>33 14 19 00-0228 Sanitary Yard Hydrants</b> (33 14 19)			
Note: With 3/4" hose thread outlet.			
33 14 19 00-0229	EA 2' Bury Depth Sanitary Yard Hydrant, 1" Galvanized Column And 3/4" Threaded Hose Outlet.....	1,656.24	92.39
33 14 19 00-0230	EA 4' Bury Depth Sanitary Yard Hydrant, 1" Galvanized Column And 3/4" Threaded Hose Outlet.....	1,739.08	92.39
33 14 19 00-0231	EA 6' Bury Depth Sanitary Yard Hydrant, 1" Galvanized Column And 3/4" Threaded Hose Outlet.....	1,821.92	92.39
<b>33 14 19 00-0232 Flushing Hydrants</b> (33 14 19)			
33 14 19 00-0233	EA 2" Inlet x 2-1/2" Outlet Steel Flushing Hydrant, 3' Bury Depth.....	864.36	56.37
<b>33 14 23 Enclosures for Water Utility Piping and Valves</b> (33 14)			
<b>33 14 23 00-0001 Roadway Or Curb Valve Boxes</b> (33 14 23)			
<b>33 14 23 00-0002 Traffic Valve Box And Lid</b> (33 14 23 00-0001)			
33 14 23 00-0003	EA 10-3/8" ID x 12" Traffic Valve Box And 11" OD Cast Iron Lid (Christy G-5).....	234.88	
33 14 23 00-0004	EA 14-1/2" ID x 12" Traffic Valve Box And 13-1/4" OD Cast Iron Lid (Christy G-12).....	715.76	
<b>33 14 23 00-0005 Utility Box</b> (33 14 23 00-0001)			
Note: Christy Concrete Products.			
<b>33 14 23 00-0006 B3 Utility Box, 9-3/8" x 15-1/2"</b> (33 14 23 00-0005)			
33 14 23 00-0007	EA 9-3/8" x 15-1/2" Precast Concrete Utility Box.....	127.28	66.75
33 14 23 00-0008	EA Cast Iron Lid For 9-3/8" x 15-1/2" Utility Box.....	115.15	7.42
33 14 23 00-0009	EA Reinforced Concrete Lid For 9-3/8" x 15-1/2" Utility Box.....	50.12	7.42
33 14 23 00-0010	EA Steel Checkered Plate Cover For 9-3/8" x 15-1/2" Utility Box.....	247.37	7.42
33 14 23 00-0011	EA 12-1/8" x 18-5/8" Reinforced Concrete Slab For 9-3/8" x 15-1/2" Utility Box.....	73.25	14.83
33 14 23 00-0012	EA 3" High Reinforced Concrete Base For 9-3/8" x 15-1/2" Utility Box.....	101.98	14.83
<b>33 14 23 00-0013 B9 Utility Box, 10-1/4" x 17-1/4"</b> (33 14 23 00-0005)			

**33 Utilities****33 10 Water Utilities****33 14 Water Utility Transmission and Distribution**

MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
33 14 23 00-0014 EA 10-1/4" x 17-1/4" Precast Concrete Utility Box.....	156.44	89.01
33 14 23 00-0015 EA Cast Iron Lid For 10-1/4" x 17-1/4" Utility Box.....	135.01	8.90
33 14 23 00-0016 EA Reinforced Concrete Lid For 10-1/4" x 17-1/4" Utility Box.....	55.97	8.90
33 14 23 00-0017 EA Steel Checkered Plate Cover For 10-1/4" x 17-1/4" Utility Box.....	259.33	7.42
33 14 23 00-0018 EA 13" x 19-3/4" Reinforced Concrete Slab For 10-1/4" x 17-1/4" Utility Box.....	81.15	14.83
33 14 23 00-0019 EA 5-3/4" High Reinforced Concrete Base For 10-1/4" x 17-1/4" Utility Box.....	109.88	22.25
33 14 23 00-0020 EA 12" High Reinforced Concrete Extension For 10-1/4" x 17-1/4" Utility Box.....	137.50	40.79
<b>33 14 23 00-0021 B12 Utility Box, 12" x 20"</b> (33 14 23 00-0005)		
33 14 23 00-0022 EA 12" x 20" Precast Concrete Utility Box.....	171.61	96.42
33 14 23 00-0023 EA Cast Iron Lid For 12" x 20" Utility Box.....	240.61	11.13
33 14 23 00-0024 EA Reinforced Concrete Lid For 12" x 20" Utility Box.....	76.54	14.83
33 14 23 00-0025 EA Steel Checkered Plate Cover For 12" x 20" Utility Box.....	351.27	14.83
33 14 23 00-0026 EA 12" High Reinforced Concrete Extension For 12" x 20" Utility Box.....	178.65	51.92
<b>33 14 23 00-0027 B16 Utility Box, 12" x 22-1/4"</b> (33 14 23 00-0005)		
33 14 23 00-0028 EA 12" x 22-1/4" Precast Concrete Utility Box.....	197.97	112.73
33 14 23 00-0029 EA Cast Iron Lid For 12" x 22-1/4" Utility Box.....	273.03	14.83
33 14 23 00-0030 EA Reinforced Concrete Lid For 12" x 22-1/4" Utility Box.....	92.83	14.83
33 14 23 00-0031 EA Steel Checkered Plate Cover For 12" x 22-1/4" Utility Box.....	353.21	14.83
33 14 23 00-0032 EA 16" x 27" Reinforced Concrete Slab For 12" x 22-1/4" Utility Box.....	132.56	25.22
33 14 23 00-0033 EA 12" High Reinforced Concrete Extension For 12" x 22-1/4" Utility Box.....	181.35	51.92
<b>33 14 23 00-0034 B30 Utility Box, 13-1/4" x 24"</b> (33 14 23 00-0005)		
33 14 23 00-0035 EA 13-1/4" x 24" Precast Concrete Utility Box (Christy B30BOX).....	237.91	133.50
33 14 23 00-0036 EA Reinforced Concrete Lid For 13-1/4" x 24" Utility Box (Christy B30D).....	126.92	23.74
33 14 23 00-0037 EA Steel Checkered Plate Cover For 13-1/4" x 24" Utility Box (Christy B30-61G).....	437.13	19.29
33 14 23 00-0038 EA 16" x 27" Reinforced Concrete Slab For 13-1/4" x 24" Utility Box (Christy B30SL).....	132.56	25.22
33 14 23 00-0039 EA 5-1/2" High Reinforced Concrete Base For 13-1/4" x 24" Utility Box (Christy B30BA).....	204.54	41.54
33 14 23 00-0040 EA 6" High Reinforced Concrete Extension For 13-1/4" x 24" Utility Box (Christy B30X6).....	157.59	28.18
33 14 23 00-0041 EA 12" High Reinforced Concrete Extension For 13-1/4" x 24" Utility Box (Christy B30X12).....	234.72	66.75
<b>33 14 23 00-0042 B36 Utility Box, 17-1/4" x 30"</b> (33 14 23 00-0005)		
33 14 23 00-0043 EA 17-1/4" x 30" Precast Concrete Utility Box (Christy B36BOX).....	309.58	169.11
33 14 23 00-0044 EA Reinforced Concrete Lid For 17-1/4" x 30" Utility Box (Christy B36D).....	207.87	40.79
33 14 23 00-0045 EA Steel Checkered Plate Cover For 17-1/4" x 30" Utility Box (Christy B36-61D).....	549.98	28.18
33 14 23 00-0046 EA 20" x 34" Reinforced Concrete Slab For 17-1/4" x 30" Utility Box (Christy B36SL).....	195.69	53.40
33 14 23 00-0047 EA 6" High Reinforced Concrete Base For 17-1/4" x 30" Utility Box (Christy B36BA).....	315.54	59.33
33 14 23 00-0048 EA 12" High Reinforced Concrete Extension For 17-1/4" x 30" Utility Box (Christy B36X12).....	311.85	86.04
<b>33 14 23 00-0049 B40 Utility Box, 24-1/2" x 36"</b> (33 14 23 00-0005)		
33 14 23 00-0050 EA 24-1/2" x 36" Precast Concrete Utility Box.....	618.17	261.08
33 14 23 00-0051 EA Reinforced Concrete Lid For 24-1/2" x 36" Utility Box.....	561.94	97.90
33 14 23 00-0052 EA Steel Checkered Plate Cover For 24-1/2" x 36" Utility Box.....	782.69	43.01
33 14 23 00-0053 EA 30" x 40" Reinforced Concrete Slab For 24-1/2" x 36" Utility Box.....	465.46	91.97
33 14 23 00-0054 EA 10" High Reinforced Concrete Extension For 24-1/2" x 36" Utility Box.....	493.27	96.42
<b>33 14 23 00-0055 B48 Utility Box, 30-1/4" x 48-1/4"</b> (33 14 23 00-0005)		
33 14 23 00-0056 EA 30-1/4" x 48-1/4" Precast Concrete Utility Box.....	797.28	296.67
33 14 23 00-0057 EA 1 Piece Reinforced Concrete Lid For 30-1/4" x 48-1/4" Utility Box.....	788.04	161.69
33 14 23 00-0058 EA 2 Piece Reinforced Concrete Lid For 30-1/4" x 48-1/4" Utility Box.....	972.40	161.69
33 14 23 00-0059 EA 2 Piece Steel Checkered Plate Cover For 30-1/4" x 48-1/4" Utility Box.....	1,242.16	74.17
33 14 23 00-0060 EA 36" x 53" Reinforced Concrete Slab For 30-1/4" x 48-1/4" Utility Box.....	709.94	200.26
33 14 23 00-0061 EA 10" High Reinforced Concrete Extension For 30-1/4" x 48-1/4" Utility Box.....	617.61	134.99

**33 30 Sanitary Sewerage Utilities** (33)**33 31 Sanitary Sewerage Piping** (33 30)**33 31 11 Public Sanitary Sewerage Gravity Piping** (33 31)

Note: Piping includes hydrostatic testing, disinfecting and warning tape. Excludes excavation and backfill. See CSI section 31 23 16 00-0000 for excavation, 31 23 16 36-0016 for backfill.

**33 31 11 00-0001 Plastic Sewer And Drain Piping** (33 31 11)**33 31 11 00-0002 Schedule 40 Polyvinyl Chloride (PVC) Sewer And Drain Pipe** (33 31 11 00-0001)

33 31 11 00-0003 LF 1-1/2" Schedule 40 Polyvinyl Chloride (PVC) Sewer And Drain Pipe.....	9.34	3.88
33 31 11 00-0004 LF 2" Schedule 40 Polyvinyl Chloride (PVC) Sewer And Drain Pipe.....	11.31	4.57
33 31 11 00-0005 LF 3" Schedule 40 Polyvinyl Chloride (PVC) Sewer And Drain Pipe.....	15.54	5.54
33 31 11 00-0006 LF 4" Schedule 40 Polyvinyl Chloride (PVC) Sewer And Drain Pipe.....	19.35	6.46
33 31 11 00-0007 LF 6" Schedule 40 Polyvinyl Chloride (PVC) Sewer And Drain Pipe.....	26.25	7.51
33 31 11 00-0008 LF 8" Schedule 40 Polyvinyl Chloride (PVC) Sewer And Drain Pipe.....	34.96	8.74
33 31 11 00-0009 LF 10" Schedule 40 Polyvinyl Chloride (PVC) Sewer And Drain Pipe.....	47.27	9.04





		<b>Utilities</b>	<b>33</b>	<b>CS</b>
		<b>Sanitary Sewerage Utilities</b>	<b>33 30</b>	
		<b>Sanitary Sewerage Piping</b>	<b>33 31</b>	

MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
33 31 11 00-0010 LF 12" Schedule 40 Polyvinyl Chloride (PVC) Sewer And Drain Pipe .....	61.66	9.37
<b>33 31 11 00-0011 Belled End Polyvinyl Chloride (PVC) Sewer And Drain Pipe</b> (33 31 11 00-0001) Note: D-2729 PVC pipe.		
33 31 11 00-0012 LF 3" Belled End Polyvinyl Chloride (PVC) Sewer And Drain Pipe .....	12.12	5.54
33 31 11 00-0013 LF 4" Belled End Polyvinyl Chloride (PVC) Sewer And Drain Pipe .....	14.23	6.46
33 31 11 00-0014 LF 6" Belled End Polyvinyl Chloride (PVC) Sewer And Drain Pipe .....	17.60	7.51
<b>33 31 11 00-0015 Polyvinyl Chloride (PVC) Sewer And Drain Fittings</b> (33 31 11 00-0001)		
<b>33 31 11 00-0016 1/4 Bends, Polyvinyl Chloride (PVC) Sewer And Drain</b> (33 31 11 00-0015)		
33 31 11 00-0017 EA 1-1/2" 1/4 Bend, Polyvinyl Chloride (PVC) Sewer And Drain .....	28.97	15.56
33 31 11 00-0018 EA 2" 1/4 Bend, Polyvinyl Chloride (PVC) Sewer And Drain .....	37.27	20.12
33 31 11 00-0019 EA 3" 1/4 Bend, Polyvinyl Chloride (PVC) Sewer And Drain .....	62.81	27.02
33 31 11 00-0020 EA 4" 1/4 Bend, Polyvinyl Chloride (PVC) Sewer And Drain .....	93.92	31.23
33 31 11 00-0021 EA 6" 1/4 Bend, Polyvinyl Chloride (PVC) Sewer And Drain .....	347.74	40.59
33 31 11 00-0022 EA 8" 1/4 Bend, Polyvinyl Chloride (PVC) Sewer And Drain .....	573.15	54.63
33 31 11 00-0023 EA 10" 1/4 Bend, Polyvinyl Chloride (PVC) Sewer And Drain .....	756.87	72.75
<b>33 31 11 00-0024 1/8 Bends, Polyvinyl Chloride (PVC) Sewer And Drain</b> (33 31 11 00-0015)		
33 31 11 00-0025 EA 1-1/2" 1/8 Bend, Polyvinyl Chloride (PVC) Sewer And Drain .....	30.27	15.56
33 31 11 00-0026 EA 2" 1/8 Bend, Polyvinyl Chloride (PVC) Sewer And Drain .....	37.16	20.12
33 31 11 00-0027 EA 3" 1/8 Bend, Polyvinyl Chloride (PVC) Sewer And Drain .....	60.86	27.02
33 31 11 00-0028 EA 4" 1/8 Bend, Polyvinyl Chloride (PVC) Sewer And Drain .....	84.39	31.23
33 31 11 00-0029 EA 6" 1/8 Bend, Polyvinyl Chloride (PVC) Sewer And Drain .....	323.47	40.59
33 31 11 00-0030 EA 8" 1/8 Bend, Polyvinyl Chloride (PVC) Sewer And Drain .....	516.74	54.63
33 31 11 00-0031 EA 10" 1/8 Bend, Polyvinyl Chloride (PVC) Sewer And Drain .....	590.93	72.75
33 31 11 00-0032 EA 12" 1/8 Bend, Polyvinyl Chloride (PVC) Sewer And Drain .....	874.78	96.90
<b>33 31 11 00-0033 Long Sweep 1/4 Bends, Polyvinyl Chloride (PVC) Sewer And Drain</b> (33 31 11 00-0015)		
33 31 11 00-0034 EA 1-1/2" Long Sweep 1/4 Bend, Polyvinyl Chloride (PVC) Sewer And Drain .....	44.50	15.33
33 31 11 00-0035 EA 2" Long Sweep 1/4 Bend, Polyvinyl Chloride (PVC) Sewer And Drain .....	46.37	20.12
33 31 11 00-0036 EA 3" Long Sweep 1/4 Bend, Polyvinyl Chloride (PVC) Sewer And Drain .....	87.12	27.61
33 31 11 00-0037 EA 4" Long Sweep 1/4 Bend, Polyvinyl Chloride (PVC) Sewer And Drain .....	140.51	33.69
33 31 11 00-0038 EA 6" Long Sweep 1/4 Bend, Polyvinyl Chloride (PVC) Sewer And Drain .....	262.27	38.96
33 31 11 00-0039 EA 8" Long Sweep 1/4 Bend, Polyvinyl Chloride (PVC) Sewer And Drain .....	449.04	44.45
33 31 11 00-0040 EA 10" Long Sweep 1/4 Bend, Polyvinyl Chloride (PVC) Sewer And Drain .....	723.54	51.82
33 31 11 00-0041 EA 12" Long Sweep 1/4 Bend, Polyvinyl Chloride (PVC) Sewer And Drain .....	1,085.38	60.40
<b>33 31 11 00-0042 1/16 Bends, Polyvinyl Chloride (PVC) Sewer And Drain</b> (33 31 11 00-0015)		
33 31 11 00-0043 EA 1-1/2" 1/16 Bend, Polyvinyl Chloride (PVC) Sewer And Drain .....	33.05	15.56
33 31 11 00-0044 EA 2" 1/16 Bend, Polyvinyl Chloride (PVC) Sewer And Drain .....	39.99	20.12
33 31 11 00-0045 EA 3" 1/16 Bend, Polyvinyl Chloride (PVC) Sewer And Drain .....	65.21	27.02
33 31 11 00-0046 EA 4" 1/16 Bend, Polyvinyl Chloride (PVC) Sewer And Drain .....	99.43	31.23
33 31 11 00-0047 EA 6" 1/16 Bend, Polyvinyl Chloride (PVC) Sewer And Drain .....	428.47	40.59
33 31 11 00-0048 EA 8" 1/16 Bend, Polyvinyl Chloride (PVC) Sewer And Drain .....	690.68	54.63
33 31 11 00-0049 EA 10" 1/16 Bend, Polyvinyl Chloride (PVC) Sewer And Drain .....	783.63	72.75
33 31 11 00-0050 EA 12" 1/16 Bend, Polyvinyl Chloride (PVC) Sewer And Drain .....	810.55	96.90
<b>33 31 11 00-0051 Reducers, Polyvinyl Chloride (PVC) Sewer And Drain</b> (33 31 11 00-0015)		
33 31 11 00-0052 EA 2" x 1-1/2" Reducer, Polyvinyl Chloride (PVC) Sewer And Drain .....	37.94	17.75
33 31 11 00-0053 EA 3" x 1-1/2" Reducer, Polyvinyl Chloride (PVC) Sewer And Drain .....	67.78	21.19
33 31 11 00-0054 EA 3" x 2" Reducer, Polyvinyl Chloride (PVC) Sewer And Drain .....	65.21	23.37
33 31 11 00-0055 EA 4" x 2" Reducer, Polyvinyl Chloride (PVC) Sewer And Drain .....	97.96	25.54
33 31 11 00-0056 EA 4" x 3" Reducer, Polyvinyl Chloride (PVC) Sewer And Drain .....	105.82	28.98
33 31 11 00-0057 EA 6" x 4" Reducer, Polyvinyl Chloride (PVC) Sewer And Drain .....	306.65	35.87
33 31 11 00-0058 EA 8" x 6" Reducer, Polyvinyl Chloride (PVC) Sewer And Drain .....	642.09	47.57
33 31 11 00-0059 EA 10" x 4" Reducer, Polyvinyl Chloride (PVC) Sewer And Drain .....	174.69	51.94
33 31 11 00-0060 EA 10" x 6" Reducer, Polyvinyl Chloride (PVC) Sewer And Drain .....	235.93	56.65
33 31 11 00-0061 EA 10" x 8" Reducer, Polyvinyl Chloride (PVC) Sewer And Drain .....	224.97	63.62
33 31 11 00-0062 EA 12" x 6" Reducer, Polyvinyl Chloride (PVC) Sewer And Drain .....	674.05	68.77
33 31 11 00-0063 EA 12" x 8" Reducer, Polyvinyl Chloride (PVC) Sewer And Drain .....	713.01	75.74
33 31 11 00-0064 EA 12" x 10" Reducer, Polyvinyl Chloride (PVC) Sewer And Drain .....	756.63	84.83
<b>33 31 11 00-0065 Sanitary Tees, Polyvinyl Chloride (PVC) Sewer And Drain</b> (33 31 11 00-0015)		
33 31 11 00-0066 EA 1-1/2" Sanitary Tee, Polyvinyl Chloride (PVC) Sewer And Drain .....	45.31	23.51
33 31 11 00-0067 EA 2" Sanitary Tee, Polyvinyl Chloride (PVC) Sewer And Drain .....	59.95	30.41
33 31 11 00-0068 EA 3" Sanitary Tee, Polyvinyl Chloride (PVC) Sewer And Drain .....	98.58	40.12
33 31 11 00-0069 EA 4" Sanitary Tee, Polyvinyl Chloride (PVC) Sewer And Drain .....	147.83	49.83
33 31 11 00-0070 EA 6" Sanitary Tee, Polyvinyl Chloride (PVC) Sewer And Drain .....	507.28	54.63
33 31 11 00-0071 EA 8" Sanitary Tee, Polyvinyl Chloride (PVC) Sewer And Drain .....	659.11	72.75

**33 Utilities****33 30 Sanitary Sewerage Utilities****33 31 Sanitary Sewerage Piping**

MINOR CSI UOM DESCRIPTION			TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
33 31 11 00-0072	<b>Wyes, Polyvinyl Chloride (PVC) Sewer And Drain</b> (33 31 11 00-0015)			
33 31 11 00-0073	EA	1-1/2" Wye, Polyvinyl Chloride (PVC) Sewer And Drain .....	55.38	23.51
33 31 11 00-0074	EA	2" Wye, Polyvinyl Chloride (PVC) Sewer And Drain .....	65.80	30.41
33 31 11 00-0075	EA	3" Wye, Polyvinyl Chloride (PVC) Sewer And Drain .....	106.06	40.12
33 31 11 00-0076	EA	4" Wye, Polyvinyl Chloride (PVC) Sewer And Drain .....	160.07	49.83
33 31 11 00-0077	EA	6" Wye, Polyvinyl Chloride (PVC) Sewer And Drain .....	461.34	54.63
33 31 11 00-0078	EA	8" Wye, Polyvinyl Chloride (PVC) Sewer And Drain .....	571.84	72.75
33 31 11 00-0079	EA	10" Wye, Polyvinyl Chloride (PVC) Sewer And Drain .....	752.68	97.09
33 31 11 00-0080	EA	12" Wye, Polyvinyl Chloride (PVC) Sewer And Drain .....	1,180.35	129.57
33 31 11 00-0081	<b>Reducing Wyes, Polyvinyl Chloride (PVC) Sewer And Drain</b> (33 31 11 00-0015)			
33 31 11 00-0082	EA	2" x 1-1/2" x 1-1/2" Reducing Wye, Polyvinyl Chloride (PVC) Sewer And Drain .....	71.20	23.51
33 31 11 00-0083	EA	2" x 2" x 1" Reducing Wye, Polyvinyl Chloride (PVC) Sewer And Drain .....	81.19	30.41
33 31 11 00-0084	EA	3" x 3" x 2" Reducing Wye, Polyvinyl Chloride (PVC) Sewer And Drain .....	95.66	40.12
33 31 11 00-0085	EA	4" x 4" x 2" Reducing Wye, Polyvinyl Chloride (PVC) Sewer And Drain .....	143.27	49.83
33 31 11 00-0086	EA	4" x 4" x 3" Reducing Wye, Polyvinyl Chloride (PVC) Sewer And Drain .....	154.76	49.83
33 31 11 00-0087	<b>Double Wyes, Polyvinyl Chloride (PVC) Sewer And Drain</b> (33 31 11 00-0015)			
33 31 11 00-0088	EA	1-1/2" Double Wye, Polyvinyl Chloride (PVC) Sewer And Drain .....	88.45	30.41
33 31 11 00-0089	EA	2" Double Wye, Polyvinyl Chloride (PVC) Sewer And Drain .....	115.38	40.12
33 31 11 00-0090	EA	3" Double Wye, Polyvinyl Chloride (PVC) Sewer And Drain .....	223.66	54.16
33 31 11 00-0091	EA	4" Double Wye, Polyvinyl Chloride (PVC) Sewer And Drain .....	387.14	65.50
33 31 11 00-0092	EA	2" x 2" x 1-1/2" x 1-1/2" Double Wye, Polyvinyl Chloride (PVC) Sewer And Drain .....	110.61	40.12
33 31 11 00-0093	EA	3" x 3" x 2" x 2" Double Wye, Polyvinyl Chloride (PVC) Sewer And Drain .....	187.25	54.16
33 31 11 00-0094	EA	4" x 4" x 3" x 3" Double Wye, Polyvinyl Chloride (PVC) Sewer And Drain .....	327.00	65.50
33 31 11 00-0095	<b>Combination Wye And 1/8 Bends, Polyvinyl Chloride (PVC) Sewer And Drain</b> (33 31 11 00-0015)			
33 31 11 00-0096	EA	1-1/2" Combination Wye And 1/8 Bend, Polyvinyl Chloride (PVC) Sewer And Drain .....	67.95	23.51
33 31 11 00-0097	EA	2" Combination Wye And 1/8 Bend, Polyvinyl Chloride (PVC) Sewer And Drain .....	85.41	30.41
33 31 11 00-0098	EA	3" Combination Wye And 1/8 Bend, Polyvinyl Chloride (PVC) Sewer And Drain .....	165.00	40.12
33 31 11 00-0099	EA	4" Combination Wye And 1/8 Bend, Polyvinyl Chloride (PVC) Sewer And Drain .....	292.25	49.83
33 31 11 00-0100	EA	2" x 2" x 1-1/2" Combination Wye And 1/8 Bend, Polyvinyl Chloride (PVC) Sewer And Drain .....	128.10	30.41
33 31 11 00-0101	EA	3" x 3" x 1-1/2" Combination Wye And 1/8 Bend, Polyvinyl Chloride (PVC) Sewer And Drain .....	203.67	40.12
33 31 11 00-0102	EA	3" x 3" x 2" Combination Wye And 1/8 Bend, Polyvinyl Chloride (PVC) Sewer And Drain .....	149.88	40.12
33 31 11 00-0103	EA	4" x 4" x 2" Combination Wye And 1/8 Bend, Polyvinyl Chloride (PVC) Sewer And Drain .....	274.13	49.83
33 31 11 00-0104	EA	4" x 4" x 3" Combination Wye And 1/8 Bend, Polyvinyl Chloride (PVC) Sewer And Drain .....	290.71	49.83
33 31 11 00-0105	<b>Double Combination Wye And 1/8 Bends, Polyvinyl Chloride (PVC) Sewer And Drain</b> (33 31 11 00-0015)			
33 31 11 00-0106	EA	1-1/2" Double Combination Wye And 1/8 Bend, Polyvinyl Chloride (PVC) Sewer And Drain .....	98.20	30.41
33 31 11 00-0107	EA	2" Double Combination Wye And 1/8 Bend, Polyvinyl Chloride (PVC) Sewer And Drain .....	116.46	40.12
33 31 11 00-0108	EA	3" Double Combination Wye And 1/8 Bend, Polyvinyl Chloride (PVC) Sewer And Drain .....	178.91	54.16
33 31 11 00-0109	EA	4" Double Combination Wye And 1/8 Bend, Polyvinyl Chloride (PVC) Sewer And Drain .....	613.15	65.50
33 31 11 00-0110	EA	6" Double Combination Wye And 1/8 Bend, Polyvinyl Chloride (PVC) Sewer And Drain .....	1,978.04	72.52
33 31 11 00-0111	<b>Cleanout Tees With Plug, Polyvinyl Chloride (PVC) Sewer And Drain</b> (33 31 11 00-0015)			
33 31 11 00-0112	EA	4" Polyvinyl Chloride (PVC) Cleanout Tees With Plug, Sewer And Drain .....	496.89	118.78
33 31 11 00-0113	EA	6" Polyvinyl Chloride (PVC) Cleanout Tees With Plug, Sewer And Drain .....	1,155.89	153.25
33 31 11 00-0114	EA	8" Polyvinyl Chloride (PVC) Cleanout Tees With Plug, Sewer And Drain .....	1,476.99	215.95
33 31 11 00-0115	EA	10" Polyvinyl Chloride (PVC) Cleanout Tees With Plug, Sewer And Drain .....	2,050.36	347.38
33 31 11 00-0116	<b>Couplings, Polyvinyl Chloride (PVC) Sewer And Drain</b> (33 31 11 00-0015)			
33 31 11 00-0117	EA	1-1/2" Coupling, Polyvinyl Chloride (PVC) Sewer And Drain .....	28.31	15.56
33 31 11 00-0118	EA	2" Coupling, Polyvinyl Chloride (PVC) Sewer And Drain .....	35.47	20.00
33 31 11 00-0119	EA	3" Coupling, Polyvinyl Chloride (PVC) Sewer And Drain .....	54.36	26.79
33 31 11 00-0120	EA	4" Coupling, Polyvinyl Chloride (PVC) Sewer And Drain .....	70.00	31.23
33 31 11 00-0121	EA	6" Coupling, Polyvinyl Chloride (PVC) Sewer And Drain .....	189.03	40.59
33 31 11 00-0122	EA	8" Coupling, Polyvinyl Chloride (PVC) Sewer And Drain .....	451.89	54.63
33 31 11 00-0123	EA	10" Coupling, Polyvinyl Chloride (PVC) Sewer And Drain .....	682.55	72.75
33 31 11 00-0124	EA	12" Coupling, Polyvinyl Chloride (PVC) Sewer And Drain .....	1,122.24	96.90
33 31 11 00-0125	<b>Adapters, Polyvinyl Chloride (PVC) Sewer And Drain</b> (33 31 11 00-0015)			
33 31 11 00-0126	EA	4" Male, Plastic Pipe x Malleable Iron Pipe Adapter, Drain And Sewer Fitting .....	159.59	95.54
33 31 11 00-0127	EA	2" x 3" x 3" Downspout Adapter, Drain And Sewer Fitting .....	114.44	72.68
33 31 11 00-0128	EA	2" x 3" x 4" Downspout Adapter, Drain And Sewer Fitting .....	116.82	72.68
33 31 11 00-0129	EA	3" x 4" x 4" Downspout Adapter, Drain And Sewer Fitting .....	123.15	72.68
33 31 11 00-0130	EA	4" Hub, Cast Iron Pipe x Plastic Pipe Adapter, Drain And Sewer Fitting .....	161.33	95.54
33 31 11 00-0131	EA	4" Spigot, Clay Pipe x Plastic Pipe Adapter, Drain And Sewer Fitting .....	156.27	95.54
33 31 11 00-0132	EA	4" Spigot, Fiberglass Pipe x Plastic Pipe Adapter, Drain And Sewer Fitting .....	147.95	95.54
33 31 11 00-0133	EA	4" Drain Grate, Drain And Sewer Fitting .....	79.81	49.13



		<b>Utilities</b>	<b>33</b>	<b>CS</b>
		<b>Sanitary Sewerage Utilities</b>	<b>33 30</b>	
		<b>Sanitary Sewerage Piping</b>	<b>33 31</b>	

MINOR CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
33 31 11 00-0134		<b>Caps, Polyvinyl Chloride (PVC) Sewer And Drain</b> (33 31 11 00-0015)		
33 31 11 00-0135	EA	3" Cap, Polyvinyl Chloride (PVC) Drain And Sewer Fitting .....	39.62	16.73
33 31 11 00-0136	EA	4" Cap, Polyvinyl Chloride (PVC) Drain And Sewer Fitting .....	64.10	20.82
33 31 11 00-0137	EA	6" Cap, Polyvinyl Chloride (PVC) Drain And Sewer Fitting .....	119.00	26.91
33 31 11 00-0138		<b>Plug Cleanout, Polyvinyl Chloride (PVC) Sewer And Drain</b> (33 31 11 00-0015)		
33 31 11 00-0139	EA	1-1/2" Plug Cleanout, Polyvinyl Chloride (PVC) Sewer And Drain .....	26.23	15.56
33 31 11 00-0140	EA	2" Plug Cleanout, Polyvinyl Chloride (PVC) Sewer And Drain .....	34.11	20.12
33 31 11 00-0141	EA	3" Plug Cleanout, Polyvinyl Chloride (PVC) Sewer And Drain .....	49.99	27.02
33 31 11 00-0142	EA	4" Plug Cleanout, Polyvinyl Chloride (PVC) Sewer And Drain .....	64.87	31.23
33 31 11 00-0143	EA	6" Plug Cleanout, Polyvinyl Chloride (PVC) Sewer And Drain .....	108.65	40.59
33 31 11 00-0144	EA	8" Plug Cleanout, Polyvinyl Chloride (PVC) Sewer And Drain .....	389.18	54.63
33 31 11 00-0145		<b>Gasketed SDR 35 Polyvinyl Chloride (PVC) Pipe</b> (33 31 11 00-0001) Note: ASTM 3034.		
33 31 11 00-0146	LF	4" Gasketed SDR 35 Polyvinyl Chloride (PVC) Pipe .....	15.95	6.46
33 31 11 00-0147	LF	6" Gasketed SDR 35 Polyvinyl Chloride (PVC) Pipe .....	20.80	7.51
33 31 11 00-0148	LF	8" Gasketed SDR 35 Polyvinyl Chloride (PVC) Pipe .....	27.28	8.74
33 31 11 00-0149	LF	10" Gasketed SDR 35 Polyvinyl Chloride (PVC) Pipe .....	32.81	9.04
33 31 11 00-0150	LF	12" Gasketed SDR 35 Polyvinyl Chloride (PVC) Pipe .....	39.46	9.36
33 31 11 00-0151	LF	15" Gasketed SDR 35 Polyvinyl Chloride (PVC) Pipe .....	50.49	9.69
33 31 11 00-0152	LF	18" Gasketed SDR 35 Polyvinyl Chloride (PVC) Pipe .....	63.11	10.05
33 31 11 00-0153	LF	21" Gasketed SDR 35 Polyvinyl Chloride (PVC) Pipe .....	81.13	10.90
33 31 11 00-0154	LF	24" Gasketed SDR 35 Polyvinyl Chloride (PVC) Pipe .....	97.82	11.77
33 31 11 00-0155	LF	27" Gasketed SDR 35 Polyvinyl Chloride (PVC) Pipe .....	121.32	13.80
33 31 11 00-0156		<b>Solvent Weld SDR 35 Polyvinyl Chloride (PVC) Pipe</b> (33 31 11 00-0001) Note: ASTM 3034.		
33 31 11 00-0157	LF	4" Solvent Weld SDR 35 Polyvinyl Chloride (PVC) Pipe .....	15.38	6.46
33 31 11 00-0158	LF	6" Solvent Weld SDR 35 Polyvinyl Chloride (PVC) Pipe .....	19.95	7.51
33 31 11 00-0159	LF	8" Solvent Weld SDR 35 Polyvinyl Chloride (PVC) Pipe .....	26.07	8.74
33 31 11 00-0160		<b>Gasketed SDR 35 Polyvinyl Chloride (PVC) Fittings</b> (33 31 11 00-0001) Note: ASTM 3034.		
33 31 11 00-0161		<b>1/4 Bends, Gasketed SDR 35 Polyvinyl Chloride (PVC)</b> (33 31 11 00-0160)		
33 31 11 00-0162	EA	4" 1/4 Bend, Gasketed SDR 35 Polyvinyl Chloride (PVC) .....	87.88	27.19
33 31 11 00-0163	EA	6" 1/4 Bend, Gasketed SDR 35 Polyvinyl Chloride (PVC) .....	130.97	31.62
33 31 11 00-0164	EA	8" 1/4 Bend, Gasketed SDR 35 Polyvinyl Chloride (PVC) .....	276.54	35.83
33 31 11 00-0165	EA	10" 1/4 Bend, Gasketed SDR 35 Polyvinyl Chloride (PVC) .....	798.36	42.16
33 31 11 00-0166	EA	12" 1/4 Bend, Gasketed SDR 35 Polyvinyl Chloride (PVC) .....	1,031.71	53.75
33 31 11 00-0167		<b>1/8 Bends, Gasketed SDR 35 Polyvinyl Chloride (PVC)</b> (33 31 11 00-0160)		
33 31 11 00-0168	EA	4" 1/8 Bend, Gasketed SDR 35 Polyvinyl Chloride (PVC) .....	79.13	27.19
33 31 11 00-0169	EA	6" 1/8 Bend, Gasketed SDR 35 Polyvinyl Chloride (PVC) .....	121.32	31.62
33 31 11 00-0170	EA	8" 1/8 Bend, Gasketed SDR 35 Polyvinyl Chloride (PVC) .....	252.15	35.83
33 31 11 00-0171	EA	10" 1/8 Bend, Gasketed SDR 35 Polyvinyl Chloride (PVC) .....	568.78	42.16
33 31 11 00-0172	EA	12" 1/8 Bend, Gasketed SDR 35 Polyvinyl Chloride (PVC) .....	813.42	53.75
33 31 11 00-0173	EA	15" 1/8 Bend, Gasketed SDR 35 Polyvinyl Chloride (PVC) .....	1,747.30	75.88
33 31 11 00-0174	EA	18" 1/8 Bend, Gasketed SDR 35 Polyvinyl Chloride (PVC) .....	2,773.40	107.51
33 31 11 00-0175	EA	21" 1/8 Bend, Gasketed SDR 35 Polyvinyl Chloride (PVC) .....	4,630.70	142.28
33 31 11 00-0176	EA	24" 1/8 Bend, Gasketed SDR 35 Polyvinyl Chloride (PVC) .....	6,314.42	189.71
33 31 11 00-0177		<b>Sanitary Tees, Gasketed SDR 35 Polyvinyl Chloride (PVC)</b> (33 31 11 00-0160)		
33 31 11 00-0178	EA	4" Sanitary Tees, Gasketed SDR 35 Polyvinyl Chloride (PVC) .....	133.05	40.79
33 31 11 00-0179	EA	6" x 4" Sanitary Tees, Gasketed SDR 35 Polyvinyl Chloride (PVC) .....	216.20	45.21
33 31 11 00-0180	EA	6" Sanitary Tees, Gasketed SDR 35 Polyvinyl Chloride (PVC) .....	243.28	47.42
33 31 11 00-0181	EA	8" x 4" Sanitary Tees, Gasketed SDR 35 Polyvinyl Chloride (PVC) .....	268.82	49.64
33 31 11 00-0182	EA	8" x 6" Sanitary Tees, Gasketed SDR 35 Polyvinyl Chloride (PVC) .....	308.34	51.85
33 31 11 00-0183	EA	8" Sanitary Tees, Gasketed SDR 35 Polyvinyl Chloride (PVC) .....	595.07	54.07
33 31 11 00-0184	EA	10" x 4" Sanitary Tees, Gasketed SDR 35 Polyvinyl Chloride (PVC) .....	763.54	55.33
33 31 11 00-0185	EA	10" x 6" Sanitary Tees, Gasketed SDR 35 Polyvinyl Chloride (PVC) .....	865.87	57.97
33 31 11 00-0186	EA	10" x 8" Sanitary Tees, Gasketed SDR 35 Polyvinyl Chloride (PVC) .....	1,281.09	60.18
33 31 11 00-0187	EA	10" Sanitary Tees, Gasketed SDR 35 Polyvinyl Chloride (PVC) .....	1,671.26	63.24
33 31 11 00-0188	EA	12" x 4" Sanitary Tees, Gasketed SDR 35 Polyvinyl Chloride (PVC) .....	939.57	67.35
33 31 11 00-0189	EA	12" x 6" Sanitary Tees, Gasketed SDR 35 Polyvinyl Chloride (PVC) .....	997.63	69.56
33 31 11 00-0190	EA	12" x 8" Sanitary Tees, Gasketed SDR 35 Polyvinyl Chloride (PVC) .....	1,426.28	71.78
33 31 11 00-0191	EA	12" x 10" Sanitary Tees, Gasketed SDR 35 Polyvinyl Chloride (PVC) .....	2,060.16	74.83
33 31 11 00-0192	EA	12" Sanitary Tees, Gasketed SDR 35 Polyvinyl Chloride (PVC) .....	2,322.02	80.62
33 31 11 00-0193		<b>Wyes, Gasketed SDR 35 Polyvinyl Chloride (PVC)</b> (33 31 11 00-0160)		

**33 Utilities****33 30 Sanitary Sewerage Utilities****33 31 Sanitary Sewerage Piping**

MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
33 31 11 00-0194 EA 4" Wye, Gasketed SDR 35 Polyvinyl Chloride (PVC).....	126.27	40.79
33 31 11 00-0195 EA 6" x 4" Wye, Gasketed SDR 35 Polyvinyl Chloride (PVC) .....	193.58	45.21
33 31 11 00-0196 EA 6" Wye, Gasketed SDR 35 Polyvinyl Chloride (PVC).....	212.91	47.42
33 31 11 00-0197 EA 8" x 4" Wye, Gasketed SDR 35 Polyvinyl Chloride (PVC) .....	259.12	49.64
33 31 11 00-0198 EA 8" x 6" Wye, Gasketed SDR 35 Polyvinyl Chloride (PVC) .....	296.78	51.85
33 31 11 00-0199 EA 8" Wye, Gasketed SDR 35 Polyvinyl Chloride (PVC).....	456.87	54.07
33 31 11 00-0200 EA 10" x 4" Wye, Gasketed SDR 35 Polyvinyl Chloride (PVC) .....	697.89	55.76
33 31 11 00-0201 EA 10" x 6" Wye, Gasketed SDR 35 Polyvinyl Chloride (PVC) .....	711.80	57.97
33 31 11 00-0202 EA 10" x 8" Wye, Gasketed SDR 35 Polyvinyl Chloride (PVC) .....	1,073.65	60.18
33 31 11 00-0203 EA 10" Wye, Gasketed SDR 35 Polyvinyl Chloride (PVC) .....	1,188.37	63.24
33 31 11 00-0204 EA 12" x 4" Wye, Gasketed SDR 35 Polyvinyl Chloride (PVC) .....	884.81	67.35
33 31 11 00-0205 EA 12" x 6" Wye, Gasketed SDR 35 Polyvinyl Chloride (PVC) .....	912.58	69.56
33 31 11 00-0206 EA 12" x 8" Wye, Gasketed SDR 35 Polyvinyl Chloride (PVC) .....	1,309.70	71.78
33 31 11 00-0207 EA 12" x 10" Wye, Gasketed SDR 35 Polyvinyl Chloride (PVC).....	1,579.33	74.83
33 31 11 00-0208 EA 12" Wye, Gasketed SDR 35 Polyvinyl Chloride (PVC) .....	1,648.76	80.62
33 31 11 00-0209 EA 15" x 10" Wye, Gasketed SDR 35 Polyvinyl Chloride (PVC).....	2,032.16	96.97
33 31 11 00-0210 EA 15" x 12" Wye, Gasketed SDR 35 Polyvinyl Chloride (PVC).....	2,255.05	102.76
33 31 11 00-0211 EA 15" Wye, Gasketed SDR 35 Polyvinyl Chloride (PVC) .....	2,820.88	113.82
<b>33 31 11 00-0212 Couplings, Gasketed SDR 35 Polyvinyl Chloride (PVC) (33 31 11 00-0160)</b>		
33 31 11 00-0213 EA 4" Coupling, Gasketed SDR 35 Polyvinyl Chloride (PVC).....	87.10	27.19
33 31 11 00-0214 EA 6" Coupling, Gasketed SDR 35 Polyvinyl Chloride (PVC).....	136.12	31.62
33 31 11 00-0215 EA 8" Coupling, Gasketed SDR 35 Polyvinyl Chloride (PVC).....	201.76	36.04
33 31 11 00-0216 EA 10" Coupling, Gasketed SDR 35 Polyvinyl Chloride (PVC).....	384.75	42.16
33 31 11 00-0217 EA 12" Coupling, Gasketed SDR 35 Polyvinyl Chloride (PVC).....	546.50	53.75
33 31 11 00-0218 EA 15" Coupling, Gasketed SDR 35 Polyvinyl Chloride (PVC).....	1,071.81	75.88
33 31 11 00-0219 EA 18" Coupling, Gasketed SDR 35 Polyvinyl Chloride (PVC).....	2,019.41	107.51
33 31 11 00-0220 EA 21" Coupling, Gasketed SDR 35 Polyvinyl Chloride (PVC).....	3,373.34	142.28
33 31 11 00-0221 EA 24" Coupling, Gasketed SDR 35 Polyvinyl Chloride (PVC).....	4,884.95	189.71
<b>33 31 11 00-0222 Increaser, Gasketed SDR 35 Polyvinyl Chloride (PVC) (33 31 11 00-0160)</b>		
33 31 11 00-0223 EA 6" x 4" Increaser, Gasketed SDR 35 Polyvinyl Chloride (PVC).....	168.92	29.41
33 31 11 00-0224 EA 8" x 4" Increaser, Gasketed SDR 35 Polyvinyl Chloride (PVC).....	243.08	31.62
33 31 11 00-0225 EA 8" x 6" Increaser, Gasketed SDR 35 Polyvinyl Chloride (PVC).....	256.28	33.83
33 31 11 00-0226 EA 10" x 6" Increaser, Gasketed SDR 35 Polyvinyl Chloride (PVC).....	581.18	36.89
33 31 11 00-0227 EA 10" x 8" Increaser, Gasketed SDR 35 Polyvinyl Chloride (PVC).....	668.28	39.10
33 31 11 00-0228 EA 12" x 6" Increaser, Gasketed SDR 35 Polyvinyl Chloride (PVC).....	746.79	42.68
33 31 11 00-0229 EA 12" x 8" Increaser, Gasketed SDR 35 Polyvinyl Chloride (PVC).....	857.51	44.90
33 31 11 00-0230 EA 12" x 10" Increaser, Gasketed SDR 35 Polyvinyl Chloride (PVC).....	983.57	47.96
33 31 11 00-0231 EA 15" x 12" Increaser, Gasketed SDR 35 Polyvinyl Chloride (PVC).....	1,481.57	64.81
<b>33 31 11 00-0232 Saddle Wye With Stainless Steel Clamps, SDR 35 Polyvinyl Chloride (PVC) (33 31 11 00-0160)</b>		
33 31 11 00-0233 EA 6" x 4" Saddle Wye With Stainless Steel Clamps, SDR 35 Polyvinyl Chloride (PVC).....	139.06	
33 31 11 00-0234 EA 8" x 4" Saddle Wye With Stainless Steel Clamps, SDR 35 Polyvinyl Chloride (PVC).....	184.06	
33 31 11 00-0235 EA 8" x 6" Saddle Wye With Stainless Steel Clamps, SDR 35 Polyvinyl Chloride (PVC).....	188.25	
33 31 11 00-0236 EA 10" x 4" Saddle Wye With Stainless Steel Clamps, SDR 35 Polyvinyl Chloride (PVC).....	313.37	
33 31 11 00-0237 EA 10" x 6" Saddle Wye With Stainless Steel Clamps, SDR 35 Polyvinyl Chloride (PVC).....	330.91	
33 31 11 00-0238 EA 10" x 8" Saddle Wye With Stainless Steel Clamps, SDR 35 Polyvinyl Chloride (PVC).....	632.58	
33 31 11 00-0239 EA 12" x 4" Saddle Wye With Stainless Steel Clamps, SDR 35 Polyvinyl Chloride (PVC).....	356.62	
33 31 11 00-0240 EA 12" x 6" Saddle Wye With Stainless Steel Clamps, SDR 35 Polyvinyl Chloride (PVC).....	389.49	
33 31 11 00-0241 EA 12" x 8" Saddle Wye With Stainless Steel Clamps, SDR 35 Polyvinyl Chloride (PVC).....	876.55	
33 31 11 00-0242 EA 12" x 10" Saddle Wye With Stainless Steel Clamps, SDR 35 Polyvinyl Chloride (PVC).....	1,034.83	
33 31 11 00-0243 EA 15" x 4" Saddle Wye With Stainless Steel Clamps, SDR 35 Polyvinyl Chloride (PVC).....	407.87	
33 31 11 00-0244 EA 15" x 6" Saddle Wye With Stainless Steel Clamps, SDR 35 Polyvinyl Chloride (PVC).....	436.56	
<b>33 31 11 00-0245 Saddle Tee With Stainless Steel Clamps, SDR 35 Polyvinyl Chloride (PVC) (33 31 11 00-0160)</b>		
33 31 11 00-0246 EA 6" x 4" Saddle Tee With Stainless Steel Clamps, SDR 35 Polyvinyl Chloride (PVC).....	148.88	
33 31 11 00-0247 EA 8" x 4" Saddle Tee With Stainless Steel Clamps, SDR 35 Polyvinyl Chloride (PVC).....	184.06	
33 31 11 00-0248 EA 8" x 6" Saddle Tee With Stainless Steel Clamps, SDR 35 Polyvinyl Chloride (PVC).....	201.62	
33 31 11 00-0249 EA 10" x 4" Saddle Tee With Stainless Steel Clamps, SDR 35 Polyvinyl Chloride (PVC).....	287.36	
33 31 11 00-0250 EA 10" x 6" Saddle Tee With Stainless Steel Clamps, SDR 35 Polyvinyl Chloride (PVC).....	328.80	
33 31 11 00-0251 EA 10" x 8" Saddle Tee With Stainless Steel Clamps, SDR 35 Polyvinyl Chloride (PVC).....	501.65	
33 31 11 00-0252 EA 12" x 4" Saddle Tee With Stainless Steel Clamps, SDR 35 Polyvinyl Chloride (PVC).....	354.53	
33 31 11 00-0253 EA 12" x 6" Saddle Tee With Stainless Steel Clamps, SDR 35 Polyvinyl Chloride (PVC).....	387.51	
33 31 11 00-0254 EA 12" x 8" Saddle Tee With Stainless Steel Clamps, SDR 35 Polyvinyl Chloride (PVC).....	583.36	
33 31 11 00-0255 EA 12" x 10" Saddle Tee With Stainless Steel Clamps, SDR 35 Polyvinyl Chloride (PVC).....	711.19	
33 31 11 00-0256 EA 15" x 4" Saddle Tee With Stainless Steel Clamps, SDR 35 Polyvinyl Chloride (PVC).....	406.58	
33 31 11 00-0257 EA 15" x 6" Saddle Tee With Stainless Steel Clamps, SDR 35 Polyvinyl Chloride (PVC).....	426.84	
33 31 11 00-0258 EA 15" x 8" Saddle Tee With Stainless Steel Clamps, SDR 35 Polyvinyl Chloride (PVC).....	716.43	
33 31 11 00-0259 EA 15" x 10" Saddle Tee With Stainless Steel Clamps, SDR 35 Polyvinyl Chloride (PVC).....	793.57	
33 31 11 00-0260 EA 15" x 12" Saddle Tee With Stainless Steel Clamps, SDR 35 Polyvinyl Chloride (PVC).....	1,125.10	
<b>33 31 11 00-0261 Couplings And Plug Fittings (33 31 11)</b>		



		<b>Utilities</b>	<b>33</b>	<b>CS</b>
		<b>Sanitary Sewerage Utilities</b>	<b>33 30</b>	
		<b>Sanitary Sewerage Piping</b>	<b>33 31</b>	

MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
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33 31 11 00-0262		Cast Iron/Plastic To Cast Iron/Plastic, Elastomeric Polyvinyl Chloride (PVC) Flexible Pipe Couplings (33 31 11 00-0261)	
Note: For cast iron or plastic to cast iron to plastic pipe. Includes stainless steel clamps.			
33 31 11 00-0263	EA	1-1/2" Cast Iron/Plastic To Cast Iron/Plastic, Elastomeric Flexible Pipe Coupling (Fernco 1056-150) .....	23.38 8.90
33 31 11 00-0264	EA	2" Cast Iron/Plastic To Cast Iron/Plastic, Elastomeric Flexible Pipe Coupling (Fernco 1056-22) .....	25.67 10.38
33 31 11 00-0265	EA	3" Cast Iron/Plastic To Cast Iron/Plastic, Elastomeric Flexible Pipe Coupling (Fernco 1056-33) .....	29.36 11.86
33 31 11 00-0266	EA	4" Cast Iron/Plastic To Cast Iron/Plastic, Elastomeric Flexible Pipe Coupling (Fernco 1056-44) .....	33.00 12.61
33 31 11 00-0267	EA	5" Cast Iron/Plastic To Cast Iron/Plastic, Elastomeric Flexible Pipe Coupling (Fernco 1056-55) .....	39.41 13.35
33 31 11 00-0268	EA	6" Cast Iron/Plastic To Cast Iron/Plastic, Elastomeric Flexible Pipe Coupling (Fernco 1056-66) .....	45.86 14.83
33 31 11 00-0269	EA	8" Cast Iron/Plastic To Cast Iron/Plastic, Elastomeric Flexible Pipe Coupling (Fernco 1056-88) .....	56.68 16.32
33 31 11 00-0270	EA	10" Cast Iron/Plastic To Cast Iron/Plastic, Elastomeric Flexible Pipe Coupling (Fernco 1056-1010) .....	68.52 17.05
33 31 11 00-0271	EA	12" Cast Iron/Plastic To Cast Iron/Plastic, Elastomeric Flexible Pipe Coupling (Fernco 1056-1212) .....	107.69 17.80
33 31 11 00-0272	EA	15" Cast Iron/Plastic To Cast Iron/Plastic, Elastomeric Flexible Pipe Coupling (Fernco 1056-1515) .....	143.65 19.29
33 31 11 00-0273	EA	18" Cast Iron/Plastic To Cast Iron/Plastic, Elastomeric Flexible Pipe Coupling (Fernco 1056-1818) .....	267.92 20.02
33 31 11 00-0274	EA	21" Cast Iron/Plastic To Cast Iron/Plastic, Elastomeric Flexible Pipe Coupling (Fernco 1056-2121) .....	310.09 21.14
33 31 11 00-0275	EA	24" Cast Iron/Plastic To Cast Iron/Plastic, Elastomeric Flexible Pipe Coupling (Fernco 1056-2424) .....	342.87 22.25
33 31 11 00-0276	EA	27" Cast Iron/Plastic To Cast Iron/Plastic, Elastomeric Flexible Pipe Coupling (Fernco 1056-2727) .....	409.56 23.74

33 31 11 00-0277	<b>Cast Iron Service Saddles With U Bolt</b> (33 31 11)	
33 31 11 00-0278	EA 2" Diameter x 2" Tapped Tee Cast Iron Service Saddles With U Bolt .....	128.29
33 31 11 00-0279	EA 3" Diameter x 1-1/2" Tapped Tee Cast Iron Service Saddles With U Bolt .....	128.89
33 31 11 00-0280	EA 3" Diameter x 2" Tapped Tee Cast Iron Service Saddles With U Bolt .....	142.03
33 31 11 00-0281	EA 4" Diameter x 1-1/2" Tapped Tee Cast Iron Service Saddles With U Bolt .....	137.12
33 31 11 00-0282	EA 4" Diameter x 2" Hub Tee Cast Iron Service Saddles With U Bolt .....	154.34
33 31 11 00-0283	EA 4" Diameter x 3" Hub Tee Cast Iron Service Saddles With U Bolt .....	173.05
33 31 11 00-0284	EA 4" Diameter x 4" Hub Tee Cast Iron Service Saddles With U Bolt .....	204.79
33 31 11 00-0285	EA 6" Diameter x 2" Hub Tee Cast Iron Service Saddles With U Bolt .....	172.56
33 31 11 00-0286	EA 6" Diameter x 3" Hub Tee Cast Iron Service Saddles With U Bolt .....	188.57
33 31 11 00-0287	EA 6" Diameter x 4" Hub Tee Cast Iron Service Saddles With U Bolt .....	217.82
33 31 11 00-0288	EA 2" Diameter x 2" Tapped Wye Cast Iron Service Saddle With U Bolt .....	187.24
33 31 11 00-0289	EA 4" Diameter x 1-1/2" Tapped Wye Cast Iron Service Saddle With U Bolt .....	140.48
33 31 11 00-0290	EA 4" Diameter x 2" Tapped Wye Cast Iron Service Saddle With U Bolt .....	153.62
33 31 11 00-0291	EA 4" Diameter x 3" Hub Wye Cast Iron Service Saddle With U Bolt .....	180.92
33 31 11 00-0292	EA 4" Diameter x 4" Hub Wye Cast Iron Service Saddle With U Bolt .....	214.45
33 31 11 00-0293	EA 6" Diameter x 4" Hub Wye Cast Iron Service Saddle With U Bolt .....	229.86

## 33 40 Stormwater Utilities (33)

### 33 41 Subdrainage (33 40)

#### 33 41 16 Subdrainage Piping (33 41)

##### 33 41 16 13 Subdrainage Piping (33 41 16)

See CSI section 33 42 11 00-0052 for polyethylene drain pipe.

33 41 16 13-0001	Corrugated High Density Polyethylene (HDPE) Drainage Piping (33 41 16 13)		
33 41 16 13-0002	Single Wall, Corrugated High Density Polyethylene (HDPE) Piping (33 41 16 13-0001)		
	Note: Excludes couplings and gaskets.		
33 41 16 13-0003	Coupled, Single Wall, Corrugated High Density Polyethylene (HDPE) Piping (33 41 16 13-0002)		
33 41 16 13-0004	LF 4" Coupled, Single Wall, Corrugated High Density Polyethylene (HDPE) Pipe .....	5.44	4.53
	For <100, Add	0.95	
	For >1,000, Deduct	-0.50	
33 41 16 13-0005	LF 6" Coupled, Single Wall, Corrugated High Density Polyethylene (HDPE) Pipe .....	6.88	4.85
	For <100, Add	1.07	
	For >1,000, Deduct	-0.59	
33 41 16 13-0006	LF 8" Coupled, Single Wall, Corrugated High Density Polyethylene (HDPE) Pipe .....	8.69	5.10
	For <100, Add	1.20	
	For >1,000, Deduct	-0.69	
33 41 16 13-0007	LF 10" Coupled, Single Wall, Corrugated High Density Polyethylene (HDPE) Pipe .....	11.88	5.26
	For <100, Add	1.38	
	For >1,000, Deduct	-0.86	
33 41 16 13-0008	LF 12" Coupled, Single Wall, Corrugated High Density Polyethylene (HDPE) Pipe .....	14.00	5.74
	For <100, Add	1.56	
	For >1,000, Deduct	-0.99	
33 41 16 13-0009	LF 15" Coupled, Single Wall, Corrugated High Density Polyethylene (HDPE) Pipe .....	18.51	6.48
	For <100, Add	1.90	
	For >1,000, Deduct	-1.25	
33 41 16 13-0010	LF 18" Coupled, Single Wall, Corrugated High Density Polyethylene (HDPE) Pipe .....	29.77	10.94
	For <100, Add	3.13	
	For >1,000, Deduct	-2.04	
33 41 16 13-0011	LF 24" Coupled, Single Wall, Corrugated High Density Polyethylene (HDPE) Pipe .....	41.42	12.01
	For <100, Add	3.87	
	For >1,000, Deduct	-2.67	

#### 33 41 16 13-0012 Coupled, Perforated, Single Wall, Corrugated High Density Polyethylene (HDPE) Piping (33 41 16 13-0002)

**33 Utilities****33 40 Stormwater Utilities****33 41 Subdrainage**

MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
33 41 16 13-0013 LF 4" Coupled, Perforated, Single Wall, Corrugated High Density Polyethylene (HDPE) Pipe..... For <100, Add 0.95 For >1,000, Deduct -0.49	5.31	4.53
33 41 16 13-0014 LF 6" Coupled, Perforated, Single Wall, Corrugated High Density Polyethylene (HDPE) Pipe..... For <100, Add 1.07 For >1,000, Deduct -0.58	6.82	4.85
33 41 16 13-0015 LF 8" Coupled, Perforated, Single Wall, Corrugated High Density Polyethylene (HDPE) Pipe..... For <100, Add 1.32 For >1,000, Deduct -0.81	11.15	5.10
33 41 16 13-0016 LF 10" Coupled, Perforated, Single Wall, Corrugated High Density Polyethylene (HDPE) Pipe..... For <100, Add 1.45 For >1,000, Deduct -0.92	13.18	5.26
33 41 16 13-0017 LF 12" Coupled, Perforated, Single Wall, Corrugated High Density Polyethylene (HDPE) Pipe..... For <100, Add 1.63 For >1,000, Deduct -1.06	15.42	5.74
33 41 16 13-0018 LF 15" Coupled, Perforated, Single Wall, Corrugated High Density Polyethylene (HDPE) Pipe..... For <100, Add 1.89 For >1,000, Deduct -1.24	18.36	6.48
33 41 16 13-0019 LF 18" Coupled, Perforated, Single Wall, Corrugated High Density Polyethylene (HDPE) Pipe..... For <100, Add 3.08 For >1,000, Deduct -1.99	28.84	10.94
33 41 16 13-0020 LF 24" Coupled, Perforated, Single Wall, Corrugated High Density Polyethylene (HDPE) Pipe..... For <100, Add 3.80 For >1,000, Deduct -2.60	39.93	12.01
<b>33 41 16 13-0021 Single Wall, Corrugated High Density Polyethylene (HDPE) Pipe Fittings (33 41 16 13-0001)</b> Note: Excludes couplings and gaskets.		
<b>33 41 16 13-0022 Tees, Single Wall, Corrugated High Density Polyethylene (HDPE) (33 41 16 13-0021)</b>		
33 41 16 13-0023 EA 4" Tee, Single Wall, Corrugated High Density Polyethylene (HDPE).....	45.24	25.30
33 41 16 13-0024 EA 6" Tee, Single Wall, Corrugated High Density Polyethylene (HDPE).....	53.66	29.52
33 41 16 13-0025 EA 8" Tee, Single Wall, Corrugated High Density Polyethylene (HDPE).....	83.85	35.85
33 41 16 13-0026 EA 10" Tee, Single Wall, Corrugated High Density Polyethylene (HDPE).....	107.18	44.29
33 41 16 13-0027 EA 12" Tee, Single Wall, Corrugated High Density Polyethylene (HDPE).....	155.63	52.73
33 41 16 13-0028 EA 15" Tee, Single Wall, Corrugated High Density Polyethylene (HDPE).....	325.71	68.90
33 41 16 13-0029 EA 18" Tee, Single Wall, Corrugated High Density Polyethylene (HDPE).....	392.27	92.79
33 41 16 13-0030 EA 24" Tee, Single Wall, Corrugated High Density Polyethylene (HDPE).....	723.37	105.45
<b>33 41 16 13-0031 Wyes, Single Wall, Corrugated High Density Polyethylene (HDPE) (33 41 16 13-0021)</b>		
33 41 16 13-0032 EA 4" Wye, Single Wall, Corrugated High Density Polyethylene (HDPE).....	46.33	25.30
33 41 16 13-0033 EA 6" Wye, Single Wall, Corrugated High Density Polyethylene (HDPE).....	57.22	29.52
33 41 16 13-0034 EA 8" Wye, Single Wall, Corrugated High Density Polyethylene (HDPE).....	121.09	35.85
<b>33 41 16 13-0035 45 Degree Bends, Single Wall, Corrugated High Density Polyethylene (HDPE) (33 41 16 13-0021)</b>		
33 41 16 13-0036 EA 4" 45 Degree Bend, Single Wall, Corrugated High Density Polyethylene (HDPE).....	30.53	16.88
<b>33 41 16 13-0037 90 Degree Bends, Single Wall, Corrugated High Density Polyethylene (HDPE) (33 41 16 13-0021)</b>		
33 41 16 13-0038 EA 4" 90 Degree Bend, Single Wall, Corrugated High Density Polyethylene (HDPE).....	31.67	16.88
33 41 16 13-0039 EA 6" 90 Degree Bend, Single Wall, Corrugated High Density Polyethylene (HDPE).....	40.37	19.69
33 41 16 13-0040 EA 8" 90 Degree Bend, Single Wall, Corrugated High Density Polyethylene (HDPE).....	58.55	23.91
33 41 16 13-0041 EA 10" 90 Degree Bend, Single Wall, Corrugated High Density Polyethylene (HDPE).....	76.64	29.52
<b>33 41 16 13-0042 Geotextile Filter Fabric Sock (33 41 16 13)</b>		
33 41 16 13-0043 LF 3" Geotextile Filter Fabric Sock.....	0.77	
33 41 16 13-0044 LF 4" Geotextile Filter Fabric Sock.....	1.01	
33 41 16 13-0045 LF 6" Geotextile Filter Fabric Sock.....	1.55	
33 41 16 13-0046 LF 8" Geotextile Filter Fabric Sock.....	2.08	
33 41 16 13-0047 LF 10" Geotextile Filter Fabric Sock.....	3.13	
33 41 16 13-0048 LF 12" Geotextile Filter Fabric Sock.....	4.33	
33 41 16 13-0049 LF 15" Geotextile Filter Fabric Sock.....	5.24	
<b>33 41 16 13-0050 Perforated Polyvinyl Chloride (PVC) Drainage Piping, D2729 (33 41 16 13)</b> Note: Includes fittings, couplings, elbows, etc.		
33 41 16 13-0051 LF 3" Perforated Polyvinyl Chloride (PVC) Drainage Piping ..... For <100, Add 1.07 For >1,000, Deduct -0.59	6.94	4.79
33 41 16 13-0052 LF 4" Perforated Polyvinyl Chloride (PVC) Drainage Piping ..... For <100, Add 1.16 For >1,000, Deduct -0.64	7.57	5.18
33 41 16 13-0053 LF 6" Perforated Polyvinyl Chloride (PVC) Drainage Piping ..... For <100, Add 1.45 For >1,000, Deduct -0.83	10.33	6.21



		<b>Utilities</b>	<b>33</b>	<b>CS</b>
		<b>Stormwater Utilities</b>	<b>33 40</b>	
		<b>Subdrainage</b>	<b>33 41</b>	

MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
33 41 16 13-0054 LF 8" Perforated Polyvinyl Chloride (PVC) Drainage Piping ..... For <100, Add 1.94 For >1,000, Deduct -1.16	15.46	7.76
33 41 16 13-0055 LF 10" Perforated Polyvinyl Chloride (PVC) Drainage Piping ..... For <100, Add 2.39 For >1,000, Deduct -1.58	23.47	8.08
33 41 16 13-0056 LF 12" Perforated Polyvinyl Chloride (PVC) Drainage Piping ..... For <100, Add 2.79 For >1,000, Deduct -1.91	29.43	8.82
33 41 16 13-0057 LF 15" Perforated Polyvinyl Chloride (PVC) Drainage Piping ..... For <100, Add 3.48 For >1,000, Deduct -2.49	39.83	9.94
<b>33 41 16 13-0058 Strip-Perforated, Galvanized, Corrugated Steel Pipe (33 41 16 13)</b> Note: Perforations are located in the bottom quarter points of the pipe.		
33 41 16 13-0059 LF 6" Diameter, 16 Gauge, Strip-Perforated, Galvanized, Corrugated Steel Pipe ..... For Full Perforated, Add 1.22	23.15	5.46
33 41 16 13-0060 LF 8" Diameter, 16 Gauge, Strip-Perforated, Galvanized, Corrugated Steel Pipe ..... For Full Perforated, Add 1.61	29.36	6.62
33 41 16 13-0061 LF 10" Diameter, 16 Gauge, Strip-Perforated, Galvanized, Corrugated Steel Pipe ..... For Full Perforated, Add 2.02	37.02	8.40
33 41 16 13-0062 LF 12" Diameter, 16 Gauge, Strip-Perforated, Galvanized, Corrugated Steel Pipe ..... For Full Perforated, Add 2.11	41.00	9.93
33 41 16 13-0063 LF 15" Diameter, 16 Gauge, Strip-Perforated, Galvanized, Corrugated Steel Pipe ..... For Full Perforated, Add 2.66	47.12	10.28
33 41 16 13-0064 LF 18" Diameter, 16 Gauge, Strip-Perforated, Galvanized, Corrugated Steel Pipe ..... For Full Perforated, Add 3.21	53.39	10.66
33 41 16 13-0065 LF 21" Diameter, 16 Gauge, Strip-Perforated, Galvanized, Corrugated Steel Pipe ..... For Full Perforated, Add 3.82	61.17	11.50
<b>33 41 16 13-0066 Strip-Perforated, Aluminized Type 2, Corrugated Steel Pipe (33 41 16 13)</b> Note: Perforations are located in the bottom quarter points of the pipe.		
33 41 16 13-0067 LF 6" Diameter, 16 Gauge, Strip-Perforated, Aluminized Type 2, Corrugated Steel Pipe ..... For Full Perforated, Add 1.42	25.12	5.46
33 41 16 13-0068 LF 8" Diameter, 16 Gauge, Strip-Perforated, Aluminized Type 2, Corrugated Steel Pipe ..... For Full Perforated, Add 1.88	32.03	6.62
33 41 16 13-0069 LF 10" Diameter, 16 Gauge, Strip-Perforated, Aluminized Type 2, Corrugated Steel Pipe ..... For Full Perforated, Add 2.35	40.28	8.40
33 41 16 13-0070 LF 12" Diameter, 16 Gauge, Strip-Perforated, Aluminized Type 2, Corrugated Steel Pipe ..... For Full Perforated, Add 2.43	44.16	9.93
33 41 16 13-0071 LF 15" Diameter, 16 Gauge, Strip-Perforated, Aluminized Type 2, Corrugated Steel Pipe ..... For Full Perforated, Add 3.05	51.04	10.28
33 41 16 13-0072 LF 18" Diameter, 16 Gauge, Strip-Perforated, Aluminized Type 2, Corrugated Steel Pipe ..... For Full Perforated, Add 3.67	58.03	10.66
33 41 16 13-0073 LF 21" Diameter, 16 Gauge, Strip-Perforated, Aluminized Type 2, Corrugated Steel Pipe ..... For Full Perforated, Add 4.36	66.58	11.50
<b>33 41 16 13-0074 Strip-Perforated, Corrugated Aluminum Pipe (33 41 16 13)</b> Note: Perforations are located in the bottom quarter points of the pipe.		
33 41 16 13-0075 LF 6" Diameter, 16 Gauge, Strip-Perforated, Corrugated Aluminum Pipe ..... For Full Perforated, Add 1.48	25.75	5.46
33 41 16 13-0076 LF 8" Diameter, 16 Gauge, Strip-Perforated, Corrugated Aluminum Pipe ..... For Full Perforated, Add 1.96	32.84	6.62
33 41 16 13-0077 LF 10" Diameter, 16 Gauge, Strip-Perforated, Corrugated Aluminum Pipe ..... For Full Perforated, Add 2.45	41.32	8.40
33 41 16 13-0078 LF 12" Diameter, 16 Gauge, Strip-Perforated, Corrugated Aluminum Pipe ..... For Full Perforated, Add 3.21	51.97	9.93
33 41 16 13-0079 LF 15" Diameter, 16 Gauge, Strip-Perforated, Corrugated Aluminum Pipe ..... For Full Perforated, Add 4.02	60.75	10.28
33 41 16 13-0080 LF 18" Diameter, 16 Gauge, Strip-Perforated, Corrugated Aluminum Pipe ..... For Full Perforated, Add 4.85	69.81	10.66
33 41 16 13-0081 LF 21" Diameter, 16 Gauge, Strip-Perforated, Corrugated Aluminum Pipe ..... For Full Perforated, Add 5.73	80.32	11.50
<b>33 41 16 13-0082 Prefabricated Composite Drains (33 41 16 13)</b>		
<b>33 41 16 13-0083 Panel-Shaped, Oblong Corrugated HDPE Drainage Pipe (ADS AdvanEDGE) (33 41 16 13-0082)</b> Note: Excludes excavation and backfill. See CSI section 31 23 16 13-0000 for excavation and backfill.		
33 41 16 13-0084 LF 12" Height, Panel-Shaped, Oblong Corrugated HDPE Drainage Pipe (ADS AdvanEDGE) ..... For External Typar Geotextile Wrap, Add 2.00	10.66	2.14
33 41 16 13-0085 EA Coupler For 12" Height, Panel-Shaped, Oblong Corrugated HDPE Drainage Pipe (ADS AdvanEDGE) .....	48.48	
33 41 16 13-0086 EA End Cap For 12" Height, Panel-Shaped, Oblong Corrugated HDPE Drainage Pipe (ADS AdvanEDGE) .....	48.48	
33 41 16 13-0087 EA Side Outlet For 12" Height, Panel-Shaped, Oblong Corrugated HDPE Drainage Pipe (ADS AdvanEDGE) .....	94.84	
33 41 16 13-0088 EA End Outlet For 12" Height, Panel-Shaped, Oblong Corrugated HDPE Drainage Pipe (ADS AdvanEDGE) .....	94.84	
33 41 16 13-0089 LF 18" Height, Panel-Shaped, Oblong Corrugated HDPE Drainage Pipe (ADS AdvanEDGE) ..... For External Typar Geotextile Wrap, Add 3.00	17.13	2.68
33 41 16 13-0090 EA Coupler For 18" Height, Panel-Shaped, Oblong Corrugated HDPE Drainage Pipe (ADS AdvanEDGE) .....	72.28	
33 41 16 13-0091 EA End Cap For 18" Height, Panel-Shaped, Oblong Corrugated HDPE Drainage Pipe (ADS AdvanEDGE) .....	72.28	
33 41 16 13-0092 EA Side Outlet For 18" Height, Panel-Shaped, Oblong Corrugated HDPE Drainage Pipe (ADS AdvanEDGE) .....	124.92	

**33 Utilities****33 40 Stormwater Utilities****33 41 Subdrainage**

MINOR  
CSI UOM DESCRIPTION

TOTAL DIRECT DEMOLITION  
UNIT COST UNIT COST

33 41 16 13-0093 EA End Outlet For 18" Height, Panel-Shaped, Oblong Corrugated HDPE Drainage Pipe (ADS AdvanEDGE) ..... 124.92

**33 42 Stormwater Conveyance** (33 40)

Note: Piping includes hydrostatic testing, disinfecting and warning tape. See CSI section 31 23 16 00-0000 for excavation, 31 23 16 36-0016 for backfill.

**33 42 11 Stormwater Gravity Piping** (33 42)**33 42 11 00-0001 Reinforced Concrete Piping** (33 42 11)**33 42 11 00-0002 Class 3 Reinforced Concrete Pipe Without Gaskets** (33 42 11 00-0001)

33 42 11 00-0003	LF	12" Diameter Class 3 Reinforced Concrete Pipe Without Gaskets.....	50.45	15.29
		For >1,000, Deduct	-2.52	
		For Class 4, Add	2.72	
		For Class 5, Add	5.72	
33 42 11 00-0004	LF	15" Diameter Class 3 Reinforced Concrete Pipe Without Gaskets.....	60.93	17.01
		For >1,000, Deduct	-3.05	
		For Class 4, Add	3.48	
		For Class 5, Add	7.32	
33 42 11 00-0005	LF	18" Diameter Class 3 Reinforced Concrete Pipe Without Gaskets.....	68.82	21.22
		For >1,000, Deduct	-3.44	
		For Class 4, Add	3.66	
		For Class 5, Add	7.70	
33 42 11 00-0006	LF	21" Diameter Class 3 Reinforced Concrete Pipe Without Gaskets.....	88.28	26.75
		For >1,000, Deduct	-4.41	
		For Class 4, Add	4.76	
		For Class 5, Add	10.01	
33 42 11 00-0007	LF	24" Diameter Class 3 Reinforced Concrete Pipe Without Gaskets.....	103.06	32.49
		For >1,000, Deduct	-5.15	
		For Class 4, Add	5.38	
		For Class 5, Add	11.33	
33 42 11 00-0008	LF	27" Diameter Class 3 Reinforced Concrete Pipe Without Gaskets.....	130.88	41.57
		For >1,000, Deduct	-6.54	
		For Class 4, Add	6.79	
		For Class 5, Add	14.30	
33 42 11 00-0009	LF	30" Diameter Class 3 Reinforced Concrete Pipe Without Gaskets.....	139.37	42.93
		For >1,000, Deduct	-6.97	
		For Class 4, Add	7.35	
		For Class 5, Add	15.46	
33 42 11 00-0010	LF	36" Diameter Class 3 Reinforced Concrete Pipe Without Gaskets.....	173.85	48.78
		For >1,000, Deduct	-8.69	
		For Class 4, Add	9.96	
		For Class 5, Add	20.97	
33 42 11 00-0011	LF	42" Diameter Class 3 Reinforced Concrete Pipe Without Gaskets.....	227.63	53.66
		For >1,000, Deduct	-11.38	
		For Class 4, Add	14.41	
		For Class 5, Add	30.35	
33 42 11 00-0012	LF	48" Diameter Class 3 Reinforced Concrete Pipe Without Gaskets.....	273.58	59.76
		For >1,000, Deduct	-13.68	
		For Class 4, Add	17.88	
		For Class 5, Add	37.64	

**33 42 11 00-0013 Concrete Reducing Wye Without Gaskets** (33 42 11 00-0001)

33 42 11 00-0014	EA	12" Concrete Reducing Wye Without Gaskets.....	647.66	58.25
33 42 11 00-0015	EA	15" Concrete Reducing Wye Without Gaskets.....	776.35	71.00
33 42 11 00-0016	EA	18" Concrete Reducing Wye Without Gaskets.....	961.89	78.28
33 42 11 00-0017	EA	21" Concrete Reducing Wye Without Gaskets.....	1,102.05	96.48
33 42 11 00-0018	EA	24" Concrete Reducing Wye Without Gaskets.....	1,243.58	116.50

**33 42 11 00-0019 Concrete Pipe Joint Gaskets** (33 42 11 00-0001)

33 42 11 00-0020	EA	12" Diameter Concrete Pipe Joint Gasket.....	6.34	
33 42 11 00-0021	EA	15" Diameter Concrete Pipe Joint Gasket.....	7.50	
33 42 11 00-0022	EA	18" Diameter Concrete Pipe Joint Gasket.....	8.69	
33 42 11 00-0023	EA	21" Diameter Concrete Pipe Joint Gasket.....	10.50	
33 42 11 00-0024	EA	24" Diameter Concrete Pipe Joint Gasket.....	12.31	
33 42 11 00-0025	EA	27" Diameter Concrete Pipe Joint Gasket.....	13.71	
33 42 11 00-0026	EA	30" Diameter Concrete Pipe Joint Gasket.....	15.07	
33 42 11 00-0027	EA	36" Diameter Concrete Pipe Joint Gasket.....	18.41	
33 42 11 00-0028	EA	42" Diameter Concrete Pipe Joint Gasket.....	21.34	
33 42 11 00-0029	EA	48" Diameter Concrete Pipe Joint Gasket.....	24.62	
33 42 11 00-0030	EA	54" Diameter Concrete Pipe Joint Gasket.....	30.17	
33 42 11 00-0031	EA	60" Diameter Concrete Pipe Joint Gasket.....	44.66	

**33 42 11 00-0032 Precast Concrete Cut Off Wall** (33 42 11 00-0001)

33 42 11 00-0033	EA	12" ID Pipe, 18" Thick, 36" High, Precast Concrete Cut Off Wall.....	309.22	171.72
33 42 11 00-0034	EA	15" ID Pipe, 18" Thick, 36" High, Precast Concrete Cut Off Wall.....	380.72	212.70
33 42 11 00-0035	EA	18" ID Pipe, 18" Thick, 36" High, Precast Concrete Cut Off Wall.....	467.83	269.28
33 42 11 00-0036	EA	21" ID Pipe, 18" Thick, 36" High, Precast Concrete Cut Off Wall.....	551.04	321.97
33 42 11 00-0037	EA	24" ID Pipe, 18" Thick, 36" High, Precast Concrete Cut Off Wall.....	632.20	372.61





	<b>Utilities</b>	<b>33</b>	
	<b>Stormwater Utilities</b>	<b>33 40</b>	<b>CS</b>
	<b>Stormwater Conveyance</b>	<b>33 42</b>	

MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
33 42 11 00-0038 EA 27" ID Pipe, 18" Thick, 36" High, Precast Concrete Cut Off Wall .....	766.25	476.13
33 42 11 00-0039 EA 30" ID Pipe, 18" Thick, 36" High, Precast Concrete Cut Off Wall .....	976.56	655.64
33 42 11 00-0040 EA 36" ID Pipe, 18" Thick, 36" High, Precast Concrete Cut Off Wall .....	1,209.60	827.36
33 42 11 00-0041 EA 42" ID Pipe, 18" Thick, 36" High, Precast Concrete Cut Off Wall .....	1,480.93	1,037.92
33 42 11 00-0042 EA 48" ID Pipe, 18" Thick, 36" High, Precast Concrete Cut Off Wall .....	1,651.07	1,169.83
33 42 11 00-0043 EA 54" ID Pipe, 18" Thick, 36" High, Precast Concrete Cut Off Wall .....	1,839.29	1,311.30
33 42 11 00-0044 EA 60" ID Pipe, 18" Thick, 36" High, Precast Concrete Cut Off Wall .....	2,028.66	1,456.67
33 42 11 00-0045 EA 66" ID Pipe, 18" Thick, 36" High, Precast Concrete Cut Off Wall .....	2,109.03	1,512.29
33 42 11 00-0046 EA 72" ID Pipe, 18" Thick, 36" High, Precast Concrete Cut Off Wall .....	2,179.81	1,561.07
33 42 11 00-0047 EA 78" ID Pipe, 18" Thick, 36" High, Precast Concrete Cut Off Wall .....	2,250.59	1,609.85
33 42 11 00-0048 EA 84" ID Pipe, 18" Thick, 36" High, Precast Concrete Cut Off Wall .....	2,324.12	1,658.64
<b>33 42 11 00-0049 Strap Assembly (33 42 11 00-0001)</b> Note: Includes drilling holes in concrete pipe, setting threaded rod, bolts, and mounting the 12' strap.		
33 42 11 00-0050 EA Up To 24" Diameter Pipe, 12' Strap Assembly .....	228.32	
33 42 11 00-0051 EA >24" Diameter Pipe, 12' Strap Assembly .....	322.55	
<b>33 42 11 00-0052 High Density Polyethylene (HDPE) Drainage Piping (33 42 11)</b>		
<b>33 42 11 00-0053 Smooth Interior, Double Wall, Corrugated High Density Polyethylene (HDPE) Piping (33 42 11 00-0052)</b> Note: Excludes couplings and gaskets.		
<b>33 42 11 00-0054 Coupled, Smooth Interior, Double Wall, Corrugated High Density Polyethylene (HDPE) Piping (33 42 11 00-0053)</b>		
33 42 11 00-0055 LF 4" Coupled, Smooth Interior, Double Wall, Corrugated High Density Polyethylene (HDPE) Pipe .....	14.40	6.46
For <100, Add	2.58	
For >1,000, Deduct	-1.37	
33 42 11 00-0056 LF 6" Coupled, Smooth Interior, Double Wall, Corrugated High Density Polyethylene (HDPE) Pipe .....	18.79	7.51
For <100, Add	3.00	
For >1,000, Deduct	-1.69	
33 42 11 00-0057 LF 8" Coupled, Smooth Interior, Double Wall, Corrugated High Density Polyethylene (HDPE) Pipe .....	23.10	8.74
For <100, Add	3.49	
For >1,000, Deduct	-2.03	
33 42 11 00-0058 LF 10" Coupled, Smooth Interior, Double Wall, Corrugated High Density Polyethylene (HDPE) Pipe .....	26.21	9.04
For <100, Add	3.62	
For >1,000, Deduct	-2.21	
33 42 11 00-0059 LF 12" Coupled, Smooth Interior, Double Wall, Corrugated High Density Polyethylene (HDPE) Pipe .....	27.55	9.36
For <100, Add	3.74	
For >1,000, Deduct	-2.31	
33 42 11 00-0060 LF 15" Coupled, Smooth Interior, Double Wall, Corrugated High Density Polyethylene (HDPE) Pipe .....	31.23	9.69
For <100, Add	3.88	
For >1,000, Deduct	-2.53	
33 42 11 00-0061 LF 18" Coupled, Smooth Interior, Double Wall, Corrugated High Density Polyethylene (HDPE) Pipe .....	37.76	10.05
For <100, Add	4.02	
For >1,000, Deduct	-2.89	
33 42 11 00-0062 LF 24" Coupled, Smooth Interior, Double Wall, Corrugated High Density Polyethylene (HDPE) Pipe .....	51.67	11.77
For <100, Add	4.71	
For >1,000, Deduct	-3.76	
33 42 11 00-0063 LF 30" Coupled, Smooth Interior, Double Wall, Corrugated High Density Polyethylene (HDPE) Pipe .....	73.25	15.84
For <100, Add	6.34	
For >1,000, Deduct	-5.25	
33 42 11 00-0064 LF 36" Coupled, Smooth Interior, Double Wall, Corrugated High Density Polyethylene (HDPE) Pipe .....	96.23	20.02
For <100, Add	8.01	
For >1,000, Deduct	-6.81	
<b>33 42 11 00-0065 Bell And Spigot, Smooth Interior, Double Wall, Corrugated High Density Polyethylene (HDPE) Piping (33 42 11 00-0053)</b>		
33 42 11 00-0066 LF 12" Bell And Spigot, Smooth Interior, Double Wall, Corrugated High Density Polyethylene (HDPE) Pipe .....	27.40	9.36
For <100, Add	3.74	
For >1,000, Deduct	-2.31	
33 42 11 00-0067 LF 15" Bell And Spigot, Smooth Interior, Double Wall, Corrugated High Density Polyethylene (HDPE) Pipe .....	31.85	9.69
For <100, Add	3.88	
For >1,000, Deduct	-2.56	
33 42 11 00-0068 LF 18" Bell And Spigot, Smooth Interior, Double Wall, Corrugated High Density Polyethylene (HDPE) Pipe .....	38.69	10.05
For <100, Add	4.02	
For >1,000, Deduct	-2.94	
33 42 11 00-0069 LF 24" Bell And Spigot, Smooth Interior, Double Wall, Corrugated High Density Polyethylene (HDPE) Pipe .....	53.15	11.77
For <100, Add	4.71	
For >1,000, Deduct	-3.83	
33 42 11 00-0070 LF 30" Bell And Spigot, Smooth Interior, Double Wall, Corrugated High Density Polyethylene (HDPE) Pipe .....	77.30	15.84
For <100, Add	6.34	
For >1,000, Deduct	-5.45	
33 42 11 00-0071 LF 36" Bell And Spigot, Smooth Interior, Double Wall, Corrugated High Density Polyethylene (HDPE) Pipe .....	99.25	20.02
For <100, Add	8.01	
For >1,000, Deduct	-6.96	
33 42 11 00-0072 LF 42" Bell And Spigot, Smooth Interior, Double Wall, Corrugated High Density Polyethylene (HDPE) Pipe .....	129.15	21.84
For <100, Add	8.74	
For >1,000, Deduct	-8.64	

**33 Utilities****33 40 Stormwater Utilities****33 42 Stormwater Conveyance**

MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
33 42 11 00-0073 LF 48" Bell And Spigot, Smooth Interior, Double Wall, Corrugated High Density Polyethylene (HDPE) Pipe ..... For <100, Add For >1,000, Deduct	140.88 9.86 -9.51	24.64
<b>33 42 11 00-0074 Perforated, Corrugated High Density Polyethylene (HDPE) Piping</b> (33 42 11 00-0052) Note: Excludes couplings and gaskets.		
<b>33 42 11 00-0075 Coupled, Perforated, Smooth Interior, Double Wall, Corrugated High Density Polyethylene (HDPE) Piping</b> (33 42 11 00-0074)		
33 42 11 00-0076 LF 4" Coupled, Perforated, Smooth Interior, Double Wall, Corrugated High Density Polyethylene (HDPE) Pipe ..... For <100, Add For >1,000, Deduct	15.18 2.58 -1.41	6.46
33 42 11 00-0077 LF 6" Coupled, Perforated, Smooth Interior, Double Wall, Corrugated High Density Polyethylene (HDPE) Pipe ..... For <100, Add For >1,000, Deduct	18.81 3.00 -1.69	7.51
33 42 11 00-0078 LF 8" Coupled, Perforated, Smooth Interior, Double Wall, Corrugated High Density Polyethylene (HDPE) Pipe ..... For <100, Add For >1,000, Deduct	23.10 3.49 -2.03	8.74
33 42 11 00-0079 LF 10" Coupled, Perforated, Smooth Interior, Double Wall, Corrugated High Density Polyethylene (HDPE) Pipe ..... For <100, Add For >1,000, Deduct	26.24 3.62 -2.22	9.04
33 42 11 00-0080 LF 12" Coupled, Perforated, Smooth Interior, Double Wall, Corrugated High Density Polyethylene (HDPE) Pipe ..... For <100, Add For >1,000, Deduct	27.55 3.74 -2.31	9.36
33 42 11 00-0081 LF 15" Coupled, Perforated, Smooth Interior, Double Wall, Corrugated High Density Polyethylene (HDPE) Pipe ..... For <100, Add For >1,000, Deduct	31.25 3.88 -2.53	9.69
33 42 11 00-0082 LF 18" Coupled, Perforated, Smooth Interior, Double Wall, Corrugated High Density Polyethylene (HDPE) Pipe ..... For <100, Add For >1,000, Deduct	37.78 4.02 -2.89	10.05
33 42 11 00-0083 LF 24" Coupled, Perforated, Smooth Interior, Double Wall, Corrugated High Density Polyethylene (HDPE) Pipe ..... For <100, Add For >1,000, Deduct	51.67 4.71 -3.76	11.77
33 42 11 00-0084 LF 30" Coupled, Perforated, Smooth Interior, Double Wall, Corrugated High Density Polyethylene (HDPE) Pipe ..... For <100, Add For >1,000, Deduct	73.51 6.34 -5.26	15.84
33 42 11 00-0085 LF 36" Coupled, Perforated, Smooth Interior, Double Wall, Corrugated High Density Polyethylene (HDPE) Pipe ..... For <100, Add For >1,000, Deduct	96.23 8.01 -6.81	20.02
<b>33 42 11 00-0086 Bell And Spigot, Perforated, Smooth Interior, Double Wall, Corrugated High Density Polyethylene (HDPE) Piping</b> (33 42 11 00-0074)		
33 42 11 00-0087 LF 12" Bell And Spigot, Perforated, Smooth Interior, Double Wall, Corrugated High Density Polyethylene (HDPE) Pipe ..... For <100, Add For >1,000, Deduct	27.42 3.74 -2.31	9.36
33 42 11 00-0088 LF 15" Bell And Spigot, Perforated, Smooth Interior, Double Wall, Corrugated High Density Polyethylene (HDPE) Pipe ..... For <100, Add For >1,000, Deduct	31.88 3.88 -2.56	9.69
33 42 11 00-0089 LF 18" Bell And Spigot, Perforated, Smooth Interior, Double Wall, Corrugated High Density Polyethylene (HDPE) Pipe ..... For <100, Add For >1,000, Deduct	38.72 4.02 -2.94	10.05
33 42 11 00-0090 LF 24" Bell And Spigot, Perforated, Smooth Interior, Double Wall, Corrugated High Density Polyethylene (HDPE) Pipe ..... For <100, Add For >1,000, Deduct	53.15 4.71 -3.83	11.77
33 42 11 00-0091 LF 30" Bell And Spigot, Perforated, Smooth Interior, Double Wall, Corrugated High Density Polyethylene (HDPE) Pipe ..... For <100, Add For >1,000, Deduct	77.30 6.34 -5.45	15.84
33 42 11 00-0092 LF 36" Bell And Spigot, Perforated, Smooth Interior, Double Wall, Corrugated High Density Polyethylene (HDPE) Pipe ..... For <100, Add For >1,000, Deduct	99.25 8.01 -6.96	20.02
33 42 11 00-0093 LF 42" Bell And Spigot, Perforated, Smooth Interior, Double Wall, Corrugated High Density Polyethylene (HDPE) Pipe ..... For <100, Add For >1,000, Deduct	129.15 8.74 -8.64	21.84
33 42 11 00-0094 LF 48" Bell And Spigot, Perforated, Smooth Interior, Double Wall, Corrugated High Density Polyethylene (HDPE) Pipe ..... For <100, Add For >1,000, Deduct	140.88 9.86 -9.51	24.64
<b>33 42 11 00-0095 Smooth Interior, Double Wall, Corrugated High Density Polyethylene (HDPE) Pipe Fittings</b> (33 42 11 00-0052) Note: Excludes couplings and gaskets.		
<b>33 42 11 00-0096 Tees, Smooth Interior, Double Wall, Corrugated High Density Polyethylene (HDPE)</b> (33 42 11 00-0095)		



	<b>Utilities</b>	<b>33</b>	
	<b>Stormwater Utilities</b>	<b>33 40</b>	<b>CS</b>
	<b>Stormwater Conveyance</b>	<b>33 42</b>	

MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
33 42 11 00-0097 EA 4" Tee, Smooth Interior, Double Wall, Corrugated High Density Polyethylene (HDPE).....	62.95	25.30
33 42 11 00-0098 EA 6" Tee, Smooth Interior, Double Wall, Corrugated High Density Polyethylene (HDPE).....	78.52	29.52
33 42 11 00-0099 EA 8" Tee, Smooth Interior, Double Wall, Corrugated High Density Polyethylene (HDPE).....	123.76	35.85
33 42 11 00-0100 EA 10" Tee, Smooth Interior, Double Wall, Corrugated High Density Polyethylene (HDPE).....	186.13	44.29
33 42 11 00-0101 EA 12" Tee, Smooth Interior, Double Wall, Corrugated High Density Polyethylene (HDPE).....	289.32	52.73
33 42 11 00-0102 EA 15" Tee, Smooth Interior, Double Wall, Corrugated High Density Polyethylene (HDPE).....	406.94	68.90
33 42 11 00-0103 EA 18" Tee, Smooth Interior, Double Wall, Corrugated High Density Polyethylene (HDPE).....	583.61	92.79
33 42 11 00-0104 EA 24" Tee, Smooth Interior, Double Wall, Corrugated High Density Polyethylene (HDPE).....	744.54	105.92
33 42 11 00-0105 EA 30" Tee, Smooth Interior, Double Wall, Corrugated High Density Polyethylene (HDPE).....	1,285.16	122.32
33 42 11 00-0106 EA 36" Tee, Smooth Interior, Double Wall, Corrugated High Density Polyethylene (HDPE).....	1,646.53	141.30
33 42 11 00-0107 EA 42" Tee, Smooth Interior, Double Wall, Corrugated High Density Polyethylene (HDPE).....	2,724.12	168.72
33 42 11 00-0108 EA 48" Tee, Smooth Interior, Double Wall, Corrugated High Density Polyethylene (HDPE).....	3,416.32	200.36
<b>33 42 11 00-0109 Wyes, Smooth Interior, Double Wall, Corrugated High Density Polyethylene (HDPE) (33 42 11 00-0095)</b>		
33 42 11 00-0110 EA 4" Wye, Smooth Interior, Double Wall, Corrugated High Density Polyethylene (HDPE).....	89.25	25.30
33 42 11 00-0111 EA 6" Wye, Smooth Interior, Double Wall, Corrugated High Density Polyethylene (HDPE).....	107.38	29.52
33 42 11 00-0112 EA 8" Wye, Smooth Interior, Double Wall, Corrugated High Density Polyethylene (HDPE).....	141.98	35.85
33 42 11 00-0113 EA 10" Wye, Smooth Interior, Double Wall, Corrugated High Density Polyethylene (HDPE).....	206.22	44.29
33 42 11 00-0114 EA 12" Wye, Smooth Interior, Double Wall, Corrugated High Density Polyethylene (HDPE).....	353.94	52.73
33 42 11 00-0115 EA 15" Wye, Smooth Interior, Double Wall, Corrugated High Density Polyethylene (HDPE).....	387.11	68.90
33 42 11 00-0116 EA 18" Wye, Smooth Interior, Double Wall, Corrugated High Density Polyethylene (HDPE).....	545.05	92.79
<b>33 42 11 00-0117 22-1/2 Degree Bends, Smooth Interior, Double Wall, Corrugated High Density Polyethylene (HDPE) (33 42 11 00-0095)</b>		
33 42 11 00-0118 EA 4" 22-1/2 Degree Bend, Smooth Interior, Double Wall, Corrugated High Density Polyethylene (HDPE).....	38.66	16.88
33 42 11 00-0119 EA 6" 22-1/2 Degree Bend, Smooth Interior, Double Wall, Corrugated High Density Polyethylene (HDPE).....	47.42	19.69
33 42 11 00-0120 EA 8" 22-1/2 Degree Bend, Smooth Interior, Double Wall, Corrugated High Density Polyethylene (HDPE).....	67.92	23.91
33 42 11 00-0121 EA 10" 22-1/2 Degree Bend, Smooth Interior, Double Wall, Corrugated High Density Polyethylene (HDPE).....	85.34	29.52
33 42 11 00-0122 EA 12" 22-1/2 Degree Bend, Smooth Interior, Double Wall, Corrugated High Density Polyethylene (HDPE).....	121.81	35.15
33 42 11 00-0123 EA 15" 22-1/2 Degree Bend, Smooth Interior, Double Wall, Corrugated High Density Polyethylene (HDPE).....	189.67	44.99
33 42 11 00-0124 EA 18" 22-1/2 Degree Bend, Smooth Interior, Double Wall, Corrugated High Density Polyethylene (HDPE).....	251.97	61.87
33 42 11 00-0125 EA 24" 22-1/2 Degree Bend, Smooth Interior, Double Wall, Corrugated High Density Polyethylene (HDPE).....	465.87	70.30
33 42 11 00-0126 EA 30" 22-1/2 Degree Bend, Smooth Interior, Double Wall, Corrugated High Density Polyethylene (HDPE).....	643.09	81.54
33 42 11 00-0127 EA 36" 22-1/2 Degree Bend, Smooth Interior, Double Wall, Corrugated High Density Polyethylene (HDPE).....	753.26	94.20
33 42 11 00-0128 EA 42" 22-1/2 Degree Bend, Smooth Interior, Double Wall, Corrugated High Density Polyethylene (HDPE).....	960.57	112.48
33 42 11 00-0129 EA 48" 22-1/2 Degree Bend, Smooth Interior, Double Wall, Corrugated High Density Polyethylene (HDPE).....	1,293.74	133.56
<b>33 42 11 00-0130 45 Degree Bends, Smooth Interior, Double Wall, Corrugated High Density Polyethylene (HDPE) (33 42 11 00-0095)</b>		
33 42 11 00-0131 EA 4" 45 Degree Bend, Smooth Interior, Double Wall, Corrugated High Density Polyethylene (HDPE).....	41.54	16.88
33 42 11 00-0132 EA 6" 45 Degree Bend, Smooth Interior, Double Wall, Corrugated High Density Polyethylene (HDPE).....	53.41	19.69
33 42 11 00-0133 EA 8" 45 Degree Bend, Smooth Interior, Double Wall, Corrugated High Density Polyethylene (HDPE).....	70.98	23.91
33 42 11 00-0134 EA 10" 45 Degree Bend, Smooth Interior, Double Wall, Corrugated High Density Polyethylene (HDPE).....	110.24	29.52
33 42 11 00-0135 EA 12" 45 Degree Bend, Smooth Interior, Double Wall, Corrugated High Density Polyethylene (HDPE).....	121.81	35.15
33 42 11 00-0136 EA 15" 45 Degree Bend, Smooth Interior, Double Wall, Corrugated High Density Polyethylene (HDPE).....	189.17	44.99
33 42 11 00-0137 EA 18" 45 Degree Bend, Smooth Interior, Double Wall, Corrugated High Density Polyethylene (HDPE).....	292.12	61.87
33 42 11 00-0138 EA 24" 45 Degree Bend, Smooth Interior, Double Wall, Corrugated High Density Polyethylene (HDPE).....	496.89	70.30
33 42 11 00-0139 EA 30" 45 Degree Bend, Smooth Interior, Double Wall, Corrugated High Density Polyethylene (HDPE).....	644.57	81.54
33 42 11 00-0140 EA 36" 45 Degree Bend, Smooth Interior, Double Wall, Corrugated High Density Polyethylene (HDPE).....	820.12	94.20
33 42 11 00-0141 EA 42" 45 Degree Bend, Smooth Interior, Double Wall, Corrugated High Density Polyethylene (HDPE).....	1,218.61	112.48
33 42 11 00-0142 EA 48" 45 Degree Bend, Smooth Interior, Double Wall, Corrugated High Density Polyethylene (HDPE).....	1,525.01	133.56
<b>33 42 11 00-0143 Couplings And End Caps, Corrugated High Density Polyethylene (HDPE) Pipe Fittings (33 42 11 00-0052)</b>		
Note: For single and double wall high density polyethylene (HDPE) piping.		
<b>33 42 11 00-0144 Couplings, Corrugated High Density Polyethylene (HDPE) Pipe (33 42 11 00-0143)</b>		
33 42 11 00-0145 EA 4" Coupling, Corrugated High Density Polyethylene (HDPE) Pipe .....	1.72	
33 42 11 00-0146 EA 6" Coupling, Corrugated High Density Polyethylene (HDPE) Pipe .....	3.08	
33 42 11 00-0147 EA 8" Coupling, Corrugated High Density Polyethylene (HDPE) Pipe .....	4.74	
33 42 11 00-0148 EA 10" Coupling, Corrugated High Density Polyethylene (HDPE) Pipe .....	5.83	
33 42 11 00-0149 EA 12" Coupling, Corrugated High Density Polyethylene (HDPE) Pipe .....	6.27	
33 42 11 00-0150 EA 15" Coupling, Corrugated High Density Polyethylene (HDPE) Pipe .....	8.93	
33 42 11 00-0151 EA 18" Coupling, Corrugated High Density Polyethylene (HDPE) Pipe .....	13.21	
33 42 11 00-0152 EA 24" Coupling, Corrugated High Density Polyethylene (HDPE) Pipe .....	21.02	
33 42 11 00-0153 EA 30" Coupling, Corrugated High Density Polyethylene (HDPE) Pipe .....	32.28	
33 42 11 00-0154 EA 36" Coupling, Corrugated High Density Polyethylene (HDPE) Pipe .....	42.23	
33 42 11 00-0155 EA 42" Coupling, Corrugated High Density Polyethylene (HDPE) Pipe .....	66.39	
33 42 11 00-0156 EA 48" Coupling, Corrugated High Density Polyethylene (HDPE) Pipe .....	89.80	
<b>33 42 11 00-0157 Self Adhering Gaskets, Corrugated High Density Polyethylene (HDPE) Pipe (33 42 11 00-0143)</b>		
33 42 11 00-0158 EA 4" Self Adhering Gasket, Corrugated High Density Polyethylene (HDPE) Pipe.....	90.92	

**33 Utilities****33 40 Stormwater Utilities****33 42 Stormwater Conveyance**

MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
33 42 11 00-0159 EA 6" Self Adhering Gasket, Corrugated High Density Polyethylene (HDPE) Pipe.....	95.20	
33 42 11 00-0160 EA 8" Self Adhering Gasket, Corrugated High Density Polyethylene (HDPE) Pipe.....	99.68	
33 42 11 00-0161 EA 10" Self Adhering Gasket, Corrugated High Density Polyethylene (HDPE) Pipe.....	104.37	
33 42 11 00-0162 EA 12" Self Adhering Gasket, Corrugated High Density Polyethylene (HDPE) Pipe.....	123.79	
33 42 11 00-0163 EA 15" Self Adhering Gasket, Corrugated High Density Polyethylene (HDPE) Pipe.....	127.81	
33 42 11 00-0164 EA 18" Self Adhering Gasket, Corrugated High Density Polyethylene (HDPE) Pipe.....	133.31	
33 42 11 00-0165 EA 24" Self Adhering Gasket, Corrugated High Density Polyethylene (HDPE) Pipe.....	151.84	
33 42 11 00-0166 EA 30" Self Adhering Gasket, Corrugated High Density Polyethylene (HDPE) Pipe.....	243.41	
33 42 11 00-0167 EA 36" Self Adhering Gasket, Corrugated High Density Polyethylene (HDPE) Pipe.....	266.61	
33 42 11 00-0168 EA 42" Self Adhering Gasket, Corrugated High Density Polyethylene (HDPE) Pipe.....	290.50	
33 42 11 00-0169 EA 48" Self Adhering Gasket, Corrugated High Density Polyethylene (HDPE) Pipe.....	352.81	
<b>33 42 11 00-0170 End Caps, Corrugated High Density Polyethylene (HDPE) Pipe (33 42 11 00-0143)</b>		
33 42 11 00-0171 EA 6" End Cap For Corrugated High Density Polyethylene (HDPE) Pipe .....	31.78	
33 42 11 00-0172 EA 8" End Cap For Corrugated High Density Polyethylene (HDPE) Pipe .....	37.32	
33 42 11 00-0173 EA 10" End Cap For Corrugated High Density Polyethylene (HDPE) Pipe .....	60.49	
33 42 11 00-0174 EA 12" End Cap For Corrugated High Density Polyethylene (HDPE) Pipe .....	102.92	
33 42 11 00-0175 EA 15" End Cap For Corrugated High Density Polyethylene (HDPE) Pipe .....	119.76	
33 42 11 00-0176 EA 18" End Cap For Corrugated High Density Polyethylene (HDPE) Pipe .....	161.91	
33 42 11 00-0177 EA 24" End Cap For Corrugated High Density Polyethylene (HDPE) Pipe .....	167.77	
<b>33 42 11 00-0178 Vitrified Clay Piping (33 42 11)</b>		
<b>33 42 11 00-0179 Extra Strength Vitrified Clay Piping (33 42 11 00-0178)</b>		
<b>33 42 11 00-0180 Plain Joint, Extra Strength, Vitrified Clay Piping (33 42 11 00-0179)</b>		
Note: ASTM C700.		
33 42 11 00-0181 LF 4" Plain Joint, Extra Strength, Vitrified Clay Pipe .....	21.11	
For 3' Lengths, Add	1.68	
For 2' Lengths, Add	2.24	
For Standard Strength, Deduct	-0.56	
For >1,000, Deduct	-1.06	
33 42 11 00-0182 LF 6" Plain Joint, Extra Strength, Vitrified Clay Pipe .....	35.14	
For 3' Lengths, Add	2.60	
For 2' Lengths, Add	3.47	
For Standard Strength, Deduct	-0.87	
For >1,000, Deduct	-1.76	
33 42 11 00-0183 LF 8" Plain Joint, Extra Strength, Vitrified Clay Pipe .....	41.79	
For 3' Lengths, Add	3.72	
For 2' Lengths, Add	4.96	
For Standard Strength, Deduct	-1.24	
For >1,000, Deduct	-2.09	
33 42 11 00-0184 LF 10" Plain Joint, Extra Strength, Vitrified Clay Pipe .....	50.01	
For 3' Lengths, Add	5.70	
For 2' Lengths, Add	7.60	
For Standard Strength, Deduct	-1.90	
For >1,000, Deduct	-2.50	
33 42 11 00-0185 LF 12" Plain Joint, Extra Strength, Vitrified Clay Pipe .....	60.66	
For 3' Lengths, Add	8.04	
For 2' Lengths, Add	10.72	
For Standard Strength, Deduct	-2.68	
For >1,000, Deduct	-3.03	
33 42 11 00-0186 LF 15" Plain Joint, Extra Strength, Vitrified Clay Pipe .....	87.93	
For 3' Lengths, Add	15.08	
For 2' Lengths, Add	20.11	
For Standard Strength, Deduct	-5.03	
For >1,000, Deduct	-4.40	
33 42 11 00-0187 LF 18" Plain Joint, Extra Strength, Vitrified Clay Pipe .....	119.03	
For 3' Lengths, Add	21.62	
For 2' Lengths, Add	28.82	
For Standard Strength, Deduct	-7.21	
For >1,000, Deduct	-5.95	
33 42 11 00-0188 LF 21" Plain Joint, Extra Strength, Vitrified Clay Pipe .....	174.67	
For 3' Lengths, Add	34.63	
For 2' Lengths, Add	46.18	
For Standard Strength, Deduct	-11.54	
For >1,000, Deduct	-8.73	
33 42 11 00-0189 LF 24" Plain Joint, Extra Strength, Vitrified Clay Pipe .....	222.74	
For 3' Lengths, Add	45.24	
For 2' Lengths, Add	60.32	
For Standard Strength, Deduct	-15.08	
For >1,000, Deduct	-11.14	
33 42 11 00-0190 LF 30" Plain Joint, Extra Strength, Vitrified Clay Pipe .....	275.39	
For 3' Lengths, Add	56.42	
For 2' Lengths, Add	75.22	
For Standard Strength, Deduct	-18.81	
For >1,000, Deduct	-13.77	
33 42 11 00-0191 LF 36" Plain Joint, Extra Strength, Vitrified Clay Pipe .....	333.20	
For 3' Lengths, Add	68.15	
For 2' Lengths, Add	90.86	
For Standard Strength, Deduct	-22.72	
For >1,000, Deduct	-16.66	



<b>Utilities</b>		<b>33</b>	<b>CS</b>
Stormwater Utilities		33 40	
Stormwater Conveyance		33 42	

MINOR CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
33 42 11 00-0192		<b>Compression Joint, Extra Strength, Vitrified Clay Piping</b> (33 42 11 00-0179) Note: ASTM C425.		
33 42 11 00-0193	LF	4" Compression Joint, Extra Strength, Vitrified Clay Pipe.....	30.10	
		For 3' Lengths, Add	1.98	
		For 2' Lengths, Add	2.64	
		For Standard Strength, Deduct	-0.66	
		For >1,000, Deduct	-1.51	
33 42 11 00-0194	LF	6" Compression Joint, Extra Strength, Vitrified Clay Pipe.....	37.22	
		For 3' Lengths, Add	3.23	
		For 2' Lengths, Add	4.30	
		For Standard Strength, Deduct	-1.08	
		For >1,000, Deduct	-1.86	
33 42 11 00-0195	LF	8" Compression Joint, Extra Strength, Vitrified Clay Pipe.....	44.58	
		For 3' Lengths, Add	4.56	
		For 2' Lengths, Add	6.08	
		For Standard Strength, Deduct	-1.52	
		For >1,000, Deduct	-2.23	
33 42 11 00-0196	LF	10" Compression Joint, Extra Strength, Vitrified Clay Pipe.....	55.97	
		For 3' Lengths, Add	7.49	
		For 2' Lengths, Add	9.98	
		For Standard Strength, Deduct	-2.50	
		For >1,000, Deduct	-2.80	
33 42 11 00-0197	LF	12" Compression Joint, Extra Strength, Vitrified Clay Pipe.....	66.62	
		For 3' Lengths, Add	9.83	
		For 2' Lengths, Add	13.11	
		For Standard Strength, Deduct	-3.28	
		For >1,000, Deduct	-3.33	
33 42 11 00-0198	LF	15" Compression Joint, Extra Strength, Vitrified Clay Pipe.....	97.43	
		For 3' Lengths, Add	17.93	
		For 2' Lengths, Add	23.91	
		For Standard Strength, Deduct	-5.98	
		For >1,000, Deduct	-4.87	
33 42 11 00-0199	LF	18" Compression Joint, Extra Strength, Vitrified Clay Pipe.....	134.48	
		For 3' Lengths, Add	26.25	
		For 2' Lengths, Add	35.00	
		For Standard Strength, Deduct	-8.75	
		For >1,000, Deduct	-6.72	
33 42 11 00-0200	LF	21" Compression Joint, Extra Strength, Vitrified Clay Pipe.....	192.36	
		For 3' Lengths, Add	39.94	
		For 2' Lengths, Add	53.25	
		For Standard Strength, Deduct	-13.31	
		For >1,000, Deduct	-9.62	
33 42 11 00-0201	LF	24" Compression Joint, Extra Strength, Vitrified Clay Pipe.....	250.67	
		For 3' Lengths, Add	53.62	
		For 2' Lengths, Add	71.50	
		For Standard Strength, Deduct	-17.87	
		For >1,000, Deduct	-12.53	
33 42 11 00-0202	LF	30" Compression Joint, Extra Strength, Vitrified Clay Pipe.....	398.28	
		For 3' Lengths, Add	93.28	
		For 2' Lengths, Add	124.38	
		For Standard Strength, Deduct	-31.09	
		For >1,000, Deduct	-19.91	
33 42 11 00-0203	LF	36" Compression Joint, Extra Strength, Vitrified Clay Pipe.....	564.08	
		For 3' Lengths, Add	137.41	
		For 2' Lengths, Add	183.21	
		For Standard Strength, Deduct	-45.80	
		For >1,000, Deduct	-28.20	
33 42 11 00-0204		<b>Extra Strength, Vitrified Clay Pipe Fittings</b> (33 42 11 00-0178)		
33 42 11 00-0205		<b>1/8 Bends, Extra Strength, Vitrified Clay</b> (33 42 11 00-0204)		
33 42 11 00-0206		<b>Plain End 1/8 Bend, Extra Strength, Vitrified Clay</b> (33 42 11 00-0205)		
33 42 11 00-0207	EA	4" Plain End 1/8 Bend, Extra Strength, Vitrified Clay.....	86.43	
33 42 11 00-0208	EA	6" Plain End 1/8 Bend, Extra Strength, Vitrified Clay.....	116.01	
33 42 11 00-0209	EA	8" Plain End 1/8 Bend, Extra Strength, Vitrified Clay.....	164.30	
33 42 11 00-0210	EA	10" Plain End 1/8 Bend, Extra Strength, Vitrified Clay.....	224.77	
33 42 11 00-0211	EA	12" Plain End 1/8 Bend, Extra Strength, Vitrified Clay.....	295.37	
33 42 11 00-0212	EA	15" Plain End 1/8 Bend, Extra Strength, Vitrified Clay.....	693.61	
33 42 11 00-0213	EA	18" Plain End 1/8 Bend, Extra Strength, Vitrified Clay.....	976.63	
33 42 11 00-0214	EA	21" Plain End 1/8 Bend, Extra Strength, Vitrified Clay.....	1,519.95	
33 42 11 00-0215	EA	24" Plain End 1/8 Bend, Extra Strength, Vitrified Clay.....	1,755.23	
33 42 11 00-0216	EA	30" Plain End 1/8 Bend, Extra Strength, Vitrified Clay.....	2,039.92	
33 42 11 00-0217	EA	36" Plain End 1/8 Bend, Extra Strength, Vitrified Clay.....	3,050.75	
33 42 11 00-0218		<b>Compression Joint 1/8 Bends, Extra Strength, Vitrified Clay</b> (33 42 11 00-0205)		
33 42 11 00-0219	EA	4" Compression Joint 1/8 Bend, Extra Strength, Vitrified Clay.....	98.02	
33 42 11 00-0220	EA	6" Compression Joint 1/8 Bend, Extra Strength, Vitrified Clay.....	138.15	
33 42 11 00-0221	EA	8" Compression Joint 1/8 Bend, Extra Strength, Vitrified Clay.....	185.86	
33 42 11 00-0222	EA	10" Compression Joint 1/8 Bend, Extra Strength, Vitrified Clay.....	248.08	
33 42 11 00-0223	EA	12" Compression Joint 1/8 Bend, Extra Strength, Vitrified Clay.....	313.47	

**33 Utilities****33 40 Stormwater Utilities****33 42 Stormwater Conveyance**

MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
33 42 11 00-0224 EA 15" Compression Joint 1/8 Bend, Extra Strength, Vitrified Clay .....	778.92	
33 42 11 00-0225 EA 18" Compression Joint 1/8 Bend, Extra Strength, Vitrified Clay .....	1,130.58	
33 42 11 00-0226 EA 21" Compression Joint 1/8 Bend, Extra Strength, Vitrified Clay .....	1,165.91	
33 42 11 00-0227 EA 24" Compression Joint 1/8 Bend, Extra Strength, Vitrified Clay .....	2,246.18	
33 42 11 00-0228 EA 30" Compression Joint 1/8 Bend, Extra Strength, Vitrified Clay .....	2,504.73	
33 42 11 00-0229 EA 36" Compression Joint 1/8 Bend, Extra Strength, Vitrified Clay .....	3,708.61	
<b>33 42 11 00-0230 1/4 Bends, Extra Strength, Vitrified Clay (33 42 11 00-0204)</b>		
<b>33 42 11 00-0231 Plain End 1/4 Bends, Extra Strength, Vitrified Clay (33 42 11 00-0230)</b>		
33 42 11 00-0232 EA 4" Plain End 1/4 Bend, Extra Strength, Vitrified Clay .....	101.95	
33 42 11 00-0233 EA 6" Plain End 1/4 Bend, Extra Strength, Vitrified Clay .....	134.71	
33 42 11 00-0234 EA 8" Plain End 1/4 Bend, Extra Strength, Vitrified Clay .....	186.17	
33 42 11 00-0235 EA 10" Plain End 1/4 Bend, Extra Strength, Vitrified Clay .....	248.80	
33 42 11 00-0236 EA 12" Plain End 1/4 Bend, Extra Strength, Vitrified Clay .....	322.44	
33 42 11 00-0237 EA 15" Plain End 1/4 Bend, Extra Strength, Vitrified Clay .....	723.74	
33 42 11 00-0238 EA 18" Plain End 1/4 Bend, Extra Strength, Vitrified Clay .....	1,014.19	
33 42 11 00-0239 EA 21" Plain End 1/4 Bend, Extra Strength, Vitrified Clay .....	1,567.34	
33 42 11 00-0240 EA 24" Plain End 1/4 Bend, Extra Strength, Vitrified Clay .....	1,812.77	
33 42 11 00-0241 EA 30" Plain End 1/4 Bend, Extra Strength, Vitrified Clay .....	2,111.68	
33 42 11 00-0242 EA 36" Plain End 1/4 Bend, Extra Strength, Vitrified Clay .....	3,130.51	
<b>33 42 11 00-0243 Compression Joint 1/4 Bends, Extra Strength, Vitrified Clay (33 42 11 00-0230)</b>		
33 42 11 00-0244 EA 4" Compression Joint 1/4 Bend, Extra Strength, Vitrified Clay .....	116.65	
33 42 11 00-0245 EA 6" Compression Joint 1/4 Bend, Extra Strength, Vitrified Clay .....	160.58	
33 42 11 00-0246 EA 8" Compression Joint 1/4 Bend, Extra Strength, Vitrified Clay .....	212.10	
33 42 11 00-0247 EA 10" Compression Joint 1/4 Bend, Extra Strength, Vitrified Clay .....	276.91	
33 42 11 00-0248 EA 12" Compression Joint 1/4 Bend, Extra Strength, Vitrified Clay .....	345.97	
33 42 11 00-0249 EA 15" Compression Joint 1/4 Bend, Extra Strength, Vitrified Clay .....	815.06	
33 42 11 00-0250 EA 18" Compression Joint 1/4 Bend, Extra Strength, Vitrified Clay .....	1,175.66	
33 42 11 00-0251 EA 21" Compression Joint 1/4 Bend, Extra Strength, Vitrified Clay .....	2,266.49	
33 42 11 00-0252 EA 24" Compression Joint 1/4 Bend, Extra Strength, Vitrified Clay .....	2,315.23	
33 42 11 00-0253 EA 30" Compression Joint 1/4 Bend, Extra Strength, Vitrified Clay .....	2,590.83	
33 42 11 00-0254 EA 36" Compression Joint 1/4 Bend, Extra Strength, Vitrified Clay .....	3,804.33	
<b>33 42 11 00-0255 Wyes Or Tees, Extra Strength, Vitrified Clay (33 42 11 00-0204)</b>		
<b>33 42 11 00-0256 Plain End Wyes Or Tees, Extra Strength, Vitrified Clay (33 42 11 00-0255)</b>		
33 42 11 00-0257 EA 4" Plain End Wyes Or Tees, Extra Strength, Vitrified Clay .....	113.04	
33 42 11 00-0258 EA 6" Plain End Wyes Or Tees, Extra Strength, Vitrified Clay .....	146.71	
33 42 11 00-0259 EA 8" Plain End Wyes Or Tees, Extra Strength, Vitrified Clay .....	197.47	
33 42 11 00-0260 EA 10" Plain End Wyes Or Tees, Extra Strength, Vitrified Clay .....	259.69	
33 42 11 00-0261 EA 12" Plain End Wyes Or Tees, Extra Strength, Vitrified Clay .....	326.33	
33 42 11 00-0262 EA 15" Plain End Wyes Or Tees, Extra Strength, Vitrified Clay .....	734.47	
33 42 11 00-0263 EA 18" Plain End Wyes Or Tees, Extra Strength, Vitrified Clay .....	1,025.06	
33 42 11 00-0264 EA 21" Plain End Wyes Or Tees, Extra Strength, Vitrified Clay .....	1,476.94	
33 42 11 00-0265 EA 24" Plain End Wyes Or Tees, Extra Strength, Vitrified Clay .....	2,050.26	
33 42 11 00-0266 EA 30" Plain End Wyes Or Tees, Extra Strength, Vitrified Clay .....	2,176.41	
33 42 11 00-0267 EA 36" Plain End Wyes Or Tees, Extra Strength, Vitrified Clay .....	3,116.11	
<b>33 42 11 00-0268 Compression Joint Wyes Or Tees, Extra Strength, Vitrified Clay (33 42 11 00-0255)</b>		
33 42 11 00-0269 EA 4" Compression Joint Wyes Or Tees, Extra Strength, Vitrified Clay .....	137.91	
33 42 11 00-0270 EA 6" Compression Joint Wyes Or Tees, Extra Strength, Vitrified Clay .....	187.44	
33 42 11 00-0271 EA 8" Compression Joint Wyes Or Tees, Extra Strength, Vitrified Clay .....	245.03	
33 42 11 00-0272 EA 10" Compression Joint Wyes Or Tees, Extra Strength, Vitrified Clay .....	315.86	
33 42 11 00-0273 EA 12" Compression Joint Wyes Or Tees, Extra Strength, Vitrified Clay .....	391.96	
33 42 11 00-0274 EA 15" Compression Joint Wyes Or Tees, Extra Strength, Vitrified Clay .....	893.11	
33 42 11 00-0275 EA 18" Compression Joint Wyes Or Tees, Extra Strength, Vitrified Clay .....	1,282.96	
33 42 11 00-0276 EA 21" Compression Joint Wyes Or Tees, Extra Strength, Vitrified Clay .....	1,898.67	
33 42 11 00-0277 EA 24" Compression Joint Wyes Or Tees, Extra Strength, Vitrified Clay .....	2,511.72	
33 42 11 00-0278 EA 30" Compression Joint Wyes Or Tees, Extra Strength, Vitrified Clay .....	2,909.14	
33 42 11 00-0279 EA 36" Compression Joint, Extra Strength, Vitrified Clay Wye Or Tee .....	4,113.89	
<b>33 42 11 00-0280 Vitrified Clay Couplings (33 42 11 00-0178)</b>		
<b>33 42 11 00-0281 Vitrified Clay To Cast Iron Or Plastic Pipe Couplings (33 42 11 00-0280)</b>		
Note: Stainless steel tightening band at each end (Fernco #1002)		
33 42 11 00-0282 EA 4" x 3" Vitrified Clay To Cast Iron Or Plastic Pipe Coupling .....	50.46	
33 42 11 00-0283 EA 4" x 4" Vitrified Clay To Cast Iron Or Plastic Pipe Coupling .....	49.92	
33 42 11 00-0284 EA 5" x 4" Vitrified Clay To Cast Iron Or Plastic Pipe Coupling .....	70.48	
33 42 11 00-0285 EA 5" x 5" Vitrified Clay To Cast Iron Or Plastic Pipe Coupling .....	66.11	
33 42 11 00-0286 EA 6" x 4" Vitrified Clay To Cast Iron Or Plastic Pipe Coupling .....	87.07	
33 42 11 00-0287 EA 6" x 5" Vitrified Clay To Cast Iron Or Plastic Pipe Coupling .....	90.87	
33 42 11 00-0288 EA 6" x 6" Vitrified Clay To Cast Iron Or Plastic Pipe Coupling .....	82.47	
33 42 11 00-0289 EA 8" x 6" Vitrified Clay To Cast Iron Or Plastic Pipe Coupling .....	121.93	
33 42 11 00-0290 EA 8" x 8" Vitrified Clay To Cast Iron Or Plastic Pipe Coupling .....	112.34	



		<b>Utilities</b>	<b>33</b>	<b>CS</b>
		<b>Stormwater Utilities</b>	<b>33 40</b>	
		<b>Stormwater Conveyance</b>	<b>33 42</b>	

MINOR		TOTAL DIRECT		DEMOLITION
CSI UOM DESCRIPTION		UNIT COST		UNIT COST
33 42 11 00-0291	EA	10" x 8" Vitrified Clay To Cast Iron Or Plastic Pipe Coupling.....		161.09
33 42 11 00-0292	EA	10" x 10" Vitrified Clay To Cast Iron Or Plastic Pipe Coupling.....		146.27
33 42 11 00-0293	EA	12" x 10" Vitrified Clay To Cast Iron Or Plastic Pipe Coupling.....		201.37
33 42 11 00-0294	EA	12" x 12" Vitrified Clay To Cast Iron Or Plastic Pipe Coupling.....		167.33
33 42 11 00-0295	EA	15" x 12" Vitrified Clay To Cast Iron Or Plastic Pipe Coupling.....		344.86
33 42 11 00-0296	EA	15" x 15" Vitrified Clay To Cast Iron Or Plastic Pipe Coupling.....		263.73
33 42 11 00-0297	Vitrified Clay To Vitrified Clay Pipe Non-Shear Couplings (33 42 11 00-0280)			
	Note: Stainless steel tightening band at each end. (NDS Non-shear)			
33 42 11 00-0298	EA	4" x 4" Vitrified Clay To Vitrified Clay Pipe Non-Shear Coupling.....		75.58
33 42 11 00-0299	EA	6" x 4" Vitrified Clay To Vitrified Clay Pipe Non-Shear Coupling.....		99.85
33 42 11 00-0300	EA	6" x 6" Vitrified Clay To Vitrified Clay Pipe Non-Shear Coupling.....		105.24
33 42 11 00-0301	EA	8" x 8" Vitrified Clay To Vitrified Clay Pipe Non-Shear Coupling.....		110.33
33 42 11 00-0302	EA	10" x 10" Vitrified Clay To Vitrified Clay Pipe Non-Shear Coupling.....		135.19
33 42 11 00-0303	EA	12" x 12" Vitrified Clay To Vitrified Clay Pipe Non-Shear Coupling.....		156.22
33 42 11 00-0304	Vitrified Clay To Plastic Pipe Non-Shear Couplings (33 42 11 00-0280)			
	Note: Stainless steel tightening band at each end. (NDS Non-shear)			
33 42 11 00-0305	EA	4" x 4" Vitrified Clay To Plastic Pipe Non-Shear Coupling.....		77.38
33 42 11 00-0306	EA	6" x 4" Vitrified Clay To Plastic Pipe Non-Shear Coupling.....		101.66
33 42 11 00-0307	EA	6" x 6" Vitrified Clay To Plastic Pipe Non-Shear Coupling.....		93.63
33 42 11 00-0308	EA	8" x 8" Vitrified Clay To Plastic Pipe Non-Shear Coupling.....		121.14
33 42 11 00-0309	EA	10" x 10" Vitrified Clay To Plastic Pipe Non-Shear Coupling.....		173.01
33 42 11 00-0310	EA	12" x 12" Vitrified Clay To Plastic Pipe Non-Shear Coupling.....		195.06
33 42 11 00-0311	Corrugated Metal Piping (33 42 11)			
33 42 11 00-0312	Galvanized Corrugated Steel Piping (33 42 11 00-0311)			
33 42 11 00-0313	2-2/3" x 1/2" Corrugation, Galvanized Corrugated Steel Piping (33 42 11 00-0312)			
33 42 11 00-0314	16 Gauge, 2-2/3" x 1/2" Corrugation, Galvanized Corrugated Steel Piping (33 42 11 00-0313)			
33 42 11 00-0315	LF	12" 16 Gauge, 2-2/3" x 1/2" Corrugation, Galvanized Corrugated Steel Pipe.....		33.26
		For Bituminous Coated Pipe, Add		3.24
		For Bituminous Coated And 25% Paved, Add		6.63
		For Smooth-Flo, Add		11.85
33 42 11 00-0316	LF	15" 16 Gauge, 2-2/3" x 1/2" Corrugation, Galvanized Corrugated Steel Pipe.....		37.43
		For Bituminous Coated Pipe, Add		4.08
		For Bituminous Coated And 25% Paved, Add		8.35
		For Smooth-Flo, Add		14.91
33 42 11 00-0317	LF	18" 16 Gauge, 2-2/3" x 1/2" Corrugation, Galvanized Corrugated Steel Pipe.....		41.74
		For Bituminous Coated Pipe, Add		4.94
		For Bituminous Coated And 25% Paved, Add		10.11
		For Smooth-Flo, Add		18.06
33 42 11 00-0318	LF	21" 16 Gauge, 2-2/3" x 1/2" Corrugation, Galvanized Corrugated Steel Pipe.....		47.43
		For Bituminous Coated Pipe, Add		5.91
		For Bituminous Coated And 25% Paved, Add		12.10
		For Smooth-Flo, Add		21.60
33 42 11 00-0319	LF	24" 16 Gauge, 2-2/3" x 1/2" Corrugation, Galvanized Corrugated Steel Pipe.....		52.46
		For Bituminous Coated Pipe, Add		6.66
		For Bituminous Coated And 25% Paved, Add		13.61
		For Smooth-Flo, Add		24.31
33 42 11 00-0320	LF	30" 16 Gauge, 2-2/3" x 1/2" Corrugation, Galvanized Corrugated Steel Pipe.....		69.28
		For Bituminous Coated Pipe, Add		8.63
		For Bituminous Coated And 25% Paved, Add		17.66
		For Smooth-Flo, Add		31.54
33 42 11 00-0321	LF	36" 16 Gauge, 2-2/3" x 1/2" Corrugation, Galvanized Corrugated Steel Pipe.....		90.54
		For Bituminous Coated Pipe, Add		10.89
		For Bituminous Coated And 25% Paved, Add		22.28
		For Smooth-Flo, Add		39.79
33 42 11 00-0322	LF	42" 16 Gauge, 2-2/3" x 1/2" Corrugation, Galvanized Corrugated Steel Pipe.....		102.92
		For Bituminous Coated Pipe, Add		12.89
		For Bituminous Coated And 25% Paved, Add		26.36
		For Smooth-Flo, Add		47.07
33 42 11 00-0323	LF	48" 16 Gauge, 2-2/3" x 1/2" Corrugation, Galvanized Corrugated Steel Pipe.....		115.69
		For Bituminous Coated Pipe, Add		14.44
		For Bituminous Coated And 25% Paved, Add		29.53
		For Smooth-Flo, Add		52.73
33 42 11 00-0324	14 Gauge, 2-2/3" x 1/2" Corrugation, Galvanized Corrugated Steel Piping (33 42 11 00-0313)			
33 42 11 00-0325	LF	12" 14 Gauge, 2-2/3" x 1/2" Corrugation, Galvanized Corrugated Steel Pipe.....		36.15
		For Bituminous Coated Pipe, Add		3.29
		For Bituminous Coated And 25% Paved, Add		7.62
		For Smooth-Flo, Add		15.41
33 42 11 00-0326	LF	15" 14 Gauge, 2-2/3" x 1/2" Corrugation, Galvanized Corrugated Steel Pipe.....		40.99
		For Bituminous Coated Pipe, Add		4.13
		For Bituminous Coated And 25% Paved, Add		9.56
		For Smooth-Flo, Add		19.33

**33 Utilities****33 40 Stormwater Utilities****33 42 Stormwater Conveyance**

MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
33 42 11 00-0327 LF 18" 14 Gauge, 2-2/3" x 1/2" Corrugation, Galvanized Corrugated Steel Pipe.....	46.05	10.92
For Bituminous Coated Pipe, Add	5.00	
For Bituminous Coated And 25% Paved, Add	11.58	
For Smooth-Flo, Add	23.40	
33 42 11 00-0328 LF 21" 14 Gauge, 2-2/3" x 1/2" Corrugation, Galvanized Corrugated Steel Pipe.....	52.41	11.83
For Bituminous Coated Pipe, Add	5.94	
For Bituminous Coated And 25% Paved, Add	13.77	
For Smooth-Flo, Add	27.83	
33 42 11 00-0329 LF 24" 14 Gauge, 2-2/3" x 1/2" Corrugation, Galvanized Corrugated Steel Pipe.....	58.25	12.74
For Bituminous Coated Pipe, Add	6.72	
For Bituminous Coated And 25% Paved, Add	15.58	
For Smooth-Flo, Add	31.49	
33 42 11 00-0330 LF 30" 14 Gauge, 2-2/3" x 1/2" Corrugation, Galvanized Corrugated Steel Pipe.....	76.35	16.39
For Bituminous Coated Pipe, Add	8.64	
For Bituminous Coated And 25% Paved, Add	20.01	
For Smooth-Flo, Add	40.44	
33 42 11 00-0331 LF 36" 14 Gauge, 2-2/3" x 1/2" Corrugation, Galvanized Corrugated Steel Pipe.....	99.12	21.47
For Bituminous Coated Pipe, Add	10.83	
For Bituminous Coated And 25% Paved, Add	25.08	
For Smooth-Flo, Add	50.70	
33 42 11 00-0332 LF 42" 14 Gauge, 2-2/3" x 1/2" Corrugation, Galvanized Corrugated Steel Pipe.....	112.75	25.37
For Bituminous Coated Pipe, Add	12.74	
For Bituminous Coated And 25% Paved, Add	29.52	
For Smooth-Flo, Add	59.67	
33 42 11 00-0333 LF 48" 14 Gauge, 2-2/3" x 1/2" Corrugation, Galvanized Corrugated Steel Pipe.....	126.93	29.27
For Bituminous Coated Pipe, Add	14.32	
For Bituminous Coated And 25% Paved, Add	33.18	
For Smooth-Flo, Add	67.06	
33 42 11 00-0334 LF 54" 14 Gauge, 2-2/3" x 1/2" Corrugation, Galvanized Corrugated Steel Pipe.....	151.47	33.18
For Bituminous Coated Pipe, Add	17.61	
For Bituminous Coated And 25% Paved, Add	40.80	
For Smooth-Flo, Add	82.48	
<b>33 42 11 00-0335 12 Gauge, 2-2/3" x 1/2" Corrugation, Galvanized Corrugated Steel Piping <sup>(33)</sup></b>		
<small>42 11 00-0313)</small>		
33 42 11 00-0336 LF 18" 12 Gauge, 2-2/3" x 1/2" Corrugation, Galvanized Corrugated Steel Pipe.....	54.97	10.92
For Bituminous Coated Pipe, Add	5.72	
For Bituminous Coated And 25% Paved, Add	10.33	
For Smooth-Flo, Add	19.86	
33 42 11 00-0337 LF 21" 12 Gauge, 2-2/3" x 1/2" Corrugation, Galvanized Corrugated Steel Pipe.....	62.78	11.83
For Bituminous Coated Pipe, Add	6.76	
For Bituminous Coated And 25% Paved, Add	12.22	
For Smooth-Flo, Add	23.48	
33 42 11 00-0338 LF 24" 12 Gauge, 2-2/3" x 1/2" Corrugation, Galvanized Corrugated Steel Pipe.....	70.07	11.83
For Bituminous Coated Pipe, Add	7.67	
For Bituminous Coated And 25% Paved, Add	13.85	
For Smooth-Flo, Add	26.61	
33 42 11 00-0339 LF 30" 12 Gauge, 2-2/3" x 1/2" Corrugation, Galvanized Corrugated Steel Pipe.....	90.96	16.39
For Bituminous Coated Pipe, Add	9.75	
For Bituminous Coated And 25% Paved, Add	17.61	
For Smooth-Flo, Add	33.84	
33 42 11 00-0340 LF 36" 12 Gauge, 2-2/3" x 1/2" Corrugation, Galvanized Corrugated Steel Pipe.....	116.46	21.47
For Bituminous Coated Pipe, Add	12.06	
For Bituminous Coated And 25% Paved, Add	21.78	
For Smooth-Flo, Add	41.85	
33 42 11 00-0341 LF 42" 12 Gauge, 2-2/3" x 1/2" Corrugation, Galvanized Corrugated Steel Pipe.....	132.78	25.37
For Bituminous Coated Pipe, Add	14.13	
For Bituminous Coated And 25% Paved, Add	25.51	
For Smooth-Flo, Add	49.03	
33 42 11 00-0342 LF 48" 12 Gauge, 2-2/3" x 1/2" Corrugation, Galvanized Corrugated Steel Pipe.....	149.89	29.27
For Bituminous Coated Pipe, Add	15.95	
For Bituminous Coated And 25% Paved, Add	28.81	
For Smooth-Flo, Add	55.37	
33 42 11 00-0343 LF 54" 12 Gauge, 2-2/3" x 1/2" Corrugation, Galvanized Corrugated Steel Pipe.....	176.82	33.18
For Bituminous Coated Pipe, Add	19.13	
For Bituminous Coated And 25% Paved, Add	34.55	
For Smooth-Flo, Add	66.40	
33 42 11 00-0344 LF 60" 12 Gauge, 2-2/3" x 1/2" Corrugation, Galvanized Corrugated Steel Pipe.....	193.28	35.13
For Bituminous Coated Pipe, Add	20.95	
For Bituminous Coated And 25% Paved, Add	37.83	
For Smooth-Flo, Add	72.71	
33 42 11 00-0345 LF 66" 12 Gauge, 2-2/3" x 1/2" Corrugation, Galvanized Corrugated Steel Pipe.....	234.10	42.93
For Bituminous Coated Pipe, Add	25.51	
For Bituminous Coated And 25% Paved, Add	46.06	
For Smooth-Flo, Add	88.52	
<b>33 42 11 00-0346 10 Gauge, 2-2/3" x 1/2" Corrugation, Galvanized Corrugated Steel Piping <sup>(33)</sup></b>		
<small>42 11 00-0313)</small>		
33 42 11 00-0347 LF 36" 10 Gauge, 2-2/3" x 1/2" Corrugation, Galvanized Corrugated Steel Pipe.....	132.68	21.47
For Bituminous Coated Pipe, Add	15.34	
For Bituminous Coated And 25% Paved, Add	25.62	
For Smooth-Flo, Add	36.56	





Utilities			33	CS
Stormwater Utilities			33 40	
Stormwater Conveyance			33 42	

MINOR	CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
33 42 11 00-0348	LF	42"	10 Gauge, 2-2/3" x 1/2" Corrugation, Galvanized Corrugated Steel Pipe..... For Bituminous Coated Pipe, Add For Bituminous Coated And 25% Paved, Add For Smooth-Flo, Add	151.77 17.97 30.02 42.83	25.37
33 42 11 00-0349	LF	48"	10 Gauge, 2-2/3" x 1/2" Corrugation, Galvanized Corrugated Steel Pipe..... For Bituminous Coated Pipe, Add For Bituminous Coated And 25% Paved, Add For Smooth-Flo, Add	171.44 20.31 33.93 48.41	29.27
33 42 11 00-0350	LF	54"	10 Gauge, 2-2/3" x 1/2" Corrugation, Galvanized Corrugated Steel Pipe..... For Bituminous Coated Pipe, Add For Bituminous Coated And 25% Paved, Add For Smooth-Flo, Add	200.95 24.05 40.18 57.33	33.18
33 42 11 00-0351	LF	60"	10 Gauge, 2-2/3" x 1/2" Corrugation, Galvanized Corrugated Steel Pipe..... For Bituminous Coated Pipe, Add For Bituminous Coated And 25% Paved, Add For Smooth-Flo, Add	220.14 26.42 44.13 62.97	35.13
33 42 11 00-0352	LF	66"	10 Gauge, 2-2/3" x 1/2" Corrugation, Galvanized Corrugated Steel Pipe..... For Bituminous Coated Pipe, Add For Bituminous Coated And 25% Paved, Add For Smooth-Flo, Add	263.62 31.60 52.79 75.33	42.93
33 42 11 00-0353	LF	72"	10 Gauge, 2-2/3" x 1/2" Corrugation, Galvanized Corrugated Steel Pipe..... For Bituminous Coated Pipe, Add For Bituminous Coated And 25% Paved, Add For Smooth-Flo, Add	316.96 33.93 56.68 80.88	62.44
33 42 11 00-0354			3" x 1" Corrugation, Galvanized Corrugated Steel Piping (33 42 11 00-0312)		
33 42 11 00-0355			16 Gauge, 3" x 1" Corrugation, Galvanized Corrugated Steel Piping (33 42 11 00-0354)		
33 42 11 00-0356	LF	36"	16 Gauge, 3" x 1" Corrugation, Galvanized Corrugated Steel Pipe..... For Bituminous Coated Pipe, Add For Bituminous Coated And 25% Paved, Add For Smooth-Flo, Add	105.42 11.98 27.19 54.14	21.47
33 42 11 00-0357	LF	42"	16 Gauge, 3" x 1" Corrugation, Galvanized Corrugated Steel Pipe..... For Bituminous Coated Pipe, Add For Bituminous Coated And 25% Paved, Add For Smooth-Flo, Add	119.99 14.06 31.93 63.57	25.37
33 42 11 00-0358	LF	48"	16 Gauge, 3" x 1" Corrugation, Galvanized Corrugated Steel Pipe..... For Bituminous Coated Pipe, Add For Bituminous Coated And 25% Paved, Add For Smooth-Flo, Add	134.91 15.77 35.81 71.30	29.27
33 42 11 00-0359	LF	54"	16 Gauge, 3" x 1" Corrugation, Galvanized Corrugated Steel Pipe..... For Bituminous Coated Pipe, Add For Bituminous Coated And 25% Paved, Add For Smooth-Flo, Add	160.62 19.27 43.74 87.09	33.18
33 42 11 00-0360	LF	60"	16 Gauge, 3" x 1" Corrugation, Galvanized Corrugated Steel Pipe..... For Bituminous Coated Pipe, Add For Bituminous Coated And 25% Paved, Add For Smooth-Flo, Add	175.00 20.99 47.65 94.88	35.13
33 42 11 00-0361	LF	66"	16 Gauge, 3" x 1" Corrugation, Galvanized Corrugated Steel Pipe..... For Bituminous Coated Pipe, Add For Bituminous Coated And 25% Paved, Add For Smooth-Flo, Add	218.88 26.96 61.21 121.88	42.93
33 42 11 00-0362	LF	72"	16 Gauge, 3" x 1" Corrugation, Galvanized Corrugated Steel Pipe..... For Bituminous Coated Pipe, Add For Bituminous Coated And 25% Paved, Add For Smooth-Flo, Add	267.88 28.74 65.24 129.91	62.44
33 42 11 00-0363	LF	78"	16 Gauge, 3" x 1" Corrugation, Galvanized Corrugated Steel Pipe..... For Bituminous Coated Pipe, Add For Bituminous Coated And 25% Paved, Add For Smooth-Flo, Add	289.23 30.53 69.29 137.98	68.29
33 42 11 00-0364	LF	84"	16 Gauge, 3" x 1" Corrugation, Galvanized Corrugated Steel Pipe..... For Bituminous Coated Pipe, Add For Bituminous Coated And 25% Paved, Add For Smooth-Flo, Add	307.89 32.31 73.34 146.04	73.18
33 42 11 00-0365	LF	90"	16 Gauge, 3" x 1" Corrugation, Galvanized Corrugated Steel Pipe..... For Bituminous Coated Pipe, Add For Bituminous Coated And 25% Paved, Add For Smooth-Flo, Add	326.61 34.10 77.41 154.13	78.05
33 42 11 00-0366	LF	96"	16 Gauge, 3" x 1" Corrugation, Galvanized Corrugated Steel Pipe..... For Bituminous Coated Pipe, Add For Bituminous Coated And 25% Paved, Add For Smooth-Flo, Add	345.97 35.88 81.44 162.17	82.93
33 42 11 00-0367	LF	102"	16 Gauge, 3" x 1" Corrugation, Galvanized Corrugated Steel Pipe..... For Bituminous Coated Pipe, Add For Bituminous Coated And 25% Paved, Add For Smooth-Flo, Add	368.10 37.68 85.52 170.30	87.81
33 42 11 00-0368			14 Gauge, 3" x 1" Corrugation, Galvanized Corrugated Steel Piping (33 42 11 00-0354)		
33 42 11 00-0369	LF	54"	14 Gauge, 3" x 1" Corrugation, Galvanized Corrugated Steel Pipe..... For Bituminous Coated Pipe, Add For Bituminous Coated And 25% Paved, Add For Smooth-Flo, Add	175.81 22.31 43.72 88.33	33.18

**33 Utilities****33 40 Stormwater Utilities****33 42 Stormwater Conveyance**

MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
33 42 11 00-0370 LF 60" 14 Gauge, 3" x 1" Corrugation, Galvanized Corrugated Steel Pipe.....	191.80	35.13
For Bituminous Coated Pipe, Add	24.35	
For Bituminous Coated And 25% Paved, Add	47.73	
For Smooth-Flo, Add	96.43	
33 42 11 00-0371 LF 66" 14 Gauge, 3" x 1" Corrugation, Galvanized Corrugated Steel Pipe.....	237.36	42.93
For Bituminous Coated Pipe, Add	30.66	
For Bituminous Coated And 25% Paved, Add	60.09	
For Smooth-Flo, Add	121.41	
33 42 11 00-0372 LF 72" 14 Gauge, 3" x 1" Corrugation, Galvanized Corrugated Steel Pipe.....	288.01	62.44
For Bituminous Coated Pipe, Add	32.77	
For Bituminous Coated And 25% Paved, Add	64.23	
For Smooth-Flo, Add	129.76	
33 42 11 00-0373 LF 78" 14 Gauge, 3" x 1" Corrugation, Galvanized Corrugated Steel Pipe.....	310.97	68.29
For Bituminous Coated Pipe, Add	34.87	
For Bituminous Coated And 25% Paved, Add	68.35	
For Smooth-Flo, Add	138.10	
33 42 11 00-0374 LF 84" 14 Gauge, 3" x 1" Corrugation, Galvanized Corrugated Steel Pipe.....	331.35	73.18
For Bituminous Coated Pipe, Add	37.00	
For Bituminous Coated And 25% Paved, Add	72.52	
For Smooth-Flo, Add	146.53	
33 42 11 00-0375 LF 90" 14 Gauge, 3" x 1" Corrugation, Galvanized Corrugated Steel Pipe.....	351.66	78.05
For Bituminous Coated Pipe, Add	39.11	
For Bituminous Coated And 25% Paved, Add	76.66	
For Smooth-Flo, Add	154.88	
33 42 11 00-0376 LF 96" 14 Gauge, 3" x 1" Corrugation, Galvanized Corrugated Steel Pipe.....	372.66	82.93
For Bituminous Coated Pipe, Add	41.22	
For Bituminous Coated And 25% Paved, Add	80.78	
For Smooth-Flo, Add	163.22	
33 42 11 00-0377 LF 102" 14 Gauge, 3" x 1" Corrugation, Galvanized Corrugated Steel Pipe.....	396.41	87.81
For Bituminous Coated Pipe, Add	43.34	
For Bituminous Coated And 25% Paved, Add	84.94	
For Smooth-Flo, Add	171.62	
33 42 11 00-0378 LF 108" 14 Gauge, 3" x 1" Corrugation, Galvanized Corrugated Steel Pipe.....	422.43	97.56
For Bituminous Coated Pipe, Add	45.46	
For Bituminous Coated And 25% Paved, Add	89.10	
For Smooth-Flo, Add	180.01	
33 42 11 00-0379 LF 114" 14 Gauge, 3" x 1" Corrugation, Galvanized Corrugated Steel Pipe.....	447.83	107.32
For Bituminous Coated Pipe, Add	47.54	
For Bituminous Coated And 25% Paved, Add	93.17	
For Smooth-Flo, Add	188.25	
<b>33 42 11 00-0380 12 Gauge, 3" x 1" Corrugation, Galvanized Corrugated Steel Piping (33 42 11 00-0354)</b>		
33 42 11 00-0381 LF 60" 12 Gauge, 3" x 1" Corrugation, Galvanized Corrugated Steel Pipe.....	229.06	35.13
For Bituminous Coated Pipe, Add	31.80	
For Bituminous Coated And 25% Paved, Add	60.59	
For Smooth-Flo, Add	98.75	
33 42 11 00-0382 LF 66" 12 Gauge, 3" x 1" Corrugation, Galvanized Corrugated Steel Pipe.....	278.63	42.93
For Bituminous Coated Pipe, Add	38.91	
For Bituminous Coated And 25% Paved, Add	74.13	
For Smooth-Flo, Add	120.83	
33 42 11 00-0383 LF 72" 12 Gauge, 3" x 1" Corrugation, Galvanized Corrugated Steel Pipe.....	332.88	62.44
For Bituminous Coated Pipe, Add	41.74	
For Bituminous Coated And 25% Paved, Add	79.52	
For Smooth-Flo, Add	129.61	
33 42 11 00-0384 LF 78" 12 Gauge, 3" x 1" Corrugation, Galvanized Corrugated Steel Pipe.....	359.48	68.29
For Bituminous Coated Pipe, Add	44.58	
For Bituminous Coated And 25% Paved, Add	84.92	
For Smooth-Flo, Add	138.41	
33 42 11 00-0385 LF 84" 12 Gauge, 3" x 1" Corrugation, Galvanized Corrugated Steel Pipe.....	383.46	73.18
For Bituminous Coated Pipe, Add	47.42	
For Bituminous Coated And 25% Paved, Add	90.34	
For Smooth-Flo, Add	147.25	
33 42 11 00-0386 LF 90" 12 Gauge, 3" x 1" Corrugation, Galvanized Corrugated Steel Pipe.....	407.40	78.05
For Bituminous Coated Pipe, Add	50.26	
For Bituminous Coated And 25% Paved, Add	95.74	
For Smooth-Flo, Add	156.05	
33 42 11 00-0387 LF 96" 12 Gauge, 3" x 1" Corrugation, Galvanized Corrugated Steel Pipe.....	432.08	82.93
For Bituminous Coated Pipe, Add	53.10	
For Bituminous Coated And 25% Paved, Add	101.16	
For Smooth-Flo, Add	164.88	
33 42 11 00-0388 LF 102" 12 Gauge, 3" x 1" Corrugation, Galvanized Corrugated Steel Pipe.....	459.46	87.81
For Bituminous Coated Pipe, Add	55.95	
For Bituminous Coated And 25% Paved, Add	106.58	
For Smooth-Flo, Add	173.72	
33 42 11 00-0389 LF 108" 12 Gauge, 3" x 1" Corrugation, Galvanized Corrugated Steel Pipe.....	489.05	97.56
For Bituminous Coated Pipe, Add	58.78	
For Bituminous Coated And 25% Paved, Add	111.98	
For Smooth-Flo, Add	182.52	
33 42 11 00-0390 LF 114" 12 Gauge, 3" x 1" Corrugation, Galvanized Corrugated Steel Pipe.....	518.12	107.32
For Bituminous Coated Pipe, Add	61.60	
For Bituminous Coated And 25% Paved, Add	117.34	
For Smooth-Flo, Add	191.26	



		<b>Utilities</b>	<b>33</b>	<b>CS</b>
		<b>Stormwater Utilities</b>	<b>33 40</b>	
		<b>Stormwater Conveyance</b>	<b>33 42</b>	

MINOR CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
33 42 11 00-0391	LF	120" 12 Gauge, 3" x 1" Corrugation, Galvanized Corrugated Steel Pipe..... <i>For Bituminous Coated Pipe, Add</i> <i>For Bituminous Coated And 25% Paved, Add</i> <i>For Smooth-Flo, Add</i>	546.15 64.44 122.77 200.10	117.08
33 42 11 00-0392		<b>10 Gauge, 3" x 1" Corrugation, Galvanized Corrugated Steel Piping</b> (33 42 11 00-0354)		
33 42 11 00-0393	LF	72" 10 Gauge, 3" x 1" Corrugation, Galvanized Corrugated Steel Pipe..... <i>For Bituminous Coated Pipe, Add</i> <i>For Bituminous Coated And 25% Paved, Add</i> <i>For Smooth-Flo, Add</i>	374.72 50.11 95.21 127.28	62.44
33 42 11 00-0394	LF	78" 10 Gauge, 3" x 1" Corrugation, Galvanized Corrugated Steel Pipe..... <i>For Bituminous Coated Pipe, Add</i> <i>For Bituminous Coated And 25% Paved, Add</i> <i>For Smooth-Flo, Add</i>	404.76 53.63 101.90 136.23	68.29
33 42 11 00-0395	LF	84" 10 Gauge, 3" x 1" Corrugation, Galvanized Corrugated Steel Pipe..... <i>For Bituminous Coated Pipe, Add</i> <i>For Bituminous Coated And 25% Paved, Add</i> <i>For Smooth-Flo, Add</i>	432.17 57.17 108.62 145.20	73.18
33 42 11 00-0396	LF	90" 10 Gauge, 3" x 1" Corrugation, Galvanized Corrugated Steel Pipe..... <i>For Bituminous Coated Pipe, Add</i> <i>For Bituminous Coated And 25% Paved, Add</i> <i>For Smooth-Flo, Add</i>	459.55 60.69 115.31 154.15	78.05
33 42 11 00-0397	LF	96" 10 Gauge, 3" x 1" Corrugation, Galvanized Corrugated Steel Pipe..... <i>For Bituminous Coated Pipe, Add</i> <i>For Bituminous Coated And 25% Paved, Add</i> <i>For Smooth-Flo, Add</i>	487.66 64.22 122.01 163.11	82.93
33 42 11 00-0398	LF	102" 10 Gauge, 3" x 1" Corrugation, Galvanized Corrugated Steel Pipe..... <i>For Bituminous Coated Pipe, Add</i> <i>For Bituminous Coated And 25% Paved, Add</i> <i>For Smooth-Flo, Add</i>	518.47 67.75 128.73 172.09	87.81
33 42 11 00-0399	LF	108" 10 Gauge, 3" x 1" Corrugation, Galvanized Corrugated Steel Pipe..... <i>For Bituminous Coated Pipe, Add</i> <i>For Bituminous Coated And 25% Paved, Add</i> <i>For Smooth-Flo, Add</i>	551.50 71.27 135.42 181.03	97.56
33 42 11 00-0400	LF	114" 10 Gauge, 3" x 1" Corrugation, Galvanized Corrugated Steel Pipe..... <i>For Bituminous Coated Pipe, Add</i> <i>For Bituminous Coated And 25% Paved, Add</i> <i>For Smooth-Flo, Add</i>	583.97 74.77 142.06 189.91	107.32
33 42 11 00-0401	LF	120" 10 Gauge, 3" x 1" Corrugation, Galvanized Corrugated Steel Pipe..... <i>For Bituminous Coated Pipe, Add</i> <i>For Bituminous Coated And 25% Paved, Add</i> <i>For Smooth-Flo, Add</i>	615.46 78.31 148.78 198.90	117.08
33 42 11 00-0402	LF	126" 10 Gauge, 3" x 1" Corrugation, Galvanized Corrugated Steel Pipe..... <i>For Bituminous Coated Pipe, Add</i> <i>For Bituminous Coated And 25% Paved, Add</i> <i>For Smooth-Flo, Add</i>	648.71 81.81 155.45 207.81	126.84
33 42 11 00-0403	LF	132" 10 Gauge, 3" x 1" Corrugation, Galvanized Corrugated Steel Pipe..... <i>For Bituminous Coated Pipe, Add</i> <i>For Bituminous Coated And 25% Paved, Add</i> <i>For Smooth-Flo, Add</i>	684.48 85.35 162.17 216.79	136.60
33 42 11 00-0404	LF	138" 10 Gauge, 3" x 1" Corrugation, Galvanized Corrugated Steel Pipe..... <i>For Bituminous Coated Pipe, Add</i> <i>For Bituminous Coated And 25% Paved, Add</i> <i>For Smooth-Flo, Add</i>	723.21 88.89 168.89 225.78	146.35
33 42 11 00-0405		<b>125 mm x 25 mm Corrugation, Galvanized Corrugated Steel Piping</b> (33 42 11 00-0312)		
33 42 11 00-0406		<b>16 Gauge, 125 mm x 25 mm Corrugation, Galvanized Corrugated Steel Piping</b> (33 42 11 00-0405)		
33 42 11 00-0407	LF	48" 16 Gauge, 125 mm x 25 mm Corrugation, Galvanized Corrugated Steel Pipe ..... <i>For Bituminous Coated Pipe, Add</i> <i>For Bituminous Coated And 25% Paved, Add</i> <i>For Smooth-Flo, Add</i>	135.35 19.83 45.21 71.78	29.27
33 42 11 00-0408	LF	54" 16 Gauge, 125 mm x 25 mm Corrugation, Galvanized Corrugated Steel Pipe ..... <i>For Bituminous Coated Pipe, Add</i> <i>For Bituminous Coated And 25% Paved, Add</i> <i>For Smooth-Flo, Add</i>	161.47 24.30 55.40 87.96	33.18
33 42 11 00-0409	LF	60" 16 Gauge, 125 mm x 25 mm Corrugation, Galvanized Corrugated Steel Pipe ..... <i>For Bituminous Coated Pipe, Add</i> <i>For Bituminous Coated And 25% Paved, Add</i> <i>For Smooth-Flo, Add</i>	175.74 26.43 60.25 95.66	35.13
33 42 11 00-0410	LF	66" 16 Gauge, 125 mm x 25 mm Corrugation, Galvanized Corrugated Steel Pipe ..... <i>For Bituminous Coated Pipe, Add</i> <i>For Bituminous Coated And 25% Paved, Add</i> <i>For Smooth-Flo, Add</i>	217.13 33.27 75.85 120.43	42.93
33 42 11 00-0411	LF	72" 16 Gauge, 125 mm x 25 mm Corrugation, Galvanized Corrugated Steel Pipe ..... <i>For Bituminous Coated Pipe, Add</i> <i>For Bituminous Coated And 25% Paved, Add</i> <i>For Smooth-Flo, Add</i>	265.92 35.44 80.80 128.28	62.44

**33 Utilities****33 40 Stormwater Utilities****33 42 Stormwater Conveyance**

MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
33 42 11 00-0412 LF 78" 16 Gauge, 125 mm x 25 mm Corrugation, Galvanized Corrugated Steel Pipe.....	287.01	68.29
For Bituminous Coated Pipe, Add	37.60	
For Bituminous Coated And 25% Paved, Add	85.73	
For Smooth-Flo, Add	136.12	
33 42 11 00-0413 LF 84" 16 Gauge, 125 mm x 25 mm Corrugation, Galvanized Corrugated Steel Pipe.....	305.36	73.18
For Bituminous Coated Pipe, Add	39.76	
For Bituminous Coated And 25% Paved, Add	90.64	
For Smooth-Flo, Add	143.91	
33 42 11 00-0414 LF 90" 16 Gauge, 125 mm x 25 mm Corrugation, Galvanized Corrugated Steel Pipe.....	323.72	78.05
For Bituminous Coated Pipe, Add	41.90	
For Bituminous Coated And 25% Paved, Add	95.54	
For Smooth-Flo, Add	151.69	
33 42 11 00-0415 LF 96" 16 Gauge, 125 mm x 25 mm Corrugation, Galvanized Corrugated Steel Pipe.....	342.91	82.93
For Bituminous Coated Pipe, Add	44.08	
For Bituminous Coated And 25% Paved, Add	100.51	
For Smooth-Flo, Add	159.58	
33 42 11 00-0416 LF 102" 16 Gauge, 125 mm x 25 mm Corrugation, Galvanized Corrugated Steel Pipe.....	364.97	87.81
For Bituminous Coated Pipe, Add	46.31	
For Bituminous Coated And 25% Paved, Add	105.59	
For Smooth-Flo, Add	167.65	
<b>33 42 11 00-0417 14 Gauge, 125 mm x 25 mm Corrugation, Galvanized Corrugated Steel Piping</b>		
33 42 11 00-0418 LF 54" 14 Gauge, 125 mm x 25 mm Corrugation, Galvanized Corrugated Steel Pipe.....	180.45	33.18
For Bituminous Coated Pipe, Add	23.23	
For Bituminous Coated And 25% Paved, Add	54.60	
For Smooth-Flo, Add	98.86	
33 42 11 00-0419 LF 60" 14 Gauge, 125 mm x 25 mm Corrugation, Galvanized Corrugated Steel Pipe.....	196.85	35.13
For Bituminous Coated Pipe, Add	25.36	
For Bituminous Coated And 25% Paved, Add	59.60	
For Smooth-Flo, Add	107.92	
33 42 11 00-0420 LF 66" 14 Gauge, 125 mm x 25 mm Corrugation, Galvanized Corrugated Steel Pipe.....	240.16	42.93
For Bituminous Coated Pipe, Add	31.22	
For Bituminous Coated And 25% Paved, Add	73.37	
For Smooth-Flo, Add	132.84	
33 42 11 00-0421 LF 72" 14 Gauge, 125 mm x 25 mm Corrugation, Galvanized Corrugated Steel Pipe.....	290.80	62.44
For Bituminous Coated Pipe, Add	33.33	
For Bituminous Coated And 25% Paved, Add	78.32	
For Smooth-Flo, Add	141.80	
33 42 11 00-0422 LF 78" 14 Gauge, 125 mm x 25 mm Corrugation, Galvanized Corrugated Steel Pipe.....	314.14	68.29
For Bituminous Coated Pipe, Add	35.51	
For Bituminous Coated And 25% Paved, Add	83.44	
For Smooth-Flo, Add	151.09	
33 42 11 00-0423 LF 84" 14 Gauge, 125 mm x 25 mm Corrugation, Galvanized Corrugated Steel Pipe.....	334.62	73.18
For Bituminous Coated Pipe, Add	37.66	
For Bituminous Coated And 25% Paved, Add	88.49	
For Smooth-Flo, Add	160.23	
33 42 11 00-0424 LF 90" 14 Gauge, 125 mm x 25 mm Corrugation, Galvanized Corrugated Steel Pipe.....	354.01	78.05
For Bituminous Coated Pipe, Add	39.58	
For Bituminous Coated And 25% Paved, Add	93.01	
For Smooth-Flo, Add	168.41	
33 42 11 00-0425 LF 96" 14 Gauge, 125 mm x 25 mm Corrugation, Galvanized Corrugated Steel Pipe.....	376.27	82.93
For Bituminous Coated Pipe, Add	41.94	
For Bituminous Coated And 25% Paved, Add	98.55	
For Smooth-Flo, Add	178.45	
33 42 11 00-0426 LF 102" 14 Gauge, 125 mm x 25 mm Corrugation, Galvanized Corrugated Steel Pipe.....	400.11	87.81
For Bituminous Coated Pipe, Add	44.08	
For Bituminous Coated And 25% Paved, Add	103.58	
For Smooth-Flo, Add	187.55	
33 42 11 00-0427 LF 108" 14 Gauge, 125 mm x 25 mm Corrugation, Galvanized Corrugated Steel Pipe.....	426.14	97.56
For Bituminous Coated Pipe, Add	46.20	
For Bituminous Coated And 25% Paved, Add	108.57	
For Smooth-Flo, Add	196.58	
33 42 11 00-0428 LF 114" 14 Gauge, 125 mm x 25 mm Corrugation, Galvanized Corrugated Steel Pipe.....	452.01	107.32
For Bituminous Coated Pipe, Add	48.37	
For Bituminous Coated And 25% Paved, Add	113.68	
For Smooth-Flo, Add	205.83	
<b>33 42 11 00-0429 12 Gauge, 125 mm x 25 mm Corrugation, Galvanized Corrugated Steel Piping</b>		
33 42 11 00-0430 LF 60" 12 Gauge, 125 mm x 25 mm Corrugation, Galvanized Corrugated Steel Pipe.....	236.37	35.13
For Bituminous Coated Pipe, Add	33.27	
For Bituminous Coated And 25% Paved, Add	63.21	
For Smooth-Flo, Add	114.10	
33 42 11 00-0431 LF 66" 12 Gauge, 125 mm x 25 mm Corrugation, Galvanized Corrugated Steel Pipe.....	283.68	42.93
For Bituminous Coated Pipe, Add	39.92	
For Bituminous Coated And 25% Paved, Add	75.86	
For Smooth-Flo, Add	136.94	
33 42 11 00-0432 LF 72" 12 Gauge, 125 mm x 25 mm Corrugation, Galvanized Corrugated Steel Pipe.....	338.47	62.44
For Bituminous Coated Pipe, Add	42.86	
For Bituminous Coated And 25% Paved, Add	81.43	
For Smooth-Flo, Add	147.01	



		<b>Utilities</b>	<b>33</b>	<b>CS</b>
		<b>Stormwater Utilities</b>	<b>33 40</b>	
		<b>Stormwater Conveyance</b>	<b>33 42</b>	

MINOR CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
33 42 11 00-0433	LF	78" 12 Gauge, 125 mm x 25 mm Corrugation, Galvanized Corrugated Steel Pipe .....	365.47	68.29
		For Bituminous Coated Pipe, Add	45.77	
		For Bituminous Coated And 25% Paved, Add	86.97	
		For Smooth-Flo, Add	157.00	
33 42 11 00-0434	LF	84" 12 Gauge, 125 mm x 25 mm Corrugation, Galvanized Corrugated Steel Pipe .....	389.66	73.18
		For Bituminous Coated Pipe, Add	48.66	
		For Bituminous Coated And 25% Paved, Add	92.46	
		For Smooth-Flo, Add	166.92	
33 42 11 00-0435	LF	90" 12 Gauge, 125 mm x 25 mm Corrugation, Galvanized Corrugated Steel Pipe .....	414.07	78.05
		For Bituminous Coated Pipe, Add	51.59	
		For Bituminous Coated And 25% Paved, Add	98.02	
		For Smooth-Flo, Add	176.96	
33 42 11 00-0436	LF	96" 12 Gauge, 125 mm x 25 mm Corrugation, Galvanized Corrugated Steel Pipe .....	439.08	82.93
		For Bituminous Coated Pipe, Add	54.50	
		For Bituminous Coated And 25% Paved, Add	103.55	
		For Smooth-Flo, Add	186.94	
33 42 11 00-0437	LF	102" 12 Gauge, 125 mm x 25 mm Corrugation, Galvanized Corrugated Steel Pipe .....	466.73	87.81
		For Bituminous Coated Pipe, Add	57.40	
		For Bituminous Coated And 25% Paved, Add	109.06	
		For Smooth-Flo, Add	196.89	
33 42 11 00-0438	LF	108" 12 Gauge, 125 mm x 25 mm Corrugation, Galvanized Corrugated Steel Pipe .....	496.79	97.56
		For Bituminous Coated Pipe, Add	60.33	
		For Bituminous Coated And 25% Paved, Add	114.63	
		For Smooth-Flo, Add	206.93	
33 42 11 00-0439	LF	114" 12 Gauge, 125 mm x 25 mm Corrugation, Galvanized Corrugated Steel Pipe .....	526.34	107.32
		For Bituminous Coated Pipe, Add	63.24	
		For Bituminous Coated And 25% Paved, Add	120.16	
		For Smooth-Flo, Add	216.91	
33 42 11 00-0440	LF	120" 12 Gauge, 125 mm x 25 mm Corrugation, Galvanized Corrugated Steel Pipe .....	554.67	117.08
		For Bituminous Coated Pipe, Add	66.15	
		For Bituminous Coated And 25% Paved, Add	125.68	
		For Smooth-Flo, Add	226.89	
<b>33 42 11 00-0441 10 Gauge, 125 mm x 25 mm Corrugation, Galvanized Corrugated Steel</b>				
<b>Piping (33 42 11 00-0405)</b>				
33 42 11 00-0442	LF	72" 10 Gauge, 125 mm x 25 mm Corrugation, Galvanized Corrugated Steel Pipe .....	384.12	62.44
		For Bituminous Coated Pipe, Add	51.99	
		For Bituminous Coated And 25% Paved, Add	98.78	
		For Smooth-Flo, Add	155.19	
33 42 11 00-0443	LF	78" 10 Gauge, 125 mm x 25 mm Corrugation, Galvanized Corrugated Steel Pipe .....	415.36	68.29
		For Bituminous Coated Pipe, Add	55.75	
		For Bituminous Coated And 25% Paved, Add	105.93	
		For Smooth-Flo, Add	166.42	
33 42 11 00-0444	LF	84" 10 Gauge, 125 mm x 25 mm Corrugation, Galvanized Corrugated Steel Pipe .....	443.52	73.18
		For Bituminous Coated Pipe, Add	59.44	
		For Bituminous Coated And 25% Paved, Add	112.93	
		For Smooth-Flo, Add	177.42	
33 42 11 00-0445	LF	90" 10 Gauge, 125 mm x 25 mm Corrugation, Galvanized Corrugated Steel Pipe .....	471.53	78.05
		For Bituminous Coated Pipe, Add	63.08	
		For Bituminous Coated And 25% Paved, Add	119.86	
		For Smooth-Flo, Add	188.31	
33 42 11 00-0446	LF	96" 10 Gauge, 125 mm x 25 mm Corrugation, Galvanized Corrugated Steel Pipe .....	500.45	82.93
		For Bituminous Coated Pipe, Add	66.77	
		For Bituminous Coated And 25% Paved, Add	126.87	
		For Smooth-Flo, Add	199.32	
33 42 11 00-0447	LF	102" 10 Gauge, 125 mm x 25 mm Corrugation, Galvanized Corrugated Steel Pipe .....	531.87	87.81
		For Bituminous Coated Pipe, Add	70.43	
		For Bituminous Coated And 25% Paved, Add	133.82	
		For Smooth-Flo, Add	210.23	
33 42 11 00-0448	LF	108" 10 Gauge, 125 mm x 25 mm Corrugation, Galvanized Corrugated Steel Pipe .....	565.70	97.56
		For Bituminous Coated Pipe, Add	74.11	
		For Bituminous Coated And 25% Paved, Add	140.81	
		For Smooth-Flo, Add	221.22	
33 42 11 00-0449	LF	114" 10 Gauge, 125 mm x 25 mm Corrugation, Galvanized Corrugated Steel Pipe .....	599.08	107.32
		For Bituminous Coated Pipe, Add	77.79	
		For Bituminous Coated And 25% Paved, Add	147.80	
		For Smooth-Flo, Add	232.20	
33 42 11 00-0450	LF	120" 10 Gauge, 125 mm x 25 mm Corrugation, Galvanized Corrugated Steel Pipe .....	631.15	117.08
		For Bituminous Coated Pipe, Add	81.44	
		For Bituminous Coated And 25% Paved, Add	154.74	
		For Smooth-Flo, Add	243.11	
33 42 11 00-0451	LF	126" 10 Gauge, 125 mm x 25 mm Corrugation, Galvanized Corrugated Steel Pipe .....	671.00	126.84
		For Bituminous Coated Pipe, Add	86.27	
		For Bituminous Coated And 25% Paved, Add	163.92	
		For Smooth-Flo, Add	257.52	
33 42 11 00-0452	LF	132" 10 Gauge, 125 mm x 25 mm Corrugation, Galvanized Corrugated Steel Pipe .....	708.98	136.60
		For Bituminous Coated Pipe, Add	90.25	
		For Bituminous Coated And 25% Paved, Add	171.48	
		For Smooth-Flo, Add	269.40	
33 42 11 00-0453	LF	138" 10 Gauge, 125 mm x 25 mm Corrugation, Galvanized Corrugated Steel Pipe .....	750.68	146.35
		For Bituminous Coated Pipe, Add	94.38	
		For Bituminous Coated And 25% Paved, Add	179.33	
		For Smooth-Flo, Add	281.74	

**33 Utilities****33 40 Stormwater Utilities****33 42 Stormwater Conveyance**

MINOR CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
33 42 11 00-0454		Helical Ribbed, Galvanized Corrugated Steel Piping (33 42 11 00-0312)		
33 42 11 00-0455		16 Gauge, Helical Ribbed, Galvanized Corrugated Steel Piping (33 42 11 00-0454)		
33 42 11 00-0456	LF	18" 16 Gauge, Helical Ribbed, Galvanized Corrugated Steel Pipe..... For Bituminous Coated Pipe, Add	47.53 6.11	10.92
33 42 11 00-0457	LF	21" 16 Gauge, Helical Ribbed, Galvanized Corrugated Steel Pipe..... For Bituminous Coated Pipe, Add	54.23 7.28	11.83
33 42 11 00-0458	LF	24" 16 Gauge, Helical Ribbed, Galvanized Corrugated Steel Pipe..... For Bituminous Coated Pipe, Add	60.44 8.27	12.74
33 42 11 00-0459	LF	30" 16 Gauge, Helical Ribbed, Galvanized Corrugated Steel Pipe..... For Bituminous Coated Pipe, Add	79.31 10.65	16.39
33 42 11 00-0460	LF	36" 16 Gauge, Helical Ribbed, Galvanized Corrugated Steel Pipe..... For Bituminous Coated Pipe, Add	102.82 13.35	21.47
33 42 11 00-0461	LF	42" 16 Gauge, Helical Ribbed, Galvanized Corrugated Steel Pipe..... For Bituminous Coated Pipe, Add	117.23 15.74	25.37
33 42 11 00-0462	LF	48" 16 Gauge, Helical Ribbed, Galvanized Corrugated Steel Pipe..... For Bituminous Coated Pipe, Add	132.08 17.72	29.27
33 42 11 00-0463	LF	54" 16 Gauge, Helical Ribbed, Galvanized Corrugated Steel Pipe..... For Bituminous Coated Pipe, Add	157.43 21.70	33.18
33 42 11 00-0464	LF	60" 16 Gauge, Helical Ribbed, Galvanized Corrugated Steel Pipe..... For Bituminous Coated Pipe, Add	171.74 23.70	35.13
33 42 11 00-0465		14 Gauge, Helical Ribbed, Galvanized Corrugated Steel Piping (33 42 11 00-0454)		
33 42 11 00-0466	LF	18" 14 Gauge, Helical Ribbed, Galvanized Corrugated Steel Pipe..... For Bituminous Coated Pipe, Add	51.91 7.07	10.92
33 42 11 00-0467	LF	21" 14 Gauge, Helical Ribbed, Galvanized Corrugated Steel Pipe..... For Bituminous Coated Pipe, Add	59.35 8.40	11.83
33 42 11 00-0468	LF	24" 14 Gauge, Helical Ribbed, Galvanized Corrugated Steel Pipe..... For Bituminous Coated Pipe, Add	66.26 9.54	12.74
33 42 11 00-0469	LF	30" 14 Gauge, Helical Ribbed, Galvanized Corrugated Steel Pipe..... For Bituminous Coated Pipe, Add	86.55 12.23	16.39
33 42 11 00-0470	LF	36" 14 Gauge, Helical Ribbed, Galvanized Corrugated Steel Pipe..... For Bituminous Coated Pipe, Add	111.54 15.25	21.47
33 42 11 00-0471	LF	42" 14 Gauge, Helical Ribbed, Galvanized Corrugated Steel Pipe..... For Bituminous Coated Pipe, Add	127.43 17.96	25.37
33 42 11 00-0472	LF	48" 14 Gauge, Helical Ribbed, Galvanized Corrugated Steel Pipe..... For Bituminous Coated Pipe, Add	143.73 20.26	29.27
33 42 11 00-0473	LF	54" 14 Gauge, Helical Ribbed, Galvanized Corrugated Steel Pipe..... For Bituminous Coated Pipe, Add	170.52 24.54	33.18
33 42 11 00-0474	LF	60" 14 Gauge, Helical Ribbed, Galvanized Corrugated Steel Pipe..... For Bituminous Coated Pipe, Add	186.31 26.86	35.13
33 42 11 00-0475	LF	66" 14 Gauge, Helical Ribbed, Galvanized Corrugated Steel Pipe..... For Bituminous Coated Pipe, Add	228.51 33.37	42.93
33 42 11 00-0476	LF	72" 14 Gauge, Helical Ribbed, Galvanized Corrugated Steel Pipe..... For Bituminous Coated Pipe, Add	278.51 35.65	62.44
33 42 11 00-0477	LF	78" 14 Gauge, Helical Ribbed, Galvanized Corrugated Steel Pipe..... For Bituminous Coated Pipe, Add	301.01 37.98	68.29
33 42 11 00-0478		12 Gauge, Helical Ribbed, Galvanized Corrugated Steel Piping (33 42 11 00-0454)		
33 42 11 00-0479	LF	30" 12 Gauge, Helical Ribbed, Galvanized Corrugated Steel Pipe..... For Bituminous Coated Pipe, Add	101.23 12.78	16.39
33 42 11 00-0480	LF	36" 12 Gauge, Helical Ribbed, Galvanized Corrugated Steel Pipe..... For Bituminous Coated Pipe, Add	129.08 15.79	21.47
33 42 11 00-0481	LF	42" 12 Gauge, Helical Ribbed, Galvanized Corrugated Steel Pipe..... For Bituminous Coated Pipe, Add	147.97 18.58	25.37
33 42 11 00-0482	LF	48" 12 Gauge, Helical Ribbed, Galvanized Corrugated Steel Pipe..... For Bituminous Coated Pipe, Add	167.16 21.00	29.27
33 42 11 00-0483	LF	54" 12 Gauge, Helical Ribbed, Galvanized Corrugated Steel Pipe..... For Bituminous Coated Pipe, Add	196.91 25.07	33.18
33 42 11 00-0484	LF	60" 12 Gauge, Helical Ribbed, Galvanized Corrugated Steel Pipe..... For Bituminous Coated Pipe, Add	215.67 27.52	35.13
33 42 11 00-0485	LF	66" 12 Gauge, Helical Ribbed, Galvanized Corrugated Steel Pipe..... For Bituminous Coated Pipe, Add	260.72 33.39	42.93
33 42 11 00-0486	LF	72" 12 Gauge, Helical Ribbed, Galvanized Corrugated Steel Pipe..... For Bituminous Coated Pipe, Add	313.63 35.81	62.44
33 42 11 00-0487	LF	78" 12 Gauge, Helical Ribbed, Galvanized Corrugated Steel Pipe..... For Bituminous Coated Pipe, Add	339.02 38.26	68.29
33 42 11 00-0488	LF	84" 12 Gauge, Helical Ribbed, Galvanized Corrugated Steel Pipe..... For Bituminous Coated Pipe, Add	361.65 40.69	73.18
33 42 11 00-0489	LF	90" 12 Gauge, Helical Ribbed, Galvanized Corrugated Steel Pipe..... For Bituminous Coated Pipe, Add	384.28 43.12	78.05
33 42 11 00-0490	LF	96" 12 Gauge, Helical Ribbed, Galvanized Corrugated Steel Pipe..... For Bituminous Coated Pipe, Add	407.61 45.55	82.93
33 42 11 00-0491	LF	102" 12 Gauge, Helical Ribbed, Galvanized Corrugated Steel Pipe..... For Bituminous Coated Pipe, Add	432.19 47.72	87.81
33 42 11 00-0492		1-1/2" x 1/4" Corrugation, Galvanized Corrugated Steel Piping (33 42 11 00-0312)		
33 42 11 00-0493		1-1/2" x 1/4" Corrugation, Galvanized Corrugated Steel Piping (33 42 11 00-0492)		



		<b>Utilities</b>	<b>33</b>	<b>CS</b>
		<b>Stormwater Utilities</b>	<b>33 40</b>	
		<b>Stormwater Conveyance</b>	<b>33 42</b>	

MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
33 42 11 00-0494 LF 6" 18 Gauge, 1-1/2" x 1/4" Corrugation, Galvanized Corrugated Steel Pipe..... <i>For Bituminous Coated Pipe, Add</i>	17.29 1.56	5.46
33 42 11 00-0495 LF 6" 16 Gauge, 1-1/2" x 1/4" Corrugation, Galvanized Corrugated Steel Pipe..... <i>For Bituminous Coated Pipe, Add</i>	18.60 1.88	5.46
33 42 11 00-0496 LF 8" 18 Gauge, 1-1/2" x 1/4" Corrugation, Galvanized Corrugated Steel Pipe..... <i>For Bituminous Coated Pipe, Add</i>	21.67 2.07	6.83
33 42 11 00-0497 LF 8" 16 Gauge, 1-1/2" x 1/4" Corrugation, Galvanized Corrugated Steel Pipe..... <i>For Bituminous Coated Pipe, Add</i>	23.33 2.47	6.83
33 42 11 00-0498 LF 10" 18 Gauge, 1-1/2" x 1/4" Corrugation, Galvanized Corrugated Steel Pipe..... <i>For Bituminous Coated Pipe, Add</i>	27.40 2.59	8.19
33 42 11 00-0499 LF 10" 16 Gauge, 1-1/2" x 1/4" Corrugation, Galvanized Corrugated Steel Pipe..... <i>For Bituminous Coated Pipe, Add</i>	29.50 3.11	8.19
<b>33 42 11 00-0500 Perforated, 1-1/2" x 1/4" Corrugation, Galvanized Corrugated Steel Piping (33 42 11 00-0492)</b>		
33 42 11 00-0501 LF 6" 18 Gauge, Perforated, 1-1/2" x 1/4" Corrugation, Galvanized Corrugated Steel Pipe..... <i>For Bituminous Coated Pipe, Add</i>	17.47 1.54	5.46
33 42 11 00-0502 LF 6" 16 Gauge, Perforated, 1-1/2" x 1/4" Corrugation, Galvanized Corrugated Steel Pipe..... <i>For Bituminous Coated Pipe, Add</i>	18.74 1.84	5.46
33 42 11 00-0503 LF 8" 18 Gauge, Perforated, 1-1/2" x 1/4" Corrugation, Galvanized Corrugated Steel Pipe..... <i>For Bituminous Coated Pipe, Add</i>	21.85 2.02	6.83
33 42 11 00-0504 LF 8" 16 Gauge, Perforated, 1-1/2" x 1/4" Corrugation, Galvanized Corrugated Steel Pipe..... <i>For Bituminous Coated Pipe, Add</i>	23.61 2.44	6.83
33 42 11 00-0505 LF 10" 18 Gauge, Perforated, 1-1/2" x 1/4" Corrugation, Galvanized Corrugated Steel Pipe..... <i>For Bituminous Coated Pipe, Add</i>	27.72 2.56	8.19
33 42 11 00-0506 LF 10" 16 Gauge, Perforated, 1-1/2" x 1/4" Corrugation, Galvanized Corrugated Steel Pipe..... <i>For Bituminous Coated Pipe, Add</i>	29.87 3.07	8.19
<b>33 42 11 00-0507 1-1/2" x 1/4" Corrugation, Galvanized Corrugated Steel Pipe Fittings (33 42 11 00-0492)</b>		
33 42 11 00-0508 EA 6" 18 Gauge, Connection Band For 1-1/2" x 1/4" Corrugation, Galvanized Corrugated Steel Pipe..... <i>For Bituminous Coated Pipe, Add</i>	9.64 2.17	
33 42 11 00-0509 EA 8" 18 Gauge, Connection Band For 1-1/2" x 1/4" Corrugation, Galvanized Corrugated Steel Pipe..... <i>For Bituminous Coated Pipe, Add</i>	12.76 2.87	
33 42 11 00-0510 EA 10" 18 Gauge, Connection Band For 1-1/2" x 1/4" Corrugation, Galvanized Corrugated Steel Pipe..... <i>For Bituminous Coated Pipe, Add</i>	15.65 3.52	
33 42 11 00-0511 EA 6" 18 Gauge, Band Elbows For 1-1/2" x 1/4" Corrugation, Galvanized Corrugated Steel Pipe..... <i>For Bituminous Coated Pipe, Add</i>	34.78 4.80	
33 42 11 00-0512 EA 6" End Caps For 1-1/2" x 1/4" Corrugation, Galvanized Corrugated Steel Pipe..... <i>For Bituminous Coated Pipe, Add</i>	8.19 1.09	
33 42 11 00-0513 EA 8" End Caps For 1-1/2" x 1/4" Corrugation, Galvanized Corrugated Steel Pipe..... <i>For Bituminous Coated Pipe, Add</i>	10.31 1.64	
<b>33 42 11 00-0514 2-2/3" x 1/2" Corrugation, Polymeric Corrugated Steel Piping (33 42 11 00-0312)</b>		
<b>33 42 11 00-0515 16 Gauge, 2-2/3" x 1/2" Corrugation, Polymeric Corrugated Steel Piping (33 42 11 00-0514)</b>		
33 42 11 00-0516 LF 12" 16 Gauge, 2-2/3" x 1/2" Corrugation, Polymeric Corrugated Steel Pipe.....	52.40	9.56
33 42 11 00-0517 LF 15" 16 Gauge, 2-2/3" x 1/2" Corrugation, Polymeric Corrugated Steel Pipe.....	61.55	10.01
33 42 11 00-0518 LF 18" 16 Gauge, 2-2/3" x 1/2" Corrugation, Polymeric Corrugated Steel Pipe.....	71.00	10.92
33 42 11 00-0519 LF 21" 16 Gauge, 2-2/3" x 1/2" Corrugation, Polymeric Corrugated Steel Pipe.....	82.39	11.83
33 42 11 00-0520 LF 24" 16 Gauge, 2-2/3" x 1/2" Corrugation, Polymeric Corrugated Steel Pipe.....	91.86	12.74
33 42 11 00-0521 LF 30" 16 Gauge, 2-2/3" x 1/2" Corrugation, Polymeric Corrugated Steel Pipe.....	120.31	16.39
33 42 11 00-0522 LF 36" 16 Gauge, 2-2/3" x 1/2" Corrugation, Polymeric Corrugated Steel Pipe.....	154.98	21.47
33 42 11 00-0523 LF 42" 16 Gauge, 2-2/3" x 1/2" Corrugation, Polymeric Corrugated Steel Pipe.....	179.14	25.37
33 42 11 00-0524 LF 48" 16 Gauge, 2-2/3" x 1/2" Corrugation, Polymeric Corrugated Steel Pipe.....	201.09	29.27
<b>33 42 11 00-0525 14 Gauge, 2-2/3" x 1/2" Corrugation, Polymeric Corrugated Steel Piping (33 42 11 00-0514)</b>		
33 42 11 00-0526 LF 12" 14 Gauge, 2-2/3" x 1/2" Corrugation, Polymeric Corrugated Steel Pipe.....	59.44	9.56
33 42 11 00-0527 LF 15" 14 Gauge, 2-2/3" x 1/2" Corrugation, Polymeric Corrugated Steel Pipe.....	70.28	10.01
33 42 11 00-0528 LF 18" 14 Gauge, 2-2/3" x 1/2" Corrugation, Polymeric Corrugated Steel Pipe.....	81.45	10.92
33 42 11 00-0529 LF 21" 14 Gauge, 2-2/3" x 1/2" Corrugation, Polymeric Corrugated Steel Pipe.....	94.49	11.83
33 42 11 00-0530 LF 24" 14 Gauge, 2-2/3" x 1/2" Corrugation, Polymeric Corrugated Steel Pipe.....	105.91	12.74
33 42 11 00-0531 LF 30" 14 Gauge, 2-2/3" x 1/2" Corrugation, Polymeric Corrugated Steel Pipe.....	137.56	16.39
33 42 11 00-0532 LF 36" 14 Gauge, 2-2/3" x 1/2" Corrugation, Polymeric Corrugated Steel Pipe.....	175.81	21.47
33 42 11 00-0533 LF 42" 14 Gauge, 2-2/3" x 1/2" Corrugation, Polymeric Corrugated Steel Pipe.....	203.05	25.37
33 42 11 00-0534 LF 48" 14 Gauge, 2-2/3" x 1/2" Corrugation, Polymeric Corrugated Steel Pipe.....	228.37	29.27
33 42 11 00-0535 LF 54" 14 Gauge, 2-2/3" x 1/2" Corrugation, Polymeric Corrugated Steel Pipe.....	276.24	33.18
<b>33 42 11 00-0536 12 Gauge, 2-2/3" x 1/2" Corrugation, Polymeric Corrugated Steel Piping (33 42 11 00-0514)</b>		
33 42 11 00-0537 LF 18" 12 Gauge, 2-2/3" x 1/2" Corrugation, Polymeric Corrugated Steel Pipe.....	103.23	10.92
33 42 11 00-0538 LF 21" 12 Gauge, 2-2/3" x 1/2" Corrugation, Polymeric Corrugated Steel Pipe.....	119.92	11.83
33 42 11 00-0539 LF 24" 12 Gauge, 2-2/3" x 1/2" Corrugation, Polymeric Corrugated Steel Pipe.....	134.83	12.74
33 42 11 00-0540 LF 30" 12 Gauge, 2-2/3" x 1/2" Corrugation, Polymeric Corrugated Steel Pipe.....	173.69	16.39
33 42 11 00-0541 LF 36" 12 Gauge, 2-2/3" x 1/2" Corrugation, Polymeric Corrugated Steel Pipe.....	210.30	21.47
33 42 11 00-0542 LF 42" 12 Gauge, 2-2/3" x 1/2" Corrugation, Polymeric Corrugated Steel Pipe.....	253.58	25.37
33 42 11 00-0543 LF 48" 12 Gauge, 2-2/3" x 1/2" Corrugation, Polymeric Corrugated Steel Pipe.....	286.04	29.27

**33 Utilities****33 40 Stormwater Utilities****33 42 Stormwater Conveyance**

MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
33 42 11 00-0544 LF 54" 12 Gauge, 2-2/3" x 1/2" Corrugation, Polymeric Corrugated Steel Pipe.....	342.04	33.18
33 42 11 00-0545 LF 60" 12 Gauge, 2-2/3" x 1/2" Corrugation, Polymeric Corrugated Steel Pipe.....	373.73	35.13
33 42 11 00-0546 LF 66" 12 Gauge, 2-2/3" x 1/2" Corrugation, Polymeric Corrugated Steel Pipe.....	457.60	42.93
<b>33 42 11 00-0547 10 Gauge, 2-2/3" x 1/2" Corrugation, Polymeric Corrugated Steel Piping (33 42 11 00-0544)</b>		
33 42 11 00-0548 LF 36" 10 Gauge, 2-2/3" x 1/2" Corrugation, Polymeric Corrugated Steel Pipe.....	258.76	21.47
33 42 11 00-0549 LF 42" 10 Gauge, 2-2/3" x 1/2" Corrugation, Polymeric Corrugated Steel Pipe.....	299.62	25.37
33 42 11 00-0550 LF 48" 10 Gauge, 2-2/3" x 1/2" Corrugation, Polymeric Corrugated Steel Pipe.....	338.33	29.27
33 42 11 00-0551 LF 54" 10 Gauge, 2-2/3" x 1/2" Corrugation, Polymeric Corrugated Steel Pipe.....	400.62	33.18
33 42 11 00-0552 LF 60" 10 Gauge, 2-2/3" x 1/2" Corrugation, Polymeric Corrugated Steel Pipe.....	438.95	35.13
33 42 11 00-0553 LF 66" 10 Gauge, 2-2/3" x 1/2" Corrugation, Polymeric Corrugated Steel Pipe.....	529.22	42.93
33 42 11 00-0554 LF 72" 10 Gauge, 2-2/3" x 1/2" Corrugation, Polymeric Corrugated Steel Pipe.....	601.45	62.44
<b>33 42 11 00-0555 3" x 1" Corrugation, Polymeric Corrugated Steel Piping (33 42 11 00-0312)</b>		
<b>33 42 11 00-0556 16 Gauge, 3" x 1" Corrugation, Polymeric Corrugated Steel Piping (33 42 11 00-0555)</b>		
33 42 11 00-0557 LF 36" 16 Gauge, 3" x 1" Corrugation, Polymeric Corrugated Steel Pipe.....	194.97	21.47
33 42 11 00-0558 LF 42" 16 Gauge, 3" x 1" Corrugation, Polymeric Corrugated Steel Pipe.....	225.25	25.37
33 42 11 00-0559 LF 48" 16 Gauge, 3" x 1" Corrugation, Polymeric Corrugated Steel Pipe.....	252.79	29.27
33 42 11 00-0560 LF 54" 16 Gauge, 3" x 1" Corrugation, Polymeric Corrugated Steel Pipe.....	305.64	33.18
33 42 11 00-0561 LF 60" 16 Gauge, 3" x 1" Corrugation, Polymeric Corrugated Steel Pipe.....	332.79	35.13
33 42 11 00-0562 LF 66" 16 Gauge, 3" x 1" Corrugation, Polymeric Corrugated Steel Pipe.....	423.32	42.93
33 42 11 00-0563 LF 72" 16 Gauge, 3" x 1" Corrugation, Polymeric Corrugated Steel Pipe.....	485.52	62.44
33 42 11 00-0564 LF 78" 16 Gauge, 3" x 1" Corrugation, Polymeric Corrugated Steel Pipe.....	520.02	68.29
33 42 11 00-0565 LF 84" 16 Gauge, 3" x 1" Corrugation, Polymeric Corrugated Steel Pipe.....	551.91	73.18
33 42 11 00-0566 LF 90" 16 Gauge, 3" x 1" Corrugation, Polymeric Corrugated Steel Pipe.....	583.85	78.05
33 42 11 00-0567 LF 96" 16 Gauge, 3" x 1" Corrugation, Polymeric Corrugated Steel Pipe.....	616.40	82.93
33 42 11 00-0568 LF 102" 16 Gauge, 3" x 1" Corrugation, Polymeric Corrugated Steel Pipe.....	651.80	87.81
<b>33 42 11 00-0569 14 Gauge, 3" x 1" Corrugation, Polymeric Corrugated Steel Piping (33 42 11 00-0555)</b>		
33 42 11 00-0570 LF 54" 14 Gauge, 3" x 1" Corrugation, Polymeric Corrugated Steel Pipe.....	343.30	33.18
33 42 11 00-0571 LF 60" 14 Gauge, 3" x 1" Corrugation, Polymeric Corrugated Steel Pipe.....	374.42	35.13
33 42 11 00-0572 LF 66" 14 Gauge, 3" x 1" Corrugation, Polymeric Corrugated Steel Pipe.....	469.18	42.93
33 42 11 00-0573 LF 72" 14 Gauge, 3" x 1" Corrugation, Polymeric Corrugated Steel Pipe.....	535.39	62.44
33 42 11 00-0574 LF 78" 14 Gauge, 3" x 1" Corrugation, Polymeric Corrugated Steel Pipe.....	573.96	68.29
33 42 11 00-0575 LF 84" 14 Gauge, 3" x 1" Corrugation, Polymeric Corrugated Steel Pipe.....	610.08	73.18
33 42 11 00-0576 LF 90" 14 Gauge, 3" x 1" Corrugation, Polymeric Corrugated Steel Pipe.....	645.98	78.05
33 42 11 00-0577 LF 96" 14 Gauge, 3" x 1" Corrugation, Polymeric Corrugated Steel Pipe.....	682.56	82.93
33 42 11 00-0578 LF 102" 14 Gauge, 3" x 1" Corrugation, Polymeric Corrugated Steel Pipe.....	722.08	87.81
33 42 11 00-0579 LF 108" 14 Gauge, 3" x 1" Corrugation, Polymeric Corrugated Steel Pipe.....	763.76	97.56
33 42 11 00-0580 LF 114" 14 Gauge, 3" x 1" Corrugation, Polymeric Corrugated Steel Pipe.....	804.55	107.32
<b>33 42 11 00-0581 12 Gauge, 3" x 1" Corrugation, Polymeric Corrugated Steel Piping (33 42 11 00-0555)</b>		
33 42 11 00-0582 LF 60" 12 Gauge, 3" x 1" Corrugation, Polymeric Corrugated Steel Pipe.....	469.12	35.13
33 42 11 00-0583 LF 66" 12 Gauge, 3" x 1" Corrugation, Polymeric Corrugated Steel Pipe.....	574.53	42.93
33 42 11 00-0584 LF 72" 12 Gauge, 3" x 1" Corrugation, Polymeric Corrugated Steel Pipe.....	649.88	62.44
33 42 11 00-0585 LF 78" 12 Gauge, 3" x 1" Corrugation, Polymeric Corrugated Steel Pipe.....	697.63	68.29
33 42 11 00-0586 LF 84" 12 Gauge, 3" x 1" Corrugation, Polymeric Corrugated Steel Pipe.....	742.88	73.18
33 42 11 00-0587 LF 90" 12 Gauge, 3" x 1" Corrugation, Polymeric Corrugated Steel Pipe.....	787.98	78.05
33 42 11 00-0588 LF 96" 12 Gauge, 3" x 1" Corrugation, Polymeric Corrugated Steel Pipe.....	833.82	82.93
33 42 11 00-0589 LF 102" 12 Gauge, 3" x 1" Corrugation, Polymeric Corrugated Steel Pipe.....	882.45	87.81
33 42 11 00-0590 LF 108" 12 Gauge, 3" x 1" Corrugation, Polymeric Corrugated Steel Pipe.....	933.20	97.56
33 42 11 00-0591 LF 114" 12 Gauge, 3" x 1" Corrugation, Polymeric Corrugated Steel Pipe.....	983.30	107.32
33 42 11 00-0592 LF 120" 12 Gauge, 3" x 1" Corrugation, Polymeric Corrugated Steel Pipe.....	1,032.59	117.08
<b>33 42 11 00-0593 10 Gauge, 3" x 1" Corrugation, Polymeric Corrugated Steel Piping (33 42 11 00-0555)</b>		
33 42 11 00-0594 LF 72" 10 Gauge, 3" x 1" Corrugation, Polymeric Corrugated Steel Pipe.....	754.21	62.44
33 42 11 00-0595 LF 78" 10 Gauge, 3" x 1" Corrugation, Polymeric Corrugated Steel Pipe.....	810.46	68.29
33 42 11 00-0596 LF 84" 10 Gauge, 3" x 1" Corrugation, Polymeric Corrugated Steel Pipe.....	864.28	73.18
33 42 11 00-0597 LF 90" 10 Gauge, 3" x 1" Corrugation, Polymeric Corrugated Steel Pipe.....	917.91	78.05
33 42 11 00-0598 LF 96" 10 Gauge, 3" x 1" Corrugation, Polymeric Corrugated Steel Pipe.....	972.34	82.93
33 42 11 00-0599 LF 102" 10 Gauge, 3" x 1" Corrugation, Polymeric Corrugated Steel Pipe.....	1,029.53	87.81
33 42 11 00-0600 LF 108" 10 Gauge, 3" x 1" Corrugation, Polymeric Corrugated Steel Pipe.....	1,088.85	97.56
33 42 11 00-0601 LF 114" 10 Gauge, 3" x 1" Corrugation, Polymeric Corrugated Steel Pipe.....	1,147.46	107.32
33 42 11 00-0602 LF 120" 10 Gauge, 3" x 1" Corrugation, Polymeric Corrugated Steel Pipe.....	1,205.32	117.08
33 42 11 00-0603 LF 126" 10 Gauge, 3" x 1" Corrugation, Polymeric Corrugated Steel Pipe.....	1,264.77	126.84
33 42 11 00-0604 LF 132" 10 Gauge, 3" x 1" Corrugation, Polymeric Corrugated Steel Pipe.....	1,326.92	136.60
33 42 11 00-0605 LF 138" 10 Gauge, 3" x 1" Corrugation, Polymeric Corrugated Steel Pipe.....	1,392.04	146.35
<b>33 42 11 00-0606 125 mm x 25 mm Corrugation, Polymeric Corrugated Steel Piping (33 42 11 00-0312)</b>		
<b>33 42 11 00-0607 16 Gauge, 125 mm x 25 mm Corrugation, Polymeric Corrugated Steel Piping (33 42 11 00-0606)</b>		
33 42 11 00-0608 LF 48" 16 Gauge, 125 mm x 25 mm Corrugation, Polymeric Corrugated Steel Pipe.....	244.67	29.27





		<b>Utilities</b>	<b>33</b>	<b>CS</b>
		<b>Stormwater Utilities</b>	<b>33 40</b>	
		<b>Stormwater Conveyance</b>	<b>33 42</b>	

MINOR CSI UOM DESCRIPTION			TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
33 42 11 00-0609	LF	54" 16 Gauge, 125 mm x 25 mm Corrugation, Polymeric Corrugated Steel Pipe.....	296.70	33.18
33 42 11 00-0610	LF	60" 16 Gauge, 125 mm x 25 mm Corrugation, Polymeric Corrugated Steel Pipe.....	322.55	35.13
33 42 11 00-0611	LF	66" 16 Gauge, 125 mm x 25 mm Corrugation, Polymeric Corrugated Steel Pipe.....	404.30	42.93
33 42 11 00-0612	LF	72" 16 Gauge, 125 mm x 25 mm Corrugation, Polymeric Corrugated Steel Pipe.....	464.93	62.44
33 42 11 00-0613	LF	78" 16 Gauge, 125 mm x 25 mm Corrugation, Polymeric Corrugated Steel Pipe.....	497.81	68.29
33 42 11 00-0614	LF	84" 16 Gauge, 125 mm x 25 mm Corrugation, Polymeric Corrugated Steel Pipe.....	527.87	73.18
33 42 11 00-0615	LF	90" 16 Gauge, 125 mm x 25 mm Corrugation, Polymeric Corrugated Steel Pipe.....	557.87	78.05
33 42 11 00-0616	LF	96" 16 Gauge, 125 mm x 25 mm Corrugation, Polymeric Corrugated Steel Pipe.....	588.89	82.93
33 42 11 00-0617	LF	102" 16 Gauge, 125 mm x 25 mm Corrugation, Polymeric Corrugated Steel Pipe.....	623.16	87.81
<b>33 42 11 00-0618 14 Gauge, 125mm x 25mm Corrugation, Polymeric Corrugated Steel Piping</b> (33 42 11 00-0606)				
33 42 11 00-0619	LF	54" 14 Gauge, 125 mm x 25 mm Corrugation, Polymeric Corrugated Steel Pipe.....	341.43	33.18
33 42 11 00-0620	LF	60" 14 Gauge, 125 mm x 25 mm Corrugation, Polymeric Corrugated Steel Pipe.....	372.37	35.13
33 42 11 00-0621	LF	66" 14 Gauge, 125 mm x 25 mm Corrugation, Polymeric Corrugated Steel Pipe.....	458.63	42.93
33 42 11 00-0622	LF	72" 14 Gauge, 125 mm x 25 mm Corrugation, Polymeric Corrugated Steel Pipe.....	523.65	62.44
33 42 11 00-0623	LF	78" 14 Gauge, 125 mm x 25 mm Corrugation, Polymeric Corrugated Steel Pipe.....	561.83	68.29
33 42 11 00-0624	LF	84" 14 Gauge, 125 mm x 25 mm Corrugation, Polymeric Corrugated Steel Pipe.....	586.87	73.18
33 42 11 00-0625	LF	90" 14 Gauge, 125 mm x 25 mm Corrugation, Polymeric Corrugated Steel Pipe.....	629.37	78.05
33 42 11 00-0626	LF	96" 14 Gauge, 125 mm x 25 mm Corrugation, Polymeric Corrugated Steel Pipe.....	667.64	82.93
33 42 11 00-0627	LF	102" 14 Gauge, 125 mm x 25 mm Corrugation, Polymeric Corrugated Steel Pipe.....	706.08	87.81
33 42 11 00-0628	LF	108" 14 Gauge, 125 mm x 25 mm Corrugation, Polymeric Corrugated Steel Pipe.....	746.49	97.56
33 42 11 00-0629	LF	114" 14 Gauge, 125 mm x 25 mm Corrugation, Polymeric Corrugated Steel Pipe.....	787.16	107.32
<b>33 42 11 00-0630 12 Gauge, 125mm x 25mm Corrugation, Polymeric Corrugated Steel Piping</b> (33 42 11 00-0606)				
33 42 11 00-0631	LF	60" 12 Gauge, 125 mm x 25 mm Corrugation, Polymeric Corrugated Steel Pipe.....	472.23	35.13
33 42 11 00-0632	LF	66" 12 Gauge, 125 mm x 25 mm Corrugation, Polymeric Corrugated Steel Pipe.....	569.11	42.93
33 42 11 00-0633	LF	72" 12 Gauge, 125 mm x 25 mm Corrugation, Polymeric Corrugated Steel Pipe.....	644.56	62.44
33 42 11 00-0634	LF	78" 12 Gauge, 125 mm x 25 mm Corrugation, Polymeric Corrugated Steel Pipe.....	691.92	68.29
33 42 11 00-0635	LF	84" 12 Gauge, 125 mm x 25 mm Corrugation, Polymeric Corrugated Steel Pipe.....	736.32	73.18
33 42 11 00-0636	LF	90" 12 Gauge, 125 mm x 25 mm Corrugation, Polymeric Corrugated Steel Pipe.....	781.30	78.05
33 42 11 00-0637	LF	96" 12 Gauge, 125 mm x 25 mm Corrugation, Polymeric Corrugated Steel Pipe.....	826.70	82.93
33 42 11 00-0638	LF	102" 12 Gauge, 125 mm x 25 mm Corrugation, Polymeric Corrugated Steel Pipe.....	874.64	87.81
33 42 11 00-0639	LF	108" 12 Gauge, 125 mm x 25 mm Corrugation, Polymeric Corrugated Steel Pipe.....	925.24	97.56
33 42 11 00-0640	LF	114" 12 Gauge, 125 mm x 25 mm Corrugation, Polymeric Corrugated Steel Pipe.....	975.18	107.32
33 42 11 00-0641	LF	120" 12 Gauge, 125 mm x 25 mm Corrugation, Polymeric Corrugated Steel Pipe.....	1,023.87	117.08
<b>33 42 11 00-0642 10 Gauge, 125mm x 25mm Corrugation, Polymeric Corrugated Steel Piping</b> (33 42 11 00-0606)				
33 42 11 00-0643	LF	72" 10 Gauge, 125 mm x 25 mm Corrugation, Polymeric Corrugated Steel Pipe.....	754.16	62.44
33 42 11 00-0644	LF	78" 10 Gauge, 125 mm x 25 mm Corrugation, Polymeric Corrugated Steel Pipe.....	811.72	68.29
33 42 11 00-0645	LF	84" 10 Gauge, 125 mm x 25 mm Corrugation, Polymeric Corrugated Steel Pipe.....	865.72	73.18
33 42 11 00-0646	LF	90" 10 Gauge, 125 mm x 25 mm Corrugation, Polymeric Corrugated Steel Pipe.....	919.31	78.05
33 42 11 00-0647	LF	96" 10 Gauge, 125 mm x 25 mm Corrugation, Polymeric Corrugated Steel Pipe.....	974.00	82.93
33 42 11 00-0648	LF	102" 10 Gauge, 125 mm x 25 mm Corrugation, Polymeric Corrugated Steel Pipe.....	1,031.10	87.81
33 42 11 00-0649	LF	108" 10 Gauge, 125 mm x 25 mm Corrugation, Polymeric Corrugated Steel Pipe.....	1,090.68	97.56
33 42 11 00-0650	LF	114" 10 Gauge, 125 mm x 25 mm Corrugation, Polymeric Corrugated Steel Pipe.....	1,149.81	107.32
33 42 11 00-0651	LF	120" 10 Gauge, 125 mm x 25 mm Corrugation, Polymeric Corrugated Steel Pipe.....	1,207.54	117.08
33 42 11 00-0652	LF	126" 10 Gauge, 125 mm x 25 mm Corrugation, Polymeric Corrugated Steel Pipe.....	1,281.18	126.84
33 42 11 00-0653	LF	132" 10 Gauge, 125 mm x 25 mm Corrugation, Polymeric Corrugated Steel Pipe.....	1,347.08	136.60
33 42 11 00-0654	LF	138" 10 Gauge, 125 mm x 25 mm Corrugation, Polymeric Corrugated Steel Pipe.....	1,417.72	146.35
<b>33 42 11 00-0655 Galvanized Corrugated Steel Pipe-Arch</b> (33 42 11 00-0311)				
<b>33 42 11 00-0656 2-2/3" x 1/2" Corrugation, Galvanized Corrugated Steel Pipe-Arch</b> (33 42 11 00-0655)				
<b>33 42 11 00-0657 16 Gauge, 2-2/3" x 1/2" Corrugation, Galvanized Corrugated Steel Pipe-Arch</b> (33 42 11 00-0656)				
33 42 11 00-0658	LF	17" x 13" 16 Gauge, 2-2/3" x 1/2" Corrugation, Galvanized Corrugated Steel Pipe-Arch.....	38.40	10.01
		For Bituminous Coated Pipe, Add	4.44	
		For Bituminous Coated And 25% Paved, Add	10.74	
		For Smooth-Flo, Add	17.72	
33 42 11 00-0659	LF	21" x 15" 16 Gauge, 2-2/3" x 1/2" Corrugation, Galvanized Corrugated Steel Pipe-Arch.....	42.62	10.92
		For Bituminous Coated Pipe, Add	5.31	
		For Bituminous Coated And 25% Paved, Add	12.83	
		For Smooth-Flo, Add	21.16	
33 42 11 00-0660	LF	24" x 18" 16 Gauge, 2-2/3" x 1/2" Corrugation, Galvanized Corrugated Steel Pipe-Arch.....	48.64	11.83
		For Bituminous Coated Pipe, Add	6.39	
		For Bituminous Coated And 25% Paved, Add	15.44	
		For Smooth-Flo, Add	25.47	
33 42 11 00-0661	LF	28" x 20" 16 Gauge, 2-2/3" x 1/2" Corrugation, Galvanized Corrugated Steel Pipe-Arch.....	54.52	12.74
		For Bituminous Coated Pipe, Add	7.36	
		For Bituminous Coated And 25% Paved, Add	17.80	
		For Smooth-Flo, Add	29.35	

**33 Utilities****33 40 Stormwater Utilities****33 42 Stormwater Conveyance**

MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
33 42 11 00-0662 LF 35" x 24" 16 Gauge, 2-2/3" x 1/2" Corrugation, Galvanized Corrugated Steel Pipe-Arch ..... For Bituminous Coated Pipe, Add ..... For Bituminous Coated And 25% Paved, Add ..... For Smooth-Flo, Add .....	71.13 9.34 22.59 37.27	16.39
33 42 11 00-0663 LF 42" x 29" 16 Gauge, 2-2/3" x 1/2" Corrugation, Galvanized Corrugated Steel Pipe-Arch ..... For Bituminous Coated Pipe, Add ..... For Bituminous Coated And 25% Paved, Add ..... For Smooth-Flo, Add .....	93.94 12.05 29.14 48.07	21.47
<b>33 42 11 00-0664 14 Gauge, 2-2/3" x 1/2" Corrugation, Galvanized Corrugated Steel Pipe-Arch</b> (33 42 11 00-0656)		
33 42 11 00-0665 LF 17" x 13" 14 Gauge, 2-2/3" x 1/2" Corrugation, Galvanized Corrugated Steel Pipe-Arch ..... For Bituminous Coated Pipe, Add ..... For Bituminous Coated And 25% Paved, Add ..... For Smooth-Flo, Add .....	42.00 4.61 10.78 17.69	10.01
33 42 11 00-0666 LF 21" x 15" 14 Gauge, 2-2/3" x 1/2" Corrugation, Galvanized Corrugated Steel Pipe-Arch ..... For Bituminous Coated Pipe, Add ..... For Bituminous Coated And 25% Paved, Add ..... For Smooth-Flo, Add .....	47.03 5.53 12.94 21.22	10.92
33 42 11 00-0667 LF 24" x 18" 14 Gauge, 2-2/3" x 1/2" Corrugation, Galvanized Corrugated Steel Pipe-Arch ..... For Bituminous Coated Pipe, Add ..... For Bituminous Coated And 25% Paved, Add ..... For Smooth-Flo, Add .....	53.56 6.57 15.38 25.22	11.83
33 42 11 00-0668 LF 28" x 20" 14 Gauge, 2-2/3" x 1/2" Corrugation, Galvanized Corrugated Steel Pipe-Arch ..... For Bituminous Coated Pipe, Add ..... For Bituminous Coated And 25% Paved, Add ..... For Smooth-Flo, Add .....	60.21 7.58 17.73 29.08	12.74
33 42 11 00-0669 LF 35" x 24" 14 Gauge, 2-2/3" x 1/2" Corrugation, Galvanized Corrugated Steel Pipe-Arch ..... For Bituminous Coated Pipe, Add ..... For Bituminous Coated And 25% Paved, Add ..... For Smooth-Flo, Add .....	78.24 9.60 22.45 36.83	16.39
33 42 11 00-0670 LF 42" x 29" 14 Gauge, 2-2/3" x 1/2" Corrugation, Galvanized Corrugated Steel Pipe-Arch ..... For Bituminous Coated Pipe, Add ..... For Bituminous Coated And 25% Paved, Add ..... For Smooth-Flo, Add .....	102.39 12.22 28.60 46.91	21.47
33 42 11 00-0671 LF 49" x 33" 14 Gauge, 2-2/3" x 1/2" Corrugation, Galvanized Corrugated Steel Pipe-Arch ..... For Bituminous Coated Pipe, Add ..... For Bituminous Coated And 25% Paved, Add ..... For Smooth-Flo, Add .....	117.40 14.56 34.07 55.88	25.37
<b>33 42 11 00-0672 12 Gauge, 2-2/3" x 1/2" Corrugation, Galvanized Corrugated Steel Pipe-Arch</b> (33 42 11 00-0656)		
33 42 11 00-0673 LF 21" x 15" 12 Gauge, 2-2/3" x 1/2" Corrugation, Galvanized Corrugated Steel Pipe-Arch ..... For Bituminous Coated Pipe, Add ..... For Bituminous Coated And 25% Paved, Add ..... For Smooth-Flo, Add .....	61.23 5.98 13.31 20.47	11.71
33 42 11 00-0674 LF 24" x 18" 12 Gauge, 2-2/3" x 1/2" Corrugation, Galvanized Corrugated Steel Pipe-Arch ..... For Bituminous Coated Pipe, Add ..... For Bituminous Coated And 25% Paved, Add ..... For Smooth-Flo, Add .....	69.76 7.09 15.79 24.27	12.69
33 42 11 00-0675 LF 28" x 20" 12 Gauge, 2-2/3" x 1/2" Corrugation, Galvanized Corrugated Steel Pipe-Arch ..... For Bituminous Coated Pipe, Add ..... For Bituminous Coated And 25% Paved, Add ..... For Smooth-Flo, Add .....	78.25 8.14 18.11 27.84	13.66
33 42 11 00-0676 LF 35" x 24" 12 Gauge, 2-2/3" x 1/2" Corrugation, Galvanized Corrugated Steel Pipe-Arch ..... For Bituminous Coated Pipe, Add ..... For Bituminous Coated And 25% Paved, Add ..... For Smooth-Flo, Add .....	101.23 10.24 22.80 35.05	17.56
33 42 11 00-0677 LF 42" x 29" 12 Gauge, 2-2/3" x 1/2" Corrugation, Galvanized Corrugated Steel Pipe-Arch ..... For Bituminous Coated Pipe, Add ..... For Bituminous Coated And 25% Paved, Add ..... For Smooth-Flo, Add .....	119.62 12.82 28.52 43.86	21.47
33 42 11 00-0678 LF 49" x 33" 12 Gauge, 2-2/3" x 1/2" Corrugation, Galvanized Corrugated Steel Pipe-Arch ..... For Bituminous Coated Pipe, Add ..... For Bituminous Coated And 25% Paved, Add ..... For Smooth-Flo, Add .....	137.29 15.16 33.73 51.87	25.37
33 42 11 00-0679 LF 57" x 38" 12 Gauge, 2-2/3" x 1/2" Corrugation, Galvanized Corrugated Steel Pipe-Arch ..... For Bituminous Coated Pipe, Add ..... For Bituminous Coated And 25% Paved, Add ..... For Smooth-Flo, Add .....	159.96 17.98 40.01 61.52	29.27
33 42 11 00-0680 LF 64" x 43" 12 Gauge, 2-2/3" x 1/2" Corrugation, Galvanized Corrugated Steel Pipe-Arch ..... For Bituminous Coated Pipe, Add ..... For Bituminous Coated And 25% Paved, Add ..... For Smooth-Flo, Add .....	179.04 19.85 44.18 67.94	33.18
<b>33 42 11 00-0681 10 Gauge, 2-2/3" x 1/2" Corrugation, Galvanized Corrugated Steel Pipe-Arch</b> (33 42 11 00-0656)		
33 42 11 00-0682 LF 42" x 29" 10 Gauge, 2-2/3" x 1/2" Corrugation, Galvanized Corrugated Steel Pipe-Arch ..... For Bituminous Coated Pipe, Add ..... For Bituminous Coated And 25% Paved, Add ..... For Smooth-Flo, Add .....	135.85 15.44 32.52 41.01	21.47



		<b>Utilities</b>	<b>33</b>	<b>CS</b>
		<b>Stormwater Utilities</b>	<b>33 40</b>	
		<b>Stormwater Conveyance</b>	<b>33 42</b>	

MINOR CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
33 42 11 00-0683	LF	49" x 33" 10 Gauge, 2-2/3" x 1/2" Corrugation, Galvanized Corrugated Steel Pipe-Arch..... <i>For Bituminous Coated Pipe, Add</i> <i>For Bituminous Coated And 25% Paved, Add</i> <i>For Smooth-Flo, Add</i>	156.21 18.22 38.35 48.37	25.37
33 42 11 00-0684	LF	57" x 38" 10 Gauge, 2-2/3" x 1/2" Corrugation, Galvanized Corrugated Steel Pipe-Arch..... <i>For Bituminous Coated Pipe, Add</i> <i>For Bituminous Coated And 25% Paved, Add</i> <i>For Smooth-Flo, Add</i>	181.40 21.44 45.13 56.91	29.27
33 42 11 00-0685	LF	64" x 43" 10 Gauge, 2-2/3" x 1/2" Corrugation, Galvanized Corrugated Steel Pipe-Arch..... <i>For Bituminous Coated Pipe, Add</i> <i>For Bituminous Coated And 25% Paved, Add</i> <i>For Smooth-Flo, Add</i>	203.27 23.77 50.04 63.10	33.18
33 42 11 00-0686	LF	71" x 47" 10 Gauge, 2-2/3" x 1/2" Corrugation, Galvanized Corrugated Steel Pipe-Arch..... <i>For Bituminous Coated Pipe, Add</i> <i>For Bituminous Coated And 25% Paved, Add</i> <i>For Smooth-Flo, Add</i>	222.63 26.09 54.93 69.28	35.13
33 42 11 00-0687		<b>3" x 1" Corrugation, Galvanized Corrugated Steel Pipe-Arch</b> (33 42 11 00-0655)		
33 42 11 00-0688		<b>14 Gauge, 3" x 1" Corrugation, Galvanized Corrugated Steel Pipe-Arch</b> (33 42 11 00-0687)		
33 42 11 00-0689	LF	60" x 46" 14 Gauge, 3" x 1" Corrugation, Galvanized Corrugated Steel Pipe-Arch ..... <i>For Bituminous Coated Pipe, Add</i> <i>For Bituminous Coated And 25% Paved, Add</i> <i>For Smooth-Flo, Add</i>	178.80 22.90 69.63 77.87	33.18
33 42 11 00-0690	LF	66" x 51" 14 Gauge, 3" x 1" Corrugation, Galvanized Corrugated Steel Pipe-Arch ..... <i>For Bituminous Coated Pipe, Add</i> <i>For Bituminous Coated And 25% Paved, Add</i> <i>For Smooth-Flo, Add</i>	195.37 25.07 76.20 85.22	35.13
33 42 11 00-0691	LF	73" x 55" 14 Gauge, 3" x 1" Corrugation, Galvanized Corrugated Steel Pipe-Arch ..... <i>For Bituminous Coated Pipe, Add</i> <i>For Bituminous Coated And 25% Paved, Add</i> <i>For Smooth-Flo, Add</i>	241.47 31.48 95.71 107.04	42.93
33 42 11 00-0692	LF	81" x 59" 14 Gauge, 3" x 1" Corrugation, Galvanized Corrugated Steel Pipe-Arch ..... <i>For Bituminous Coated Pipe, Add</i> <i>For Bituminous Coated And 25% Paved, Add</i> <i>For Smooth-Flo, Add</i>	292.92 33.75 102.60 114.75	62.44
33 42 11 00-0693	LF	87" x 63" 14 Gauge, 3" x 1" Corrugation, Galvanized Corrugated Steel Pipe-Arch ..... <i>For Bituminous Coated Pipe, Add</i> <i>For Bituminous Coated And 25% Paved, Add</i> <i>For Smooth-Flo, Add</i>	317.27 36.13 109.85 122.86	68.29
33 42 11 00-0694	LF	95" x 67" 14 Gauge, 3" x 1" Corrugation, Galvanized Corrugated Steel Pipe-Arch ..... <i>For Bituminous Coated Pipe, Add</i> <i>For Bituminous Coated And 25% Paved, Add</i> <i>For Smooth-Flo, Add</i>	338.99 38.53 117.13 131.00	73.18
33 42 11 00-0695	LF	103" x 71" 14 Gauge, 3" x 1" Corrugation, Galvanized Corrugated Steel Pipe-Arch ..... <i>For Bituminous Coated Pipe, Add</i> <i>For Bituminous Coated And 25% Paved, Add</i> <i>For Smooth-Flo, Add</i>	360.68 40.91 124.38 139.11	78.05
33 42 11 00-0696	LF	112" x 75" 14 Gauge, 3" x 1" Corrugation, Galvanized Corrugated Steel Pipe-Arch ..... <i>For Bituminous Coated Pipe, Add</i> <i>For Bituminous Coated And 25% Paved, Add</i> <i>For Smooth-Flo, Add</i>	383.03 43.29 131.60 147.19	82.93
33 42 11 00-0697		<b>12 Gauge, 3" x 1" Corrugation, Galvanized Corrugated Steel Pipe-Arch</b> (33 42 11 00-0687)		
33 42 11 00-0698	LF	66" x 51" 12 Gauge, 3" x 1" Corrugation, Galvanized Corrugated Steel Pipe-Arch ..... <i>For Bituminous Coated Pipe, Add</i> <i>For Bituminous Coated And 25% Paved, Add</i> <i>For Smooth-Flo, Add</i>	232.67 32.53 85.22 100.83	35.13
33 42 11 00-0699	LF	73" x 55" 12 Gauge, 3" x 1" Corrugation, Galvanized Corrugated Steel Pipe-Arch ..... <i>For Bituminous Coated Pipe, Add</i> <i>For Bituminous Coated And 25% Paved, Add</i> <i>For Smooth-Flo, Add</i>	282.84 39.76 104.16 123.24	42.93
33 42 11 00-0700	LF	81" x 59" 12 Gauge, 3" x 1" Corrugation, Galvanized Corrugated Steel Pipe-Arch ..... <i>For Bituminous Coated Pipe, Add</i> <i>For Bituminous Coated And 25% Paved, Add</i> <i>For Smooth-Flo, Add</i>	337.96 42.76 112.03 132.55	62.44
33 42 11 00-0701	LF	87" x 63" 12 Gauge, 3" x 1" Corrugation, Galvanized Corrugated Steel Pipe-Arch ..... <i>For Bituminous Coated Pipe, Add</i> <i>For Bituminous Coated And 25% Paved, Add</i> <i>For Smooth-Flo, Add</i>	365.95 45.87 120.18 142.20	68.29
33 42 11 00-0702	LF	95" x 67" 12 Gauge, 3" x 1" Corrugation, Galvanized Corrugated Steel Pipe-Arch ..... <i>For Bituminous Coated Pipe, Add</i> <i>For Bituminous Coated And 25% Paved, Add</i> <i>For Smooth-Flo, Add</i>	391.31 48.99 128.36 151.88	73.18
33 42 11 00-0703	LF	103" x 71" 12 Gauge, 3" x 1" Corrugation, Galvanized Corrugated Steel Pipe-Arch ..... <i>For Bituminous Coated Pipe, Add</i> <i>For Bituminous Coated And 25% Paved, Add</i> <i>For Smooth-Flo, Add</i>	416.66 52.11 136.53 161.54	78.05
33 42 11 00-0704	LF	112" x 75" 12 Gauge, 3" x 1" Corrugation, Galvanized Corrugated Steel Pipe-Arch ..... <i>For Bituminous Coated Pipe, Add</i> <i>For Bituminous Coated And 25% Paved, Add</i> <i>For Smooth-Flo, Add</i>	442.65 55.21 144.66 171.16	82.93

**33 Utilities****33 40 Stormwater Utilities****33 42 Stormwater Conveyance**

MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
33 42 11 00-0705 LF 117" x 79" 12 Gauge, 3" x 1" Corrugation, Galvanized Corrugated Steel Pipe-Arch ..... For Bituminous Coated Pipe, Add ..... For Bituminous Coated And 25% Paved, Add ..... For Smooth-Flo, Add .....	471.48 58.35 152.88 180.89	87.81
33 42 11 00-0706 LF 128" x 83" 12 Gauge, 3" x 1" Corrugation, Galvanized Corrugated Steel Pipe-Arch ..... For Bituminous Coated Pipe, Add ..... For Bituminous Coated And 25% Paved, Add ..... For Smooth-Flo, Add .....	502.48 61.47 161.05 190.55	97.56
33 42 11 00-0707 LF 137" x 87" 12 Gauge, 3" x 1" Corrugation, Galvanized Corrugated Steel Pipe-Arch ..... For Bituminous Coated Pipe, Add ..... For Bituminous Coated And 25% Paved, Add ..... For Smooth-Flo, Add .....	534.62 64.90 170.03 201.18	107.32
<b>33 42 11 00-0708 10 Gauge, 3" x 1" Corrugation, Galvanized Corrugated Steel Pipe-Arch</b> (33 42 11 00-0687)		
33 42 11 00-0709 LF 81" x 59" 10 Gauge, 3" x 1" Corrugation, Galvanized Corrugated Steel Pipe-Arch ..... For Bituminous Coated Pipe, Add ..... For Bituminous Coated And 25% Paved, Add ..... For Smooth-Flo, Add .....	379.81 51.13 121.68 132.17	62.44
33 42 11 00-0710 LF 87" x 63" 10 Gauge, 3" x 1" Corrugation, Galvanized Corrugated Steel Pipe-Arch ..... For Bituminous Coated Pipe, Add ..... For Bituminous Coated And 25% Paved, Add ..... For Smooth-Flo, Add .....	411.26 54.93 130.74 142.00	68.29
33 42 11 00-0711 LF 95" x 67" 10 Gauge, 3" x 1" Corrugation, Galvanized Corrugated Steel Pipe-Arch ..... For Bituminous Coated Pipe, Add ..... For Bituminous Coated And 25% Paved, Add ..... For Smooth-Flo, Add .....	440.05 58.74 139.81 151.85	73.18
33 42 11 00-0712 LF 103" x 71" 10 Gauge, 3" x 1" Corrugation, Galvanized Corrugated Steel Pipe-Arch ..... For Bituminous Coated Pipe, Add ..... For Bituminous Coated And 25% Paved, Add ..... For Smooth-Flo, Add .....	468.77 62.53 148.83 161.65	78.05
33 42 11 00-0713 LF 112" x 75" 10 Gauge, 3" x 1" Corrugation, Galvanized Corrugated Steel Pipe-Arch ..... For Bituminous Coated Pipe, Add ..... For Bituminous Coated And 25% Paved, Add ..... For Smooth-Flo, Add .....	498.23 66.33 157.87 171.46	82.93
33 42 11 00-0714 LF 117" x 79" 10 Gauge, 3" x 1" Corrugation, Galvanized Corrugated Steel Pipe-Arch ..... For Bituminous Coated Pipe, Add ..... For Bituminous Coated And 25% Paved, Add ..... For Smooth-Flo, Add .....	530.45 70.15 166.95 181.33	87.81
33 42 11 00-0715 LF 128" x 83" 10 Gauge, 3" x 1" Corrugation, Galvanized Corrugated Steel Pipe-Arch ..... For Bituminous Coated Pipe, Add ..... For Bituminous Coated And 25% Paved, Add ..... For Smooth-Flo, Add .....	564.89 73.95 176.00 191.16	97.56
33 42 11 00-0716 LF 137" x 87" 10 Gauge, 3" x 1" Corrugation, Galvanized Corrugated Steel Pipe-Arch ..... For Bituminous Coated Pipe, Add ..... For Bituminous Coated And 25% Paved, Add ..... For Smooth-Flo, Add .....	600.19 78.01 185.66 201.66	107.32
33 42 11 00-0717 LF 142" x 91" 10 Gauge, 3" x 1" Corrugation, Galvanized Corrugated Steel Pipe-Arch ..... For Bituminous Coated Pipe, Add ..... For Bituminous Coated And 25% Paved, Add ..... For Smooth-Flo, Add .....	638.36 82.89 197.27 214.26	117.08
<b>33 42 11 00-0718 125 mm x 25 mm Corrugation, Galvanized Corrugated Steel Pipe-Arch</b> (33 42 11 00-0655)		
<b>33 42 11 00-0719 12 Gauge, 125 mm x 25 mm Corrugation, Galvanized Corrugated Steel Pipe-Arch</b> (33 42 11 00-0718)		
33 42 11 00-0720 LF 81" x 59" 12 Gauge, 125 mm x 25 mm Corrugation, Galvanized Corrugated Steel Pipe-Arch ..... For Bituminous Coated Pipe, Add ..... For Bituminous Coated And 25% Paved, Add ..... For Smooth-Flo, Add .....	342.07 43.58 106.34 135.32	62.44
33 42 11 00-0721 LF 87" x 63" 12 Gauge, 125 mm x 25 mm Corrugation, Galvanized Corrugated Steel Pipe-Arch ..... For Bituminous Coated Pipe, Add ..... For Bituminous Coated And 25% Paved, Add ..... For Smooth-Flo, Add .....	369.65 46.61 113.73 144.72	68.29
33 42 11 00-0722 LF 95" x 67" 12 Gauge, 125 mm x 25 mm Corrugation, Galvanized Corrugated Steel Pipe-Arch ..... For Bituminous Coated Pipe, Add ..... For Bituminous Coated And 25% Paved, Add ..... For Smooth-Flo, Add .....	394.37 49.61 121.04 154.03	73.18
33 42 11 00-0723 LF 103" x 71" 12 Gauge, 125 mm x 25 mm Corrugation, Galvanized Corrugated Steel Pipe-Arch ..... For Bituminous Coated Pipe, Add ..... For Bituminous Coated And 25% Paved, Add ..... For Smooth-Flo, Add .....	419.12 52.60 128.35 163.33	78.05
33 42 11 00-0724 LF 112" x 75" 12 Gauge, 125 mm x 25 mm Corrugation, Galvanized Corrugated Steel Pipe-Arch ..... For Bituminous Coated Pipe, Add ..... For Bituminous Coated And 25% Paved, Add ..... For Smooth-Flo, Add .....	444.67 55.62 135.71 172.69	82.93
33 42 11 00-0725 LF 117" x 79" 12 Gauge, 125 mm x 25 mm Corrugation, Galvanized Corrugated Steel Pipe-Arch ..... For Bituminous Coated Pipe, Add ..... For Bituminous Coated And 25% Paved, Add ..... For Smooth-Flo, Add .....	473.16 58.69 143.20 182.23	87.81



		<b>Utilities</b>	<b>33</b>	<b>CS</b>
		<b>Stormwater Utilities</b>	<b>33 40</b>	
		<b>Stormwater Conveyance</b>	<b>33 42</b>	

MINOR CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
33 42 11 00-0726	LF	128" x 83" 12 Gauge, 125 mm x 25 mm Corrugation, Galvanized Corrugated Steel Pipe-Arch..... <i>For Bituminous Coated Pipe, Add</i> <i>For Bituminous Coated And 25% Paved, Add</i> <i>For Smooth-Flo, Add</i>	503.83 61.74 150.64 191.70	97.56
33 42 11 00-0727	LF	137" x 87" 12 Gauge, 125 mm x 25 mm Corrugation, Galvanized Corrugated Steel Pipe-Arch..... <i>For Bituminous Coated Pipe, Add</i> <i>For Bituminous Coated And 25% Paved, Add</i> <i>For Smooth-Flo, Add</i>	537.95 65.56 159.97 203.57	107.32
<b>33 42 11 00-0728 10 Gauge, 125 mm x 25 mm Corrugation, Galvanized Corrugated Steel Pipe-Arch</b> (33 42 11 00-0718)				
33 42 11 00-0729	LF	81" x 59" 10 Gauge, 125 mm x 25 mm Corrugation, Galvanized Corrugated Steel Pipe-Arch..... <i>For Bituminous Coated Pipe, Add</i> <i>For Bituminous Coated And 25% Paved, Add</i> <i>For Smooth-Flo, Add</i>	388.39 52.84 119.43 129.73	62.44
33 42 11 00-0730	LF	87" x 63" 10 Gauge, 125 mm x 25 mm Corrugation, Galvanized Corrugated Steel Pipe-Arch..... <i>For Bituminous Coated Pipe, Add</i> <i>For Bituminous Coated And 25% Paved, Add</i> <i>For Smooth-Flo, Add</i>	419.67 56.61 127.95 138.99	68.29
33 42 11 00-0731	LF	95" x 67" 10 Gauge, 125 mm x 25 mm Corrugation, Galvanized Corrugated Steel Pipe-Arch..... <i>For Bituminous Coated Pipe, Add</i> <i>For Bituminous Coated And 25% Paved, Add</i> <i>For Smooth-Flo, Add</i>	448.16 60.36 136.42 148.19	73.18
33 42 11 00-0732	LF	103" x 71" 10 Gauge, 125 mm x 25 mm Corrugation, Galvanized Corrugated Steel Pipe-Arch..... <i>For Bituminous Coated Pipe, Add</i> <i>For Bituminous Coated And 25% Paved, Add</i> <i>For Smooth-Flo, Add</i>	476.78 64.13 144.94 157.45	78.05
33 42 11 00-0733	LF	112" x 75" 10 Gauge, 125 mm x 25 mm Corrugation, Galvanized Corrugated Steel Pipe-Arch..... <i>For Bituminous Coated Pipe, Add</i> <i>For Bituminous Coated And 25% Paved, Add</i> <i>For Smooth-Flo, Add</i>	505.47 67.78 153.18 166.39	82.93
33 42 11 00-0734	LF	117" x 79" 10 Gauge, 125 mm x 25 mm Corrugation, Galvanized Corrugated Steel Pipe-Arch..... <i>For Bituminous Coated Pipe, Add</i> <i>For Bituminous Coated And 25% Paved, Add</i> <i>For Smooth-Flo, Add</i>	538.23 71.70 162.05 176.03	87.81
33 42 11 00-0735	LF	128" x 83" 10 Gauge, 125 mm x 25 mm Corrugation, Galvanized Corrugated Steel Pipe-Arch..... <i>For Bituminous Coated Pipe, Add</i> <i>For Bituminous Coated And 25% Paved, Add</i> <i>For Smooth-Flo, Add</i>	572.74 75.52 170.68 185.40	97.56
33 42 11 00-0736	LF	137" x 87" 10 Gauge, 125 mm x 25 mm Corrugation, Galvanized Corrugated Steel Pipe-Arch..... <i>For Bituminous Coated Pipe, Add</i> <i>For Bituminous Coated And 25% Paved, Add</i> <i>For Smooth-Flo, Add</i>	610.66 80.10 181.04 196.66	107.32
33 42 11 00-0737	LF	142" x 91" 10 Gauge, 125 mm x 25 mm Corrugation, Galvanized Corrugated Steel Pipe-Arch..... <i>For Bituminous Coated Pipe, Add</i> <i>For Bituminous Coated And 25% Paved, Add</i> <i>For Smooth-Flo, Add</i>	646.10 84.43 190.82 207.29	117.08
<b>33 42 11 00-0738 2-2/3" x 1/2" Corrugation, Polymeric Corrugated Steel Pipe-Arch</b> (33 42 11 00-0655)				
<b>33 42 11 00-0739 16 Gauge, 2-2/3" x 1/2" Corrugation, Polymeric Corrugated Steel Pipe-Arch</b> (33 42 11 00-0738)				
33 42 11 00-0740	LF	17" x 13" 16 Gauge, 2-2/3" x 1/2" Corrugation, Polymeric Corrugated Steel Pipe-Arch .....	61.61	10.01
33 42 11 00-0741	LF	21" x 15" 16 Gauge, 2-2/3" x 1/2" Corrugation, Polymeric Corrugated Steel Pipe-Arch .....	70.36	10.92
33 42 11 00-0742	LF	24" x 18" 16 Gauge, 2-2/3" x 1/2" Corrugation, Polymeric Corrugated Steel Pipe-Arch .....	82.11	11.83
33 42 11 00-0743	LF	28" x 20" 16 Gauge, 2-2/3" x 1/2" Corrugation, Polymeric Corrugated Steel Pipe-Arch .....	93.14	12.74
33 42 11 00-0744	LF	35" x 24" 16 Gauge, 2-2/3" x 1/2" Corrugation, Polymeric Corrugated Steel Pipe-Arch .....	120.34	16.39
33 42 11 00-0745	LF	42" x 29" 16 Gauge, 2-2/3" x 1/2" Corrugation, Polymeric Corrugated Steel Pipe-Arch .....	157.85	21.47
<b>33 42 11 00-0746 14 Gauge, 2-2/3" x 1/2" Corrugation, Polymeric Corrugated Steel Pipe-Arch</b> (33 42 11 00-0738)				
33 42 11 00-0747	LF	17" x 13" 14 Gauge, 2-2/3" x 1/2" Corrugation, Polymeric Corrugated Steel Pipe-Arch .....	69.90	10.01
33 42 11 00-0748	LF	21" x 15" 14 Gauge, 2-2/3" x 1/2" Corrugation, Polymeric Corrugated Steel Pipe-Arch .....	80.48	10.92
33 42 11 00-0749	LF	24" x 18" 14 Gauge, 2-2/3" x 1/2" Corrugation, Polymeric Corrugated Steel Pipe-Arch .....	93.41	11.83
33 42 11 00-0750	LF	28" x 20" 14 Gauge, 2-2/3" x 1/2" Corrugation, Polymeric Corrugated Steel Pipe-Arch .....	106.28	12.74
33 42 11 00-0751	LF	35" x 24" 14 Gauge, 2-2/3" x 1/2" Corrugation, Polymeric Corrugated Steel Pipe-Arch .....	136.67	16.39
33 42 11 00-0752	LF	42" x 29" 14 Gauge, 2-2/3" x 1/2" Corrugation, Polymeric Corrugated Steel Pipe-Arch .....	177.28	21.47
33 42 11 00-0753	LF	49" x 33" 14 Gauge, 2-2/3" x 1/2" Corrugation, Polymeric Corrugated Steel Pipe-Arch .....	206.80	25.37
<b>33 42 11 00-0754 12 Gauge, 2-2/3" x 1/2" Corrugation, Polymeric Corrugated Steel Pipe-Arch</b> (33 42 11 00-0738)				
33 42 11 00-0755	LF	21" x 15" 12 Gauge, 2-2/3" x 1/2" Corrugation, Polymeric Corrugated Steel Pipe-Arch .....	105.29	10.92
33 42 11 00-0756	LF	24" x 18" 12 Gauge, 2-2/3" x 1/2" Corrugation, Polymeric Corrugated Steel Pipe-Arch .....	122.80	11.83
33 42 11 00-0757	LF	28" x 20" 12 Gauge, 2-2/3" x 1/2" Corrugation, Polymeric Corrugated Steel Pipe-Arch .....	139.56	12.74
33 42 11 00-0758	LF	35" x 24" 12 Gauge, 2-2/3" x 1/2" Corrugation, Polymeric Corrugated Steel Pipe-Arch .....	178.21	16.39
33 42 11 00-0759	LF	42" x 29" 12 Gauge, 2-2/3" x 1/2" Corrugation, Polymeric Corrugated Steel Pipe-Arch .....	227.45	21.47
33 42 11 00-0760	LF	49" x 33" 12 Gauge, 2-2/3" x 1/2" Corrugation, Polymeric Corrugated Steel Pipe-Arch .....	265.23	25.37
33 42 11 00-0761	LF	57" x 38" 12 Gauge, 2-2/3" x 1/2" Corrugation, Polymeric Corrugated Steel Pipe-Arch .....	312.71	29.27
33 42 11 00-0762	LF	64" x 43" 12 Gauge, 2-2/3" x 1/2" Corrugation, Polymeric Corrugated Steel Pipe-Arch .....	347.27	33.18

**33 Utilities****33 40 Stormwater Utilities****33 42 Stormwater Conveyance**

MINOR CSI UOM DESCRIPTION		TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
33 42 11 00-0763	10 Gauge, 2-2/3" x 1/2" Corrugation, Polymeric Corrugated Steel Pipe-Arch (33 42 11 00-0738)		
33 42 11 00-0764	LF 42" x 29" 10 Gauge, 2-2/3" x 1/2" Corrugation, Polymeric Corrugated Steel Pipe-Arch	266.80	21.47
33 42 11 00-0765	LF 49" x 33" 10 Gauge, 2-2/3" x 1/2" Corrugation, Polymeric Corrugated Steel Pipe-Arch	311.15	25.37
33 42 11 00-0766	LF 57" x 38" 10 Gauge, 2-2/3" x 1/2" Corrugation, Polymeric Corrugated Steel Pipe-Arch	364.76	29.27
33 42 11 00-0767	LF 64" x 43" 10 Gauge, 2-2/3" x 1/2" Corrugation, Polymeric Corrugated Steel Pipe-Arch	406.12	33.18
33 42 11 00-0768	LF 64" x 43" 10 Gauge, 2-2/3" x 1/2" Corrugation, Polymeric Corrugated Steel Pipe-Arch	444.87	35.13
33 42 11 00-0769	3" x 1" Corrugation, Polymeric Corrugated Steel Pipe-Arch (33 42 11 00-0655)		
33 42 11 00-0770	14 Gauge, 3" x 1" Corrugation, Polymeric Corrugated Steel Pipe-Arch (33 42 11 00-0769)		
33 42 11 00-0771	LF 60" x 46" 14 Gauge, 3" x 1" Corrugation, Polymeric Corrugated Steel Pipe-Arch	350.69	33.18
33 42 11 00-0772	LF 66" x 51" 14 Gauge, 3" x 1" Corrugation, Polymeric Corrugated Steel Pipe-Arch	383.11	35.13
33 42 11 00-0773	LF 73" x 55" 14 Gauge, 3" x 1" Corrugation, Polymeric Corrugated Steel Pipe-Arch	479.27	42.93
33 42 11 00-0774	LF 81" x 59" 14 Gauge, 3" x 1" Corrugation, Polymeric Corrugated Steel Pipe-Arch	547.51	62.44
33 42 11 00-0775	LF 87" x 63" 14 Gauge, 3" x 1" Corrugation, Polymeric Corrugated Steel Pipe-Arch	589.52	68.29
33 42 11 00-0776	LF 95" x 67" 14 Gauge, 3" x 1" Corrugation, Polymeric Corrugated Steel Pipe-Arch	628.97	73.18
33 42 11 00-0777	LF 103" x 71" 14 Gauge, 3" x 1" Corrugation, Polymeric Corrugated Steel Pipe-Arch	668.28	78.05
33 42 11 00-0778	LF 112" x 75" 14 Gauge, 3" x 1" Corrugation, Polymeric Corrugated Steel Pipe-Arch	708.36	82.93
33 42 11 00-0779	12 Gauge, 3" x 1" Corrugation, Polymeric Corrugated Steel Pipe-Arch (33 42 11 00-0769)		
33 42 11 00-0780	LF 66" x 51" 12 Gauge, 3" x 1" Corrugation, Polymeric Corrugated Steel Pipe-Arch	478.00	35.13
33 42 11 00-0781	LF 73" x 55" 12 Gauge, 3" x 1" Corrugation, Polymeric Corrugated Steel Pipe-Arch	584.89	42.93
33 42 11 00-0782	LF 81" x 59" 12 Gauge, 3" x 1" Corrugation, Polymeric Corrugated Steel Pipe-Arch	662.47	62.44
33 42 11 00-0783	LF 87" x 63" 12 Gauge, 3" x 1" Corrugation, Polymeric Corrugated Steel Pipe-Arch	713.64	68.29
33 42 11 00-0784	LF 95" x 67" 12 Gauge, 3" x 1" Corrugation, Polymeric Corrugated Steel Pipe-Arch	762.30	73.18
33 42 11 00-0785	LF 103" x 71" 12 Gauge, 3" x 1" Corrugation, Polymeric Corrugated Steel Pipe-Arch	810.93	78.05
33 42 11 00-0786	LF 112" x 75" 12 Gauge, 3" x 1" Corrugation, Polymeric Corrugated Steel Pipe-Arch	860.13	82.93
33 42 11 00-0787	LF 117" x 79" 12 Gauge, 3" x 1" Corrugation, Polymeric Corrugated Steel Pipe-Arch	912.32	87.81
33 42 11 00-0788	LF 128" x 83" 12 Gauge, 3" x 1" Corrugation, Polymeric Corrugated Steel Pipe-Arch	966.60	97.56
33 42 11 00-0789	LF 137" x 87" 12 Gauge, 3" x 1" Corrugation, Polymeric Corrugated Steel Pipe-Arch	1,024.33	107.32
33 42 11 00-0790	10 Gauge, 3" x 1" Corrugation, Polymeric Corrugated Steel Pipe-Arch (33 42 11 00-0769)		
33 42 11 00-0791	LF 81" x 59" 10 Gauge, 3" x 1" Corrugation, Polymeric Corrugated Steel Pipe-Arch	766.76	62.44
33 42 11 00-0792	LF 87" x 63" 10 Gauge, 3" x 1" Corrugation, Polymeric Corrugated Steel Pipe-Arch	826.56	68.29
33 42 11 00-0793	LF 95" x 67" 10 Gauge, 3" x 1" Corrugation, Polymeric Corrugated Steel Pipe-Arch	883.84	73.18
33 42 11 00-0794	LF 103" x 71" 10 Gauge, 3" x 1" Corrugation, Polymeric Corrugated Steel Pipe-Arch	940.84	78.05
33 42 11 00-0795	LF 112" x 75" 10 Gauge, 3" x 1" Corrugation, Polymeric Corrugated Steel Pipe-Arch	998.63	82.93
33 42 11 00-0796	LF 117" x 79" 10 Gauge, 3" x 1" Corrugation, Polymeric Corrugated Steel Pipe-Arch	1,059.35	87.81
33 42 11 00-0797	LF 128" x 83" 10 Gauge, 3" x 1" Corrugation, Polymeric Corrugated Steel Pipe-Arch	1,122.22	97.56
33 42 11 00-0798	LF 137" x 87" 10 Gauge, 3" x 1" Corrugation, Polymeric Corrugated Steel Pipe-Arch	1,187.78	107.32
33 42 11 00-0799	LF 142" x 91" 10 Gauge, 3" x 1" Corrugation, Polymeric Corrugated Steel Pipe-Arch	1,262.30	117.08
33 42 11 00-0800	125 mm x 25 mm Corrugation, Polymeric Corrugated Steel Pipe-Arch (33 42 11 00-0655)		
33 42 11 00-0801	12 Gauge, 125 mm x 25 mm Corrugation, Polymeric Corrugated Steel Pipe-Arch (33 42 11 00-0800)		
33 42 11 00-0802	LF 81" x 59" 12 Gauge, 125 mm x 25 mm Corrugation, Polymeric Corrugated Steel Pipe-Arch	653.09	62.44
33 42 11 00-0803	LF 87" x 63" 12 Gauge, 125 mm x 25 mm Corrugation, Polymeric Corrugated Steel Pipe-Arch	701.92	68.29
33 42 11 00-0804	LF 95" x 67" 12 Gauge, 125 mm x 25 mm Corrugation, Polymeric Corrugated Steel Pipe-Arch	747.65	73.18
33 42 11 00-0805	LF 103" x 71" 12 Gauge, 125 mm x 25 mm Corrugation, Polymeric Corrugated Steel Pipe-Arch	793.36	78.05
33 42 11 00-0806	LF 112" x 75" 12 Gauge, 125 mm x 25 mm Corrugation, Polymeric Corrugated Steel Pipe-Arch	840.03	82.93
33 42 11 00-0807	LF 117" x 79" 12 Gauge, 125 mm x 25 mm Corrugation, Polymeric Corrugated Steel Pipe-Arch	890.04	87.81
33 42 11 00-0808	LF 128" x 83" 12 Gauge, 125 mm x 25 mm Corrugation, Polymeric Corrugated Steel Pipe-Arch	942.06	97.56
33 42 11 00-0809	LF 137" x 87" 12 Gauge, 125 mm x 25 mm Corrugation, Polymeric Corrugated Steel Pipe-Arch	1,002.96	107.32
33 42 11 00-0810	10 Gauge, 125 mm x 25 mm Corrugation, Polymeric Corrugated Steel Pipe-Arch (33 42 11 00-0800)		
33 42 11 00-0811	LF 81" x 59" 10 Gauge, 125 mm x 25 mm Corrugation, Polymeric Corrugated Steel Pipe-Arch	764.32	62.44
33 42 11 00-0812	LF 87" x 63" 10 Gauge, 125 mm x 25 mm Corrugation, Polymeric Corrugated Steel Pipe-Arch	821.99	68.29
33 42 11 00-0813	LF 95" x 67" 10 Gauge, 125 mm x 25 mm Corrugation, Polymeric Corrugated Steel Pipe-Arch	876.75	73.18
33 42 11 00-0814	LF 103" x 71" 10 Gauge, 125 mm x 25 mm Corrugation, Polymeric Corrugated Steel Pipe-Arch	931.78	78.05
33 42 11 00-0815	LF 112" x 75" 10 Gauge, 125 mm x 25 mm Corrugation, Polymeric Corrugated Steel Pipe-Arch	986.05	82.93
33 42 11 00-0816	LF 117" x 79" 10 Gauge, 125 mm x 25 mm Corrugation, Polymeric Corrugated Steel Pipe-Arch	1,046.25	87.81
33 42 11 00-0817	LF 128" x 83" 10 Gauge, 125 mm x 25 mm Corrugation, Polymeric Corrugated Steel Pipe-Arch	1,107.53	97.56
33 42 11 00-0818	LF 137" x 87" 10 Gauge, 125 mm x 25 mm Corrugation, Polymeric Corrugated Steel Pipe-Arch	1,177.68	107.32
33 42 11 00-0819	LF 142" x 91" 10 Gauge, 125 mm x 25 mm Corrugation, Polymeric Corrugated Steel Pipe-Arch	1,243.28	117.08
33 42 11 00-0820	Aluminized Type 2 Corrugated Steel Piping (33 42 11 00-0311)		
33 42 11 00-0821	2-2/3" x 1/2" Corrugation, Aluminized Type 2 Corrugated Steel Piping (33 42 11 00-0820)		



		<b>Utilities</b>	<b>33</b>	<b>CS</b>
		<b>Stormwater Utilities</b>	<b>33 40</b>	
		<b>Stormwater Conveyance</b>	<b>33 42</b>	

MINOR		TOTAL DIRECT		DEMOLITION	
CSI UOM DESCRIPTION		UNIT COST		UNIT COST	
33 42 11 00-0822	16 Gauge, 2-2/3" x 1/2" Corrugation, Aluminized Type 2 Corrugated Steel Piping (33 42 11 00-0821)				
33 42 11 00-0823	LF 12" 16 Gauge, 2-2/3" x 1/2" Corrugation, Aluminized Type 2 Corrugated Steel Pipe ..... For 1/2 Bituminous Coated And 25% Paved, Add	36.22 6.61	9.56		
33 42 11 00-0824	LF 15" 16 Gauge, 2-2/3" x 1/2" Corrugation, Aluminized Type 2 Corrugated Steel Pipe ..... For 1/2 Bituminous Coated And 25% Paved, Add	41.16 8.32	10.01		
33 42 11 00-0825	LF 18" 16 Gauge, 2-2/3" x 1/2" Corrugation, Aluminized Type 2 Corrugated Steel Pipe ..... For 1/2 Bituminous Coated And 25% Paved, Add	46.29 10.09	10.92		
33 42 11 00-0826	LF 21" 16 Gauge, 2-2/3" x 1/2" Corrugation, Aluminized Type 2 Corrugated Steel Pipe ..... For 1/2 Bituminous Coated And 25% Paved, Add	52.85 12.06	11.83		
33 42 11 00-0827	LF 24" 16 Gauge, 2-2/3" x 1/2" Corrugation, Aluminized Type 2 Corrugated Steel Pipe ..... For 1/2 Bituminous Coated And 25% Paved, Add	58.59 13.59	12.74		
33 42 11 00-0828	LF 30" 16 Gauge, 2-2/3" x 1/2" Corrugation, Aluminized Type 2 Corrugated Steel Pipe ..... For 1/2 Bituminous Coated And 25% Paved, Add	77.23 17.63	16.39		
33 42 11 00-0829	LF 36" 16 Gauge, 2-2/3" x 1/2" Corrugation, Aluminized Type 2 Corrugated Steel Pipe ..... For 1/2 Bituminous Coated And 25% Paved, Add	100.57 22.24	21.47		
33 42 11 00-0830	LF 42" 16 Gauge, 2-2/3" x 1/2" Corrugation, Aluminized Type 2 Corrugated Steel Pipe ..... For 1/2 Bituminous Coated And 25% Paved, Add	114.77 26.30	25.37		
33 42 11 00-0831	LF 48" 16 Gauge, 2-2/3" x 1/2" Corrugation, Aluminized Type 2 Corrugated Steel Pipe ..... For 1/2 Bituminous Coated And 25% Paved, Add	128.99 29.47	29.27		
33 42 11 00-0832	14 Gauge, 2-2/3" x 1/2" Corrugation, Aluminized Type 2 Corrugated Steel Piping (33 42 11 00-0821)				
33 42 11 00-0833	LF 12" 14 Gauge, 2-2/3" x 1/2" Corrugation, Aluminized Type 2 Corrugated Steel Pipe ..... For 1/2 Bituminous Coated And 25% Paved, Add	39.79 6.28	9.56		
33 42 11 00-0834	LF 15" 14 Gauge, 2-2/3" x 1/2" Corrugation, Aluminized Type 2 Corrugated Steel Pipe ..... For 1/2 Bituminous Coated And 25% Paved, Add	45.57 7.88	10.01		
33 42 11 00-0835	LF 18" 14 Gauge, 2-2/3" x 1/2" Corrugation, Aluminized Type 2 Corrugated Steel Pipe ..... For 1/2 Bituminous Coated And 25% Paved, Add	51.54 9.52	10.92		
33 42 11 00-0836	LF 21" 14 Gauge, 2-2/3" x 1/2" Corrugation, Aluminized Type 2 Corrugated Steel Pipe ..... For 1/2 Bituminous Coated And 25% Paved, Add	58.94 11.32	11.83		
33 42 11 00-0837	LF 24" 14 Gauge, 2-2/3" x 1/2" Corrugation, Aluminized Type 2 Corrugated Steel Pipe ..... For 1/2 Bituminous Coated And 25% Paved, Add	65.66 12.82	12.74		
33 42 11 00-0838	LF 30" 14 Gauge, 2-2/3" x 1/2" Corrugation, Aluminized Type 2 Corrugated Steel Pipe ..... For 1/2 Bituminous Coated And 25% Paved, Add	85.88 16.47	16.39		
33 42 11 00-0839	LF 36" 14 Gauge, 2-2/3" x 1/2" Corrugation, Aluminized Type 2 Corrugated Steel Pipe ..... For 1/2 Bituminous Coated And 25% Paved, Add	111.04 20.64	21.47		
33 42 11 00-0840	LF 42" 14 Gauge, 2-2/3" x 1/2" Corrugation, Aluminized Type 2 Corrugated Steel Pipe ..... For 1/2 Bituminous Coated And 25% Paved, Add	126.83 24.31	25.37		
33 42 11 00-0841	LF 48" 14 Gauge, 2-2/3" x 1/2" Corrugation, Aluminized Type 2 Corrugated Steel Pipe ..... For 1/2 Bituminous Coated And 25% Paved, Add	142.72 27.30	29.27		
33 42 11 00-0842	LF 54" 14 Gauge, 2-2/3" x 1/2" Corrugation, Aluminized Type 2 Corrugated Steel Pipe ..... For 1/2 Bituminous Coated And 25% Paved, Add	170.86 33.57	33.18		
33 42 11 00-0843	12 Gauge, 2-2/3" x 1/2" Corrugation, Aluminized Type 2 Corrugated Steel Piping (33 42 11 00-0821)				
33 42 11 00-0844	LF 18" 12 Gauge, 2-2/3" x 1/2" Corrugation, Aluminized Type 2 Corrugated Steel Pipe ..... For 1/2 Bituminous Coated And 25% Paved, Add	62.58 8.87	10.92		
33 42 11 00-0845	LF 21" 12 Gauge, 2-2/3" x 1/2" Corrugation, Aluminized Type 2 Corrugated Steel Pipe ..... For 1/2 Bituminous Coated And 25% Paved, Add	71.83 10.50	11.83		
33 42 11 00-0846	LF 24" 12 Gauge, 2-2/3" x 1/2" Corrugation, Aluminized Type 2 Corrugated Steel Pipe ..... For 1/2 Bituminous Coated And 25% Paved, Add	80.30 11.90	12.74		
33 42 11 00-0847	LF 30" 12 Gauge, 2-2/3" x 1/2" Corrugation, Aluminized Type 2 Corrugated Steel Pipe ..... For 1/2 Bituminous Coated And 25% Paved, Add	104.16 15.17	16.39		
33 42 11 00-0848	LF 36" 12 Gauge, 2-2/3" x 1/2" Corrugation, Aluminized Type 2 Corrugated Steel Pipe ..... For 1/2 Bituminous Coated And 25% Paved, Add	133.09 18.83	21.47		
33 42 11 00-0849	LF 42" 12 Gauge, 2-2/3" x 1/2" Corrugation, Aluminized Type 2 Corrugated Steel Pipe ..... For 1/2 Bituminous Coated And 25% Paved, Add	152.38 22.08	25.37		
33 42 11 00-0850	LF 48" 12 Gauge, 2-2/3" x 1/2" Corrugation, Aluminized Type 2 Corrugated Steel Pipe ..... For 1/2 Bituminous Coated And 25% Paved, Add	171.87 24.90	29.27		
33 42 11 00-0851	LF 54" 12 Gauge, 2-2/3" x 1/2" Corrugation, Aluminized Type 2 Corrugated Steel Pipe ..... For 1/2 Bituminous Coated And 25% Paved, Add	204.15 30.07	33.18		
33 42 11 00-0852	LF 60" 12 Gauge, 2-2/3" x 1/2" Corrugation, Aluminized Type 2 Corrugated Steel Pipe ..... For 1/2 Bituminous Coated And 25% Paved, Add	222.97 32.88	35.13		
33 42 11 00-0853	LF 66" 12 Gauge, 2-2/3" x 1/2" Corrugation, Aluminized Type 2 Corrugated Steel Pipe ..... For 1/2 Bituminous Coated And 25% Paved, Add	272.14 40.44	42.93		
33 42 11 00-0854	10 Gauge, 2-2/3" x 1/2" Corrugation, Aluminized Type 2 Corrugated Steel Piping (33 42 11 00-0821)				
33 42 11 00-0855	LF 36" 10 Gauge, 2-2/3" x 1/2" Corrugation, Aluminized Type 2 Corrugated Steel Pipe ..... For 1/2 Bituminous Coated And 25% Paved, Add	152.91 20.62	21.47		
33 42 11 00-0856	LF 42" 10 Gauge, 2-2/3" x 1/2" Corrugation, Aluminized Type 2 Corrugated Steel Pipe ..... For 1/2 Bituminous Coated And 25% Paved, Add	175.57 24.17	25.37		
33 42 11 00-0857	LF 48" 10 Gauge, 2-2/3" x 1/2" Corrugation, Aluminized Type 2 Corrugated Steel Pipe ..... For 1/2 Bituminous Coated And 25% Paved, Add	198.20 27.29	29.27		
33 42 11 00-0858	LF 54" 10 Gauge, 2-2/3" x 1/2" Corrugation, Aluminized Type 2 Corrugated Steel Pipe ..... For 1/2 Bituminous Coated And 25% Paved, Add	233.67 32.52	33.18		

**33 Utilities****33 40 Stormwater Utilities****33 42 Stormwater Conveyance**

MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
33 42 11 00-0859 LF 60" 10 Gauge, 2-2/3" x 1/2" Corrugation, Aluminized Type 2 Corrugated Steel Pipe ..... <i>For 1/2 Bituminous Coated And 25% Paved, Add</i>	255.83 35.67	35.13
33 42 11 00-0860 LF 66" 10 Gauge, 2-2/3" x 1/2" Corrugation, Aluminized Type 2 Corrugated Steel Pipe ..... <i>For 1/2 Bituminous Coated And 25% Paved, Add</i>	308.22 43.04	42.93
33 42 11 00-0861 LF 72" 10 Gauge, 2-2/3" x 1/2" Corrugation, Aluminized Type 2 Corrugated Steel Pipe ..... <i>For 1/2 Bituminous Coated And 25% Paved, Add</i>	364.49 46.14	62.44
<b>33 42 11 00-0862 3" x 1" Corrugation, Aluminized Type 2 Corrugated Steel Piping</b> <small>(33 42 11 00-0862)</small>		
<b>33 42 11 00-0863 16 Gauge, 3" x 1" Corrugation, Aluminized Type 2 Corrugated Steel Piping</b>		
33 42 11 00-0864 LF 36" 16 Gauge, 3" x 1" Corrugation, Aluminized Type 2 Corrugated Steel Pipe ..... <i>For 1/2 Bituminous Coated And 25% Paved, Add</i>	116.15 24.72	21.47
33 42 11 00-0865 LF 42" 16 Gauge, 3" x 1" Corrugation, Aluminized Type 2 Corrugated Steel Pipe ..... <i>For 1/2 Bituminous Coated And 25% Paved, Add</i>	132.62 29.03	25.37
33 42 11 00-0866 LF 48" 16 Gauge, 3" x 1" Corrugation, Aluminized Type 2 Corrugated Steel Pipe ..... <i>For 1/2 Bituminous Coated And 25% Paved, Add</i>	149.05 32.55	29.27
33 42 11 00-0867 LF 54" 16 Gauge, 3" x 1" Corrugation, Aluminized Type 2 Corrugated Steel Pipe ..... <i>For 1/2 Bituminous Coated And 25% Paved, Add</i>	177.89 39.76	33.18
33 42 11 00-0868 LF 60" 16 Gauge, 3" x 1" Corrugation, Aluminized Type 2 Corrugated Steel Pipe ..... <i>For 1/2 Bituminous Coated And 25% Paved, Add</i>	193.82 43.32	35.13
33 42 11 00-0869 LF 66" 16 Gauge, 3" x 1" Corrugation, Aluminized Type 2 Corrugated Steel Pipe ..... <i>For 1/2 Bituminous Coated And 25% Paved, Add</i>	243.05 55.65	42.93
33 42 11 00-0870 LF 72" 16 Gauge, 3" x 1" Corrugation, Aluminized Type 2 Corrugated Steel Pipe ..... <i>For 1/2 Bituminous Coated And 25% Paved, Add</i>	293.63 59.31	62.44
33 42 11 00-0871 LF 78" 16 Gauge, 3" x 1" Corrugation, Aluminized Type 2 Corrugated Steel Pipe ..... <i>For 1/2 Bituminous Coated And 25% Paved, Add</i>	316.56 62.99	68.29
33 42 11 00-0872 LF 84" 16 Gauge, 3" x 1" Corrugation, Aluminized Type 2 Corrugated Steel Pipe ..... <i>For 1/2 Bituminous Coated And 25% Paved, Add</i>	336.84 66.68	73.18
33 42 11 00-0873 LF 90" 16 Gauge, 3" x 1" Corrugation, Aluminized Type 2 Corrugated Steel Pipe ..... <i>For 1/2 Bituminous Coated And 25% Paved, Add</i>	357.15 70.36	78.05
33 42 11 00-0874 LF 96" 16 Gauge, 3" x 1" Corrugation, Aluminized Type 2 Corrugated Steel Pipe ..... <i>For 1/2 Bituminous Coated And 25% Paved, Add</i>	378.12 74.04	82.93
33 42 11 00-0875 LF 102" 16 Gauge, 3" x 1" Corrugation, Aluminized Type 2 Corrugated Steel Pipe ..... <i>For 1/2 Bituminous Coated And 25% Paved, Add</i>	401.86 77.75	87.81
<b>33 42 11 00-0876 14 Gauge, 3" x 1" Corrugation, Aluminized Type 2 Corrugated Steel Piping</b> <small>(33 42 11 00-0862)</small>		
33 42 11 00-0877 LF 54" 14 Gauge, 3" x 1" Corrugation, Aluminized Type 2 Corrugated Steel Pipe ..... <i>For 1/2 Bituminous Coated And 25% Paved, Add</i>	195.80 34.46	33.18
33 42 11 00-0878 LF 60" 14 Gauge, 3" x 1" Corrugation, Aluminized Type 2 Corrugated Steel Pipe ..... <i>For 1/2 Bituminous Coated And 25% Paved, Add</i>	213.61 37.62	35.13
33 42 11 00-0879 LF 66" 14 Gauge, 3" x 1" Corrugation, Aluminized Type 2 Corrugated Steel Pipe ..... <i>For 1/2 Bituminous Coated And 25% Paved, Add</i>	264.83 47.36	42.93
33 42 11 00-0880 LF 72" 14 Gauge, 3" x 1" Corrugation, Aluminized Type 2 Corrugated Steel Pipe ..... <i>For 1/2 Bituminous Coated And 25% Paved, Add</i>	317.36 50.62	62.44
33 42 11 00-0881 LF 78" 14 Gauge, 3" x 1" Corrugation, Aluminized Type 2 Corrugated Steel Pipe ..... <i>For 1/2 Bituminous Coated And 25% Paved, Add</i>	342.21 53.87	68.29
33 42 11 00-0882 LF 84" 14 Gauge, 3" x 1" Corrugation, Aluminized Type 2 Corrugated Steel Pipe ..... <i>For 1/2 Bituminous Coated And 25% Paved, Add</i>	364.51 57.16	73.18
33 42 11 00-0883 LF 90" 14 Gauge, 3" x 1" Corrugation, Aluminized Type 2 Corrugated Steel Pipe ..... <i>For 1/2 Bituminous Coated And 25% Paved, Add</i>	386.70 60.41	78.05
33 42 11 00-0884 LF 96" 14 Gauge, 3" x 1" Corrugation, Aluminized Type 2 Corrugated Steel Pipe ..... <i>For 1/2 Bituminous Coated And 25% Paved, Add</i>	409.59 63.67	82.93
33 42 11 00-0885 LF 102" 14 Gauge, 3" x 1" Corrugation, Aluminized Type 2 Corrugated Steel Pipe ..... <i>For 1/2 Bituminous Coated And 25% Paved, Add</i>	435.26 66.95	87.81
33 42 11 00-0886 LF 108" 14 Gauge, 3" x 1" Corrugation, Aluminized Type 2 Corrugated Steel Pipe ..... <i>For 1/2 Bituminous Coated And 25% Paved, Add</i>	463.16 70.22	97.56
33 42 11 00-0887 LF 114" 14 Gauge, 3" x 1" Corrugation, Aluminized Type 2 Corrugated Steel Pipe ..... <i>For 1/2 Bituminous Coated And 25% Paved, Add</i>	490.45 73.44	107.32
<b>33 42 11 00-0888 12 Gauge, 3" x 1" Corrugation, Aluminized Type 2 Corrugated Steel Piping</b> <small>(33 42 11 00-0862)</small>		
33 42 11 00-0889 LF 60" 12 Gauge, 3" x 1" Corrugation, Aluminized Type 2 Corrugated Steel Pipe ..... <i>For 1/2 Bituminous Coated And 25% Paved, Add</i>	257.61 50.46	35.13
33 42 11 00-0890 LF 66" 12 Gauge, 3" x 1" Corrugation, Aluminized Type 2 Corrugated Steel Pipe ..... <i>For 1/2 Bituminous Coated And 25% Paved, Add</i>	313.54 61.73	42.93
33 42 11 00-0891 LF 72" 12 Gauge, 3" x 1" Corrugation, Aluminized Type 2 Corrugated Steel Pipe ..... <i>For 1/2 Bituminous Coated And 25% Paved, Add</i>	370.31 66.21	62.44
33 42 11 00-0892 LF 78" 12 Gauge, 3" x 1" Corrugation, Aluminized Type 2 Corrugated Steel Pipe ..... <i>For 1/2 Bituminous Coated And 25% Paved, Add</i>	399.47 70.71	68.29
33 42 11 00-0893 LF 84" 12 Gauge, 3" x 1" Corrugation, Aluminized Type 2 Corrugated Steel Pipe ..... <i>For 1/2 Bituminous Coated And 25% Paved, Add</i>	426.01 75.23	73.18
33 42 11 00-0894 LF 90" 12 Gauge, 3" x 1" Corrugation, Aluminized Type 2 Corrugated Steel Pipe ..... <i>For 1/2 Bituminous Coated And 25% Paved, Add</i>	452.51 79.73	78.05
33 42 11 00-0895 LF 96" 12 Gauge, 3" x 1" Corrugation, Aluminized Type 2 Corrugated Steel Pipe ..... <i>For 1/2 Bituminous Coated And 25% Paved, Add</i>	479.68 84.22	82.93
33 42 11 00-0896 LF 102" 12 Gauge, 3" x 1" Corrugation, Aluminized Type 2 Corrugated Steel Pipe ..... <i>For 1/2 Bituminous Coated And 25% Paved, Add</i>	509.62 88.74	87.81
33 42 11 00-0897 LF 108" 12 Gauge, 3" x 1" Corrugation, Aluminized Type 2 Corrugated Steel Pipe ..... <i>For 1/2 Bituminous Coated And 25% Paved, Add</i>	541.77 93.24	97.56





		<b>Utilities</b>	<b>33</b>	<b>CS</b>
		<b>Stormwater Utilities</b>	<b>33 40</b>	
		<b>Stormwater Conveyance</b>	<b>33 42</b>	

MINOR CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
33 42 11 00-0898	LF	114" 12 Gauge, 3" x 1" Corrugation, Aluminized Type 2 Corrugated Steel Pipe .....	573.36	107.32
		For 1/2 Bituminous Coated And 25% Paved, Add .....	97.71	
33 42 11 00-0899	LF	120" 12 Gauge, 3" x 1" Corrugation, Aluminized Type 2 Corrugated Steel Pipe .....	603.95	117.08
		For 1/2 Bituminous Coated And 25% Paved, Add .....	102.23	
<b>33 42 11 00-0900 10 Gauge, 3" x 1" Corrugation, Aluminized Type 2 Corrugated Steel Piping</b>				
		(33 42 11 00-0892)		
33 42 11 00-0901	LF	72" 10 Gauge, 3" x 1" Corrugation, Aluminized Type 2 Corrugated Steel Pipe .....	419.70	62.44
		For 1/2 Bituminous Coated And 25% Paved, Add .....	81.27	
33 42 11 00-0902	LF	78" 10 Gauge, 3" x 1" Corrugation, Aluminized Type 2 Corrugated Steel Pipe .....	452.83	68.29
		For 1/2 Bituminous Coated And 25% Paved, Add .....	86.96	
33 42 11 00-0903	LF	84" 10 Gauge, 3" x 1" Corrugation, Aluminized Type 2 Corrugated Steel Pipe .....	483.44	73.18
		For 1/2 Bituminous Coated And 25% Paved, Add .....	92.70	
33 42 11 00-0904	LF	90" 10 Gauge, 3" x 1" Corrugation, Aluminized Type 2 Corrugated Steel Pipe .....	513.95	78.05
		For 1/2 Bituminous Coated And 25% Paved, Add .....	98.41	
33 42 11 00-0905	LF	96" 10 Gauge, 3" x 1" Corrugation, Aluminized Type 2 Corrugated Steel Pipe .....	545.22	82.93
		For 1/2 Bituminous Coated And 25% Paved, Add .....	104.13	
33 42 11 00-0906	LF	102" 10 Gauge, 3" x 1" Corrugation, Aluminized Type 2 Corrugated Steel Pipe .....	579.23	87.81
		For 1/2 Bituminous Coated And 25% Paved, Add .....	109.87	
33 42 11 00-0907	LF	108" 10 Gauge, 3" x 1" Corrugation, Aluminized Type 2 Corrugated Steel Pipe .....	615.39	97.56
		For 1/2 Bituminous Coated And 25% Paved, Add .....	115.57	
33 42 11 00-0908	LF	114" 10 Gauge, 3" x 1" Corrugation, Aluminized Type 2 Corrugated Steel Pipe .....	651.02	107.32
		For 1/2 Bituminous Coated And 25% Paved, Add .....	121.24	
33 42 11 00-0909	LF	120" 10 Gauge, 3" x 1" Corrugation, Aluminized Type 2 Corrugated Steel Pipe .....	685.69	117.08
		For 1/2 Bituminous Coated And 25% Paved, Add .....	126.98	
33 42 11 00-0910	LF	126" 10 Gauge, 3" x 1" Corrugation, Aluminized Type 2 Corrugated Steel Pipe .....	722.10	126.84
		For 1/2 Bituminous Coated And 25% Paved, Add .....	132.68	
33 42 11 00-0911	LF	132" 10 Gauge, 3" x 1" Corrugation, Aluminized Type 2 Corrugated Steel Pipe .....	761.03	136.60
		For 1/2 Bituminous Coated And 25% Paved, Add .....	138.41	
33 42 11 00-0912	LF	138" 10 Gauge, 3" x 1" Corrugation, Aluminized Type 2 Corrugated Steel Pipe .....	802.93	146.35
		For 1/2 Bituminous Coated And 25% Paved, Add .....	144.15	
<b>33 42 11 00-0913 125 mm x 25 mm Corrugation, Aluminized Type 2 Corrugated Steel Piping</b>				
		(33 42 11 00-0820)		
<b>33 42 11 00-0914 16 Gauge, 125 mm x 25 mm Corrugation, Aluminized Type 2 Corrugated Steel Piping</b>				
		(33 42 11 00-0913)		
33 42 11 00-0915	LF	48" 16 Gauge, 125 mm x 25 mm Corrugation, Aluminized Type 2 Corrugated Steel Pipe .....	149.62	29.27
		For 1/2 Bituminous Coated And 25% Paved, Add .....	40.33	
33 42 11 00-0916	LF	54" 16 Gauge, 125 mm x 25 mm Corrugation, Aluminized Type 2 Corrugated Steel Pipe .....	178.94	33.18
		For 1/2 Bituminous Coated And 25% Paved, Add .....	49.42	
33 42 11 00-0917	LF	60" 16 Gauge, 125 mm x 25 mm Corrugation, Aluminized Type 2 Corrugated Steel Pipe .....	194.73	35.13
		For 1/2 Bituminous Coated And 25% Paved, Add .....	53.74	
33 42 11 00-0918	LF	66" 16 Gauge, 125 mm x 25 mm Corrugation, Aluminized Type 2 Corrugated Steel Pipe .....	241.03	42.93
		For 1/2 Bituminous Coated And 25% Paved, Add .....	67.65	
33 42 11 00-0919	LF	72" 16 Gauge, 125 mm x 25 mm Corrugation, Aluminized Type 2 Corrugated Steel Pipe .....	291.37	62.44
		For 1/2 Bituminous Coated And 25% Paved, Add .....	72.06	
33 42 11 00-0920	LF	78" 16 Gauge, 125 mm x 25 mm Corrugation, Aluminized Type 2 Corrugated Steel Pipe .....	314.04	68.29
		For 1/2 Bituminous Coated And 25% Paved, Add .....	76.48	
33 42 11 00-0921	LF	84" 16 Gauge, 125 mm x 25 mm Corrugation, Aluminized Type 2 Corrugated Steel Pipe .....	333.94	73.18
		For 1/2 Bituminous Coated And 25% Paved, Add .....	80.86	
33 42 11 00-0922	LF	90" 16 Gauge, 125 mm x 25 mm Corrugation, Aluminized Type 2 Corrugated Steel Pipe .....	353.81	78.05
		For 1/2 Bituminous Coated And 25% Paved, Add .....	85.21	
33 42 11 00-0923	LF	96" 16 Gauge, 125 mm x 25 mm Corrugation, Aluminized Type 2 Corrugated Steel Pipe .....	374.58	82.93
		For 1/2 Bituminous Coated And 25% Paved, Add .....	89.65	
33 42 11 00-0924	LF	102" 16 Gauge, 125 mm x 25 mm Corrugation, Aluminized Type 2 Corrugated Steel Pipe .....	398.26	87.81
		For 1/2 Bituminous Coated And 25% Paved, Add .....	94.19	
<b>33 42 11 00-0925 14 Gauge, 125 mm x 25 mm Corrugation, Aluminized Type 2 Corrugated Steel Piping</b>				
		(33 42 11 00-0913)		
33 42 11 00-0926	LF	54" 14 Gauge, 125 mm x 25 mm Corrugation, Aluminized Type 2 Corrugated Steel Pipe .....	201.32	33.18
		For 1/2 Bituminous Coated And 25% Paved, Add .....	46.59	
33 42 11 00-0927	LF	60" 14 Gauge, 125 mm x 25 mm Corrugation, Aluminized Type 2 Corrugated Steel Pipe .....	219.67	35.13
		For 1/2 Bituminous Coated And 25% Paved, Add .....	50.87	
33 42 11 00-0928	LF	66" 14 Gauge, 125 mm x 25 mm Corrugation, Aluminized Type 2 Corrugated Steel Pipe .....	268.20	42.93
		For 1/2 Bituminous Coated And 25% Paved, Add .....	62.61	
33 42 11 00-0929	LF	72" 14 Gauge, 125 mm x 25 mm Corrugation, Aluminized Type 2 Corrugated Steel Pipe .....	320.76	62.44
		For 1/2 Bituminous Coated And 25% Paved, Add .....	66.84	
33 42 11 00-0930	LF	78" 14 Gauge, 125 mm x 25 mm Corrugation, Aluminized Type 2 Corrugated Steel Pipe .....	346.05	68.29
		For 1/2 Bituminous Coated And 25% Paved, Add .....	71.21	
33 42 11 00-0931	LF	84" 14 Gauge, 125 mm x 25 mm Corrugation, Aluminized Type 2 Corrugated Steel Pipe .....	368.45	73.18
		For 1/2 Bituminous Coated And 25% Paved, Add .....	75.52	
33 42 11 00-0932	LF	90" 14 Gauge, 125 mm x 25 mm Corrugation, Aluminized Type 2 Corrugated Steel Pipe .....	389.60	78.05
		For 1/2 Bituminous Coated And 25% Paved, Add .....	79.39	
33 42 11 00-0933	LF	96" 14 Gauge, 125 mm x 25 mm Corrugation, Aluminized Type 2 Corrugated Steel Pipe .....	413.94	82.93
		For 1/2 Bituminous Coated And 25% Paved, Add .....	84.10	
33 42 11 00-0934	LF	102" 14 Gauge, 125 mm x 25 mm Corrugation, Aluminized Type 2 Corrugated Steel Pipe .....	439.73	87.81
		For 1/2 Bituminous Coated And 25% Paved, Add .....	88.40	
33 42 11 00-0935	LF	108" 14 Gauge, 125 mm x 25 mm Corrugation, Aluminized Type 2 Corrugated Steel Pipe .....	467.68	97.56
		For 1/2 Bituminous Coated And 25% Paved, Add .....	92.66	

**33 Utilities****33 40 Stormwater Utilities****33 42 Stormwater Conveyance**

MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
33 42 11 00-0936 LF 114" 14 Gauge, 125 mm x 25 mm Corrugation, Aluminized Type 2 Corrugated Steel Pipe ..... For 1/2 Bituminous Coated And 25% Paved, Add	495.50 97.02	107.32
<b>33 42 11 00-0937 12 Gauge, 125 mm x 25 mm Corrugation, Aluminized Type 2 Corrugated Steel Piping (33 42 11 00-0913)</b>		
33 42 11 00-0938 LF 60" 12 Gauge, 125 mm x 25 mm Corrugation, Aluminized Type 2 Corrugated Steel Pipe ..... For 1/2 Bituminous Coated And 25% Paved, Add	266.30 56.13	35.13
33 42 11 00-0939 LF 66" 12 Gauge, 125 mm x 25 mm Corrugation, Aluminized Type 2 Corrugated Steel Pipe ..... For 1/2 Bituminous Coated And 25% Paved, Add	319.60 67.36	42.93
33 42 11 00-0940 LF 72" 12 Gauge, 125 mm x 25 mm Corrugation, Aluminized Type 2 Corrugated Steel Pipe ..... For 1/2 Bituminous Coated And 25% Paved, Add	377.05 72.32	62.44
33 42 11 00-0941 LF 78" 12 Gauge, 125 mm x 25 mm Corrugation, Aluminized Type 2 Corrugated Steel Pipe ..... For 1/2 Bituminous Coated And 25% Paved, Add	406.64 77.23	68.29
33 42 11 00-0942 LF 84" 12 Gauge, 125 mm x 25 mm Corrugation, Aluminized Type 2 Corrugated Steel Pipe ..... For 1/2 Bituminous Coated And 25% Paved, Add	433.45 82.11	73.18
33 42 11 00-0943 LF 90" 12 Gauge, 125 mm x 25 mm Corrugation, Aluminized Type 2 Corrugated Steel Pipe ..... For 1/2 Bituminous Coated And 25% Paved, Add	460.52 87.06	78.05
33 42 11 00-0944 LF 96" 12 Gauge, 125 mm x 25 mm Corrugation, Aluminized Type 2 Corrugated Steel Pipe ..... For 1/2 Bituminous Coated And 25% Paved, Add	488.13 91.96	82.93
33 42 11 00-0945 LF 102" 12 Gauge, 125 mm x 25 mm Corrugation, Aluminized Type 2 Corrugated Steel Pipe ..... For 1/2 Bituminous Coated And 25% Paved, Add	518.40 96.86	87.81
33 42 11 00-0946 LF 108" 12 Gauge, 125 mm x 25 mm Corrugation, Aluminized Type 2 Corrugated Steel Pipe ..... For 1/2 Bituminous Coated And 25% Paved, Add	551.09 101.80	97.56
33 42 11 00-0947 LF 114" 12 Gauge, 125 mm x 25 mm Corrugation, Aluminized Type 2 Corrugated Steel Pipe ..... For 1/2 Bituminous Coated And 25% Paved, Add	583.26 106.71	107.32
33 42 11 00-0948 LF 120" 12 Gauge, 125 mm x 25 mm Corrugation, Aluminized Type 2 Corrugated Steel Pipe ..... For 1/2 Bituminous Coated And 25% Paved, Add	614.22 111.62	117.08
<b>33 42 11 00-0949 10 Gauge, 125 mm x 25 mm Corrugation, Aluminized Type 2 Corrugated Steel Piping (33 42 11 00-0913)</b>		
33 42 11 00-0950 LF 72" 10 Gauge, 125 mm x 25 mm Corrugation, Aluminized Type 2 Corrugated Steel Pipe ..... For 1/2 Bituminous Coated And 25% Paved, Add	430.94 87.74	62.44
33 42 11 00-0951 LF 78" 10 Gauge, 125 mm x 25 mm Corrugation, Aluminized Type 2 Corrugated Steel Pipe ..... For 1/2 Bituminous Coated And 25% Paved, Add	465.55 94.08	68.29
33 42 11 00-0952 LF 84" 10 Gauge, 125 mm x 25 mm Corrugation, Aluminized Type 2 Corrugated Steel Pipe ..... For 1/2 Bituminous Coated And 25% Paved, Add	497.04 100.30	73.18
33 42 11 00-0953 LF 90" 10 Gauge, 125 mm x 25 mm Corrugation, Aluminized Type 2 Corrugated Steel Pipe ..... For 1/2 Bituminous Coated And 25% Paved, Add	528.36 106.46	78.05
33 42 11 00-0954 LF 96" 10 Gauge, 125 mm x 25 mm Corrugation, Aluminized Type 2 Corrugated Steel Pipe ..... For 1/2 Bituminous Coated And 25% Paved, Add	560.54 112.67	82.93
33 42 11 00-0955 LF 102" 10 Gauge, 125 mm x 25 mm Corrugation, Aluminized Type 2 Corrugated Steel Pipe ..... For 1/2 Bituminous Coated And 25% Paved, Add	595.29 118.85	87.81
33 42 11 00-0956 LF 108" 10 Gauge, 125 mm x 25 mm Corrugation, Aluminized Type 2 Corrugated Steel Pipe ..... For 1/2 Bituminous Coated And 25% Paved, Add	632.42 125.06	97.56
33 42 11 00-0957 LF 114" 10 Gauge, 125 mm x 25 mm Corrugation, Aluminized Type 2 Corrugated Steel Pipe ..... For 1/2 Bituminous Coated And 25% Paved, Add	669.10 131.26	107.32
33 42 11 00-0958 LF 120" 10 Gauge, 125 mm x 25 mm Corrugation, Aluminized Type 2 Corrugated Steel Pipe ..... For 1/2 Bituminous Coated And 25% Paved, Add	704.47 137.43	117.08
33 42 11 00-0959 LF 126" 10 Gauge, 125 mm x 25 mm Corrugation, Aluminized Type 2 Corrugated Steel Pipe ..... For 1/2 Bituminous Coated And 25% Paved, Add	748.69 145.59	126.84
33 42 11 00-0960 LF 132" 10 Gauge, 125 mm x 25 mm Corrugation, Aluminized Type 2 Corrugated Steel Pipe ..... For 1/2 Bituminous Coated And 25% Paved, Add	790.25 152.30	136.60
33 42 11 00-0961 LF 138" 10 Gauge, 125 mm x 25 mm Corrugation, Aluminized Type 2 Corrugated Steel Pipe ..... For 1/2 Bituminous Coated And 25% Paved, Add	835.65 159.27	146.35
<b>33 42 11 00-0962 Helical Ribbed, Aluminized Type 2 Corrugated Steel Piping (33 42 11 00-0820)</b>		
<b>33 42 11 00-0963 16 Gauge, Helical Ribbed, Aluminized Type 2 Corrugated Steel Piping (33 42 11 00-0962)</b>		
33 42 11 00-0964 LF 18" 16 Gauge, Helical Ribbed, Aluminized Type 2 Corrugated Steel Pipe .....	52.31	10.92
33 42 11 00-0965 LF 21" 16 Gauge, Helical Ribbed, Aluminized Type 2 Corrugated Steel Pipe .....	59.82	11.83
33 42 11 00-0966 LF 24" 16 Gauge, Helical Ribbed, Aluminized Type 2 Corrugated Steel Pipe .....	66.84	12.74
33 42 11 00-0967 LF 30" 16 Gauge, Helical Ribbed, Aluminized Type 2 Corrugated Steel Pipe .....	87.29	16.39
33 42 11 00-0968 LF 36" 16 Gauge, Helical Ribbed, Aluminized Type 2 Corrugated Steel Pipe .....	112.38	21.47
33 42 11 00-0969 LF 42" 16 Gauge, Helical Ribbed, Aluminized Type 2 Corrugated Steel Pipe .....	128.41	25.37
33 42 11 00-0970 LF 48" 16 Gauge, Helical Ribbed, Aluminized Type 2 Corrugated Steel Pipe .....	144.84	29.27
33 42 11 00-0971 LF 54" 16 Gauge, Helical Ribbed, Aluminized Type 2 Corrugated Steel Pipe .....	171.80	33.18
33 42 11 00-0972 LF 60" 16 Gauge, Helical Ribbed, Aluminized Type 2 Corrugated Steel Pipe .....	187.69	35.13
<b>33 42 11 00-0973 14 Gauge, Helical Ribbed, Aluminized Type 2 Corrugated Steel Piping (33 42 11 00-0962)</b>		
33 42 11 00-0974 LF 18" 14 Gauge, Helical Ribbed, Aluminized Type 2 Corrugated Steel Pipe .....	57.50	10.92
33 42 11 00-0975 LF 21" 14 Gauge, Helical Ribbed, Aluminized Type 2 Corrugated Steel Pipe .....	65.88	11.83
33 42 11 00-0976 LF 24" 14 Gauge, Helical Ribbed, Aluminized Type 2 Corrugated Steel Pipe .....	73.70	12.74
33 42 11 00-0977 LF 30" 14 Gauge, Helical Ribbed, Aluminized Type 2 Corrugated Steel Pipe .....	95.88	16.39
33 42 11 00-0978 LF 36" 14 Gauge, Helical Ribbed, Aluminized Type 2 Corrugated Steel Pipe .....	122.72	21.47
33 42 11 00-0979 LF 42" 14 Gauge, Helical Ribbed, Aluminized Type 2 Corrugated Steel Pipe .....	140.49	25.37
33 42 11 00-0980 LF 48" 14 Gauge, Helical Ribbed, Aluminized Type 2 Corrugated Steel Pipe .....	158.64	29.27
33 42 11 00-0981 LF 54" 14 Gauge, Helical Ribbed, Aluminized Type 2 Corrugated Steel Pipe .....	187.32	33.18



		<b>Utilities</b>	<b>33</b>	<b>33</b>
		<b>Stormwater Utilities</b>	<b>33 40</b>	
		<b>Stormwater Conveyance</b>	<b>33 42</b>	

MINOR CSI UOM DESCRIPTION				TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
33 42 11 00-0982	LF	60" 14 Gauge, Helical Ribbed, Aluminized Type 2 Corrugated Steel Pipe .....	205.00		35.13
33 42 11 00-0983	LF	66" 14 Gauge, Helical Ribbed, Aluminized Type 2 Corrugated Steel Pipe .....	249.24		42.93
33 42 11 00-0984	LF	72" 14 Gauge, Helical Ribbed, Aluminized Type 2 Corrugated Steel Pipe .....	301.10		62.44
33 42 11 00-0985	LF	78" 14 Gauge, Helical Ribbed, Aluminized Type 2 Corrugated Steel Pipe .....	325.45		68.29
<b>33 42 11 00-0986 12 Gauge, Helical Ribbed, Aluminized Type 2 Corrugated Steel Piping</b> <small>(33 42 11 00-0982)</small>					
33 42 11 00-0987	LF	30" 12 Gauge, Helical Ribbed, Aluminized Type 2 Corrugated Steel Pipe .....	113.28		16.39
33 42 11 00-0988	LF	36" 12 Gauge, Helical Ribbed, Aluminized Type 2 Corrugated Steel Pipe .....	143.56		21.47
33 42 11 00-0989	LF	42" 12 Gauge, Helical Ribbed, Aluminized Type 2 Corrugated Steel Pipe .....	164.90		25.37
33 42 11 00-0990	LF	48" 12 Gauge, Helical Ribbed, Aluminized Type 2 Corrugated Steel Pipe .....	186.48		29.27
33 42 11 00-0991	LF	54" 12 Gauge, Helical Ribbed, Aluminized Type 2 Corrugated Steel Pipe .....	218.62		33.18
33 42 11 00-0992	LF	60" 12 Gauge, Helical Ribbed, Aluminized Type 2 Corrugated Steel Pipe .....	239.84		35.13
33 42 11 00-0993	LF	66" 12 Gauge, Helical Ribbed, Aluminized Type 2 Corrugated Steel Pipe .....	287.49		42.93
33 42 11 00-0994	LF	72" 12 Gauge, Helical Ribbed, Aluminized Type 2 Corrugated Steel Pipe .....	342.78		62.44
33 42 11 00-0995	LF	78" 12 Gauge, Helical Ribbed, Aluminized Type 2 Corrugated Steel Pipe .....	370.59		68.29
33 42 11 00-0996	LF	84" 12 Gauge, Helical Ribbed, Aluminized Type 2 Corrugated Steel Pipe .....	395.61		73.18
33 42 11 00-0997	LF	90" 12 Gauge, Helical Ribbed, Aluminized Type 2 Corrugated Steel Pipe .....	420.70		78.05
33 42 11 00-0998	LF	96" 12 Gauge, Helical Ribbed, Aluminized Type 2 Corrugated Steel Pipe .....	446.39		82.93
33 42 11 00-0999	LF	102" 12 Gauge, Helical Ribbed, Aluminized Type 2 Corrugated Steel Pipe .....	473.13		87.81
<b>33 42 11 00-1000 Aluminized Type 2 Corrugated Steel Pipe-Arch</b> <small>(33 42 11 00-0311)</small>					
<b>33 42 11 00-1001 2-2/3" x 1/2" Corrugation, Aluminized Type 2 Corrugated Steel Pipe-Arch</b> <small>(33 42 11 00-1000)</small>					
<b>33 42 11 00-1002 16 Gauge, 2-2/3" x 1/2" Corrugation, Aluminized Type 2 Corrugated Steel Pipe-Arch</b> <small>(33 42 11 00-1001)</small>					
33 42 11 00-1003	LF	17" x 13" 16 Gauge, 2-2/3" x 1/2" Corrugation, Aluminized Type 2 Corrugated Steel Pipe-Arch.....	42.37		10.01
For 1/2 Bituminous Coated And 40% Paved, Add			10.75		
33 42 11 00-1004	LF	21" x 15" 16 Gauge, 2-2/3" x 1/2" Corrugation, Aluminized Type 2 Corrugated Steel Pipe-Arch.....	47.37		10.92
For 1/2 Bituminous Coated And 40% Paved, Add			12.85		
33 42 11 00-1005	LF	24" x 18" 16 Gauge, 2-2/3" x 1/2" Corrugation, Aluminized Type 2 Corrugated Steel Pipe-Arch.....	54.33		11.83
For 1/2 Bituminous Coated And 40% Paved, Add			15.45		
33 42 11 00-1006	LF	28" x 20" 16 Gauge, 2-2/3" x 1/2" Corrugation, Aluminized Type 2 Corrugated Steel Pipe-Arch.....	61.08		12.74
For 1/2 Bituminous Coated And 40% Paved, Add			17.81		
33 42 11 00-1007	LF	35" x 24" 16 Gauge, 2-2/3" x 1/2" Corrugation, Aluminized Type 2 Corrugated Steel Pipe-Arch.....	79.48		16.39
For 1/2 Bituminous Coated And 40% Paved, Add			22.62		
33 42 11 00-1008	LF	42" x 29" 16 Gauge, 2-2/3" x 1/2" Corrugation, Aluminized Type 2 Corrugated Steel Pipe-Arch.....	104.71		21.47
For 1/2 Bituminous Coated And 40% Paved, Add			29.18		
<b>33 42 11 00-1009 14 Gauge, 2-2/3" x 1/2" Corrugation, Aluminized Type 2 Corrugated Steel Pipe-Arch</b> <small>(33 42 11 00-1001)</small>					
33 42 11 00-1010	LF	17" x 13" 14 Gauge, 2-2/3" x 1/2" Corrugation, Aluminized Type 2 Corrugated Steel Pipe-Arch.....	46.78		10.01
For 1/2 Bituminous Coated And 40% Paved, Add			11.14		
33 42 11 00-1011	LF	21" x 15" 14 Gauge, 2-2/3" x 1/2" Corrugation, Aluminized Type 2 Corrugated Steel Pipe-Arch.....	52.72		10.92
For 1/2 Bituminous Coated And 40% Paved, Add			13.35		
33 42 11 00-1012	LF	24" x 18" 14 Gauge, 2-2/3" x 1/2" Corrugation, Aluminized Type 2 Corrugated Steel Pipe-Arch.....	60.36		11.83
For 1/2 Bituminous Coated And 40% Paved, Add			15.88		
33 42 11 00-1013	LF	28" x 20" 14 Gauge, 2-2/3" x 1/2" Corrugation, Aluminized Type 2 Corrugated Steel Pipe-Arch.....	68.05		12.74
For 1/2 Bituminous Coated And 40% Paved, Add			18.31		
33 42 11 00-1014	LF	35" x 24" 14 Gauge, 2-2/3" x 1/2" Corrugation, Aluminized Type 2 Corrugated Steel Pipe-Arch.....	88.17		16.39
For 1/2 Bituminous Coated And 40% Paved, Add			23.19		
33 42 11 00-1015	LF	42" x 29" 14 Gauge, 2-2/3" x 1/2" Corrugation, Aluminized Type 2 Corrugated Steel Pipe-Arch.....	115.04		21.47
For 1/2 Bituminous Coated And 40% Paved, Add			29.54		
33 42 11 00-1016	LF	49" x 33" 14 Gauge, 2-2/3" x 1/2" Corrugation, Aluminized Type 2 Corrugated Steel Pipe-Arch.....	132.48		25.37
For 1/2 Bituminous Coated And 40% Paved, Add			35.19		
<b>33 42 11 00-1017 12 Gauge, 2-2/3" x 1/2" Corrugation, Aluminized Type 2 Corrugated Steel Pipe-Arch</b> <small>(33 42 11 00-1001)</small>					
33 42 11 00-1018	LF	21" x 15" 12 Gauge, 2-2/3" x 1/2" Corrugation, Aluminized Type 2 Corrugated Steel Pipe-Arch.....	63.62		10.92
For 1/2 Bituminous Coated And 40% Paved, Add			12.23		
33 42 11 00-1019	LF	24" x 18" 12 Gauge, 2-2/3" x 1/2" Corrugation, Aluminized Type 2 Corrugated Steel Pipe-Arch.....	73.28		11.83
For 1/2 Bituminous Coated And 40% Paved, Add			14.53		
33 42 11 00-1020	LF	28" x 20" 12 Gauge, 2-2/3" x 1/2" Corrugation, Aluminized Type 2 Corrugated Steel Pipe-Arch.....	82.69		12.74
For 1/2 Bituminous Coated And 40% Paved, Add			16.68		
33 42 11 00-1021	LF	35" x 24" 12 Gauge, 2-2/3" x 1/2" Corrugation, Aluminized Type 2 Corrugated Steel Pipe-Arch.....	106.45		16.39
For 1/2 Bituminous Coated And 40% Paved, Add			21.05		
33 42 11 00-1022	LF	42" x 29" 12 Gauge, 2-2/3" x 1/2" Corrugation, Aluminized Type 2 Corrugated Steel Pipe-Arch.....	137.13		21.47
For 1/2 Bituminous Coated And 40% Paved, Add			26.47		
33 42 11 00-1023	LF	49" x 33" 12 Gauge, 2-2/3" x 1/2" Corrugation, Aluminized Type 2 Corrugated Steel Pipe-Arch.....	158.23		25.37
For 1/2 Bituminous Coated And 40% Paved, Add			31.37		
33 42 11 00-1024	LF	57" x 38" 12 Gauge, 2-2/3" x 1/2" Corrugation, Aluminized Type 2 Corrugated Steel Pipe-Arch.....	185.31		29.27
For 1/2 Bituminous Coated And 40% Paved, Add			37.36		
33 42 11 00-1025	LF	64" x 43" 12 Gauge, 2-2/3" x 1/2" Corrugation, Aluminized Type 2 Corrugated Steel Pipe-Arch.....	206.78		33.18
For 1/2 Bituminous Coated And 40% Paved, Add			41.18		

**33 Utilities****33 40 Stormwater Utilities****33 42 Stormwater Conveyance**

MINOR CSI UOM DESCRIPTION			TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
33 42 11 00-1026	<b>10 Gauge, 2-2/3" x 1/2" Corrugation, Aluminized Type 2 Corrugated Steel Pipe-Arch</b> (33 42 11 00-1001)			
33 42 11 00-1027	LF 42" x 29" 10 Gauge, 2-2/3" x 1/2" Corrugation, Aluminized Type 2 Corrugated Steel Pipe-Arch.....	156.95	21.47	
	For 1/2 Bituminous Coated And 40% Paved, Add	27.86		
33 42 11 00-1028	LF 49" x 33" 10 Gauge, 2-2/3" x 1/2" Corrugation, Aluminized Type 2 Corrugated Steel Pipe-Arch.....	181.36	25.37	
	For 1/2 Bituminous Coated And 40% Paved, Add	32.92		
33 42 11 00-1029	LF 57" x 38" 10 Gauge, 2-2/3" x 1/2" Corrugation, Aluminized Type 2 Corrugated Steel Pipe-Arch.....	211.53	29.27	
	For 1/2 Bituminous Coated And 40% Paved, Add	38.87		
33 42 11 00-1030	LF 64" x 43" 10 Gauge, 2-2/3" x 1/2" Corrugation, Aluminized Type 2 Corrugated Steel Pipe-Arch.....	236.43	33.18	
	For 1/2 Bituminous Coated And 40% Paved, Add	43.04		
33 42 11 00-1031	LF 71" x 47" 10 Gauge, 2-2/3" x 1/2" Corrugation, Aluminized Type 2 Corrugated Steel Pipe-Arch.....	258.82	35.13	
	For 1/2 Bituminous Coated And 40% Paved, Add	47.20		
33 42 11 00-1032	<b>3" x 1" Corrugation, Aluminized Type 2 Corrugated Steel Pipe-Arch</b> (33 42 11 00-1000)			
33 42 11 00-1033	<b>14 Gauge, 3" x 1" Corrugation, Aluminized Type 2 Corrugated Steel Pipe-Arch</b> (33 42 11 00-1032)			
33 42 11 00-1034	LF 60" x 46" 14 Gauge, 3" x 1" Corrugation, Aluminized Type 2 Corrugated Steel Pipe-Arch.....	199.34	33.18	
	For 1/2 Bituminous Coated And 40% Paved, Add	61.86		
33 42 11 00-1035	LF 66" x 51" 14 Gauge, 3" x 1" Corrugation, Aluminized Type 2 Corrugated Steel Pipe-Arch.....	217.82	35.13	
	For 1/2 Bituminous Coated And 40% Paved, Add	67.68		
33 42 11 00-1036	LF 73" x 55" 14 Gauge, 3" x 1" Corrugation, Aluminized Type 2 Corrugated Steel Pipe-Arch.....	269.68	42.93	
	For 1/2 Bituminous Coated And 40% Paved, Add	85.01		
33 42 11 00-1037	LF 81" x 59" 14 Gauge, 3" x 1" Corrugation, Aluminized Type 2 Corrugated Steel Pipe-Arch.....	323.15	62.44	
	For 1/2 Bituminous Coated And 40% Paved, Add	91.13		
33 42 11 00-1038	LF 87" x 63" 14 Gauge, 3" x 1" Corrugation, Aluminized Type 2 Corrugated Steel Pipe-Arch.....	349.65	68.29	
	For 1/2 Bituminous Coated And 40% Paved, Add	97.58		
33 42 11 00-1039	LF 95" x 67" 14 Gauge, 3" x 1" Corrugation, Aluminized Type 2 Corrugated Steel Pipe-Arch.....	373.50	73.18	
	For 1/2 Bituminous Coated And 40% Paved, Add	104.04		
33 42 11 00-1040	LF 103" x 71" 14 Gauge, 3" x 1" Corrugation, Aluminized Type 2 Corrugated Steel Pipe-Arch.....	397.31	78.05	
	For 1/2 Bituminous Coated And 40% Paved, Add	110.47		
33 42 11 00-1041	LF 112" x 75" 14 Gauge, 3" x 1" Corrugation, Aluminized Type 2 Corrugated Steel Pipe-Arch.....	421.85	82.93	
	For 1/2 Bituminous Coated And 40% Paved, Add	116.91		
33 42 11 00-1042	<b>12 Gauge, 3" x 1" Corrugation, Aluminized Type 2 Corrugated Steel Pipe-Arch</b> (33 42 11 00-1032)			
33 42 11 00-1043	LF 66" x 51" 12 Gauge, 3" x 1" Corrugation, Aluminized Type 2 Corrugated Steel Pipe-Arch.....	261.85	35.13	
	For 1/2 Bituminous Coated And 40% Paved, Add	76.92		
33 42 11 00-1044	LF 73" x 55" 12 Gauge, 3" x 1" Corrugation, Aluminized Type 2 Corrugated Steel Pipe-Arch.....	318.49	42.93	
	For 1/2 Bituminous Coated And 40% Paved, Add	94.01		
33 42 11 00-1045	LF 81" x 59" 12 Gauge, 3" x 1" Corrugation, Aluminized Type 2 Corrugated Steel Pipe-Arch.....	376.31	62.44	
	For 1/2 Bituminous Coated And 40% Paved, Add	101.11		
33 42 11 00-1046	LF 87" x 63" 12 Gauge, 3" x 1" Corrugation, Aluminized Type 2 Corrugated Steel Pipe-Arch.....	407.05	68.29	
	For 1/2 Bituminous Coated And 40% Paved, Add	108.45		
33 42 11 00-1047	LF 95" x 67" 12 Gauge, 3" x 1" Corrugation, Aluminized Type 2 Corrugated Steel Pipe-Arch.....	435.24	73.18	
	For 1/2 Bituminous Coated And 40% Paved, Add	115.85		
33 42 11 00-1048	LF 103" x 71" 12 Gauge, 3" x 1" Corrugation, Aluminized Type 2 Corrugated Steel Pipe-Arch.....	463.39	78.05	
	For 1/2 Bituminous Coated And 40% Paved, Add	123.22		
33 42 11 00-1049	LF 112" x 75" 12 Gauge, 3" x 1" Corrugation, Aluminized Type 2 Corrugated Steel Pipe-Arch.....	492.17	82.93	
	For 1/2 Bituminous Coated And 40% Paved, Add	130.56		
33 42 11 00-1050	LF 117" x 79" 12 Gauge, 3" x 1" Corrugation, Aluminized Type 2 Corrugated Steel Pipe-Arch.....	523.79	87.81	
	For 1/2 Bituminous Coated And 40% Paved, Add	137.97		
33 42 11 00-1051	LF 128" x 83" 12 Gauge, 3" x 1" Corrugation, Aluminized Type 2 Corrugated Steel Pipe-Arch.....	557.59	97.56	
	For 1/2 Bituminous Coated And 40% Paved, Add	145.34		
33 42 11 00-1052	LF 137" x 87" 12 Gauge, 3" x 1" Corrugation, Aluminized Type 2 Corrugated Steel Pipe-Arch.....	592.82	107.32	
	For 1/2 Bituminous Coated And 40% Paved, Add	153.45		
33 42 11 00-1053	<b>10 Gauge, 3" x 1" Corrugation, Aluminized Type 2 Corrugated Steel Pipe-Arch</b> (33 42 11 00-1032)			
33 42 11 00-1054	LF 81" x 59" 10 Gauge, 3" x 1" Corrugation, Aluminized Type 2 Corrugated Steel Pipe-Arch.....	425.66	62.44	
	For 1/2 Bituminous Coated And 40% Paved, Add	109.44		
33 42 11 00-1055	LF 87" x 63" 10 Gauge, 3" x 1" Corrugation, Aluminized Type 2 Corrugated Steel Pipe-Arch.....	460.51	68.29	
	For 1/2 Bituminous Coated And 40% Paved, Add	117.58		
33 42 11 00-1056	LF 95" x 67" 10 Gauge, 3" x 1" Corrugation, Aluminized Type 2 Corrugated Steel Pipe-Arch.....	492.73	73.18	
	For 1/2 Bituminous Coated And 40% Paved, Add	125.74		
33 42 11 00-1057	LF 103" x 71" 10 Gauge, 3" x 1" Corrugation, Aluminized Type 2 Corrugated Steel Pipe-Arch.....	524.85	78.05	
	For 1/2 Bituminous Coated And 40% Paved, Add	133.85		
33 42 11 00-1058	LF 112" x 75" 10 Gauge, 3" x 1" Corrugation, Aluminized Type 2 Corrugated Steel Pipe-Arch.....	560.44	82.93	
	For 1/2 Bituminous Coated And 40% Paved, Add	142.97		
33 42 11 00-1059	LF 112" x 75" 10 Gauge, 3" x 1" Corrugation, Aluminized Type 2 Corrugated Steel Pipe-Arch.....	593.37	87.81	
	For 1/2 Bituminous Coated And 40% Paved, Add	150.15		
33 42 11 00-1060	LF 128" x 83" 10 Gauge, 3" x 1" Corrugation, Aluminized Type 2 Corrugated Steel Pipe-Arch.....	631.24	97.56	
	For 1/2 Bituminous Coated And 40% Paved, Add	158.30		
33 42 11 00-1061	LF 137" x 87" 10 Gauge, 3" x 1" Corrugation, Aluminized Type 2 Corrugated Steel Pipe-Arch.....	670.14	107.32	
	For 1/2 Bituminous Coated And 40% Paved, Add	166.98		
33 42 11 00-1062	LF 142" x 91" 10 Gauge, 3" x 1" Corrugation, Aluminized Type 2 Corrugated Steel Pipe-Arch.....	712.68	117.08	
	For 1/2 Bituminous Coated And 40% Paved, Add	177.42		



		<b>Utilities</b>	<b>33</b>	<b>CS</b>
		Stormwater Utilities	33 40	
		Stormwater Conveyance	33 42	

MINOR CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
33 42 11 00-1063		125 mm x 25 mm Corrugation, Aluminized Type 2 Corrugated Steel Pipe-Arch <small>(33 42 11 00-1000)</small>		
33 42 11 00-1064		12 Gauge, 125 mm x 25 mm Corrugation, Aluminized Type 2 Corrugated Steel Pipe-Arch <small>(33 42 11 00-1063)</small>		
33 42 11 00-1065	LF	81" x 59" 12 Gauge, 125 mm x 25 mm Corrugation, Aluminized Type 2 Corrugated Steel Pipe-Arch ..... <i>For 1/2 Bituminous Coated And 40% Paved, Add</i>	381.29 99.51	62.44
33 42 11 00-1066	LF	87" x 63" 12 Gauge, 125 mm x 25 mm Corrugation, Aluminized Type 2 Corrugated Steel Pipe-Arch ..... <i>For 1/2 Bituminous Coated And 40% Paved, Add</i>	411.59 106.42	68.29
33 42 11 00-1067	LF	95" x 67" 12 Gauge, 125 mm x 25 mm Corrugation, Aluminized Type 2 Corrugated Steel Pipe-Arch ..... <i>For 1/2 Bituminous Coated And 40% Paved, Add</i>	439.04 113.27	73.18
33 42 11 00-1068	LF	103" x 71" 12 Gauge, 125 mm x 25 mm Corrugation, Aluminized Type 2 Corrugated Steel Pipe-Arch ..... <i>For 1/2 Bituminous Coated And 40% Paved, Add</i>	466.48 120.11	78.05
33 42 11 00-1069	LF	112" x 75" 12 Gauge, 125 mm x 25 mm Corrugation, Aluminized Type 2 Corrugated Steel Pipe-Arch ..... <i>For 1/2 Bituminous Coated And 40% Paved, Add</i>	494.73 126.99	82.93
33 42 11 00-1070	LF	117" x 79" 12 Gauge, 125 mm x 25 mm Corrugation, Aluminized Type 2 Corrugated Steel Pipe-Arch ..... <i>For 1/2 Bituminous Coated And 40% Paved, Add</i>	525.98 134.00	87.81
33 42 11 00-1071	LF	128" x 83" 12 Gauge, 125 mm x 25 mm Corrugation, Aluminized Type 2 Corrugated Steel Pipe-Arch ..... <i>For 1/2 Bituminous Coated And 40% Paved, Add</i>	559.41 140.97	97.56
33 42 11 00-1072	LF	137" x 87" 12 Gauge, 125 mm x 25 mm Corrugation, Aluminized Type 2 Corrugated Steel Pipe-Arch ..... <i>For 1/2 Bituminous Coated And 40% Paved, Add</i>	596.96 149.70	107.32
33 42 11 00-1073		10 Gauge, 125 mm x 25 mm Corrugation, Aluminized Type 2 Corrugated Steel Pipe-Arch <small>(33 42 11 00-1063)</small>		
33 42 11 00-1074	LF	81" x 59" 10 Gauge, 125 mm x 25 mm Corrugation, Aluminized Type 2 Corrugated Steel Pipe-Arch ..... <i>For 1/2 Bituminous Coated And 40% Paved, Add</i>	435.96 110.37	62.44
33 42 11 00-1075	LF	87" x 63" 10 Gauge, 125 mm x 25 mm Corrugation, Aluminized Type 2 Corrugated Steel Pipe-Arch ..... <i>For 1/2 Bituminous Coated And 40% Paved, Add</i>	470.64 118.25	68.29
33 42 11 00-1076	LF	95" x 67" 10 Gauge, 125 mm x 25 mm Corrugation, Aluminized Type 2 Corrugated Steel Pipe-Arch ..... <i>For 1/2 Bituminous Coated And 40% Paved, Add</i>	502.49 126.08	73.18
33 42 11 00-1077	LF	103" x 71" 10 Gauge, 125 mm x 25 mm Corrugation, Aluminized Type 2 Corrugated Steel Pipe-Arch ..... <i>For 1/2 Bituminous Coated And 40% Paved, Add</i>	534.52 133.96	78.05
33 42 11 00-1078	LF	112" x 75" 10 Gauge, 125 mm x 25 mm Corrugation, Aluminized Type 2 Corrugated Steel Pipe-Arch ..... <i>For 1/2 Bituminous Coated And 40% Paved, Add</i>	566.50 141.57	82.93
33 42 11 00-1079	LF	117" x 79" 10 Gauge, 125 mm x 25 mm Corrugation, Aluminized Type 2 Corrugated Steel Pipe-Arch ..... <i>For 1/2 Bituminous Coated And 40% Paved, Add</i>	602.76 149.76	87.81
33 42 11 00-1080	LF	128" x 83" 10 Gauge, 125 mm x 25 mm Corrugation, Aluminized Type 2 Corrugated Steel Pipe-Arch ..... <i>For 1/2 Bituminous Coated And 40% Paved, Add</i>	640.74 157.74	97.56
33 42 11 00-1081	LF	137" x 87" 10 Gauge, 125 mm x 25 mm Corrugation, Aluminized Type 2 Corrugated Steel Pipe-Arch ..... <i>For 1/2 Bituminous Coated And 40% Paved, Add</i>	682.77 167.31	107.32
33 42 11 00-1082	LF	142" x 91" 10 Gauge, 125 mm x 25 mm Corrugation, Aluminized Type 2 Corrugated Steel Pipe-Arch ..... <i>For 1/2 Bituminous Coated And 40% Paved, Add</i>	722.11 176.36	117.08
33 42 11 00-1083		Spiral Lockseam Corrugated Aluminum Piping <small>(33 42 11 00-0311)</small>		
33 42 11 00-1084		1-1/2" x 1/4" Corrugation, Spiral Lockseam Corrugated Aluminum Piping <small>(33 42 11 00-1083)</small>		
33 42 11 00-1085		18 Gauge, 1-1/2" x 1/4" Corrugation, Spiral Lockseam Corrugated Aluminum Piping <small>(33 42 11 00-1084)</small>		
33 42 11 00-1086	LF	6" 18 Gauge, 1-1/2" x 1/4" Corrugation, Spiral Lockseam Corrugated Aluminum Pipe ..... <i>For Bituminous Coated Pipe, Add</i>	21.57 2.04	5.46
33 42 11 00-1087	LF	8" 18 Gauge, 1-1/2" x 1/4" Corrugation, Spiral Lockseam Corrugated Aluminum Pipe ..... <i>For Bituminous Coated Pipe, Add</i>	27.71 2.78	6.83
33 42 11 00-1088	LF	10" 18 Gauge, 1-1/2" x 1/4" Corrugation, Spiral Lockseam Corrugated Aluminum Pipe ..... <i>For Bituminous Coated Pipe, Add</i>	35.87 3.66	8.19
33 42 11 00-1089		16 Gauge, 1-1/2" x 1/4" Corrugation, Spiral Lockseam Corrugated Aluminum Piping <small>(33 42 11 00-1084)</small>		
33 42 11 00-1090	LF	6" 16 Gauge, 1-1/2" x 1/4" Corrugation, Spiral Lockseam Corrugated Aluminum Pipe ..... <i>For Bituminous Coated Pipe, Add</i>	23.92 2.03	5.46
33 42 11 00-1091	LF	8" 16 Gauge, 1-1/2" x 1/4" Corrugation, Spiral Lockseam Corrugated Aluminum Pipe ..... <i>For Bituminous Coated Pipe, Add</i>	31.02 2.77	6.83
33 42 11 00-1092	LF	10" 16 Gauge, 1-1/2" x 1/4" Corrugation, Spiral Lockseam Corrugated Aluminum Pipe ..... <i>For Bituminous Coated Pipe, Add</i>	40.29 3.66	8.19
33 42 11 00-1093		2-2/3" x 1/2" Corrugation, Spiral Lockseam Corrugated Aluminum Piping <small>(33 42 11 00-1083)</small>		
33 42 11 00-1094		16 Gauge, 2-2/3" x 1/2" Corrugation, Spiral Lockseam Corrugated Aluminum Piping <small>(33 42 11 00-1093)</small>		
33 42 11 00-1095	LF	12" 16 Gauge, 2-2/3" x 1/2" Corrugation, Spiral Lockseam Corrugated Aluminum Pipe ..... <i>For Bituminous Coated Pipe, Add</i>	41.61 4.02	9.56
33 42 11 00-1096	LF	15" 16 Gauge, 2-2/3" x 1/2" Corrugation, Spiral Lockseam Corrugated Aluminum Pipe ..... <i>For Bituminous Coated Pipe, Add</i>	47.86 5.05	10.01
33 42 11 00-1097	LF	18" 16 Gauge, 2-2/3" x 1/2" Corrugation, Spiral Lockseam Corrugated Aluminum Pipe ..... <i>For Bituminous Coated Pipe, Add</i>	54.48 6.14	10.92
33 42 11 00-1098	LF	21" 16 Gauge, 2-2/3" x 1/2" Corrugation, Spiral Lockseam Corrugated Aluminum Pipe ..... <i>For Bituminous Coated Pipe, Add</i>	62.59 7.33	11.83

**33 Utilities****33 40 Stormwater Utilities****33 42 Stormwater Conveyance**

MINOR CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
33 42 11 00-1099	LF	24" 16 Gauge, 2-2/3" x 1/2" Corrugation, Spiral Lockseam Corrugated Aluminum Pipe..... <i>For Bituminous Coated Pipe, Add</i>	69.86 8.31	12.74
<b>33 42 11 00-1100</b>		<b>14 Gauge, 2-2/3" x 1/2" Corrugation, Spiral Lockseam Corrugated Aluminum Piping</b> (33 42 11 00-1093)		
33 42 11 00-1101	LF	12" 14 Gauge, 2-2/3" x 1/2" Corrugation, Spiral Lockseam Corrugated Aluminum Pipe..... <i>For Bituminous Coated Pipe, Add</i>	46.64 3.94	9.56
33 42 11 00-1102	LF	15" 14 Gauge, 2-2/3" x 1/2" Corrugation, Spiral Lockseam Corrugated Aluminum Pipe..... <i>For Bituminous Coated Pipe, Add</i>	54.27 4.96	10.01
33 42 11 00-1103	LF	18" 14 Gauge, 2-2/3" x 1/2" Corrugation, Spiral Lockseam Corrugated Aluminum Pipe..... <i>For Bituminous Coated Pipe, Add</i>	62.17 6.01	10.92
33 42 11 00-1104	LF	21" 14 Gauge, 2-2/3" x 1/2" Corrugation, Spiral Lockseam Corrugated Aluminum Pipe..... <i>For Bituminous Coated Pipe, Add</i>	71.49 7.13	11.83
33 42 11 00-1105	LF	24" 14 Gauge, 2-2/3" x 1/2" Corrugation, Spiral Lockseam Corrugated Aluminum Pipe..... <i>For Bituminous Coated Pipe, Add</i>	80.08 8.10	12.74
33 42 11 00-1106	LF	30" 14 Gauge, 2-2/3" x 1/2" Corrugation, Spiral Lockseam Corrugated Aluminum Pipe..... <i>For Bituminous Coated Pipe, Add</i>	104.25 10.39	16.39
33 42 11 00-1107	LF	36" 14 Gauge, 2-2/3" x 1/2" Corrugation, Spiral Lockseam Corrugated Aluminum Pipe..... <i>For Bituminous Coated Pipe, Add</i>	133.38 12.91	21.47
<b>33 42 11 00-1108</b>		<b>12 Gauge, 2-2/3" x 1/2" Corrugation, Spiral Lockseam Corrugated Aluminum Piping</b> (33 42 11 00-1093)		
33 42 11 00-1109	LF	24" 12 Gauge, 2-2/3" x 1/2" Corrugation, Spiral Lockseam Corrugated Aluminum Pipe..... <i>For Bituminous Coated Pipe, Add</i>	99.63 7.69	12.74
33 42 11 00-1110	LF	30" 12 Gauge, 2-2/3" x 1/2" Corrugation, Spiral Lockseam Corrugated Aluminum Pipe..... <i>For Bituminous Coated Pipe, Add</i>	128.58 9.78	16.39
33 42 11 00-1111	LF	36" 12 Gauge, 2-2/3" x 1/2" Corrugation, Spiral Lockseam Corrugated Aluminum Pipe..... <i>For Bituminous Coated Pipe, Add</i>	162.60 12.06	21.47
33 42 11 00-1112	LF	42" 12 Gauge, 2-2/3" x 1/2" Corrugation, Spiral Lockseam Corrugated Aluminum Pipe..... <i>For Bituminous Coated Pipe, Add</i>	187.35 14.18	25.37
33 42 11 00-1113	LF	48" 12 Gauge, 2-2/3" x 1/2" Corrugation, Spiral Lockseam Corrugated Aluminum Pipe..... <i>For Bituminous Coated Pipe, Add</i>	211.89 16.05	29.27
33 42 11 00-1114	LF	54" 12 Gauge, 2-2/3" x 1/2" Corrugation, Spiral Lockseam Corrugated Aluminum Pipe..... <i>For Bituminous Coated Pipe, Add</i>	249.17 19.04	33.18
<b>33 42 11 00-1115</b>		<b>10 Gauge, 2-2/3" x 1/2" Corrugation, Spiral Lockseam Corrugated Aluminum Piping</b> (33 42 11 00-1093)		
33 42 11 00-1116	LF	36" 10 Gauge, 2-2/3" x 1/2" Corrugation, Spiral Lockseam Corrugated Aluminum Pipe..... <i>For Bituminous Coated Pipe, Add</i>	193.74 11.86	21.47
33 42 11 00-1117	LF	42" 10 Gauge, 2-2/3" x 1/2" Corrugation, Spiral Lockseam Corrugated Aluminum Pipe..... <i>For Bituminous Coated Pipe, Add</i>	223.63 13.92	25.37
33 42 11 00-1118	LF	48" 10 Gauge, 2-2/3" x 1/2" Corrugation, Spiral Lockseam Corrugated Aluminum Pipe..... <i>For Bituminous Coated Pipe, Add</i>	253.47 15.79	29.27
33 42 11 00-1119	LF	54" 10 Gauge, 2-2/3" x 1/2" Corrugation, Spiral Lockseam Corrugated Aluminum Pipe..... <i>For Bituminous Coated Pipe, Add</i>	295.94 18.53	33.18
33 42 11 00-1120	LF	60" 10 Gauge, 2-2/3" x 1/2" Corrugation, Spiral Lockseam Corrugated Aluminum Pipe..... <i>For Bituminous Coated Pipe, Add</i>	325.32 20.42	35.13
<b>33 42 11 00-1121</b>		<b>3" x 1" Corrugation, Spiral Lockseam Corrugated Aluminum Piping</b> (33 42 11 00-1083)		
<b>33 42 11 00-1122</b>		<b>16 Gauge, 3" x 1" Corrugation, Spiral Lockseam Corrugated Aluminum Piping</b> (33 42 11 00-1121)		
33 42 11 00-1123	LF	30" 16 Gauge, 3" x 1" Corrugation, Spiral Lockseam Corrugated Aluminum Pipe.....	102.66	16.39
33 42 11 00-1124	LF	36" 16 Gauge, 3" x 1" Corrugation, Spiral Lockseam Corrugated Aluminum Pipe.....	131.39	21.47
33 42 11 00-1125	LF	42" 16 Gauge, 3" x 1" Corrugation, Spiral Lockseam Corrugated Aluminum Pipe.....	150.30	25.37
33 42 11 00-1126	LF	48" 16 Gauge, 3" x 1" Corrugation, Spiral Lockseam Corrugated Aluminum Pipe.....	170.20	29.27
33 42 11 00-1127	LF	54" 16 Gauge, 3" x 1" Corrugation, Spiral Lockseam Corrugated Aluminum Pipe.....	200.87	33.18
<b>33 42 11 00-1128</b>		<b>14 Gauge, 3" x 1" Corrugation, Spiral Lockseam Corrugated Aluminum Piping</b> (33 42 11 00-1121)		
33 42 11 00-1129	LF	30" 14 Gauge, 3" x 1" Corrugation, Spiral Lockseam Corrugated Aluminum Pipe.....	115.48	16.39
33 42 11 00-1130	LF	36" 14 Gauge, 3" x 1" Corrugation, Spiral Lockseam Corrugated Aluminum Pipe.....	149.67	21.47
33 42 11 00-1131	LF	42" 14 Gauge, 3" x 1" Corrugation, Spiral Lockseam Corrugated Aluminum Pipe.....	171.52	25.37
33 42 11 00-1132	LF	48" 14 Gauge, 3" x 1" Corrugation, Spiral Lockseam Corrugated Aluminum Pipe.....	193.36	29.27
33 42 11 00-1133	LF	54" 14 Gauge, 3" x 1" Corrugation, Spiral Lockseam Corrugated Aluminum Pipe.....	228.00	33.18
33 42 11 00-1134	LF	60" 14 Gauge, 3" x 1" Corrugation, Spiral Lockseam Corrugated Aluminum Pipe.....	249.28	35.13
33 42 11 00-1135	LF	66" 14 Gauge, 3" x 1" Corrugation, Spiral Lockseam Corrugated Aluminum Pipe.....	303.17	42.93
33 42 11 00-1136	LF	72" 14 Gauge, 3" x 1" Corrugation, Spiral Lockseam Corrugated Aluminum Pipe.....	358.95	62.44
33 42 11 00-1137	LF	78" 14 Gauge, 3" x 1" Corrugation, Spiral Lockseam Corrugated Aluminum Pipe.....	387.11	68.29
<b>33 42 11 00-1138</b>		<b>12 Gauge, 3" x 1" Corrugation, Spiral Lockseam Corrugated Aluminum Piping</b> (33 42 11 00-1121)		
33 42 11 00-1139	LF	30" 12 Gauge, 3" x 1" Corrugation, Spiral Lockseam Corrugated Aluminum Pipe.....	145.39	16.39
33 42 11 00-1140	LF	36" 12 Gauge, 3" x 1" Corrugation, Spiral Lockseam Corrugated Aluminum Pipe.....	183.32	21.47



	<b>Utilities</b>	<b>33</b>	
	<b>Stormwater Utilities</b>	<b>33 40</b>	<b>CS</b>
	<b>Stormwater Conveyance</b>	<b>33 42</b>	

MINOR CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
33 42 11 00-1141	LF	42" 12 Gauge, 3" x 1" Corrugation, Spiral Lockseam Corrugated Aluminum Pipe .....	211.73	25.37
33 42 11 00-1142	LF	48" 12 Gauge, 3" x 1" Corrugation, Spiral Lockseam Corrugated Aluminum Pipe .....	239.47	29.27
33 42 11 00-1143	LF	54" 12 Gauge, 3" x 1" Corrugation, Spiral Lockseam Corrugated Aluminum Pipe .....	279.77	33.18
33 42 11 00-1144	LF	60" 12 Gauge, 3" x 1" Corrugation, Spiral Lockseam Corrugated Aluminum Pipe .....	306.60	35.13
33 42 11 00-1145	LF	66" 12 Gauge, 3" x 1" Corrugation, Spiral Lockseam Corrugated Aluminum Pipe .....	366.03	42.93
33 42 11 00-1146	LF	72" 12 Gauge, 3" x 1" Corrugation, Spiral Lockseam Corrugated Aluminum Pipe .....	427.52	62.44
33 42 11 00-1147	LF	78" 12 Gauge, 3" x 1" Corrugation, Spiral Lockseam Corrugated Aluminum Pipe .....	461.27	68.29
33 42 11 00-1148	LF	84" 12 Gauge, 3" x 1" Corrugation, Spiral Lockseam Corrugated Aluminum Pipe .....	492.43	73.18
33 42 11 00-1149	LF	90" 12 Gauge, 3" x 1" Corrugation, Spiral Lockseam Corrugated Aluminum Pipe .....	523.53	78.05
33 42 11 00-1150	LF	96" 12 Gauge, 3" x 1" Corrugation, Spiral Lockseam Corrugated Aluminum Pipe .....	555.33	82.93
33 42 11 00-1151		<b>10 Gauge, 3" x 1" Corrugation, Spiral Lockseam Corrugated Aluminum Piping</b> (33 42 11 00-1121)		
33 42 11 00-1152	LF	60" 10 Gauge, 3" x 1" Corrugation, Spiral Lockseam Corrugated Aluminum Pipe .....	366.89	35.13
33 42 11 00-1153	LF	66" 10 Gauge, 3" x 1" Corrugation, Spiral Lockseam Corrugated Aluminum Pipe .....	429.81	42.93
33 42 11 00-1154	LF	72" 10 Gauge, 3" x 1" Corrugation, Spiral Lockseam Corrugated Aluminum Pipe .....	497.02	62.44
33 42 11 00-1155	LF	78" 10 Gauge, 3" x 1" Corrugation, Spiral Lockseam Corrugated Aluminum Pipe .....	536.50	68.29
33 42 11 00-1156	LF	84" 10 Gauge, 3" x 1" Corrugation, Spiral Lockseam Corrugated Aluminum Pipe .....	573.30	73.18
33 42 11 00-1157	LF	90" 10 Gauge, 3" x 1" Corrugation, Spiral Lockseam Corrugated Aluminum Pipe .....	610.11	78.05
33 42 11 00-1158	LF	96" 10 Gauge, 3" x 1" Corrugation, Spiral Lockseam Corrugated Aluminum Pipe .....	647.59	82.93
33 42 11 00-1159	LF	102" 10 Gauge, 3" x 1" Corrugation, Spiral Lockseam Corrugated Aluminum Pipe .....	687.87	87.81
33 42 11 00-1160	LF	108" 10 Gauge, 3" x 1" Corrugation, Spiral Lockseam Corrugated Aluminum Pipe .....	730.35	97.56
33 42 11 00-1161		<b>Exterior Box Corrugation, Aluminized Type 2 Corrugated Steel Piping</b> (33 42 11 00-1083) Note: Contech ULTRA FLO. HS 20 and HS 25 vehicular loading.		
33 42 11 00-1162		<b>16 Gauge, Exterior Box Corrugation, Aluminized Type 2 Corrugated Steel Piping</b> (33 42 11 00-1161)		
33 42 11 00-1163	LF	18" 16 Gauge, Exterior Box Corrugation, Aluminized Type 2 Corrugated Steel Pipe .....	71.74	10.92
33 42 11 00-1164	LF	21" 16 Gauge, Exterior Box Corrugation, Aluminized Type 2 Corrugated Steel Pipe .....	77.15	11.83
33 42 11 00-1165	LF	24" 16 Gauge, Exterior Box Corrugation, Aluminized Type 2 Corrugated Steel Pipe .....	92.79	12.74
33 42 11 00-1166	LF	27" 16 Gauge, Exterior Box Corrugation, Aluminized Type 2 Corrugated Steel Pipe .....	107.14	14.56
33 42 11 00-1167	LF	30" 16 Gauge, Exterior Box Corrugation, Aluminized Type 2 Corrugated Steel Pipe .....	120.21	16.39
33 42 11 00-1168	LF	33" 16 Gauge, Exterior Box Corrugation, Aluminized Type 2 Corrugated Steel Pipe .....	133.95	18.20
33 42 11 00-1169		<b>14 Gauge, Exterior Box Corrugation, Aluminized Type 2 Corrugated Steel Piping</b> (33 42 11 00-1161)		
33 42 11 00-1170	LF	18" 14 Gauge, Exterior Box Corrugation, Aluminized Type 2 Corrugated Steel Pipe .....	82.58	10.92
33 42 11 00-1171	LF	21" 14 Gauge, Exterior Box Corrugation, Aluminized Type 2 Corrugated Steel Pipe .....	95.33	11.83
33 42 11 00-1172	LF	24" 14 Gauge, Exterior Box Corrugation, Aluminized Type 2 Corrugated Steel Pipe .....	107.37	12.74
33 42 11 00-1173	LF	27" 14 Gauge, Exterior Box Corrugation, Aluminized Type 2 Corrugated Steel Pipe .....	123.50	14.56
33 42 11 00-1174	LF	30" 14 Gauge, Exterior Box Corrugation, Aluminized Type 2 Corrugated Steel Pipe .....	138.36	16.39
33 42 11 00-1175	LF	33" 14 Gauge, Exterior Box Corrugation, Aluminized Type 2 Corrugated Steel Pipe .....	153.95	18.20
33 42 11 00-1176	LF	36" 14 Gauge, Exterior Box Corrugation, Aluminized Type 2 Corrugated Steel Pipe .....	174.56	21.47
33 42 11 00-1177	LF	42" 14 Gauge, Exterior Box Corrugation, Aluminized Type 2 Corrugated Steel Pipe .....	201.29	25.37
33 42 11 00-1178	LF	48" 14 Gauge, Exterior Box Corrugation, Aluminized Type 2 Corrugated Steel Pipe .....	227.76	29.27
33 42 11 00-1179		<b>12 Gauge, Exterior Box Corrugation, Aluminized Type 2 Corrugated Steel Piping</b> (33 42 11 00-1161)		
33 42 11 00-1180	LF	30" 12 Gauge, Exterior Box Corrugation, Aluminized Type 2 Corrugated Steel Pipe .....	173.84	16.39
33 42 11 00-1181	LF	33" 12 Gauge, Exterior Box Corrugation, Aluminized Type 2 Corrugated Steel Pipe .....	192.90	18.20
33 42 11 00-1182	LF	36" 12 Gauge, Exterior Box Corrugation, Aluminized Type 2 Corrugated Steel Pipe .....	217.11	21.47
33 42 11 00-1183	LF	42" 12 Gauge, Exterior Box Corrugation, Aluminized Type 2 Corrugated Steel Pipe .....	250.97	25.37
33 42 11 00-1184	LF	48" 12 Gauge, Exterior Box Corrugation, Aluminized Type 2 Corrugated Steel Pipe .....	284.54	29.27
33 42 11 00-1185	LF	54" 12 Gauge, Exterior Box Corrugation, Aluminized Type 2 Corrugated Steel Pipe .....	392.56	33.18
33 42 11 00-1186	LF	60" 12 Gauge, Exterior Box Corrugation, Aluminized Type 2 Corrugated Steel Pipe .....	431.98	35.13
33 42 11 00-1187		<b>10 Gauge, Exterior Box Corrugation, Aluminized Type 2 Corrugated Steel Piping</b> (33 42 11 00-1161)		
33 42 11 00-1188	LF	48" 10 Gauge, Exterior Box Corrugation, Aluminized Type 2 Corrugated Steel Pipe .....	400.24	29.27
33 42 11 00-1189	LF	54" 10 Gauge, Exterior Box Corrugation, Aluminized Type 2 Corrugated Steel Pipe .....	463.89	33.18
33 42 11 00-1190	LF	60" 10 Gauge, Exterior Box Corrugation, Aluminized Type 2 Corrugated Steel Pipe .....	511.33	35.13
33 42 11 00-1191	LF	66" 10 Gauge, Exterior Box Corrugation, Aluminized Type 2 Corrugated Steel Pipe .....	594.29	42.93
33 42 11 00-1192	LF	72" 10 Gauge, Exterior Box Corrugation, Aluminized Type 2 Corrugated Steel Pipe .....	675.17	62.44
33 42 11 00-1193	LF	78" 10 Gauge, Exterior Box Corrugation, Aluminized Type 2 Corrugated Steel Pipe .....	728.97	68.29
33 42 11 00-1194	LF	84" 10 Gauge, Exterior Box Corrugation, Aluminized Type 2 Corrugated Steel Pipe .....	779.64	73.18
33 42 11 00-1195		<b>Spiral Lockseam Aluminum Pipe-Arch</b> (33 42 11 00-0311)		
33 42 11 00-1196		<b>2-2/3" x 1/2" Corrugation, Spiral Lockseam Aluminum Pipe-Arch</b> (33 42 11 00-1195)		
33 42 11 00-1197		<b>16 Gauge, 2-2/3" x 1/2" Corrugation, Spiral Lockseam Aluminum Pipe-Arch</b> (33 42 11 00-1196)		

**33 Utilities****33 40 Stormwater Utilities****33 42 Stormwater Conveyance**

MINOR CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
33 42 11 00-1198	LF	17" x 13" 16 Gauge, 2-2/3" x 1/2" Corrugation, Spiral Lockseam Aluminum Pipe-Arch..... <i>For Bituminous Coated Pipe, Add</i>	50.14 5.06	10.01
33 42 11 00-1199	LF	21" x 15" 16 Gauge, 2-2/3" x 1/2" Corrugation, Spiral Lockseam Aluminum Pipe-Arch..... <i>For Bituminous Coated Pipe, Add</i>	56.65 6.04	10.92
33 42 11 00-1200	LF	24" x 18" 16 Gauge, 2-2/3" x 1/2" Corrugation, Spiral Lockseam Aluminum Pipe-Arch..... <i>For Bituminous Coated Pipe, Add</i>	65.06 7.19	11.83
<b>33 42 11 00-1201</b>		<b>14 Gauge, 2-2/3" x 1/2" Corrugation, Spiral Lockseam Aluminum Pipe-Arch</b> <small>(33 42 11 00-1196)</small>		
33 42 11 00-1202	LF	17" x 13" 14 Gauge, 2-2/3" x 1/2" Corrugation, Spiral Lockseam Aluminum Pipe-Arch..... <i>For Bituminous Coated Pipe, Add</i>	56.57 5.04	10.01
33 42 11 00-1203	LF	21" x 15" 14 Gauge, 2-2/3" x 1/2" Corrugation, Spiral Lockseam Aluminum Pipe-Arch..... <i>For Bituminous Coated Pipe, Add</i>	62.82 5.81	10.92
33 42 11 00-1204	LF	24" x 18" 14 Gauge, 2-2/3" x 1/2" Corrugation, Spiral Lockseam Aluminum Pipe-Arch..... <i>For Bituminous Coated Pipe, Add</i>	73.96 7.14	11.83
33 42 11 00-1205	LF	28" x 20" 14 Gauge, 2-2/3" x 1/2" Corrugation, Spiral Lockseam Aluminum Pipe-Arch..... <i>For Bituminous Coated Pipe, Add</i>	83.43 8.19	12.74
33 42 11 00-1206	LF	35" x 24" 14 Gauge, 2-2/3" x 1/2" Corrugation, Spiral Lockseam Aluminum Pipe-Arch..... <i>For Bituminous Coated Pipe, Add</i>	107.58 10.36	16.39
<b>33 42 11 00-1207</b>		<b>12 Gauge, 2-2/3" x 1/2" Corrugation, Spiral Lockseam Aluminum Pipe-Arch</b> <small>(33 42 11 00-1196)</small>		
33 42 11 00-1208	LF	28" x 20" 12 Gauge, 2-2/3" x 1/2" Corrugation, Spiral Lockseam Aluminum Pipe-Arch..... <i>For Bituminous Coated Pipe, Add</i>	102.99 7.80	12.74
33 42 11 00-1209	LF	35" x 24" 12 Gauge, 2-2/3" x 1/2" Corrugation, Spiral Lockseam Aluminum Pipe-Arch..... <i>For Bituminous Coated Pipe, Add</i>	131.97 9.84	16.39
33 42 11 00-1210	LF	42" x 29" 12 Gauge, 2-2/3" x 1/2" Corrugation, Spiral Lockseam Aluminum Pipe-Arch..... <i>For Bituminous Coated Pipe, Add</i>	168.34 12.28	21.47
33 42 11 00-1211	LF	49" x 33" 12 Gauge, 2-2/3" x 1/2" Corrugation, Spiral Lockseam Aluminum Pipe-Arch..... <i>For Bituminous Coated Pipe, Add</i>	194.91 14.52	25.37
<b>33 42 11 00-1212</b>		<b>10 Gauge, 2-2/3" x 1/2" Corrugation, Spiral Lockseam Aluminum Pipe-Arch</b> <small>(33 42 11 00-1196)</small>		
33 42 11 00-1213	LF	42" x 29" 10 Gauge, 2-2/3" x 1/2" Corrugation, Spiral Lockseam Aluminum Pipe-Arch..... <i>For Bituminous Coated Pipe, Add</i>	199.44 11.85	21.47
33 42 11 00-1214	LF	49" x 33" 10 Gauge, 2-2/3" x 1/2" Corrugation, Spiral Lockseam Aluminum Pipe-Arch..... <i>For Bituminous Coated Pipe, Add</i>	231.25 13.98	25.37
33 42 11 00-1215	LF	57" x 38" 10 Gauge, 2-2/3" x 1/2" Corrugation, Spiral Lockseam Aluminum Pipe-Arch..... <i>For Bituminous Coated Pipe, Add</i>	268.77 16.38	29.27
33 42 11 00-1216	LF	64" x 43" 10 Gauge, 2-2/3" x 1/2" Corrugation, Spiral Lockseam Aluminum Pipe-Arch..... <i>For Bituminous Coated Pipe, Add</i>	300.97 18.23	33.18
<b>33 42 11 00-1217</b>		<b>3" x 1" Corrugation, Spiral Lockseam Aluminum Pipe-Arch</b> <small>(33 42 11 00-1195)</small>		
<b>33 42 11 00-1218</b>		<b>14 Gauge, 3" x 1" Corrugation, Spiral Lockseam Aluminum Pipe-Arch</b> <small>(33 42 11 00-1217)</small>		
33 42 11 00-1219	LF	60" x 46" 14 Gauge, 3" x 1" Corrugation, Spiral Lockseam Aluminum Pipe-Arch.....	233.03	33.18
33 42 11 00-1220	LF	66" x 51" 14 Gauge, 3" x 1" Corrugation, Spiral Lockseam Aluminum Pipe-Arch.....	255.12	35.13
33 42 11 00-1221	LF	73" x 55" 14 Gauge, 3" x 1" Corrugation, Spiral Lockseam Aluminum Pipe-Arch.....	310.39	42.93
<b>33 42 11 00-1222</b>		<b>12 Gauge, 3" x 1" Corrugation, Spiral Lockseam Aluminum Pipe-Arch</b> <small>(33 42 11 00-1217)</small>		
33 42 11 00-1223	LF	60" x 46" 12 Gauge, 3" x 1" Corrugation, Spiral Lockseam Aluminum Pipe-Arch.....	284.79	33.18
33 42 11 00-1224	LF	66" x 51" 12 Gauge, 3" x 1" Corrugation, Spiral Lockseam Aluminum Pipe-Arch.....	312.44	35.13
33 42 11 00-1225	LF	73" x 55" 12 Gauge, 3" x 1" Corrugation, Spiral Lockseam Aluminum Pipe-Arch.....	373.00	42.93
33 42 11 00-1226	LF	81" x 59" 12 Gauge, 3" x 1" Corrugation, Spiral Lockseam Aluminum Pipe-Arch.....	435.01	62.44
33 42 11 00-1227	LF	87" x 63" 12 Gauge, 3" x 1" Corrugation, Spiral Lockseam Aluminum Pipe-Arch.....	469.30	68.29
33 42 11 00-1228	LF	95" x 67" 12 Gauge, 3" x 1" Corrugation, Spiral Lockseam Aluminum Pipe-Arch.....	500.99	73.18
<b>33 42 11 00-1229</b>		<b>10 Gauge, 3" x 1" Corrugation, Spiral Lockseam Aluminum Pipe-Arch</b> <small>(33 42 11 00-1217)</small>		
33 42 11 00-1230	LF	66" x 51" 10 Gauge, 3" x 1" Corrugation, Spiral Lockseam Aluminum Pipe-Arch.....	372.64	35.13
33 42 11 00-1231	LF	73" x 55" 10 Gauge, 3" x 1" Corrugation, Spiral Lockseam Aluminum Pipe-Arch.....	436.52	42.93
33 42 11 00-1232	LF	81" x 59" 10 Gauge, 3" x 1" Corrugation, Spiral Lockseam Aluminum Pipe-Arch.....	504.24	62.44
33 42 11 00-1233	LF	87" x 63" 10 Gauge, 3" x 1" Corrugation, Spiral Lockseam Aluminum Pipe-Arch.....	544.26	68.29
33 42 11 00-1234	LF	95" x 67" 10 Gauge, 3" x 1" Corrugation, Spiral Lockseam Aluminum Pipe-Arch.....	581.58	73.18
33 42 11 00-1235	LF	103" x 71" 10 Gauge, 3" x 1" Corrugation, Spiral Lockseam Aluminum Pipe-Arch.....	618.91	78.05
<b>33 42 11 00-1236</b>		<b>Corrugated Steel Pipe Fittings</b> <small>(33 42 11 00-0311)</small> Note: Equivalent pipe-arch sizes are approximate.		
<b>33 42 11 00-1237</b>		<b>Fabricate 2-Piece Single Miter Elbow, Corrugated Steel Pipe Fittings</b> <small>(33 42 11 00-1236)</small> Note: Excludes material. Use appropriate size, gauge, corrugation and type of material from pipe sections for the listed requirements of pipe needed.		
33 42 11 00-1238	EA	Fabricate 6" 2-Piece Single Miter Elbow, Corrugated Steel Pipe Fitting (Requires 2' Of Appropriate Pipe) .....	84.82	
33 42 11 00-1239	EA	Fabricate 8" 2-Piece Single Miter Elbow, Corrugated Steel Pipe Fitting (Requires 2' Of Appropriate Pipe) .....	106.37	
33 42 11 00-1240	EA	Fabricate 10" 2-Piece Single Miter Elbow, Corrugated Steel Pipe Fitting (Requires 2' Of Appropriate Pipe) .....	127.92	
33 42 11 00-1241	EA	Fabricate 12" 2-Piece Single Miter Elbow, Corrugated Steel Pipe Fitting (Requires 4' Of Appropriate Pipe) .....	150.82	





	<b>Utilities</b>	<b>33</b>	
	<b>Stormwater Utilities</b>	<b>33 40</b>	<b>CS</b>
	<b>Stormwater Conveyance</b>	<b>33 42</b>	

MINOR CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
33 42 11 00-1242	EA	Fabricate 15" (Or 17" x 13" Pipe-Arch) 2-Piece Single Miter Elbow, Corrugated Steel Pipe Fitting (Requires 4' Of Appropriate Pipe).....	183.12	
33 42 11 00-1243	EA	Fabricate 18" (Or 21" x 15" Pipe-Arch) 2-Piece Single Miter Elbow, Corrugated Steel Pipe Fitting (Requires 4' Of Appropriate Pipe).....	215.42	
33 42 11 00-1244	EA	Fabricate 21" (Or 24" x 18" Pipe-Arch) 2-Piece Single Miter Elbow, Corrugated Steel Pipe Fitting (Requires 4' Of Appropriate Pipe).....	247.74	
33 42 11 00-1245	EA	Fabricate 24" (Or 28" x 20" Pipe-Arch) 2-Piece Single Miter Elbow, Corrugated Steel Pipe Fitting (Requires 4' Of Appropriate Pipe).....	280.04	
33 42 11 00-1246	EA	Fabricate 30" (Or 35" x 24" Pipe-Arch) 2-Piece Single Miter Elbow, Corrugated Steel Pipe Fitting (Requires 6' Of Appropriate Pipe).....	364.88	
33 42 11 00-1247	EA	Fabricate 36" (Or 42" x 29" Pipe-Arch) 2-Piece Single Miter Elbow, Corrugated Steel Pipe Fitting (Requires 6' Of Appropriate Pipe).....	434.89	
33 42 11 00-1248	EA	Fabricate 42" (Or 49" x 33" Pipe-Arch) 2-Piece Single Miter Elbow, Corrugated Steel Pipe Fitting (Requires 6' Of Appropriate Pipe).....	504.90	
33 42 11 00-1249	EA	Fabricate 48" (Or 57" x 38" Pipe-Arch) 2-Piece Single Miter Elbow, Corrugated Steel Pipe Fitting (Requires 6' Of Appropriate Pipe).....	653.02	
33 42 11 00-1250	EA	Fabricate 54" (Or 64" x 43" Pipe-Arch) 2-Piece Single Miter Elbow, Corrugated Steel Pipe Fitting (Requires 8' Of Appropriate Pipe).....	736.50	
33 42 11 00-1251	EA	Fabricate 60" (Or 71" x 47" Pipe-Arch) 2-Piece Single Miter Elbow, Corrugated Steel Pipe Fitting (Requires 8' Of Appropriate Pipe).....	822.68	
33 42 11 00-1252	EA	Fabricate 66" (Or 77" x 52" Pipe-Arch) 2-Piece Single Miter Elbow, Corrugated Steel Pipe Fitting (Requires 8' Of Appropriate Pipe).....	911.53	
33 42 11 00-1253	EA	Fabricate 72" (Or 83" x 57" Pipe-Arch) 2-Piece Single Miter Elbow, Corrugated Steel Pipe Fitting (Requires 10' Of Appropriate Pipe).....	1,110.80	
33 42 11 00-1254	EA	Fabricate 78" (Or 87" x 63" Pipe-Arch) 2-Piece Single Miter Elbow, Corrugated Steel Pipe Fitting (Requires 10' Of Appropriate Pipe).....	1,211.78	
33 42 11 00-1255	EA	Fabricate 84" (Or 95" x 67" Pipe-Arch) 2-Piece Single Miter Elbow, Corrugated Steel Pipe Fitting (Requires 10' Of Appropriate Pipe).....	1,315.45	
33 42 11 00-1256	EA	Fabricate 90" (Or 103" x 71" Pipe-Arch) 2-Piece Single Miter Elbow, Corrugated Steel Pipe Fitting (Requires 12' Of Appropriate Pipe).....	1,614.35	
33 42 11 00-1257	EA	Fabricate 96" (Or 112" x 75" Pipe-Arch) 2-Piece Single Miter Elbow, Corrugated Steel Pipe Fitting (Requires 12' Of Appropriate Pipe).....	1,732.86	
33 42 11 00-1258	EA	Fabricate 102" (Or 117" x 79" Pipe-Arch) 2-Piece Single Miter Elbow, Corrugated Steel Pipe Fitting (Requires 12' Of Appropriate Pipe).....	1,852.69	
33 42 11 00-1259	EA	Fabricate 108" (Or 128" x 83" Pipe-Arch) 2-Piece Single Miter Elbow, Corrugated Steel Pipe Fitting (Requires 14' Of Appropriate Pipe).....	1,972.51	
33 42 11 00-1260	EA	Fabricate 114" (Or 137" x 87" Pipe-Arch) 2-Piece Single Miter Elbow, Corrugated Steel Pipe Fitting (Requires 14' Of Appropriate Pipe).....	2,090.98	
33 42 11 00-1261	EA	Fabricate 120" (Or 142" x 91" Pipe-Arch) 2-Piece Single Miter Elbow, Corrugated Steel Pipe Fitting (Requires 14' Of Appropriate Pipe).....	2,210.82	
33 42 11 00-1262	EA	Fabricate 126" 2-Piece Single Miter Elbow, Corrugated Steel Pipe Fitting (Requires 16' Of Appropriate Pipe).....	2,337.17	
33 42 11 00-1263	EA	Fabricate 132" 2-Piece Single Miter Elbow, Corrugated Steel Pipe Fitting (Requires 16' Of Appropriate Pipe).....	2,470.73	
33 42 11 00-1264	EA	Fabricate 138" 2-Piece Single Miter Elbow, Corrugated Steel Pipe Fitting (Requires 16' Of Appropriate Pipe).....	2,611.91	

### 33 42 11 00-1265

#### Fabricate Corrugated Steel Pipe Tees Or Laterals (33 42 11 00-1236)

Note: Fabrication charge excludes material. Use appropriate size, gauge, corrugation and type of material from pipe sections for the listed requirements of pipe needed.

33 42 11 00-1266	EA	Fabricate 6" Tee Or Lateral, Corrugated Steel Pipe Fitting (Requires 3' Of Appropriate Pipe).....	110.41	
33 42 11 00-1267	EA	Fabricate 8" Tee Or Lateral, Corrugated Steel Pipe Fitting (Requires 3' Of Appropriate Pipe).....	141.38	
33 42 11 00-1268	EA	Fabricate 10" Tee Or Lateral, Corrugated Steel Pipe Fitting (Requires 3' Of Appropriate Pipe).....	172.32	
33 42 11 00-1269	EA	Fabricate 12" Tee Or Lateral, Corrugated Steel Pipe Fitting (Requires 3' Of Appropriate Pipe).....	203.32	
33 42 11 00-1270	EA	Fabricate 15" (Or 17" x 13" Pipe-Arch) Tee Or Lateral, Corrugated Steel Pipe Fitting (Requires 4' Of Appropriate Pipe).....	247.74	
33 42 11 00-1271	EA	Fabricate 18" (Or 21" x 15" Pipe-Arch) Tee Or Lateral, Corrugated Steel Pipe Fitting (Requires 6' Of Appropriate Pipe).....	293.51	
33 42 11 00-1272	EA	Fabricate 21" (Or 24" x 18" Pipe-Arch) Tee Or Lateral, Corrugated Steel Pipe Fitting (Requires 6' Of Appropriate Pipe).....	339.31	
33 42 11 00-1273	EA	Fabricate 24" (Or 28" x 20" Pipe-Arch) Tee Or Lateral, Corrugated Steel Pipe Fitting (Requires 6' Of Appropriate Pipe).....	385.05	
33 42 11 00-1274	EA	Fabricate 30" (Or 35" x 24" Pipe-Arch) Tee Or Lateral, Corrugated Steel Pipe Fitting (Requires 8' Of Appropriate Pipe).....	504.90	
33 42 11 00-1275	EA	Fabricate 36" (Or 42" x 29" Pipe-Arch) Tee Or Lateral, Corrugated Steel Pipe Fitting (Requires 9' Of Appropriate Pipe).....	601.85	
33 42 11 00-1276	EA	Fabricate 42" (Or 49" x 33" Pipe-Arch) Tee Or Lateral, Corrugated Steel Pipe Fitting (Requires 9' Of Appropriate Pipe).....	700.13	
33 42 11 00-1277	EA	Fabricate 48" (Or 57" x 38" Pipe-Arch) Tee Or Lateral, Corrugated Steel Pipe Fitting (Requires 9' Of Appropriate Pipe).....	908.83	
33 42 11 00-1278	EA	Fabricate 54" (Or 64" x 43" Pipe-Arch) Tee Or Lateral, Corrugated Steel Pipe Fitting (Requires 12' Of Appropriate Pipe).....	1,023.27	
33 42 11 00-1279	EA	Fabricate 60" (Or 71" x 47" Pipe-Arch) Tee Or Lateral, Corrugated Steel Pipe Fitting (Requires 12' Of Appropriate Pipe).....	1,141.75	
33 42 11 00-1280	EA	Fabricate 66" (Or 77" x 52" Pipe-Arch) Tee Or Lateral, Corrugated Steel Pipe Fitting (Requires 12' Of Appropriate Pipe).....	1,262.94	
33 42 11 00-1281	EA	Fabricate 72" (Or 83" x 57" Pipe-Arch) Tee Or Lateral, Corrugated Steel Pipe Fitting (Requires 14' Of Appropriate Pipe).....	1,540.28	
33 42 11 00-1282	EA	Fabricate 78" (Or 87" x 63" Pipe-Arch) Tee Or Lateral, Corrugated Steel Pipe Fitting (Requires 16' Of Appropriate Pipe).....	1,677.65	
33 42 11 00-1283	EA	Fabricate 84" (Or 95" x 67" Pipe-Arch) Tee Or Lateral, Corrugated Steel Pipe Fitting (Requires 16' Of Appropriate Pipe).....	1,817.66	
33 42 11 00-1284	EA	Fabricate 90" (Or 103" x 71" Pipe-Arch) Tee Or Lateral, Corrugated Steel Pipe Fitting (Requires 18' Of Appropriate Pipe).....	2,236.37	
33 42 11 00-1285	EA	Fabricate 96" (Or 112" x 75" Pipe-Arch) Tee Or Lateral, Corrugated Steel Pipe Fitting (Requires 18' Of Appropriate Pipe).....	2,396.61	

**33 Utilities****33 40 Stormwater Utilities****33 42 Stormwater Conveyance**

MINOR CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
33 42 11 00-1286	EA	Fabricate 102" (Or 117" x 79" Pipe-Arch) Tee Or Lateral, Corrugated Steel Pipe Fitting (Requires 20' Of Appropriate Pipe).....	2,556.84	
33 42 11 00-1287	EA	Fabricate 108" (Or 128" x 83" Pipe-Arch) Tee Or Lateral, Corrugated Steel Pipe Fitting (Requires 20' Of Appropriate Pipe).....	2,718.39	
33 42 11 00-1288	EA	Fabricate 114" (Or 137" x 87" Pipe-Arch) Tee Or Lateral, Corrugated Steel Pipe Fitting (Requires 21' Of Appropriate Pipe).....	2,879.98	
33 42 11 00-1289	EA	Fabricate 120" (Or 142" x 91" Pipe-Arch) Tee Or Lateral, Corrugated Steel Pipe Fitting (Requires 21' Of Appropriate Pipe).....	3,040.18	
33 42 11 00-1290	EA	Fabricate 126" Tee Or Lateral, Corrugated Steel Pipe Fitting (Requires 23' Of Appropriate Pipe).....	3,209.32	
33 42 11 00-1291	EA	Fabricate 132" Tee Or Lateral, Corrugated Steel Pipe Fitting (Requires 24' Of Appropriate Pipe).....	3,387.85	
33 42 11 00-1292	EA	Fabricate 138" Tee Or Lateral, Corrugated Steel Pipe Fitting (Requires 24' Of Appropriate Pipe).....	3,576.30	
<b>33 42 11 00-1293 Fabricate Skew Or Bevel Ends, Corrugated Steel Pipe Fitting (33 42 11 00-1236)</b>				
Note: Applied to pipe tasks.				
33 42 11 00-1294	EA	Fabricate 6" Skew Or Bevel End, Corrugated Steel Pipe Fitting.....	42.16	
33 42 11 00-1295	EA	Fabricate 8" Skew Or Bevel End, Corrugated Steel Pipe Fitting.....	53.03	
33 42 11 00-1296	EA	Fabricate 10" Skew Or Bevel End, Corrugated Steel Pipe Fitting.....	66.71	
33 42 11 00-1297	EA	Fabricate 12" Skew Or Bevel End, Corrugated Steel Pipe Fitting.....	81.69	
33 42 11 00-1298	EA	Fabricate 15" (Or 17" x 13" Pipe-Arch) Skew Or Bevel End, Corrugated Steel Pipe Fitting.....	103.37	
33 42 11 00-1299	EA	Fabricate 18" (Or 21" x 15" Pipe-Arch) Skew Or Bevel End, Corrugated Steel Pipe Fitting.....	126.57	
33 42 11 00-1300	EA	Fabricate 21" (Or 24" x 18" Pipe-Arch) Skew Or Bevel End, Corrugated Steel Pipe Fitting.....	148.26	
33 42 11 00-1301	EA	Fabricate 24" (Or 28" x 20" Pipe-Arch) Skew Or Bevel End, Corrugated Steel Pipe Fitting.....	172.25	
33 42 11 00-1302	EA	Fabricate 30" (Or 35" x 24" Pipe-Arch) Skew Or Bevel End, Corrugated Steel Pipe Fitting.....	211.56	
33 42 11 00-1303	EA	Fabricate 36" (Or 42" x 29" Pipe-Arch) Skew Or Bevel End, Corrugated Steel Pipe Fitting.....	252.25	
33 42 11 00-1304	EA	Fabricate 42" (Or 49" x 33" Pipe-Arch) Skew Or Bevel End, Corrugated Steel Pipe Fitting.....	300.98	
33 42 11 00-1305	EA	Fabricate 48" (Or 57" x 38" Pipe-Arch) Skew Or Bevel End, Corrugated Steel Pipe Fitting.....	370.24	
33 42 11 00-1306	EA	Fabricate 54" (Or 64" x 43" Pipe-Arch) Skew Or Bevel End, Corrugated Steel Pipe Fitting.....	419.06	
33 42 11 00-1307	EA	Fabricate 60" (Or 71" x 47" Pipe-Arch) Skew Or Bevel End, Corrugated Steel Pipe Fitting.....	471.94	
33 42 11 00-1308	EA	Fabricate 66" (Or 77" x 52" Pipe-Arch) Skew Or Bevel End, Corrugated Steel Pipe Fitting.....	572.31	
33 42 11 00-1309	EA	Fabricate 72" (Or 83" x 57" Pipe-Arch) Skew Or Bevel End, Corrugated Steel Pipe Fitting.....	634.68	
33 42 11 00-1310	EA	Fabricate 78" (Or 87" x 63" Pipe-Arch) Skew Or Bevel End, Corrugated Steel Pipe Fitting.....	774.37	
33 42 11 00-1311	EA	Fabricate 84" (Or 95" x 67" Pipe-Arch) Skew Or Bevel End, Corrugated Steel Pipe Fitting.....	843.56	
33 42 11 00-1312	EA	Fabricate 90" (Or 103" x 71" Pipe-Arch) Skew Or Bevel End, Corrugated Steel Pipe Fitting.....	916.82	
33 42 11 00-1313	EA	Fabricate 96" (Or 112" x 75" Pipe-Arch) Skew Or Bevel End, Corrugated Steel Pipe Fitting.....	988.64	
33 42 11 00-1314	EA	Fabricate 102" (Or 117" x 79" Pipe-Arch) Skew Or Bevel End, Corrugated Steel Pipe Fitting.....	1,061.88	
33 42 11 00-1315	EA	Fabricate 108" (Or 128" x 83" Pipe-Arch) Skew Or Bevel End, Corrugated Steel Pipe Fitting.....	1,136.46	
33 42 11 00-1316	EA	Fabricate 114" (Or 137" x 87" Pipe-Arch) Skew Or Bevel End, Corrugated Steel Pipe Fitting.....	1,209.72	
33 42 11 00-1317	EA	Fabricate 120" (Or 142" x 91" Pipe-Arch) Skew Or Bevel End, Corrugated Steel Pipe Fitting.....	1,282.94	
33 42 11 00-1318	EA	Fabricate 126" Skew Or Bevel End, Corrugated Steel Pipe Fitting.....	1,360.58	
33 42 11 00-1319	EA	Fabricate 132" Skew Or Bevel End, Corrugated Steel Pipe Fitting.....	1,442.92	
33 42 11 00-1320	EA	Fabricate 138" Skew Or Bevel End, Corrugated Steel Pipe Fitting.....	1,530.25	
<b>33 42 11 00-1321 Coupling Bands, Corrugated Metal Pipe Fitting (33 42 11 00-1236)</b>				
33 42 11 00-1322	EA	6" Coupling Band, Corrugated Metal Pipe Fitting.....	11.71	
		For Bituminous Coated, Add.....	3.40	
33 42 11 00-1323	EA	8" Coupling Band, Corrugated Metal Pipe Fitting.....	15.55	
		For Bituminous Coated, Add.....	4.51	
33 42 11 00-1324	EA	10" Coupling Band, Corrugated Metal Pipe Fitting.....	19.59	
		For Bituminous Coated, Add.....	5.68	
33 42 11 00-1325	EA	12" Coupling Band, Corrugated Metal Pipe Fitting.....	32.52	
		For Bituminous Coated, Add.....	9.43	
33 42 11 00-1326	EA	15" Coupling Band, Corrugated Metal Pipe Fitting.....	41.00	
		For Bituminous Coated, Add.....	11.89	
33 42 11 00-1327	EA	18" Coupling Band, Corrugated Metal Pipe Fitting.....	60.16	
		For Bituminous Coated, Add.....	17.45	
33 42 11 00-1328	EA	21" Coupling Band, Corrugated Metal Pipe Fitting.....	71.40	
		For Bituminous Coated, Add.....	20.71	
33 42 11 00-1329	EA	24" Coupling Band, Corrugated Metal Pipe Fitting.....	80.96	
		For Bituminous Coated, Add.....	23.48	
33 42 11 00-1330	EA	30" Coupling Band, Corrugated Metal Pipe Fitting.....	140.11	
		For Bituminous Coated, Add.....	40.63	
33 42 11 00-1331	EA	36" Coupling Band, Corrugated Metal Pipe Fitting.....	224.16	
		For Bituminous Coated, Add.....	53.80	
33 42 11 00-1332	EA	42" Coupling Band, Corrugated Metal Pipe Fitting.....	263.38	
		For Bituminous Coated, Add.....	63.21	
33 42 11 00-1333	EA	48" Coupling Band, Corrugated Metal Pipe Fitting.....	295.12	
		For Bituminous Coated, Add.....	70.83	
33 42 11 00-1334	EA	54" Coupling Band, Corrugated Metal Pipe Fitting.....	418.53	
		For Bituminous Coated, Add.....	100.45	
33 42 11 00-1335	EA	60" Coupling Band, Corrugated Metal Pipe Fitting.....	598.63	
		For Bituminous Coated, Add.....	107.75	
33 42 11 00-1336	EA	66" Coupling Band, Corrugated Metal Pipe Fitting.....	735.70	
		For Bituminous Coated, Add.....	132.43	
33 42 11 00-1337	EA	72" Coupling Band, Corrugated Metal Pipe Fitting.....	945.06	
		For Bituminous Coated, Add.....	132.31	
33 42 11 00-1338	EA	78" Coupling Band, Corrugated Metal Pipe Fitting.....	1,010.80	
		For Bituminous Coated, Add.....	141.51	
33 42 11 00-1339	EA	84" Coupling Band, Corrugated Metal Pipe Fitting.....	1,076.91	
		For Bituminous Coated, Add.....	150.77	
33 42 11 00-1340	EA	90" Coupling Band, Corrugated Metal Pipe Fitting.....	1,142.69	
		For Bituminous Coated, Add.....	159.98	



		<b>Utilities</b>	<b>33</b>	<b>CS</b>
		<b>Stormwater Utilities</b>	<b>33 40</b>	
		<b>Stormwater Conveyance</b>	<b>33 42</b>	

MINOR CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
33 42 11 00-1341	EA	96" Coupling Band, Corrugated Metal Pipe Fitting .....	1,208.64	
		For Bituminous Coated, Add .....	169.21	
33 42 11 00-1342	EA	102" Coupling Band, Corrugated Metal Pipe Fitting .....	1,274.75	
		For Bituminous Coated, Add .....	178.47	
33 42 11 00-1343	EA	108" Coupling Band, Corrugated Metal Pipe Fitting .....	1,340.56	
		For Bituminous Coated, Add .....	187.68	
33 42 11 00-1344	EA	114" Coupling Band, Corrugated Metal Pipe Fitting .....	1,587.75	
		For Bituminous Coated, Add .....	190.53	
33 42 11 00-1345	EA	120" Coupling Band, Corrugated Metal Pipe Fitting .....	1,472.08	
		For Bituminous Coated, Add .....	176.65	
33 42 11 00-1346	EA	126" Coupling Band, Corrugated Metal Pipe Fitting .....	1,537.69	
		For Bituminous Coated, Add .....	184.52	
33 42 11 00-1347	EA	132" Coupling Band, Corrugated Metal Pipe Fitting .....	1,603.77	
		For Bituminous Coated, Add .....	192.45	
33 42 11 00-1348	EA	138" Coupling Band, Corrugated Metal Pipe Fitting .....	1,669.92	
		For Bituminous Coated, Add .....	200.39	

### 33 42 13 Stormwater Culverts (33 42)

#### 33 42 13 13 Precast Concrete Stormwater Culverts (33 42 13)

##### 33 42 13 13-0001 Precast Reinforced Concrete Box Culvert (33 42 13 13)

Note: The quantity required shall be the entire length of the culvert including the length of the cut-off sections. Includes delivery, handling, hoisting into place, alignment, bracing, permanent connections, grouting of joints and caulking of joints. Excludes crane, excavation and backfill. Minimum length 6'-0". See CSI section 01 22 23 00-0776 for crane lifting equipment.

33 42 13 13-0002	LF	3' x 3' Precast Reinforced Concrete Box Culvert .....	413.56	48.78
		For Each LF Of Cut-Off Section, Add .....	16.54	
33 42 13 13-0003	LF	4' x 2' Precast Reinforced Concrete Box Culvert .....	466.97	48.78
		For Each LF Of Cut-Off Section, Add .....	18.68	
33 42 13 13-0004	LF	4' x 3' Precast Reinforced Concrete Box Culvert .....	553.25	48.78
		For Each LF Of Cut-Off Section, Add .....	22.13	
33 42 13 13-0005	LF	5' x 3' Precast Reinforced Concrete Box Culvert .....	663.83	60.98
		For Each LF Of Cut-Off Section, Add .....	26.55	
33 42 13 13-0006	LF	5' x 4' Precast Reinforced Concrete Box Culvert .....	680.27	60.98
		For Each LF Of Cut-Off Section, Add .....	27.21	
33 42 13 13-0007	LF	5' x 5' Precast Reinforced Concrete Box Culvert .....	688.48	60.98
		For Each LF Of Cut-Off Section, Add .....	27.54	
33 42 13 13-0008	LF	6' x 3' Precast Reinforced Concrete Box Culvert .....	709.78	63.42
		For Each LF Of Cut-Off Section, Add .....	28.39	
33 42 13 13-0009	LF	6' x 4' Precast Reinforced Concrete Box Culvert .....	713.89	63.42
		For Each LF Of Cut-Off Section, Add .....	28.56	
33 42 13 13-0010	LF	6' x 6' Precast Reinforced Concrete Box Culvert .....	787.84	63.42
		For Each LF Of Cut-Off Section, Add .....	31.51	
33 42 13 13-0011	LF	7' x 4' Precast Reinforced Concrete Box Culvert .....	807.29	73.18
		For Each LF Of Cut-Off Section, Add .....	32.29	
33 42 13 13-0012	LF	7' x 6' Precast Reinforced Concrete Box Culvert .....	859.77	99.52
		For Each LF Of Cut-Off Section, Add .....	34.39	
33 42 13 13-0013	LF	8' x 2' Precast Reinforced Concrete Box Culvert .....	791.95	63.42
		For Each LF Of Cut-Off Section, Add .....	31.68	
33 42 13 13-0014	LF	8' x 3' Precast Reinforced Concrete Box Culvert .....	811.40	73.18
		For Each LF Of Cut-Off Section, Add .....	32.46	
33 42 13 13-0015	LF	8' x 4' Precast Reinforced Concrete Box Culvert .....	823.72	73.18
		For Each LF Of Cut-Off Section, Add .....	32.95	
33 42 13 13-0016	LF	8' x 5' Precast Reinforced Concrete Box Culvert .....	992.29	97.56
		For Each LF Of Cut-Off Section, Add .....	39.69	
33 42 13 13-0017	LF	8' x 6' Precast Reinforced Concrete Box Culvert .....	995.58	97.56
		For Each LF Of Cut-Off Section, Add .....	39.82	
33 42 13 13-0018	LF	8' x 8' Precast Reinforced Concrete Box Culvert .....	1,099.23	121.96
		For Each LF Of Cut-Off Section, Add .....	43.97	
33 42 13 13-0019	LF	9' x 4' Precast Reinforced Concrete Box Culvert .....	1,098.29	97.56
		For Each LF Of Cut-Off Section, Add .....	43.93	
33 42 13 13-0020	LF	9' x 6' Precast Reinforced Concrete Box Culvert .....	1,159.22	121.96
		For Each LF Of Cut-Off Section, Add .....	46.37	
33 42 13 13-0021	LF	10' x 3' Precast Reinforced Concrete Box Culvert .....	1,163.32	121.96
		For Each LF Of Cut-Off Section, Add .....	46.53	
33 42 13 13-0022	LF	10' x 4' Precast Reinforced Concrete Box Culvert .....	1,418.05	121.96
		For Each LF Of Cut-Off Section, Add .....	56.72	
33 42 13 13-0023	LF	10' x 5' Precast Reinforced Concrete Box Culvert .....	1,483.08	146.35
		For Each LF Of Cut-Off Section, Add .....	59.32	
33 42 13 13-0024	LF	10' x 6' Precast Reinforced Concrete Box Culvert .....	1,499.52	146.35
		For Each LF Of Cut-Off Section, Add .....	59.98	
33 42 13 13-0025	LF	10' x 7' Precast Reinforced Concrete Box Culvert .....	1,503.63	146.35
		For Each LF Of Cut-Off Section, Add .....	60.15	
33 42 13 13-0026	LF	10' x 8' Precast Reinforced Concrete Box Culvert .....	1,509.38	146.35
		For Each LF Of Cut-Off Section, Add .....	60.38	
33 42 13 13-0027	LF	12' x 3' Precast Reinforced Concrete Box Culvert .....	1,564.56	170.74
		For Each LF Of Cut-Off Section, Add .....	62.58	
33 42 13 13-0028	LF	12' x 4' Precast Reinforced Concrete Box Culvert .....	1,564.56	170.74
		For Each LF Of Cut-Off Section, Add .....	62.58	
33 42 13 13-0029	LF	12' x 6' Precast Reinforced Concrete Box Culvert .....	1,564.56	170.74
		For Each LF Of Cut-Off Section, Add .....	62.58	
33 42 13 13-0030	LF	12' x 8' Precast Reinforced Concrete Box Culvert .....	1,564.56	170.74
		For Each LF Of Cut-Off Section, Add .....	62.58	

**33 Utilities****33 40 Stormwater Utilities****33 42 Stormwater Conveyance**

MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
33 42 13 13-0031 LF 16' x 10' Precast Reinforced Concrete Box Culvert ..... <i>For Each LF Of Cut-Off Section, Add</i>	2,286.96 91.48	195.14
33 42 13 13-0032 LF 24' x 10' Precast Reinforced Concrete Box Culvert ..... <i>For Each LF Of Cut-Off Section, Add</i>	3,190.83 127.63	195.14
<b>33 42 13 13-0033 Precast Reinforced Concrete Box Culvert For Roadways (33 42 13 13)</b>		
Note: AASHTO HL-93 Rated. The quantity required shall be the entire length of the culvert including the length of the cut-off sections. Includes delivery, handling, hoisting into place, alignment, bracing, permanent connections, grouting of joints and caulking of joints. Excludes crane, excavation and backfill. Minimum length 6'-0". See CSI section 01 22 23 00-0776 for crane lifting equipment.		
33 42 13 13-0034 LF 3' x 3' Precast Reinforced Concrete Box Culvert For Roadways ..... <i>For Each LF Of Cut-Off Section, Add</i>	1,042.58 41.70	48.78
33 42 13 13-0035 LF 4' x 2' Precast Reinforced Concrete Box Culvert For Roadways ..... <i>For Each LF Of Cut-Off Section, Add</i>	1,121.50 44.86	48.78
33 42 13 13-0036 LF 4' x 3' Precast Reinforced Concrete Box Culvert For Roadways ..... <i>For Each LF Of Cut-Off Section, Add</i>	1,261.18 50.45	48.78
33 42 13 13-0037 LF 5' x 3' Precast Reinforced Concrete Box Culvert For Roadways ..... <i>For Each LF Of Cut-Off Section, Add</i>	1,425.13 57.01	60.98
33 42 13 13-0038 LF 5' x 4' Precast Reinforced Concrete Box Culvert For Roadways ..... <i>For Each LF Of Cut-Off Section, Add</i>	1,564.81 62.59	60.98
33 42 13 13-0039 LF 5' x 5' Precast Reinforced Concrete Box Culvert For Roadways ..... <i>For Each LF Of Cut-Off Section, Add</i>	1,704.49 68.18	60.98
33 42 13 13-0040 LF 6' x 3' Precast Reinforced Concrete Box Culvert For Roadways ..... <i>For Each LF Of Cut-Off Section, Add</i>	1,569.67 62.79	63.42
33 42 13 13-0041 LF 6' x 4' Precast Reinforced Concrete Box Culvert For Roadways ..... <i>For Each LF Of Cut-Off Section, Add</i>	1,709.35 68.37	63.42
33 42 13 13-0042 LF 6' x 6' Precast Reinforced Concrete Box Culvert For Roadways ..... <i>For Each LF Of Cut-Off Section, Add</i>	1,988.71 79.55	63.42
33 42 13 13-0043 LF 7' x 4' Precast Reinforced Concrete Box Culvert For Roadways ..... <i>For Each LF Of Cut-Off Section, Add</i>	1,868.48 74.74	73.18
33 42 13 13-0044 LF 7' x 6' Precast Reinforced Concrete Box Culvert For Roadways ..... <i>For Each LF Of Cut-Off Section, Add</i>	2,200.29 88.01	99.52
33 42 13 13-0045 LF 8' x 2' Precast Reinforced Concrete Box Culvert For Roadways ..... <i>For Each LF Of Cut-Off Section, Add</i>	1,709.35 68.37	63.42
33 42 13 13-0046 LF 8' x 3' Precast Reinforced Concrete Box Culvert For Roadways ..... <i>For Each LF Of Cut-Off Section, Add</i>	1,868.48 74.74	73.18
33 42 13 13-0047 LF 8' x 4' Precast Reinforced Concrete Box Culvert For Roadways ..... <i>For Each LF Of Cut-Off Section, Add</i>	2,008.16 80.33	73.18
33 42 13 13-0048 LF 8' x 5' Precast Reinforced Concrete Box Culvert For Roadways ..... <i>For Each LF Of Cut-Off Section, Add</i>	2,196.41 87.86	97.56
33 42 13 13-0049 LF 8' x 6' Precast Reinforced Concrete Box Culvert For Roadways ..... <i>For Each LF Of Cut-Off Section, Add</i>	2,336.09 93.44	97.56
33 42 13 13-0050 LF 8' x 8' Precast Reinforced Concrete Box Culvert For Roadways ..... <i>For Each LF Of Cut-Off Section, Add</i>	2,664.05 106.56	121.96
33 42 13 13-0051 LF 9' x 4' Precast Reinforced Concrete Box Culvert For Roadways ..... <i>For Each LF Of Cut-Off Section, Add</i>	2,358.95 94.36	97.56
33 42 13 13-0052 LF 9' x 6' Precast Reinforced Concrete Box Culvert For Roadways ..... <i>For Each LF Of Cut-Off Section, Add</i>	2,706.09 108.24	121.96
33 42 13 13-0053 LF 10' x 3' Precast Reinforced Concrete Box Culvert For Roadways ..... <i>For Each LF Of Cut-Off Section, Add</i>	2,675.70 107.03	121.96
33 42 13 13-0054 LF 10' x 4' Precast Reinforced Concrete Box Culvert For Roadways ..... <i>For Each LF Of Cut-Off Section, Add</i>	2,841.56 113.66	121.96
33 42 13 13-0055 LF 10' x 5' Precast Reinforced Concrete Box Culvert For Roadways ..... <i>For Each LF Of Cut-Off Section, Add</i>	3,056.01 122.24	146.35
33 42 13 13-0056 LF 10' x 6' Precast Reinforced Concrete Box Culvert For Roadways ..... <i>For Each LF Of Cut-Off Section, Add</i>	3,221.87 128.87	146.35
33 42 13 13-0057 LF 10' x 7' Precast Reinforced Concrete Box Culvert For Roadways ..... <i>For Each LF Of Cut-Off Section, Add</i>	3,387.75 135.51	146.35
33 42 13 13-0058 LF 10' x 8' Precast Reinforced Concrete Box Culvert For Roadways ..... <i>For Each LF Of Cut-Off Section, Add</i>	3,553.61 142.14	146.35
33 42 13 13-0059 LF 12' x 3' Precast Reinforced Concrete Box Culvert For Roadways ..... <i>For Each LF Of Cut-Off Section, Add</i>	3,545.78 141.83	170.74
33 42 13 13-0060 LF 12' x 4' Precast Reinforced Concrete Box Culvert For Roadways ..... <i>For Each LF Of Cut-Off Section, Add</i>	3,734.31 149.37	170.74
33 42 13 13-0061 LF 12' x 6' Precast Reinforced Concrete Box Culvert For Roadways ..... <i>For Each LF Of Cut-Off Section, Add</i>	4,111.44 164.46	170.74
33 42 13 13-0062 LF 12' x 8' Precast Reinforced Concrete Box Culvert For Roadways ..... <i>For Each LF Of Cut-Off Section, Add</i>	4,488.57 179.54	170.74
33 42 13 13-0063 LF 16' x 10' Precast Reinforced Concrete Box Culvert For Roadways ..... <i>For Each LF Of Cut-Off Section, Add</i>	5,375.22 215.01	195.14
33 42 13 13-0064 LF 24' x 10' Precast Reinforced Concrete Box Culvert For Roadways ..... <i>For Each LF Of Cut-Off Section, Add</i>	6,799.90 272.00	195.14

**33 42 23 Headwalls and Endwalls for Stormwater Piping (33 42)****33 42 23 00-0001 Headwalls (33 42 23)**

Note: Excludes excavation and backfill. Select pipe with closest opening area for square or round culverts.

**33 42 23 00-0002 Cast In Place Concrete Headwalls (33 42 23 00-0001)**

Note: Includes concrete, forms, rebar (where required), finish and curing.

**33 42 23 00-0003 Skewed Wingwall, Cast In Place Concrete Headwall (33 42 23 00-0002)**

Note: Sized by pipe diameter.



	<b>Utilities</b>	<b>33</b>	
	<b>Stormwater Utilities</b>	<b>33 40</b>	<b>CS</b>
	<b>Stormwater Conveyance</b>	<b>33 42</b>	

MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
33 42 23 00-0004 EA 12" Pipe, Skewed Wingwall, Cast In Place Concrete Headwall.....	1,554.78	654.27
33 42 23 00-0005 EA 15" Pipe, Skewed Wingwall, Cast In Place Concrete Headwall.....	1,955.14	697.89
33 42 23 00-0006 EA 18" Pipe, Skewed Wingwall, Cast In Place Concrete Headwall.....	2,561.30	914.14
33 42 23 00-0007 EA 24" Pipe, Skewed Wingwall, Cast In Place Concrete Headwall.....	4,031.57	1,308.54
33 42 23 00-0008 EA 30" Pipe, Skewed Wingwall, Cast In Place Concrete Headwall.....	5,615.84	1,744.72
33 42 23 00-0009 EA 36" Pipe, Skewed Wingwall, Cast In Place Concrete Headwall.....	6,679.95	2,299.74
33 42 23 00-0010 EA 42" Pipe, Skewed Wingwall, Cast In Place Concrete Headwall.....	9,136.29	3,172.20
33 42 23 00-0011 EA 48" Pipe, Skewed Wingwall, Cast In Place Concrete Headwall.....	10,868.23	3,738.64
33 42 23 00-0012 EA 54" Pipe, Skewed Wingwall, Cast In Place Concrete Headwall.....	13,065.67	4,551.49
33 42 23 00-0013 EA 60" Pipe, Skewed Wingwall, Cast In Place Concrete Headwall.....	15,657.11	5,509.63
<b>33 42 23 00-0014 Precast Concrete Headwalls (33 42 23 00-0001)</b>		
33 42 23 00-0015 EA 12" Pipe, Precast Concrete Headwall.....	897.64	163.83
33 42 23 00-0016 EA 15" Pipe, Precast Concrete Headwall.....	924.95	172.93
33 42 23 00-0017 EA 18" Pipe, Precast Concrete Headwall.....	1,016.55	196.60
33 42 23 00-0018 EA 24" Pipe, Precast Concrete Headwall.....	1,125.44	209.34
33 42 23 00-0019 EA 30" Pipe, Precast Concrete Headwall.....	1,534.21	245.74
33 42 23 00-0020 EA 36" Pipe, Precast Concrete Headwall.....	1,717.42	254.85
33 42 23 00-0021 EA 42" Pipe, Precast Concrete Headwall.....	2,275.92	301.09
33 42 23 00-0022 EA 48" Pipe, Precast Concrete Headwall.....	2,518.85	331.72
33 42 23 00-0023 EA 54" Pipe, Precast Concrete Headwall.....	2,784.78	351.24
33 42 23 00-0024 EA 60" Pipe, Precast Concrete Headwall.....	3,169.01	351.24
33 42 23 00-0025 EA 72" Pipe, Precast Concrete Headwall.....	3,859.44	439.05
33 42 23 00-0026 EA 84" Pipe, Precast Concrete Headwall.....	5,515.97	526.86
<b>33 42 23 00-0027 Precast Concrete Wingwalls (33 42 23 00-0001)</b>		
33 42 23 00-0028 EA 18" ID Pipe (26" Hole) Precast Concrete Wingwall.....	5,515.36	1,738.64
Note: 12" Thick wall and base. Wingwalls are configured at 0-30 degrees off centerline of pipe.		
33 42 23 00-0029 EA 24" ID Pipe (32" Hole) Precast Concrete Wingwall.....	5,808.07	1,931.83
Note: 12" Thick wall and base. Wingwalls are configured at 0-30 degrees off centerline of pipe.		
33 42 23 00-0030 EA 30" ID Pipe (42" Hole) Precast Concrete Wingwall.....	6,295.89	2,253.79
Note: 12" Thick wall and base. Wingwalls are configured at 0-30 degrees off centerline of pipe.		
33 42 23 00-0031 EA 33" ID Pipe (46" Hole) Precast Concrete Wingwall.....	6,783.73	2,575.76
Note: 12" thick wall and base. Wingwalls are configured at zero degrees only off centerline of pipe.		
33 42 23 00-0032 EA 36" ID Pipe (50" Hole) Precast Concrete Wingwall.....	6,783.73	2,575.76
Note: 12" Thick wall and base. Wingwalls are configured at 0-30 degrees off centerline of pipe.		
33 42 23 00-0033 EA 44" ID Pipe (58" Hole) Precast Concrete Wingwall.....	6,978.86	2,704.55
Note: 12" Thick wall and base. Wingwalls are configured at 0-30 degrees off centerline of pipe.		
33 42 23 00-0034 EA 48" ID Pipe (62" Hole) Precast Concrete Wingwall.....	12,778.64	2,768.94
Note: 12" thick wall and base. Wingwalls are configured at 0-30 degrees off centerline of pipe.		
33 42 23 00-0035 EA 52" ID Pipe (66" Hole) Precast Concrete Wingwall.....	13,071.33	2,962.13
Note: 12" thick wall and base. Wingwalls are configured at zero degrees only off centerline of pipe.		
<b>33 42 23 00-0036 Precast Concrete Transverse Drainage Interceptor (33 42 23 00-0001)</b>		
33 42 23 00-0037 EA 34" x 48" x 28" Precast Concrete Transverse Drainage Interceptor With Frame And Grate.....	4,650.61	682.97
<b>33 42 26 End Sections for Stormwater Piping (33 42)</b>		
<b>33 42 26 16 Corrugated Metal End Sections for Stormwater Piping (33 42 26)</b>		
33 42 26 16-0001 Corrugated Metal Pipe End Sections (33 42 26 16)		
33 42 26 16-0002 Galvanized Corrugated Steel Pipe End Sections (33 42 26 16-0001)		
33 42 26 16-0003 Type 1 Galvanized Corrugated Steel Pipe End Sections (33 42 26 16-0002)		
Note: Used with annular corrugations, no band required. Consists of a 12 gauge steel strap with a 6" bolt and nut.		
33 42 26 16-0004 EA 12" 16 Gauge, Type 1 Galvanized Corrugated Steel Pipe End Section.....	246.13	63.71
33 42 26 16-0005 EA 15" 16 Gauge, Type 1 Galvanized Corrugated Steel Pipe End Section.....	284.97	68.27
33 42 26 16-0006 EA 18" 16 Gauge, Type 1 Galvanized Corrugated Steel Pipe End Section.....	331.92	72.81
33 42 26 16-0007 EA 21" 16 Gauge, Type 1 Galvanized Corrugated Steel Pipe End Section.....	400.97	79.64
33 42 26 16-0008 EA 24" 16 Gauge, Type 1 Galvanized Corrugated Steel Pipe End Section.....	443.98	86.47
33 42 26 16-0009 Type 2 Galvanized Corrugated Steel Pipe End Sections (33 42 26 16-0002)		
Note: Partial circumferential rod with two hinge type lugs used with annular corrugations. No band required.		
33 42 26 16-0010 EA 30" 14 Gauge, Type 2 Galvanized Corrugated Steel Pipe End Section.....	711.06	97.85
33 42 26 16-0011 EA 36" 14 Gauge, Type 2 Galvanized Corrugated Steel Pipe End Section.....	923.83	117.08
33 42 26 16-0012 EA 42" 12 Gauge, Type 2 Galvanized Corrugated Steel Pipe End Section.....	1,411.50	136.60
33 42 26 16-0013 EA 48" 12 Gauge, Type 2 Galvanized Corrugated Steel Pipe End Section.....	1,722.93	156.11
33 42 26 16-0014 EA 54" 12 Gauge, Type 2 Galvanized Corrugated Steel Pipe End Section.....	2,053.63	195.14
33 42 26 16-0015 EA 60" 10 Gauge, Type 2 Galvanized Corrugated Steel Pipe End Section.....	2,399.11	234.16
33 42 26 16-0016 Type 3 Or 5 Galvanized Corrugated Steel Pipe End Sections (33 42 26 16-0002)		
Note: Stubbed with 1' of pipe (excluded in price). Used with all pipe having annular end corrugations.		
33 42 26 16-0017 EA 12" 16 Gauge, Type 3 Or 5 Galvanized Corrugated Steel Pipe End Section.....	256.73	63.71
33 42 26 16-0018 EA 15" 16 Gauge, Type 3 Or 5 Galvanized Corrugated Steel Pipe End Section.....	295.88	68.27
33 42 26 16-0019 EA 18" 16 Gauge, Type 3 Or 5 Galvanized Corrugated Steel Pipe End Section.....	348.69	72.81

**33 Utilities****33 40 Stormwater Utilities****33 42 Stormwater Conveyance**

MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
33 42 26 16-0020 EA 21" 16 Gauge, Type 3 Or 5 Galvanized Corrugated Steel Pipe End Section.....	421.10	79.64
33 42 26 16-0021 EA 24" 16 Gauge, Type 3 Or 5 Galvanized Corrugated Steel Pipe End Section.....	466.81	86.47
33 42 26 16-0022 EA 30" 14 Gauge, Type 3 Or 5 Galvanized Corrugated Steel Pipe End Section.....	781.15	97.85
33 42 26 16-0023 EA 36" 14 Gauge, Type 3 Or 5 Galvanized Corrugated Steel Pipe End Section.....	1,009.86	117.08
33 42 26 16-0024 EA 42" 12 Gauge, Type 3 Or 5 Galvanized Corrugated Steel Pipe End Section.....	1,601.53	136.60
33 42 26 16-0025 EA 48" 12 Gauge, Type 3 Or 5 Galvanized Corrugated Steel Pipe End Section.....	1,968.16	156.11
33 42 26 16-0026 EA 54" 12 Gauge, Type 3 Or 5 Galvanized Corrugated Steel Pipe End Section.....	2,301.62	195.14
33 42 26 16-0027 EA 60" 10 Gauge, Type 3 Or 5 Galvanized Corrugated Steel Pipe End Section.....	3,184.56	234.16
33 42 26 16-0028 EA 66" 10 Gauge, Type 3 Or 5 Galvanized Corrugated Steel Pipe End Section.....	3,625.73	351.24
33 42 26 16-0029 EA 72" 10 Gauge, Type 3 Or 5 Galvanized Corrugated Steel Pipe End Section.....	4,250.55	468.32
33 42 26 16-0030 EA 78" 10 Gauge, Type 3 Or 5 Galvanized Corrugated Steel Pipe End Section.....	4,628.97	502.46
33 42 26 16-0031 EA 84" 10 Gauge, Type 3 Or 5 Galvanized Corrugated Steel Pipe End Section.....	5,016.45	536.62
<b>33 42 26 16-0032 Toe Plate Extensions For Galvanized Corrugated Steel Pipe End Section (33</b>		
<small>42 26 16-0002)</small>		
33 42 26 16-0033 EA Toe Plate Extension For 12" Diameter Galvanized Corrugated Steel Pipe End Section .....	31.69	
33 42 26 16-0034 EA Toe Plate Extension For 15" Diameter Galvanized Corrugated Steel Pipe End Section .....	35.28	
33 42 26 16-0035 EA Toe Plate Extension For 18" Diameter Galvanized Corrugated Steel Pipe End Section .....	39.69	
33 42 26 16-0036 EA Toe Plate Extension For 21" Diameter Galvanized Corrugated Steel Pipe End Section .....	43.15	
33 42 26 16-0037 EA Toe Plate Extension For 24" Diameter Galvanized Corrugated Steel Pipe End Section .....	48.28	
33 42 26 16-0038 EA Toe Plate Extension For 30" Diameter Galvanized Corrugated Steel Pipe End Section .....	84.05	
33 42 26 16-0039 EA Toe Plate Extension For 36" Diameter Galvanized Corrugated Steel Pipe End Section .....	90.46	
33 42 26 16-0040 EA Toe Plate Extension For 42" Diameter Galvanized Corrugated Steel Pipe End Section .....	123.65	
33 42 26 16-0041 EA Toe Plate Extension For 48" Diameter Galvanized Corrugated Steel Pipe End Section .....	132.41	
33 42 26 16-0042 EA Toe Plate Extension For 54" Diameter Galvanized Corrugated Steel Pipe End Section .....	161.61	
33 42 26 16-0043 EA Toe Plate Extension For 60" Diameter Galvanized Corrugated Steel Pipe End Section .....	165.65	
33 42 26 16-0044 EA Toe Plate Extension For 66" Diameter Galvanized Corrugated Steel Pipe End Section .....	177.04	
33 42 26 16-0045 EA Toe Plate Extension For 72" Diameter Galvanized Corrugated Steel Pipe End Section .....	202.03	
33 42 26 16-0046 EA Toe Plate Extension For 78" Diameter Galvanized Corrugated Steel Pipe End Section .....	225.93	
33 42 26 16-0047 EA 84" Diameter Galvanized Corrugated Steel Pipe End Section Toe Plate Extension.....	231.62	
<b>33 42 26 16-0048 Galvanized Corrugated Steel Pipe-Arch End Sections (33 42 26 16-0001)</b>		
<b>33 42 26 16-0049 Type 1 Galvanized Corrugated Steel Pipe-Arch End Sections (33 42 26 16-0048)</b>		
<small>Note: Used with annular corrugations, no band required. Consists of a 12 gauge steel strap with a 6" bolt and nut.</small>		
33 42 26 16-0050 EA 17" x 13" 16 Gauge, Type 1 Galvanized Corrugated Steel Pipe-Arch End Section .....	284.97	68.27
33 42 26 16-0051 EA 21" x 15" 16 Gauge, Type 1 Galvanized Corrugated Steel Pipe-Arch End Section .....	331.92	72.81
33 42 26 16-0052 EA 24" x 18" 16 Gauge, Type 1 Galvanized Corrugated Steel Pipe-Arch End Section .....	400.97	79.64
33 42 26 16-0053 EA 28" x 20" 16 Gauge, Type 1 Galvanized Corrugated Steel Pipe-Arch End Section .....	443.98	86.47
<b>33 42 26 16-0054 Type 2 Galvanized Corrugated Steel Pipe-Arch End Sections (33 42 26 16-0048)</b>		
<small>Note: Partial circumferential rod with two hinge type lugs used with annular corrugations. No band required.</small>		
33 42 26 16-0055 EA 17" x 13" 16 Gauge, Type 2 Galvanized Corrugated Steel Pipe-Arch End Section .....	275.82	68.27
33 42 26 16-0056 EA 21" x 15" 16 Gauge, Type 2 Galvanized Corrugated Steel Pipe-Arch End Section .....	314.99	72.81
33 42 26 16-0057 EA 24" x 18" 16 Gauge, Type 2 Galvanized Corrugated Steel Pipe-Arch End Section .....	352.50	79.64
33 42 26 16-0058 EA 28" x 20" 16 Gauge, Type 2 Galvanized Corrugated Steel Pipe-Arch End Section .....	397.70	86.47
33 42 26 16-0059 EA 35" x 24" 14 Gauge, Type 2 Galvanized Corrugated Steel Pipe-Arch End Section .....	579.10	97.85
33 42 26 16-0060 EA 42" x 29" 14 Gauge, Type 2 Galvanized Corrugated Steel Pipe-Arch End Section .....	843.53	117.08
33 42 26 16-0061 EA 49" x 33" 12 Gauge, Type 2 Galvanized Corrugated Steel Pipe-Arch End Section .....	1,307.18	136.60
33 42 26 16-0062 EA 57" x 38" 12 Gauge, Type 2 Galvanized Corrugated Steel Pipe-Arch End Section .....	1,653.41	156.11
<b>33 42 26 16-0063 Type 3 Or 5 Galvanized Corrugated Steel Pipe-Arch End Sections (33 42 26 16-0048)</b>		
<small>Note: Stubbed with 1' of pipe (excluded in price). Used with all pipe having annular end corrugations.</small>		
33 42 26 16-0064 EA 17" x 13" 16 Gauge, Type 3 Or 5 Galvanized Corrugated Steel Pipe-Arch End Section .....	280.46	68.27
33 42 26 16-0065 EA 21" x 15" 16 Gauge, Type 3 Or 5 Galvanized Corrugated Steel Pipe-Arch End Section .....	325.09	72.81
33 42 26 16-0066 EA 24" x 18" 16 Gauge, Type 3 Or 5 Galvanized Corrugated Steel Pipe-Arch End Section .....	368.28	79.64
33 42 26 16-0067 EA 28" x 20" 16 Gauge, Type 3 Or 5 Galvanized Corrugated Steel Pipe-Arch End Section .....	416.41	86.47
33 42 26 16-0068 EA 35" x 24" 14 Gauge, Type 3 Or 5 Galvanized Corrugated Steel Pipe-Arch End Section .....	610.91	97.85
33 42 26 16-0069 EA 42" x 29" 14 Gauge, Type 3 Or 5 Galvanized Corrugated Steel Pipe-Arch End Section .....	886.92	117.08
33 42 26 16-0070 EA 49" x 33" 12 Gauge, Type 3 Or 5 Galvanized Corrugated Steel Pipe-Arch End Section .....	1,376.60	136.60
33 42 26 16-0071 EA 57" x 38" 12 Gauge, Type 3 Or 5 Galvanized Corrugated Steel Pipe-Arch End Section .....	1,733.29	156.11
33 42 26 16-0072 EA 64" x 43" 12 Gauge, Type 3 Or 5 Galvanized Corrugated Steel Pipe-Arch End Section .....	2,086.45	195.14
33 42 26 16-0073 EA 71" x 47" 10 Gauge, Type 3 Or 5 Galvanized Corrugated Steel Pipe-Arch End Section .....	2,739.90	234.16
33 42 26 16-0074 EA 77" x 52" 10 Gauge, Type 3 Or 5 Galvanized Corrugated Steel Pipe-Arch End Section .....	3,827.28	351.24
33 42 26 16-0075 EA 83" x 57" 10 Gauge, Type 3 Or 5 Galvanized Corrugated Steel Pipe-Arch End Section .....	4,247.87	468.32
<b>33 42 26 16-0076 Toe Plate Extensions For Galvanized Corrugated Steel Pipe-Arch End</b>		
<small>Section (33 42 26 16-0048)</small>		
33 42 26 16-0077 EA Toe Plate Extension For 17" x 13" Galvanized Corrugated Steel Pipe-Arch End Section .....	35.28	
33 42 26 16-0078 EA Toe Plate Extension For 21" x 15" Galvanized Corrugated Steel Pipe-Arch End Section .....	39.69	
33 42 26 16-0079 EA Toe Plate Extension For 24" x 18" Galvanized Corrugated Steel Pipe-Arch End Section .....	43.15	
33 42 26 16-0080 EA Toe Plate Extension For 28" x 20" Galvanized Corrugated Steel Pipe-Arch End Section .....	48.28	
33 42 26 16-0081 EA Toe Plate Extension For 35" x 24" Galvanized Corrugated Steel Pipe-Arch End Section .....	84.05	
33 42 26 16-0082 EA Toe Plate Extension For 42" x 29" Galvanized Corrugated Steel Pipe-Arch End Section .....	90.46	
33 42 26 16-0083 EA Toe Plate Extension For 49" x 33" Galvanized Corrugated Steel Pipe-Arch End Section .....	123.65	
33 42 26 16-0084 EA Toe Plate Extension For 57" x 38" Galvanized Corrugated Steel Pipe-Arch End Section .....	137.66	



	<b>Utilities</b>	<b>33</b>	
	<b>Stormwater Utilities</b>	<b>33 40</b>	<b>CS</b>
	<b>Stormwater Conveyance</b>	<b>33 42</b>	

MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
33 42 26 16-0085 EA Toe Plate Extension For 64" x 43" Galvanized Corrugated Steel Pipe-Arch End Section .....	161.61	
33 42 26 16-0086 EA Toe Plate Extension For 71" x 47" Galvanized Corrugated Steel Pipe-Arch End Section .....	167.74	
33 42 26 16-0087 EA Toe Plate Extension For 77" x 52" Galvanized Corrugated Steel Pipe-Arch End Section .....	194.07	
33 42 26 16-0088 EA Toe Plate Extension For 83" x 57" Galvanized Corrugated Steel Pipe-Arch End Section .....	220.78	
<b>33 42 26 16-0089 Corrugated Aluminum Pipe End Sections (33 42 26 16-0001)</b>		
<b>33 42 26 16-0090 Corrugated Aluminum Pipe End Sections (33 42 26 16-0089)</b>		
33 42 26 16-0091 EA 12" Diameter 16 Gauge, Corrugated Aluminum Pipe End Section .....	369.38	63.71
33 42 26 16-0092 EA 15" Diameter 16 Gauge, Corrugated Aluminum Pipe End Section .....	425.31	68.27
33 42 26 16-0093 EA 18" Diameter 16 Gauge, Corrugated Aluminum Pipe End Section .....	503.67	72.81
33 42 26 16-0094 EA 21" Diameter 16 Gauge, Corrugated Aluminum Pipe End Section .....	623.62	79.64
33 42 26 16-0095 EA 24" Diameter 14 Gauge, Corrugated Aluminum Pipe End Section .....	813.24	86.47
33 42 26 16-0096 EA 30" Diameter 14 Gauge, Corrugated Aluminum Pipe End Section .....	1,217.24	97.85
33 42 26 16-0097 EA 36" Diameter 14 Gauge, Corrugated Aluminum Pipe End Section .....	1,655.31	117.08
33 42 26 16-0098 EA 36" Diameter 12 Gauge, Corrugated Aluminum Pipe End Section .....	2,058.56	117.08
33 42 26 16-0099 EA 42" Diameter 12 Gauge, Corrugated Aluminum Pipe End Section .....	2,624.70	136.60
33 42 26 16-0100 EA 48" Diameter 12 Gauge, Corrugated Aluminum Pipe End Section .....	3,743.49	156.11
33 42 26 16-0101 EA 54" Diameter 12 Gauge, Corrugated Aluminum Pipe End Section .....	4,148.15	195.14
33 42 26 16-0102 EA 60" Diameter 12 And 10 Gauge, Corrugated Aluminum Pipe End Section .....	5,589.03	234.16
33 42 26 16-0103 EA 66" Diameter 12 And 10 Gauge, Corrugated Aluminum Pipe End Section .....	6,336.45	351.24
33 42 26 16-0104 EA 72" Diameter 12 And 10 Gauge, Corrugated Aluminum Pipe End Section .....	7,415.29	468.32
33 42 26 16-0105 EA 78" Diameter 12 And 10 Gauge, Corrugated Aluminum Pipe End Section .....	8,098.12	502.46
33 42 26 16-0106 EA 84" Diameter 12 And 10 Gauge, Corrugated Aluminum Pipe End Section .....	8,545.45	536.62
33 42 26 16-0107 EA 90" Diameter 12 And 10 Gauge, Corrugated Aluminum Pipe End Section .....	11,680.61	585.40
33 42 26 16-0108 EA 96" Diameter 12 And 10 Gauge, Corrugated Aluminum Pipe End Section .....	12,929.93	634.19
<b>33 42 26 16-0109 Toe Plate Extensions For Corrugated Aluminum Pipe End Section (33 42 26 16-0089)</b>		
33 42 26 16-0110 EA Toe Plate Extension For 12" Diameter, 16 Gauge, Corrugated Aluminum Pipe End Section .....	57.82	
33 42 26 16-0111 EA Toe Plate Extension For 15" Diameter, 16 Gauge, Corrugated Aluminum Pipe End Section .....	61.29	
33 42 26 16-0112 EA Toe Plate Extension For 18" Diameter, 16 Gauge, Corrugated Aluminum Pipe End Section .....	66.49	
33 42 26 16-0113 EA Toe Plate Extension For 21" Diameter, 16 Gauge, Corrugated Aluminum Pipe End Section .....	74.83	
33 42 26 16-0114 EA Toe Plate Extension For 24" Diameter, 14 Gauge, Corrugated Aluminum Pipe End Section .....	79.39	
33 42 26 16-0115 EA Toe Plate Extension For 30" Diameter, 14 Gauge, Corrugated Aluminum Pipe End Section .....	102.84	
33 42 26 16-0116 EA Toe Plate Extension For 36" Diameter, 14 Gauge, Corrugated Aluminum Pipe End Section .....	123.29	
33 42 26 16-0117 EA Toe Plate Extension For 36" Diameter, 12 Gauge, Corrugated Aluminum Pipe End Section .....	130.02	
33 42 26 16-0118 EA Toe Plate Extension For 42" Diameter, 12 Gauge, Corrugated Aluminum Pipe End Section .....	142.61	
33 42 26 16-0119 EA Toe Plate Extension For 48" Diameter, 12 Gauge, Corrugated Aluminum Pipe End Section .....	161.20	
33 42 26 16-0120 EA Toe Plate Extension For 54" Diameter, 12 Gauge, Corrugated Aluminum Pipe End Section .....	190.55	
33 42 26 16-0121 EA Toe Plate Extension For 60" Diameter, 12 And 10 Gauge, Corrugated Aluminum Pipe End Section .....	265.92	
33 42 26 16-0122 EA Toe Plate Extension For 66" Diameter, 12 And 10 Gauge, Corrugated Aluminum Pipe End Section .....	286.80	
33 42 26 16-0123 EA Toe Plate Extension For 72" Diameter, 12 And 10 Gauge, Corrugated Aluminum Pipe End Section .....	364.12	
33 42 26 16-0124 EA Toe Plate Extension For 78" Diameter, 12 And 10 Gauge, Corrugated Aluminum Pipe End Section .....	394.14	
33 42 26 16-0125 EA Toe Plate Extension For 84" Diameter, 12 And 10 Gauge, Corrugated Aluminum Pipe End Section .....	419.99	
33 42 26 16-0126 EA Toe Plate Extension For 90" Diameter, 12 And 10 Gauge, Corrugated Aluminum Pipe End Section .....	447.16	
33 42 26 16-0127 EA Toe Plate Extension For 96" Diameter, 12 And 10 Gauge, Corrugated Aluminum Pipe End Section .....	474.66	
<b>33 42 26 16-0128 Corrugated Aluminum Pipe-Arch End Sections (33 42 26 16-0001)</b>		
<b>33 42 26 16-0129 Corrugated Aluminum Pipe-Arch End Sections (33 42 26 16-0128)</b>		
33 42 26 16-0130 EA 17" x 13" 16 Gauge, Corrugated Aluminum Pipe-Arch End Section .....	438.35	68.27
33 42 26 16-0131 EA 21" x 15" 16 Gauge, Corrugated Aluminum Pipe-Arch End Section .....	535.44	72.81
33 42 26 16-0132 EA 24" x 18" 16 Gauge, Corrugated Aluminum Pipe-Arch End Section .....	581.48	79.64
33 42 26 16-0133 EA 28" x 20" 16 Gauge, Corrugated Aluminum Pipe-Arch End Section .....	627.50	86.47
33 42 26 16-0134 EA 35" x 24" 14 Gauge, Corrugated Aluminum Pipe-Arch End Section .....	938.64	97.85
33 42 26 16-0135 EA 42" x 29" 14 Gauge, Corrugated Aluminum Pipe-Arch End Section .....	1,673.84	117.08
33 42 26 16-0136 EA 42" x 29" 12 Gauge, Corrugated Aluminum Pipe-Arch End Section .....	1,776.08	117.08
33 42 26 16-0137 EA 49" x 33" 12 Gauge, Corrugated Aluminum Pipe-Arch End Section .....	2,372.53	136.60
33 42 26 16-0138 EA 57" x 38" 12 Gauge, Corrugated Aluminum Pipe-Arch End Section .....	3,645.29	156.11
33 42 26 16-0139 EA 64" x 43" 12 Gauge, Corrugated Aluminum Pipe-Arch End Section .....	4,174.81	195.14
33 42 26 16-0140 EA 71" x 47" 12 And 10 Gauge, Corrugated Aluminum Pipe-Arch End Section .....	5,047.59	234.16
33 42 26 16-0141 EA 77" x 52" 12 And 10 Gauge, Corrugated Aluminum Pipe-Arch End Section .....	8,452.86	351.24
33 42 26 16-0142 EA 83" x 57" 12 And 10 Gauge, Corrugated Aluminum Pipe-Arch End Section .....	8,878.98	468.32
33 42 26 16-0143 EA 87" x 63" 12 And 10 Gauge, Corrugated Aluminum Pipe-Arch End Section .....	9,667.13	502.46
33 42 26 16-0144 EA 95" x 67" 12 And 10 Gauge, Corrugated Aluminum Pipe-Arch End Section .....	10,090.90	536.62
33 42 26 16-0145 EA 103" x 71" 12 And 10 Gauge, Corrugated Aluminum Pipe-Arch End Section .....	10,999.20	585.40
33 42 26 16-0146 EA 112" x 75" 12 And 10 Gauge, Corrugated Aluminum Pipe-Arch End Section .....	11,653.31	634.19
<b>33 42 26 16-0147 Toe Plate Extensions For Corrugated Aluminum Pipe-Arch End Section (33 42 26 16-0128)</b>		
33 42 26 16-0148 EA Toe Plate Extension For 17" x 13", 16 Gauge, Corrugated Aluminum Pipe-Arch End Section .....	61.29	
33 42 26 16-0149 EA Toe Plate Extension For 21" x 15", 16 Gauge, Corrugated Aluminum Pipe-Arch End Section .....	66.49	
33 42 26 16-0150 EA Toe Plate Extension For 24" x 18", 16 Gauge, Corrugated Aluminum Pipe-Arch End Section .....	70.12	
33 42 26 16-0151 EA Toe Plate Extension For 28" x 20", 16 Gauge, Corrugated Aluminum Pipe-Arch End Section .....	76.80	
33 42 26 16-0152 EA Toe Plate Extension For 35" x 24", 14 Gauge, Corrugated Aluminum Pipe-Arch End Section .....	88.03	
33 42 26 16-0153 EA Toe Plate Extension For 42" x 29", 14 Gauge, Corrugated Aluminum Pipe-Arch End Section .....	114.77	
33 42 26 16-0154 EA Toe Plate Extension For 42" x 29", 12 Gauge, Corrugated Aluminum Pipe-Arch End Section .....	125.51	

**33 Utilities****33 40 Stormwater Utilities****33 42 Stormwater Conveyance**

MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
33 42 26 16-0155 EA Toe Plate Extension For 49" x 33", 12 Gauge, Corrugated Aluminum Pipe-Arch End Section.....	142.61	
33 42 26 16-0156 EA Toe Plate Extension For 57" x 38", 12 Gauge, Corrugated Aluminum Pipe-Arch End Section.....	161.20	
33 42 26 16-0157 EA Toe Plate Extension For 64" x 43", 12 Gauge, Corrugated Aluminum Pipe-Arch End Section.....	190.55	
33 42 26 16-0158 EA Toe Plate Extension For 71" x 47", 12 And 10 Gauge, Corrugated Aluminum Pipe-Arch End Section.....	242.04	
33 42 26 16-0159 EA Toe Plate Extension For 77" x 52", 12 And 10 Gauge, Corrugated Aluminum Pipe-Arch End Section.....	306.79	
33 42 26 16-0160 EA Toe Plate Extension For 83" x 57", 12 And 10 Gauge, Corrugated Aluminum Pipe-Arch End Section.....	414.11	
33 42 26 16-0161 EA Toe Plate Extension For 87" x 63", 12 And 10 Gauge, Corrugated Aluminum Pipe-Arch End Section.....	470.23	
33 42 26 16-0162 EA Toe Plate Extension For 95" x 67", 12 And 10 Gauge, Corrugated Aluminum Pipe-Arch End Section.....	492.56	
33 42 26 16-0163 EA Toe Plate Extension For 103" x 71", 12 And 10 Gauge, Corrugated Aluminum Pipe-Arch End Section.....	510.85	
33 42 26 16-0164 EA Toe Plate Extension For 112" x 75", 12 And 10 Gauge, Corrugated Aluminum Pipe-Arch End Section.....	533.17	
<b>33 42 26 16-0165 Low Slope Corrugated Steel Pipe End Sections And Accessories (33 42 26 16-0001)</b>		
<b>33 42 26 16-0166 4:1 Corrugated Steel Pipe End Sections (33 42 26 16-0165)</b>		
33 42 26 16-0167 EA 15" 16 Gauge, 4:1 Corrugated Steel Pipe End Section .....	563.52	68.27
33 42 26 16-0168 EA 18" 16 Gauge, 4:1 Corrugated Steel Pipe End Section .....	725.21	72.81
33 42 26 16-0169 EA 21" 16 Gauge, 4:1 Corrugated Steel Pipe End Section .....	887.63	79.64
33 42 26 16-0170 EA 24" 16 Gauge, 4:1 Corrugated Steel Pipe End Section .....	1,061.59	86.47
33 42 26 16-0171 EA 30" 16 Gauge, 4:1 Corrugated Steel Pipe End Section .....	1,123.36	97.85
33 42 26 16-0172 EA 36" 16 Gauge, 4:1 Corrugated Steel Pipe End Section .....	1,469.71	117.08
33 42 26 16-0173 EA 42" 16 Gauge, 4:1 Corrugated Steel Pipe End Section .....	2,322.16	136.60
<b>33 42 26 16-0174 3" Diameter Parallel Safety Bar For 4:1 Corrugated Steel Pipe End Sections (33 42 26 16-0165)</b>		
Note: Includes nut and bolt set.		
33 42 26 16-0175 EA 3" Diameter Parallel Safety Bar For 15" 4:1 Corrugated Steel Pipe End Section.....	401.17	
33 42 26 16-0176 EA 3" Diameter Parallel Safety Bar For 18" 4:1 Corrugated Steel Pipe End Section.....	803.41	
33 42 26 16-0177 EA 3" Diameter Parallel Safety Bar For 21" 4:1 Corrugated Steel Pipe End Section.....	881.65	
33 42 26 16-0178 EA 3" Diameter Parallel Safety Bar For 24" 4:1 Corrugated Steel Pipe End Section.....	916.66	
<b>33 42 26 16-0179 6:1 Corrugated Steel Pipe End Sections (33 42 26 16-0165)</b>		
33 42 26 16-0180 EA 15" 16 Gauge, 6:1 Corrugated Steel Pipe End Section .....	590.00	68.27
33 42 26 16-0181 EA 18" 16 Gauge, 6:1 Corrugated Steel Pipe End Section .....	772.83	72.81
33 42 26 16-0182 EA 21" 16 Gauge, 6:1 Corrugated Steel Pipe End Section .....	1,027.79	79.64
33 42 26 16-0183 EA 24" 16 Gauge, 6:1 Corrugated Steel Pipe End Section .....	1,207.26	86.47
33 42 26 16-0184 EA 30" 16 Gauge, 6:1 Corrugated Steel Pipe End Section .....	1,432.59	97.85
33 42 26 16-0185 EA 36" 16 Gauge, 6:1 Corrugated Steel Pipe End Section .....	1,742.65	117.08
33 42 26 16-0186 EA 42" 16 Gauge, 6:1 Corrugated Steel Pipe End Section .....	2,663.65	136.60
<b>33 42 26 16-0187 3" Diameter Parallel Safety Bar For 6:1 Corrugated Steel Pipe End Sections (33 42 26 16-0165)</b>		
Note: Includes nut and bolt set.		
33 42 26 16-0188 EA 3" Diameter Parallel Safety Bar For 15" 6:1 Corrugated Steel Pipe End Section.....	780.45	
33 42 26 16-0189 EA 3" Diameter Parallel Safety Bar For 18" 6:1 Corrugated Steel Pipe End Section.....	828.45	
33 42 26 16-0190 EA 3" Diameter Parallel Safety Bar For 21" 6:1 Corrugated Steel Pipe End Section.....	911.23	
33 42 26 16-0191 EA 3" Diameter Parallel Safety Bar For 24" 6:1 Corrugated Steel Pipe End Section.....	957.62	
<b>33 42 26 16-0192 Toe Plate Extensions For Low Slope Corrugated Steel Pipe End Section (33 42 26 16-0165)</b>		
33 42 26 16-0193 EA Toe Plate Extension For 15" Low Slope Corrugated Steel Pipe End Section .....	68.31	
33 42 26 16-0194 EA Toe Plate Extension For 18" Low Slope Corrugated Steel Pipe End Section .....	76.66	
33 42 26 16-0195 EA Toe Plate Extension For 21" Low Slope Corrugated Steel Pipe End Section .....	83.43	
33 42 26 16-0196 EA Toe Plate Extension For 24" Low Slope Corrugated Steel Pipe End Section .....	93.16	
33 42 26 16-0197 EA Toe Plate Extension For 30" Low Slope Corrugated Steel Pipe End Section .....	140.08	
33 42 26 16-0198 EA Toe Plate Extension For 36" Low Slope Corrugated Steel Pipe End Section .....	150.35	
33 42 26 16-0199 EA Toe Plate Extension For 42" Low Slope Corrugated Steel Pipe End Section .....	201.90	
<b>33 42 26 16-0200 Low Slope Corrugated Steel Pipe-Arch End Sections And Accessories (33 42 26 16-0001)</b>		
<b>33 42 26 16-0201 4:1 Corrugated Steel Pipe-Arch End Section (33 42 26 16-0200)</b>		
33 42 26 16-0202 EA 21" x 15" 16 Gauge, 4:1 Corrugated Steel Pipe-Arch End Section .....	669.43	72.81
33 42 26 16-0203 EA 24" x 18" 16 Gauge, 4:1 Corrugated Steel Pipe-Arch End Section .....	839.58	79.64
33 42 26 16-0204 EA 28" x 20" 16 Gauge, 4:1 Corrugated Steel Pipe-Arch End Section .....	993.55	86.47
33 42 26 16-0205 EA 35" x 24" 16 Gauge, 4:1 Corrugated Steel Pipe-Arch End Section .....	1,870.45	97.85
<b>33 42 26 16-0206 3" Diameter Parallel Safety Bar For 4:1 Corrugated Steel Pipe-Arch End Sections (33 42 26 16-0200)</b>		
Note: Includes nut and bolt set.		
33 42 26 16-0207 EA 3" Diameter Parallel Safety Bar For 21" x 15" 4:1 Corrugated Steel Pipe-Arch End Section.....	477.85	
33 42 26 16-0208 EA 3" Diameter Parallel Safety Bar For 24" x 18" 4:1 Corrugated Steel Pipe-Arch End Section.....	869.99	
33 42 26 16-0209 EA 3" Diameter Parallel Safety Bar For 28" x 20" 4:1 Corrugated Steel Pipe-Arch End Section.....	916.66	
33 42 26 16-0210 EA 3" Diameter Parallel Safety Bar For 35" x 24" 4:1 Corrugated Steel Pipe-Arch End Section.....	1,348.86	





		<b>Utilities</b>	<b>33</b>	<b>CS</b>
		<b>Stormwater Utilities</b>	<b>33 40</b>	
		<b>Stormwater Conveyance</b>	<b>33 42</b>	

MINOR CSI UOM DESCRIPTION		TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
<b>33 42 26 16-0211 Toe Plate Extensions For Low Slope Corrugated Steel Pipe-Arch End Section</b> (33 42 26 16-0200)			
33 42 26 16-0212	EA Toe Plate Extension For 21" x 15" Low Slope Corrugated Steel Pipe-Arch End Section .....	69.06	
33 42 26 16-0213	EA Toe Plate Extension For 24" x 18" Low Slope Corrugated Steel Pipe-Arch End Section .....	78.34	
33 42 26 16-0214	EA Toe Plate Extension For 28" x 20" Low Slope Corrugated Steel Pipe-Arch End Section .....	85.40	
33 42 26 16-0215	EA Toe Plate Extension For 35" x 24" Low Slope Corrugated Steel Pipe-Arch End Section .....	101.80	
<b>33 42 26 19 Corrugated High-Density Polyethylene (HDPE) End Sections for Stormwater Piping</b> (33 42 26)			
<b>33 42 26 19-0001 Corrugated High Density Polyethylene (HDPE) Pipe End Sections</b> (33 42 26 19)			
33 42 26 19-0002	EA 4" End Section, Corrugated High Density Polyethylene (HDPE) Pipe .....	60.38	21.08
33 42 26 19-0003	EA 6" End Section, Corrugated High Density Polyethylene (HDPE) Pipe .....	110.62	31.62
33 42 26 19-0004	EA 8" End Section, Corrugated High Density Polyethylene (HDPE) Pipe .....	149.35	39.52
33 42 26 19-0005	EA 10" End Section, Corrugated High Density Polyethylene (HDPE) Pipe .....	235.47	63.24
33 42 26 19-0006	EA 12" End Section, Corrugated High Density Polyethylene (HDPE) Pipe .....	278.67	71.14
33 42 26 19-0007	EA 15" End Section, Corrugated High Density Polyethylene (HDPE) Pipe .....	296.03	76.42
33 42 26 19-0008	EA 18" End Section, Corrugated High Density Polyethylene (HDPE) Pipe .....	351.03	84.32
33 42 26 19-0009	EA 24" End Section, Corrugated High Density Polyethylene (HDPE) Pipe .....	451.41	100.12
33 42 26 19-0010	EA 30" End Section, Corrugated High Density Polyethylene (HDPE) Pipe .....	908.25	113.30
33 42 26 19-0011	EA 36" End Section, Corrugated High Density Polyethylene (HDPE) Pipe .....	1,105.02	126.47
<b>33 42 26 23 Concrete End Sections for Stormwater Piping</b> (33 42 26)			
<b>33 42 26 23-0001 Precast Concrete End Sections</b> (33 42 26 23)			
<b>33 42 26 23-0002 Precast Concrete End Sections</b> (33 42 26 23-0001)			
33 42 26 23-0003	EA 12" Diameter Pipe, Precast Concrete End Section .....	599.23	106.76
33 42 26 23-0004	EA 15" Diameter Pipe, Precast Concrete End Section .....	803.08	132.15
33 42 26 23-0005	EA 18" Diameter Pipe, Precast Concrete End Section .....	994.80	167.29
33 42 26 23-0006	EA 21" Diameter Pipe, Precast Concrete End Section .....	1,142.56	200.05
33 42 26 23-0007	EA 24" Diameter Pipe, Precast Concrete End Section .....	1,216.56	231.54
33 42 26 23-0008	EA 27" Diameter Pipe, Precast Concrete End Section .....	1,535.15	290.75
33 42 26 23-0009	EA 30" Diameter Pipe, Precast Concrete End Section .....	1,908.59	436.71
33 42 26 23-0010	EA 36" Diameter Pipe, Precast Concrete End Section .....	2,358.02	551.05
33 42 26 23-0011	EA 42" Diameter Pipe, Precast Concrete End Section .....	2,855.99	691.26
33 42 26 23-0012	EA 48" Diameter Pipe, Precast Concrete End Section .....	3,132.89	779.56
33 42 26 23-0013	EA 54" Diameter Pipe, Precast Concrete End Section .....	3,420.05	873.22
33 42 26 23-0014	EA 60" Diameter Pipe, Precast Concrete End Section .....	3,714.57	970.79
<b>33 42 26 23-0015 Flared Precast Concrete End Sections</b> (33 42 26 23-0001)			
33 42 26 23-0016	EA 12" Diameter Pipe, Flared Precast Concrete End Section .....	751.93	113.67
33 42 26 23-0017	EA 15" Diameter Pipe, Flared Precast Concrete End Section .....	906.00	141.66
33 42 26 23-0018	EA 18" Diameter Pipe, Flared Precast Concrete End Section .....	1,100.85	179.33
33 42 26 23-0019	EA 21" Diameter Pipe, Flared Precast Concrete End Section .....	1,259.12	214.46
33 42 26 23-0020	EA 24" Diameter Pipe, Flared Precast Concrete End Section .....	1,534.70	248.21
33 42 26 23-0021	EA 27" Diameter Pipe, Flared Precast Concrete End Section .....	1,863.18	396.42
33 42 26 23-0022	EA 30" Diameter Pipe, Flared Precast Concrete End Section .....	1,955.49	545.79
33 42 26 23-0023	EA 36" Diameter Pipe, Flared Precast Concrete End Section .....	2,635.88	688.82
33 42 26 23-0024	EA 42" Diameter Pipe, Flared Precast Concrete End Section .....	3,167.82	864.25
33 42 26 23-0025	EA 48" Diameter Pipe, Flared Precast Concrete End Section .....	3,432.79	974.69
33 42 26 23-0026	EA 54" Diameter Pipe, Flared Precast Concrete End Section .....	3,839.80	1,091.68
33 42 26 23-0027	EA 60" Diameter Pipe, Flared Precast Concrete End Section .....	4,254.76	1,212.56
<b>33 42 31 Stormwater Area Drains and Inlets</b> (33 42)			
<b>33 42 31 00-0001 Storm Drains</b> (33 42 31)			
See CSI section 33 05 61 00-0001 for manhole structures.			
<b>33 42 31 00-0002 Catch Basins And Inlet Basins</b> (33 42 31 00-0001)			
Note: Includes base slab, opening and grout. Excludes frame, grate, excavation and backfill.			
<b>33 42 31 00-0003 Cast In Place, Grate Drop Inlet Basins</b> (33 42 31 00-0002)			
Note: Inside dimensions.			
<b>33 42 31 00-0004 3' x 3' x 4" Thick Wall, Cast In Place, Grate Drop Inlet Basins</b> (33 42 31 00-0003)			
33 42 31 00-0005	EA 2' Deep, 3' x 3' x 4" Thick Wall, Cast In Place, Grate Drop Inlet Basin .....	2,006.16	321.81
33 42 31 00-0006	EA 3' Deep, 3' x 3' x 4" Thick Wall, Cast In Place, Grate Drop Inlet Basin .....	2,413.81	377.05
33 42 31 00-0007	EA 4' Deep, 3' x 3' x 4" Thick Wall, Cast In Place, Grate Drop Inlet Basin .....	2,821.46	432.21
33 42 31 00-0008	EA 5' Deep, 3' x 3' x 4" Thick Wall, Cast In Place, Grate Drop Inlet Basin .....	3,229.11	487.45
33 42 31 00-0009	EA 6' Deep, 3' x 3' x 4" Thick Wall, Cast In Place, Grate Drop Inlet Basin .....	3,636.76	542.60
<b>33 42 31 00-0010 3'-8" x 3'-8" x 6" Thick Wall, Cast In Place, Grate Drop Inlet Basins</b> (33 42 31 00-0003)			
33 42 31 00-0011	EA 2' Deep, 3'-8" x 3'-8" x 6" Thick Wall, Cast In Place, Grate Drop Inlet Basin .....	2,776.44	319.86
33 42 31 00-0012	EA 3' Deep, 3'-8" x 3'-8" x 6" Thick Wall, Cast In Place, Grate Drop Inlet Basin .....	3,388.37	426.48

**33 Utilities****33 40 Stormwater Utilities****33 42 Stormwater Conveyance**

MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
33 42 31 00-0013 EA 4' Deep, 3'-8" x 3'-8" x 6" Thick Wall, Cast In Place, Grate Drop Inlet Basin.....	4,249.19	581.57
33 42 31 00-0014 EA 5' Deep, 3'-8" x 3'-8" x 6" Thick Wall, Cast In Place, Grate Drop Inlet Basin.....	5,234.61	678.51
33 42 31 00-0015 EA 6' Deep, 3'-8" x 3'-8" x 6" Thick Wall, Cast In Place, Grate Drop Inlet Basin.....	5,923.65	775.43
<b>33 42 31 00-0016 4' x 4' x 8" Thick Wall, Cast In Place, Grate Drop Inlet Basins (33 42 31 00-0003)</b>		
33 42 31 00-0017 EA 2' Deep, 4' x 4' x 8" Thick Wall, Cast In Place, Grate Drop Inlet Basin.....	2,995.78	348.95
33 42 31 00-0018 EA 3' Deep, 4' x 4' x 8" Thick Wall, Cast In Place, Grate Drop Inlet Basin.....	4,158.84	484.65
33 42 31 00-0019 EA 4' Deep, 4' x 4' x 8" Thick Wall, Cast In Place, Grate Drop Inlet Basin.....	4,992.34	630.04
33 42 31 00-0020 EA 5' Deep, 4' x 4' x 8" Thick Wall, Cast In Place, Grate Drop Inlet Basin.....	5,762.49	726.97
33 42 31 00-0021 EA 6' Deep, 4' x 4' x 8" Thick Wall, Cast In Place, Grate Drop Inlet Basin.....	7,289.15	930.52
<b>33 42 31 00-0022 Cast In Place, Catch Basin (33 42 31 00-0002)</b>		
Note: Inside span, overall depth. Includes concrete, forms, rebar (where required), finish and curing.		
<b>33 42 31 00-0023 3' x 3', Cast In Place, Catch Basins (33 42 31 00-0002)</b>		
33 42 31 00-0024 EA 3' Deep, 3' x 3' x 6" Thick Wall, Cast In Place, Catch Basin.....	2,516.04	389.07
33 42 31 00-0025 EA 3'-6" Deep, 3' x 3' x 6" Thick Wall, Cast In Place, Catch Basin.....	2,667.08	413.69
33 42 31 00-0026 EA 4' Deep, 3' x 3' x 6" Thick Wall, Cast In Place, Catch Basin.....	2,926.16	444.32
33 42 31 00-0027 EA 4'-6" Deep, 3' x 3' x 8" Thick Wall, Cast In Place, Catch Basin.....	3,314.93	491.81
33 42 31 00-0028 EA 5' Deep, 3' x 3' x 8" Thick Wall, Cast In Place, Catch Basin.....	3,587.40	523.51
33 42 31 00-0029 EA 5'-6" Deep, 3' x 3' x 8" Thick Wall, Cast In Place, Catch Basin.....	3,755.02	549.01
33 42 31 00-0030 EA 6' Deep, 3' x 3' x 8" Thick Wall, Cast In Place, Catch Basin.....	4,027.66	580.70
33 42 31 00-0031 EA 6'-6" Deep, 3' x 3' x 8" Thick Wall, Cast In Place, Catch Basin.....	4,190.95	606.30
33 42 31 00-0032 EA 7' Deep, 3' x 3' x 8" Thick Wall, Cast In Place, Catch Basin.....	4,465.09	637.89
33 42 31 00-0033 EA 7'-6" Deep, 3' x 3' x 8" Thick Wall, Cast In Place, Catch Basin.....	4,631.21	663.48
33 42 31 00-0034 EA 8' Deep, 3' x 3' x 8" Thick Wall, Cast In Place, Catch Basin.....	4,903.76	695.17
33 42 31 00-0035 VLF >8' Deep, 3' x 3' x 8" Thick Wall, Cast In Place, Catch Basin.....	613.00	86.84
<b>33 42 31 00-0036 3'-6" x 3'-6", Cast In Place, Catch Basins (33 42 31 00-0022)</b>		
33 42 31 00-0037 EA 3' Deep, 3'-6" x 3'-6" x 6" Thick Wall, Cast In Place, Catch Basin.....	2,894.56	449.75
33 42 31 00-0038 EA 3'-6" Deep, 3'-6" x 3'-6" x 6" Thick Wall, Cast In Place, Catch Basin.....	3,083.92	481.35
33 42 31 00-0039 EA 4' Deep, 3'-6" x 3'-6" x 6" Thick Wall, Cast In Place, Catch Basin.....	3,355.57	513.04
33 42 31 00-0040 EA 4'-6" Deep, 3'-6" x 3'-6" x 8" Thick Wall, Cast In Place, Catch Basin.....	3,810.34	568.20
33 42 31 00-0041 EA 5' Deep, 3'-6" x 3'-6" x 8" Thick Wall, Cast In Place, Catch Basin.....	4,108.35	604.06
33 42 31 00-0042 EA 5'-6" Deep, 3'-6" x 3'-6" x 8" Thick Wall, Cast In Place, Catch Basin.....	4,301.33	633.82
33 42 31 00-0043 EA 6' Deep, 3'-6" x 3'-6" x 8" Thick Wall, Cast In Place, Catch Basin.....	4,603.51	669.68
33 42 31 00-0044 EA 6'-6" Deep, 3'-6" x 3'-6" x 8" Thick Wall, Cast In Place, Catch Basin.....	4,796.49	699.43
33 42 31 00-0045 EA 7' Deep, 3'-6" x 3'-6" x 8" Thick Wall, Cast In Place, Catch Basin.....	5,095.92	735.31
33 42 31 00-0046 EA 7'-6" Deep, 3'-6" x 3'-6" x 8" Thick Wall, Cast In Place, Catch Basin.....	5,290.16	765.06
33 42 31 00-0047 EA 8' Deep, 3'-6" x 3'-6" x 8" Thick Wall, Cast In Place, Catch Basin.....	5,589.68	800.92
33 42 31 00-0048 VLF >8' Deep, 3'-6" x 3'-6" x 8" Thick Wall, Cast In Place, Catch Basin.....	698.73	100.13
<b>33 42 31 00-0049 4' x 4', Cast In Place, Catch Basins (33 42 31 00-0022)</b>		
33 42 31 00-0050 EA 3' Deep, 4' x 4' x 6" Thick Wall, Cast In Place, Catch Basin.....	3,299.58	514.50
33 42 31 00-0051 EA 3'-6" Deep, 4' x 4' x 6" Thick Wall, Cast In Place, Catch Basin.....	3,501.50	547.17
33 42 31 00-0052 EA 4' Deep, 4' x 4' x 6" Thick Wall, Cast In Place, Catch Basin.....	3,809.96	585.83
33 42 31 00-0053 EA 4'-6" Deep, 4' x 4' x 8" Thick Wall, Cast In Place, Catch Basin.....	4,331.31	648.75
33 42 31 00-0054 EA 5' Deep, 4' x 4' x 8" Thick Wall, Cast In Place, Catch Basin.....	4,658.94	688.78
33 42 31 00-0055 EA 5'-6" Deep, 4' x 4' x 8" Thick Wall, Cast In Place, Catch Basin.....	4,879.96	722.80
33 42 31 00-0056 EA 6' Deep, 4' x 4' x 8" Thick Wall, Cast In Place, Catch Basin.....	5,207.59	762.83
33 42 31 00-0057 EA 6'-6" Deep, 4' x 4' x 8" Thick Wall, Cast In Place, Catch Basin.....	5,427.35	796.85
33 42 31 00-0058 EA 7' Deep, 4' x 4' x 8" Thick Wall, Cast In Place, Catch Basin.....	5,754.99	836.89
33 42 31 00-0059 EA 7'-6" Deep, 4' x 4' x 8" Thick Wall, Cast In Place, Catch Basin.....	5,975.99	870.91
33 42 31 00-0060 EA 8' Deep, 4' x 4' x 8" Thick Wall, Cast In Place, Catch Basin.....	6,303.63	911.03
33 42 31 00-0061 VLF >8' Deep, 4' x 4' x 8" Thick Wall, Cast In Place, Catch Basin.....	787.92	113.89
<b>33 42 31 00-0062 4'-6" x 4'-6", Cast In Place, Catch Basins (33 42 31 00-0022)</b>		
33 42 31 00-0063 EA 3' Deep, 4'-6" x 4'-6" x 6" Thick Wall, Cast In Place, Catch Basin.....	3,801.27	596.60
33 42 31 00-0064 EA 3'-6" Deep, 4'-6" x 4'-6" x 6" Thick Wall, Cast In Place, Catch Basin.....	4,035.89	630.33
33 42 31 00-0065 EA 4' Deep, 4'-6" x 4'-6" x 6" Thick Wall, Cast In Place, Catch Basin.....	4,374.38	673.94
33 42 31 00-0066 EA 4'-6" Deep, 4'-6" x 4'-6" x 8" Thick Wall, Cast In Place, Catch Basin.....	4,968.94	745.48
33 42 31 00-0067 EA 5' Deep, 4'-6" x 4'-6" x 8" Thick Wall, Cast In Place, Catch Basin.....	5,329.94	790.65
33 42 31 00-0068 EA 5'-6" Deep, 4'-6" x 4'-6" x 8" Thick Wall, Cast In Place, Catch Basin.....	5,584.42	829.71
33 42 31 00-0069 EA 6' Deep, 4'-6" x 4'-6" x 8" Thick Wall, Cast In Place, Catch Basin.....	5,946.66	874.88
33 42 31 00-0070 EA 6'-6" Deep, 4'-6" x 4'-6" x 8" Thick Wall, Cast In Place, Catch Basin.....	6,201.14	914.04
33 42 31 00-0071 EA 7' Deep, 4'-6" x 4'-6" x 8" Thick Wall, Cast In Place, Catch Basin.....	6,562.14	959.21
33 42 31 00-0072 EA 7'-6" Deep, 4'-6" x 4'-6" x 8" Thick Wall, Cast In Place, Catch Basin.....	6,815.11	998.27
33 42 31 00-0073 EA 8' Deep, 4'-6" x 4'-6" x 8" Thick Wall, Cast In Place, Catch Basin.....	7,178.87	1,043.44
33 42 31 00-0074 VLF >8' Deep, 4'-6" x 4'-6" x 8" Thick Wall, Cast In Place, Catch Basin.....	897.41	130.47
<b>33 42 31 00-0075 5' x 5', Cast In Place, Catch Basins (33 42 31 00-0022)</b>		
33 42 31 00-0076 EA 4' Deep, 5' x 5' x 6" Thick Wall, Cast In Place, Catch Basin.....	4,895.98	756.72
33 42 31 00-0077 EA 4'-6" Deep, 5' x 5' x 8" Thick Wall, Cast In Place, Catch Basin.....	5,558.16	836.21
33 42 31 00-0078 EA 5' Deep, 5' x 5' x 8" Thick Wall, Cast In Place, Catch Basin.....	5,949.18	885.73



		<b>Utilities</b>	<b>33</b>	<b>CS</b>
		<b>Stormwater Utilities</b>	<b>33 40</b>	
		<b>Stormwater Conveyance</b>	<b>33 42</b>	

MINOR CSI UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
33 42 31 00-0079	EA 5'-6" Deep, 5' x 5' x 8" Thick Wall, Cast In Place, Catch Basin .....	6,232.15	929.17
33 42 31 00-0080	EA 6' Deep, 5' x 5' x 8" Thick Wall, Cast In Place, Catch Basin .....	6,618.91	978.60
33 42 31 00-0081	EA 6'-6" Deep, 5' x 5' x 8" Thick Wall, Cast In Place, Catch Basin .....	6,903.39	1,022.02
33 42 31 00-0082	EA 7' Deep, 5' x 5' x 8" Thick Wall, Cast In Place, Catch Basin .....	7,292.90	1,071.55
33 42 31 00-0083	EA 7'-6" Deep, 5' x 5' x 8" Thick Wall, Cast In Place, Catch Basin .....	7,573.12	1,114.98
33 42 31 00-0084	EA 8' Deep, 5' x 5' x 8" Thick Wall, Cast In Place, Catch Basin .....	7,964.14	1,164.41
33 42 31 00-0085	VLF >8' Deep, 5' x 5' x 8" Thick Wall, Cast In Place, Catch Basin .....	1,499.63	145.59
<b>33 42 31 00-0086 5'-6" x 5'-6", Cast In Place, Catch Basins (33 42 31 00-0022)</b>			
33 42 31 00-0087	EA 4' Deep, 5'-6" x 5'-6" x 6" Thick Wall, Cast In Place, Catch Basin .....	5,441.78	843.86
33 42 31 00-0088	EA 4'-6" Deep, 5'-6" x 5'-6" x 8" Thick Wall, Cast In Place, Catch Basin .....	6,351.33	955.24
33 42 31 00-0089	EA 5' Deep, 5'-6" x 5'-6" x 8" Thick Wall, Cast In Place, Catch Basin .....	6,780.60	1,010.29
33 42 31 00-0090	EA 5'-6" Deep, 5'-6" x 5' x 8" Thick Wall, Cast In Place, Catch Basin .....	7,101.84	1,059.63
33 42 31 00-0091	EA 6' Deep, 5'-6" x 5'-6" x 8" Thick Wall, Cast In Place, Catch Basin .....	7,533.88	1,115.07
33 42 31 00-0092	EA 6'-6" Deep, 5'-6" x 5'-6" x 8" Thick Wall, Cast In Place, Catch Basin .....	7,856.63	1,164.41
33 42 31 00-0093	EA 7' Deep, 5'-6" x 5'-6" x 8" Thick Wall, Cast In Place, Catch Basin .....	8,285.91	1,219.85
33 42 31 00-0094	EA 7'-6" Deep, 5'-6" x 5'-6" x 8" Thick Wall, Cast In Place, Catch Basin .....	8,607.15	1,269.19
33 42 31 00-0095	EA 8' Deep, 5'-6" x 5'-6" x 8" Thick Wall, Cast In Place, Catch Basin .....	9,036.43	1,324.63
33 42 31 00-0096	VLF >8' Deep, 5'-6" x 5'-6" x 8" Thick Wall, Cast In Place, Catch Basin .....	1,129.56	165.55
<b>33 42 31 00-0097 6' x 6', Cast In Place, Catch Basins (33 42 31 00-0022)</b>			
33 42 31 00-0098	EA 4' Deep, 6' x 6' x 6" Thick Wall, Cast In Place, Catch Basin .....	6,017.24	935.08
33 42 31 00-0099	EA 4'-6" Deep, 6' x 6' x 8" Thick Wall, Cast In Place, Catch Basin .....	7,018.99	1,057.30
33 42 31 00-0100	EA 5' Deep, 6' x 6' x 8" Thick Wall, Cast In Place, Catch Basin .....	7,478.86	1,117.20
33 42 31 00-0101	EA 5'-6" Deep, 6' x 6' x 8" Thick Wall, Cast In Place, Catch Basin .....	7,829.45	1,171.00
33 42 31 00-0102	EA 6' Deep, 6' x 6' x 8" Thick Wall, Cast In Place, Catch Basin .....	8,287.83	1,230.90
33 42 31 00-0103	EA 6'-6" Deep, 6' x 6' x 8" Thick Wall, Cast In Place, Catch Basin .....	8,641.16	1,284.69
33 42 31 00-0104	EA 7' Deep, 6' x 6' x 8" Thick Wall, Cast In Place, Catch Basin .....	9,098.28	1,344.60
33 42 31 00-0105	EA 7'-6" Deep, 6' x 6' x 8" Thick Wall, Cast In Place, Catch Basin .....	9,450.11	1,398.39
33 42 31 00-0106	EA 8' Deep, 6' x 6' x 8" Thick Wall, Cast In Place, Catch Basin .....	9,909.98	1,458.30
33 42 31 00-0107	VLF >8' Deep, 6' x 6' x 8" Thick Wall, Cast In Place, Catch Basin .....	1,238.80	182.32
<b>33 42 31 00-0108 6'-6" x 6'-6", Cast In Place, Catch Basins (33 42 31 00-0022)</b>			
33 42 31 00-0109	EA 4' Deep, 6'-6" x 6'-6" x 6" Thick Wall, Cast In Place, Catch Basin .....	6,618.04	1,030.64
33 42 31 00-0110	EA 4'-6" Deep, 6'-6" x 6'-6" x 8" Thick Wall, Cast In Place, Catch Basin .....	7,938.90	1,194.07
33 42 31 00-0111	EA 5' Deep, 6'-6" x 6'-6" x 8" Thick Wall, Cast In Place, Catch Basin .....	8,440.38	1,260.36
33 42 31 00-0112	EA 5'-6" Deep, 6'-6" x 6'-6" x 8" Thick Wall, Cast In Place, Catch Basin .....	8,835.24	1,320.56
33 42 31 00-0113	EA 6' Deep, 6'-6" x 6'-6" x 8" Thick Wall, Cast In Place, Catch Basin .....	9,336.73	1,386.77
33 42 31 00-0114	EA 6'-6" Deep, 6'-6" x 6'-6" x 8" Thick Wall, Cast In Place, Catch Basin .....	9,731.59	1,447.05
33 42 31 00-0115	EA 7' Deep, 6'-6" x 6'-6" x 8" Thick Wall, Cast In Place, Catch Basin .....	10,233.07	1,513.26
33 42 31 00-0116	EA 7'-6" Deep, 6'-6" x 6'-6" x 8" Thick Wall, Cast In Place, Catch Basin .....	10,627.93	1,573.45
33 42 31 00-0117	EA 8' Deep, 6'-6" x 6'-6" x 8" Thick Wall, Cast In Place, Catch Basin .....	11,132.17	1,639.75
33 42 31 00-0118	VLF >8' Deep, 6'-6" x 6'-6" x 8" Thick Wall, Cast In Place, Catch Basin .....	1,391.48	205.01
<b>33 42 31 00-0119 7' x 7', Cast In Place, Catch Basins (33 42 31 00-0022)</b>			
33 42 31 00-0120	EA 4' Deep, 7' x 7' x 6" Thick Wall, Cast In Place, Catch Basin .....	7,245.90	1,130.38
33 42 31 00-0121	EA 4'-6" Deep, 7' x 7' x 8" Thick Wall, Cast In Place, Catch Basin .....	8,690.32	1,308.73
33 42 31 00-0122	EA 5' Deep, 7' x 7' x 8" Thick Wall, Cast In Place, Catch Basin .....	9,222.98	1,379.68
33 42 31 00-0123	EA 5'-6" Deep, 7' x 7' x 8" Thick Wall, Cast In Place, Catch Basin .....	9,646.36	1,444.44
33 42 31 00-0124	EA 6' Deep, 7' x 7' x 8" Thick Wall, Cast In Place, Catch Basin .....	10,180.41	1,515.29
33 42 31 00-0125	EA 6'-6" Deep, 7' x 7' x 8" Thick Wall, Cast In Place, Catch Basin .....	10,603.79	1,580.14
33 42 31 00-0126	EA 7' Deep, 7' x 7' x 8" Thick Wall, Cast In Place, Catch Basin .....	11,136.45	1,650.99
33 42 31 00-0127	EA 7'-6" Deep, 7' x 7' x 8" Thick Wall, Cast In Place, Catch Basin .....	11,561.34	1,715.84
33 42 31 00-0128	EA 8' Deep, 7' x 7' x 8" Thick Wall, Cast In Place, Catch Basin .....	12,093.88	1,786.70
33 42 31 00-0129	VLF >8' Deep, 7' x 7' x 8" Thick Wall, Cast In Place, Catch Basin .....	1,511.78	223.33
<b>33 42 31 00-0130 7'-6" x 7'-6", Cast In Place, Catch Basins (33 42 31 00-0022)</b>			
33 42 31 00-0131	EA 4' Deep, 7'-6" x 7'-6" x 6" Thick Wall, Cast In Place, Catch Basin .....	8,156.56	1,268.70
33 42 31 00-0132	EA 4'-6" Deep, 7'-6" x 7'-6" x 8" Thick Wall, Cast In Place, Catch Basin .....	9,473.01	1,428.05
33 42 31 00-0133	EA 5' Deep, 7'-6" x 7'-6" x 8" Thick Wall, Cast In Place, Catch Basin .....	10,034.09	1,503.56
33 42 31 00-0134	EA 5'-6" Deep, 7'-6" x 7'-6" x 8" Thick Wall, Cast In Place, Catch Basin .....	10,490.13	1,572.96
33 42 31 00-0135	EA 6' Deep, 7'-6" x 7'-6" x 8" Thick Wall, Cast In Place, Catch Basin .....	11,052.63	1,648.47
33 42 31 00-0136	EA 6'-6" Deep, 7'-6" x 7'-6" x 8" Thick Wall, Cast In Place, Catch Basin .....	11,508.67	1,717.87
33 42 31 00-0137	EA 7' Deep, 7'-6" x 7'-6" x 8" Thick Wall, Cast In Place, Catch Basin .....	12,069.75	1,793.37
33 42 31 00-0138	EA 7'-6" Deep, 7'-6" x 7'-6" x 8" Thick Wall, Cast In Place, Catch Basin .....	12,525.80	1,862.78
33 42 31 00-0139	EA 8' Deep, 7'-6" x 7'-6" x 8" Thick Wall, Cast In Place, Catch Basin .....	13,088.39	1,938.28
33 42 31 00-0140	VLF >8' Deep, 7'-6" x 7'-6" x 8" Thick Wall, Cast In Place, Catch Basin .....	1,636.02	242.32
<b>33 42 31 00-0141 8' x 8', Cast In Place, Catch Basins (33 42 31 00-0022)</b>			
33 42 31 00-0142	EA 4' Deep, 8' x 8' x 6" Thick Wall, Cast In Place, Catch Basin .....	8,862.56	1,380.36
33 42 31 00-0143	EA 4'-6" Deep, 8' x 8' x 8" Thick Wall, Cast In Place, Catch Basin .....	10,283.99	1,552.03
33 42 31 00-0144	EA 5' Deep, 8' x 8' x 8" Thick Wall, Cast In Place, Catch Basin .....	10,875.09	1,632.09
33 42 31 00-0145	EA 5'-6" Deep, 8' x 8' x 8" Thick Wall, Cast In Place, Catch Basin .....	11,362.32	1,706.14
33 42 31 00-0146	EA 6' Deep, 8' x 8' x 8" Thick Wall, Cast In Place, Catch Basin .....	11,953.32	1,786.21

**33 Utilities****33 40 Stormwater Utilities****33 42 Stormwater Conveyance**

MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
33 42 31 00-0147 EA 6'-6" Deep, 8' x 8' x 8" Thick Wall, Cast In Place, Catch Basin .....	12,437.53	1,860.26
33 42 31 00-0148 EA 7' Deep, 8' x 8' x 8" Thick Wall, Cast In Place, Catch Basin .....	13,031.54	1,940.32
33 42 31 00-0149 EA 7'-6" Deep, 8' x 8' x 8" Thick Wall, Cast In Place, Catch Basin .....	13,518.77	2,014.37
33 42 31 00-0150 EA 8' Deep, 8' x 8' x 8" Thick Wall, Cast In Place, Catch Basin .....	14,101.16	2,094.44
33 42 31 00-0151 VLF >8' Deep, 8' x 8' x 8" Thick Wall, Cast In Place, Catch Basin .....	1,763.72	261.81
<b>33 42 31 00-0152 Precast Concrete Catch Basins (33 42 31 00-0002)</b>		
Note: Inside dimensions.		
<b>33 42 31 00-0153 1'-6" Diameter Precast Catch Basins (33 42 31 00-0152)</b>		
33 42 31 00-0154 EA 4' Deep, 1'-6" Diameter Precast Catch Basins .....	817.70	198.91
33 42 31 00-0155 EA 6' Deep, 1'-6" Diameter Precast Catch Basins .....	1,110.35	298.36
33 42 31 00-0156 EA 8' Deep, 1'-6" Diameter Precast Catch Basins .....	1,384.21	387.87
33 42 31 00-0157 EA 10' Deep, 1'-6" Diameter Precast Catch Basins .....	1,670.17	458.49
33 42 31 00-0158 EA 12' Deep, 1'-6" Diameter Precast Catch Basins .....	2,033.51	581.81
33 42 31 00-0159 EA 14' Deep, 1'-6" Diameter Precast Catch Basins .....	2,318.38	671.32
33 42 31 00-0160 VLF Vertical Linear Foot Over 14' Deep, 1'-6" Diameter Precast Catch Basins .....	159.29	44.75
<b>33 42 31 00-0161 2' Diameter Precast Catch Basins (33 42 31 00-0152)</b>		
33 42 31 00-0162 EA 4' Deep, 2' Diameter Precast Catch Basin .....	938.66	221.29
33 42 31 00-0163 EA 6' Deep, 2' Diameter Precast Catch Basin .....	1,267.32	328.20
33 42 31 00-0164 EA 8' Deep, 2' Diameter Precast Catch Basin .....	1,574.66	432.63
33 42 31 00-0165 EA 10' Deep, 2' Diameter Precast Catch Basin .....	1,895.47	504.73
33 42 31 00-0166 EA 12' Deep, 2' Diameter Precast Catch Basin .....	2,318.50	646.45
33 42 31 00-0167 EA 14' Deep, 2' Diameter Precast Catch Basin .....	2,640.19	745.91
33 42 31 00-0168 VLF Vertical Linear Foot Over 14' Deep, 2' Diameter Precast Catch Basin .....	181.34	53.71
<b>33 42 31 00-0169 3' Diameter Precast Catch Basins (33 42 31 00-0152)</b>		
33 42 31 00-0170 EA 4' Deep, 3' Diameter Precast Catch Basin .....	1,284.16	261.07
33 42 31 00-0171 EA 6' Deep, 3' Diameter Precast Catch Basin .....	1,710.44	385.89
33 42 31 00-0172 EA 8' Deep, 3' Diameter Precast Catch Basin .....	2,112.59	509.71
33 42 31 00-0173 EA 10' Deep, 3' Diameter Precast Catch Basin .....	2,631.54	636.50
33 42 31 00-0174 EA 12' Deep, 3' Diameter Precast Catch Basin .....	3,095.32	758.84
33 42 31 00-0175 EA 14' Deep, 3' Diameter Precast Catch Basin .....	3,536.51	883.16
33 42 31 00-0176 VLF Vertical Linear Foot Over 14' Deep, 3' Diameter Precast Catch Basin .....	239.94	63.09
<b>33 42 31 00-0177 4' Diameter Precast Catch Basins (33 42 31 00-0152)</b>		
33 42 31 00-0178 EA 4' Deep, 4' Diameter Precast Catch Basin .....	1,589.64	290.40
33 42 31 00-0179 EA 6' Deep, 4' Diameter Precast Catch Basin .....	2,038.69	397.82
33 42 31 00-0180 EA 8' Deep, 4' Diameter Precast Catch Basin .....	2,638.98	596.73
33 42 31 00-0181 EA 10' Deep, 4' Diameter Precast Catch Basin .....	3,292.26	745.91
33 42 31 00-0182 EA 12' Deep, 4' Diameter Precast Catch Basin .....	3,873.68	895.09
33 42 31 00-0183 EA 14' Deep, 4' Diameter Precast Catch Basin .....	4,427.87	1,044.27
33 42 31 00-0184 VLF Vertical Linear Foot Over 14' Deep, 4' Diameter Precast Catch Basin .....	299.61	74.59
<b>33 42 31 00-0185 5' Diameter Precast Catch Basins (33 42 31 00-0152)</b>		
33 42 31 00-0186 EA 4' Deep, 5' Diameter Precast Catch Basin .....	2,130.35	397.82
33 42 31 00-0187 EA 6' Deep, 5' Diameter Precast Catch Basin .....	2,842.67	596.73
33 42 31 00-0188 EA 8' Deep, 5' Diameter Precast Catch Basin .....	3,557.93	795.64
33 42 31 00-0189 EA 10' Deep, 5' Diameter Precast Catch Basin .....	4,325.52	994.54
33 42 31 00-0190 EA 12' Deep, 5' Diameter Precast Catch Basin .....	5,075.67	1,193.45
33 42 31 00-0191 EA 14' Deep, 5' Diameter Precast Catch Basin .....	5,892.83	1,392.36
33 42 31 00-0192 VLF Vertical Linear Foot Over 14' Deep, 5' Diameter Precast Catch Basin .....	398.36	99.45
<b>33 42 31 00-0193 6' Diameter Precast Catch Basins (33 42 31 00-0152)</b>		
33 42 31 00-0194 EA 4' Deep, 6' Diameter Precast Catch Basin .....	3,097.30	596.73
33 42 31 00-0195 EA 6' Deep, 6' Diameter Precast Catch Basin .....	4,077.38	895.09
33 42 31 00-0196 EA 8' Deep, 6' Diameter Precast Catch Basin .....	5,144.20	1,193.45
33 42 31 00-0197 EA 10' Deep, 6' Diameter Precast Catch Basin .....	6,404.78	1,491.82
33 42 31 00-0198 EA 12' Deep, 6' Diameter Precast Catch Basin .....	7,614.44	1,790.18
33 42 31 00-0199 EA 14' Deep, 6' Diameter Precast Catch Basin .....	8,780.96	2,088.54
33 42 31 00-0200 VLF Vertical Linear Foot Over 14' Deep, 6' Diameter Precast Catch Basin .....	592.54	149.18
<b>33 42 31 00-0201 Precast Catch Basins Accessories (33 42 31 00-0152)</b>		
33 42 31 00-0202 EA Single Or Double Wing Slab Top With Throat .....	1,456.60	646.45
33 42 31 00-0203 EA 4' x 4' Weir Box, Precast Catch Basin .....	980.05	79.57
33 42 31 00-0204 EA 4' Diameter Inlet Round To Square Adapter, Precast Catch Basin .....	492.49	84.54
33 42 31 00-0205 EA 3' Diameter, Up To 6" High, Precast Extension Ring .....	589.59	124.32
For Each Additional Inch In Height, Add 77.53		
33 42 31 00-0206 EA 4' Diameter, Up To 6" High, Precast Extension Ring .....	691.80	149.18
For Each Additional Inch In Height, Add 90.42		
33 42 31 00-0207 EA 5' Diameter, Up To 6" High, Precast Extension Ring .....	807.35	174.05
For Each Additional Inch In Height, Add 105.59		



		<b>Utilities</b>	<b>33</b>	<b>CS</b>
		<b>Stormwater Utilities</b>	<b>33 40</b>	
		<b>Stormwater Conveyance</b>	<b>33 42</b>	

MINOR		TOTAL DIRECT		DEMOLITION	
CSI	UOM DESCRIPTION	UNIT COST	UNIT COST	UNIT COST	UNIT COST
33 42 31 00-0208	EA 6' Diameter, Up To 6" High, Precast Extension Ring .....	966.50		248.64	
	For Each Additional Inch In Height, Add	119.69			
33 42 31 00-0209	EA Adjust Existing Catch Basin Inlet Grate To Match Grade .....	596.69			
33 42 31 00-0210 Catch Basin Risers (33 42 31 00-0152)					
33 42 31 00-0211	EA Up To 860 Square Inch, Up to 2" Rise, Catch Basin Riser .....	383.57			
33 42 31 00-0212	EA >860 To 1140 Square Inch, Up To 2" Rise, Catch Basin Riser.....	429.36			
33 42 31 00-0213	EA >1140 Square Inch, Up To 2" Rise, Catch Basin Riser.....	483.86			
33 42 31 00-0214	EA Up To 860 Square Inch, >2" To 3" Rise, Catch Basin Riser .....	413.09			
33 42 31 00-0215	EA >860 To 1140 Square Inch, >2" To 3" Rise, Catch Basin Riser.....	461.95			
33 42 31 00-0216	EA >1140 Square Inch, >2" To 3" Rise, Catch Basin Riser.....	522.35			
33 42 31 00-0217	EA Up To 860 Square Inch, >3" To 4" Rise, Catch Basin Riser .....	457.50			
33 42 31 00-0218	EA >860 To 1140 Square Inch, >3" To 4" Rise, Catch Basin Riser.....	500.86			
33 42 31 00-0219	EA >1140 Square Inch, >3" To 4" Rise, Catch Basin Riser.....	561.46			
33 42 31 00-0220 Cast In Place, Storm Drain Cleanout (33 42 31 00-0002)					
	Note: Inside span.				
33 42 31 00-0221	EA 6' Deep, 4' x 4' x 8" Thick Wall, Cast In Place, Storm Drain Cleanout .....	5,396.85		767.49	
33 42 31 00-0222	EA 6' Deep, 4' x 5' x 8" Thick Wall, Cast In Place, Storm Drain Cleanout .....	6,132.63		875.85	
33 42 31 00-0223	EA 6' Deep, 4' x 6' x 8" Thick Wall, Cast In Place, Storm Drain Cleanout .....	6,944.08		994.01	
33 42 31 00-0224	EA 7' Deep, 4' x 7' x 8" Thick Wall, Cast In Place, Storm Drain Cleanout .....	8,346.82		1,192.42	
33 42 31 00-0225	EA 8' Deep, 4' x 8' x 8" Thick Wall, Cast In Place, Storm Drain Cleanout .....	10,098.32		1,439.59	
33 42 31 00-0226 Precast Concrete Inlet Boxes (33 42 31 00-0002)					
	Note: Inside dimensions.				
33 42 31 00-0227 Precast Concrete Inlet Boxes (33 42 31 00-0226)					
33 42 31 00-0228 24" x 24" ID, Precast Concrete Inlet Boxes (33 42 31 00-0227)					
	Note: Yard inlet.				
33 42 31 00-0229 24" x 24" ID, Precast Concrete Inlet Boxes (33 42 31 00-0228)					
33 42 31 00-0230	EA 24" Height, 24" x 24" ID, Precast Concrete Inlet Box.....	688.17		69.62	
33 42 31 00-0231	EA 30" Height, 24" x 24" ID, Precast Concrete Inlet Box.....	809.50		84.54	
33 42 31 00-0232	EA 36" Height, 24" x 24" ID, Precast Concrete Inlet Box.....	930.83		99.45	
33 42 31 00-0233	EA 42" Height, 24" x 24" ID, Precast Concrete Inlet Box.....	1,053.40		115.00	
33 42 31 00-0234 24" x 24" ID, Precast Concrete Inlet Box Risers (33 42 31 00-0228)					
33 42 31 00-0235	EA 6" Height, 24" x 24" ID, Precast Concrete Inlet Box Riser .....	176.03			
33 42 31 00-0236	EA 12" Height, 24" x 24" ID, Precast Concrete Inlet Box Riser .....	282.43			
33 42 31 00-0237	EA 18" Height, 24" x 24" ID, Precast Concrete Inlet Box Riser .....	398.79			
33 42 31 00-0238	EA 24" Height, 24" x 24" ID, Precast Concrete Inlet Box Riser .....	515.14			
33 42 31 00-0239	EA 30" Height, 24" x 24" ID, Precast Concrete Inlet Box Riser .....	631.50			
33 42 31 00-0240	EA 36" Height, 24" x 24" ID, Precast Concrete Inlet Box Riser .....	747.85			
33 42 31 00-0241 22" x 48" ID, Precast Concrete Inlet Boxes (33 42 31 00-0227)					
33 42 31 00-0242 22" x 48" ID, Precast Concrete Inlet Boxes (33 42 31 00-0241)					
33 42 31 00-0243	EA 36" Height, 22" x 48" ID, Precast Concrete Inlet Box.....	1,419.00		195.14	
33 42 31 00-0244	EA 42" Height, 22" x 48" ID, Precast Concrete Inlet Box.....	1,597.22		225.62	
33 42 31 00-0245	EA 48" Height, 22" x 48" ID, Precast Concrete Inlet Box.....	1,775.45		256.12	
33 42 31 00-0246	EA 54" Height, 22" x 48" ID, Precast Concrete Inlet Box.....	1,953.81		286.68	
33 42 31 00-0247	EA 60" Height, 22" x 48" ID, Precast Concrete Inlet Box.....	2,132.18		317.24	
33 42 31 00-0248	EA 66" Height, 22" x 48" ID, Precast Concrete Inlet Box.....	2,310.55		347.81	
33 42 31 00-0249	EA 72" Height, 22" x 48" ID, Precast Concrete Inlet Box.....	2,488.92		378.37	
33 42 31 00-0250 22" x 48" ID, Precast Concrete Inlet Box Risers (33 42 31 00-0241)					
33 42 31 00-0251	EA 6" Height, 22" x 48" ID, Precast Concrete Inlet Box Riser .....	344.92			
33 42 31 00-0252	EA 12" Height, 22" x 48" ID, Precast Concrete Inlet Box Riser .....	550.61			
33 42 31 00-0253	EA 18" Height, 22" x 48" ID, Precast Concrete Inlet Box Riser .....	600.37			
33 42 31 00-0254	EA 24" Height, 22" x 48" ID, Precast Concrete Inlet Box Riser .....	767.34			
33 42 31 00-0255	EA 30" Height, 22" x 48" ID, Precast Concrete Inlet Box Riser .....	934.31			
33 42 31 00-0256	EA 36" Height, 22" x 48" ID, Precast Concrete Inlet Box Riser .....	1,093.73			
33 42 31 00-0257	EA 42" Height, 22" x 48" ID, Precast Concrete Inlet Box Riser .....	1,271.96			
33 42 31 00-0258	EA 48" Height, 22" x 48" ID, Precast Concrete Inlet Box Riser .....	1,450.18			
33 42 31 00-0259	EA 54" Height, 22" x 48" ID, Precast Concrete Inlet Box Riser .....	1,628.55			
33 42 31 00-0260	EA 60" Height, 22" x 48" ID, Precast Concrete Inlet Box Riser .....	1,806.91			
33 42 31 00-0261	EA 66" Height, 22" x 48" ID, Precast Concrete Inlet Box Riser .....	1,985.29			
33 42 31 00-0262	EA 72" Height, 22" x 48" ID, Precast Concrete Inlet Box Riser .....	2,163.66			
33 42 31 00-0263 30" x 48" ID, Precast Concrete Inlet Boxes (33 42 31 00-0227)					
33 42 31 00-0264 30" x 48" ID, Precast Concrete Inlet Boxes (33 42 31 00-0263)					
33 42 31 00-0265	EA 36" Height, 30" x 48" ID, Precast Concrete Inlet Box.....	1,372.37		214.65	
33 42 31 00-0266	EA 42" Height, 30" x 48" ID, Precast Concrete Inlet Box.....	1,551.36		248.19	

**33 Utilities****33 40 Stormwater Utilities****33 42 Stormwater Conveyance**

MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
33 42 31 00-0267 EA 48" Height, 30" x 48" ID, Precast Concrete Inlet Box.....	1,730.33	281.73
33 42 31 00-0268 EA 54" Height, 30" x 48" ID, Precast Concrete Inlet Box.....	1,909.49	315.35
33 42 31 00-0269 EA 60" Height, 30" x 48" ID, Precast Concrete Inlet Box.....	2,088.64	348.96
33 42 31 00-0270 EA 66" Height, 30" x 48" ID, Precast Concrete Inlet Box.....	2,267.79	382.58
33 42 31 00-0271 EA 72" Height, 30" x 48" ID, Precast Concrete Inlet Box.....	2,446.93	416.20
<b>33 42 31 00-0272 30" x 48" ID, Precast Concrete Inlet Box Risers (33 42 31 00-0263)</b>		
33 42 31 00-0273 EA 6" Height, 30" x 48" ID, Precast Concrete Inlet Box Riser.....	342.51	
33 42 31 00-0274 EA 12" Height, 30" x 48" ID, Precast Concrete Inlet Box Riser.....	540.61	
33 42 31 00-0275 EA 18" Height, 30" x 48" ID, Precast Concrete Inlet Box Riser.....	591.36	
33 42 31 00-0276 EA 24" Height, 30" x 48" ID, Precast Concrete Inlet Box Riser.....	754.98	
33 42 31 00-0277 EA 30" Height, 30" x 48" ID, Precast Concrete Inlet Box Riser.....	918.60	
33 42 31 00-0278 EA 36" Height, 30" x 48" ID, Precast Concrete Inlet Box Riser.....	1,081.24	
33 42 31 00-0279 EA 42" Height, 30" x 48" ID, Precast Concrete Inlet Box Riser.....	1,257.54	
33 42 31 00-0280 EA 48" Height, 30" x 48" ID, Precast Concrete Inlet Box Riser.....	1,432.86	
33 42 31 00-0281 EA 54" Height, 30" x 48" ID, Precast Concrete Inlet Box Riser.....	1,609.17	
33 42 31 00-0282 EA 60" Height, 30" x 48" ID, Precast Concrete Inlet Box Riser.....	1,784.49	
33 42 31 00-0283 EA 66" Height, 30" x 48" ID, Precast Concrete Inlet Box Riser.....	1,960.80	
33 42 31 00-0284 EA 72" Height, 30" x 48" ID, Precast Concrete Inlet Box Riser.....	2,137.11	
<b>33 42 31 00-0285 42" x 48" ID, Precast Concrete Inlet Boxes (33 42 31 00-0227)</b>		
<b>33 42 31 00-0286 42" x 48" ID, Precast Concrete Inlet Boxes (33 42 31 00-0285)</b>		
33 42 31 00-0287 EA 36" Height, 42" x 48" ID, Precast Concrete Inlet Box.....	1,629.08	234.16
33 42 31 00-0288 EA 42" Height, 42" x 48" ID, Precast Concrete Inlet Box.....	1,839.17	272.21
33 42 31 00-0289 EA 48" Height, 42" x 48" ID, Precast Concrete Inlet Box.....	2,049.26	311.23
33 42 31 00-0290 EA 54" Height, 42" x 48" ID, Precast Concrete Inlet Box.....	2,258.37	349.29
33 42 31 00-0291 EA 60" Height, 42" x 48" ID, Precast Concrete Inlet Box.....	2,468.47	388.32
33 42 31 00-0292 EA 66" Height, 42" x 48" ID, Precast Concrete Inlet Box.....	2,678.55	426.37
33 42 31 00-0293 EA 72" Height, 42" x 48" ID, Precast Concrete Inlet Box.....	2,887.66	464.42
<b>33 42 31 00-0294 42" x 48" ID, Precast Concrete Inlet Box Risers (33 42 31 00-0285)</b>		
33 42 31 00-0295 EA 6" Height, 42" x 48" ID, Precast Concrete Inlet Box Riser.....	377.09	
33 42 31 00-0296 EA 12" Height, 42" x 48" ID, Precast Concrete Inlet Box Riser.....	607.82	
33 42 31 00-0297 EA 18" Height, 42" x 48" ID, Precast Concrete Inlet Box Riser.....	660.03	
33 42 31 00-0298 EA 24" Height, 42" x 48" ID, Precast Concrete Inlet Box Riser.....	845.24	
33 42 31 00-0299 EA 30" Height, 42" x 48" ID, Precast Concrete Inlet Box Riser.....	1,030.45	
33 42 31 00-0300 EA 36" Height, 42" x 48" ID, Precast Concrete Inlet Box Riser.....	1,215.67	
33 42 31 00-0301 EA 42" Height, 42" x 48" ID, Precast Concrete Inlet Box Riser.....	1,414.04	
33 42 31 00-0302 EA 48" Height, 42" x 48" ID, Precast Concrete Inlet Box Riser.....	1,612.43	
33 42 31 00-0303 EA 54" Height, 42" x 48" ID, Precast Concrete Inlet Box Riser.....	1,810.81	
33 42 31 00-0304 EA 60" Height, 42" x 48" ID, Precast Concrete Inlet Box Riser.....	2,009.19	
33 42 31 00-0305 EA 66" Height, 42" x 48" ID, Precast Concrete Inlet Box Riser.....	2,207.58	
33 42 31 00-0306 EA 72" Height, 42" x 48" ID, Precast Concrete Inlet Box Riser.....	2,405.95	
<b>33 42 31 00-0307 42" x 48" ID, Precast Concrete Inlet Box Tops (33 42 31 00-0285)</b>		
33 42 31 00-0308 EA 42" x 48" ID, Precast Concrete Inlet Box Top Slab.....	926.17	146.35
<b>33 42 31 00-0309 48" x 54" ID, Precast Concrete Inlet Boxes (33 42 31 00-0227)</b>		
<b>33 42 31 00-0310 48" x 54" ID, Precast Concrete Inlet Boxes (33 42 31 00-0309)</b>		
33 42 31 00-0311 EA 36" Height, 48" x 54" ID, Precast Concrete Inlet Box.....	2,300.61	260.18
33 42 31 00-0312 EA 42" Height, 48" x 54" ID, Precast Concrete Inlet Box.....	2,580.10	302.94
33 42 31 00-0313 EA 48" Height, 48" x 54" ID, Precast Concrete Inlet Box.....	2,859.59	345.71
33 42 31 00-0314 EA 54" Height, 48" x 54" ID, Precast Concrete Inlet Box.....	3,138.77	388.32
33 42 31 00-0315 EA 60" Height, 48" x 54" ID, Precast Concrete Inlet Box.....	3,417.93	430.93
33 42 31 00-0316 EA 66" Height, 48" x 54" ID, Precast Concrete Inlet Box.....	3,697.11	473.54
33 42 31 00-0317 EA 72" Height, 48" x 54" ID, Precast Concrete Inlet Box.....	3,976.30	516.15
<b>33 42 31 00-0318 48" x 54" ID, Precast Concrete Inlet Box Risers (33 42 31 00-0309)</b>		
33 42 31 00-0319 EA 6" Height, 48" x 54" ID, Precast Concrete Inlet Box Riser.....	379.34	
33 42 31 00-0320 EA 12" Height, 48" x 54" ID, Precast Concrete Inlet Box Riser.....	599.30	
33 42 31 00-0321 EA 18" Height, 48" x 54" ID, Precast Concrete Inlet Box Riser.....	874.57	
33 42 31 00-0322 EA 24" Height, 48" x 54" ID, Precast Concrete Inlet Box Riser.....	1,149.84	
33 42 31 00-0323 EA 30" Height, 48" x 54" ID, Precast Concrete Inlet Box Riser.....	1,408.84	
33 42 31 00-0324 EA 36" Height, 48" x 54" ID, Precast Concrete Inlet Box Riser.....	1,684.09	
33 42 31 00-0325 EA 42" Height, 48" x 54" ID, Precast Concrete Inlet Box Riser.....	1,963.59	
33 42 31 00-0326 EA 48" Height, 48" x 54" ID, Precast Concrete Inlet Box Riser.....	2,243.08	
33 42 31 00-0327 EA 54" Height, 48" x 54" ID, Precast Concrete Inlet Box Riser.....	2,522.26	
33 42 31 00-0328 EA 60" Height, 48" x 54" ID, Precast Concrete Inlet Box Riser.....	2,801.42	
33 42 31 00-0329 EA 66" Height, 48" x 54" ID, Precast Concrete Inlet Box Riser.....	3,080.60	
33 42 31 00-0330 EA 72" Height, 48" x 54" ID, Precast Concrete Inlet Box Riser.....	3,359.79	



		<b>Utilities</b>	<b>33</b>	<b>CS</b>
		<b>Stormwater Utilities</b>	<b>33 40</b>	
		<b>Stormwater Conveyance</b>	<b>33 42</b>	

MINOR CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
33 42 31 00-0331		48" x 54" ID, Precast Concrete Inlet Box Tops (33 42 31 00-0309)		
33 42 31 00-0332	EA	48" x 54" ID, Precast Concrete Inlet Box Top Slab.....	1,006.52	158.54
33 42 31 00-0333		48" x 66" ID, Precast Concrete Inlet Boxes (33 42 31 00-0227)		
33 42 31 00-0334		48" x 66" ID, Precast Concrete Inlet Boxes (33 42 31 00-0333)		
33 42 31 00-0335	EA	36" Height, 48" x 66" ID, Precast Concrete Inlet Box.....	2,656.30	327.83
33 42 31 00-0336	EA	42" Height, 48" x 66" ID, Precast Concrete Inlet Box.....	2,964.76	382.59
33 42 31 00-0337	EA	48" Height, 48" x 66" ID, Precast Concrete Inlet Box.....	3,273.21	437.36
33 42 31 00-0338	EA	54" Height, 48" x 66" ID, Precast Concrete Inlet Box.....	3,581.08	491.83
33 42 31 00-0339	EA	60" Height, 48" x 66" ID, Precast Concrete Inlet Box.....	3,888.92	546.30
33 42 31 00-0340	EA	66" Height, 48" x 66" ID, Precast Concrete Inlet Box.....	4,196.77	600.78
33 42 31 00-0341	EA	72" Height, 48" x 66" ID, Precast Concrete Inlet Box.....	4,504.62	655.25
33 42 31 00-0342		48" x 66" ID, Precast Concrete Inlet Box Risers (33 42 31 00-0333)		
33 42 31 00-0343	EA	6" Height, 48" x 66" ID, Precast Concrete Inlet Box Riser .....	417.45	
33 42 31 00-0344	EA	12" Height, 48" x 66" ID, Precast Concrete Inlet Box Riser .....	643.69	
33 42 31 00-0345	EA	18" Height, 48" x 66" ID, Precast Concrete Inlet Box Riser .....	951.87	
33 42 31 00-0346	EA	24" Height, 48" x 66" ID, Precast Concrete Inlet Box Riser .....	1,260.06	
33 42 31 00-0347	EA	30" Height, 48" x 66" ID, Precast Concrete Inlet Box Riser .....	1,540.92	
33 42 31 00-0348	EA	36" Height, 48" x 66" ID, Precast Concrete Inlet Box Riser .....	1,849.11	
33 42 31 00-0349	EA	42" Height, 48" x 66" ID, Precast Concrete Inlet Box Riser .....	2,157.57	
33 42 31 00-0350	EA	48" Height, 48" x 66" ID, Precast Concrete Inlet Box Riser .....	2,466.02	
33 42 31 00-0351	EA	54" Height, 48" x 66" ID, Precast Concrete Inlet Box Riser .....	2,773.88	
33 42 31 00-0352	EA	60" Height, 48" x 66" ID, Precast Concrete Inlet Box Riser .....	3,081.72	
33 42 31 00-0353	EA	66" Height, 48" x 66" ID, Precast Concrete Inlet Box Riser .....	3,389.57	
33 42 31 00-0354	EA	72" Height, 48" x 66" ID, Precast Concrete Inlet Box Riser .....	3,697.42	
33 42 31 00-0355		48" x 66" ID, Precast Concrete Inlet Box Tops (33 42 31 00-0333)		
33 42 31 00-0356	EA	48" x 66" ID, Precast Concrete Inlet Box Top Slab.....	1,119.21	177.57
33 42 31 00-0357		42" x 102" ID, Precast Concrete Inlet Boxes (33 42 31 00-0227)		
33 42 31 00-0358		42" x 102" ID, Precast Concrete Inlet Boxes (33 42 31 00-0357)		
33 42 31 00-0359	EA	36" Height, 42" x 102" ID, Precast Concrete Inlet Box.....	3,331.56	441.97
33 42 31 00-0360	EA	42" Height, 42" x 102" ID, Precast Concrete Inlet Box.....	3,722.35	515.15
33 42 31 00-0361	EA	48" Height, 42" x 102" ID, Precast Concrete Inlet Box.....	4,113.16	587.35
33 42 31 00-0362	EA	54" Height, 42" x 102" ID, Precast Concrete Inlet Box.....	4,502.98	660.53
33 42 31 00-0363	EA	60" Height, 42" x 102" ID, Precast Concrete Inlet Box.....	4,893.79	732.73
33 42 31 00-0364	EA	66" Height, 42" x 102" ID, Precast Concrete Inlet Box.....	5,283.60	804.93
33 42 31 00-0365	EA	72" Height, 42" x 102" ID, Precast Concrete Inlet Box.....	5,675.37	878.10
33 42 31 00-0366		42" x 102" ID, Precast Concrete Inlet Box Risers (33 42 31 00-0357)		
33 42 31 00-0367	EA	6" Height, 42" x 102" ID, Precast Concrete Inlet Box Riser .....	560.56	
33 42 31 00-0368	EA	12" Height, 42" x 102" ID, Precast Concrete Inlet Box Riser .....	849.90	
33 42 31 00-0369	EA	18" Height, 42" x 102" ID, Precast Concrete Inlet Box Riser .....	1,233.86	
33 42 31 00-0370	EA	24" Height, 42" x 102" ID, Precast Concrete Inlet Box Riser .....	1,617.83	
33 42 31 00-0371	EA	30" Height, 42" x 102" ID, Precast Concrete Inlet Box Riser .....	1,973.50	
33 42 31 00-0372	EA	36" Height, 42" x 102" ID, Precast Concrete Inlet Box Riser .....	2,357.47	
33 42 31 00-0373	EA	42" Height, 42" x 102" ID, Precast Concrete Inlet Box Riser .....	2,748.27	
33 42 31 00-0374	EA	48" Height, 42" x 102" ID, Precast Concrete Inlet Box Riser .....	3,139.07	
33 42 31 00-0375	EA	54" Height, 42" x 102" ID, Precast Concrete Inlet Box Riser .....	3,528.90	
33 42 31 00-0376	EA	60" Height, 42" x 102" ID, Precast Concrete Inlet Box Riser .....	3,919.70	
33 42 31 00-0377	EA	66" Height, 42" x 102" ID, Precast Concrete Inlet Box Riser .....	4,309.51	
33 42 31 00-0378	EA	72" Height, 42" x 102" ID, Precast Concrete Inlet Box Riser .....	4,700.32	
33 42 31 00-0379		42" x 102" ID, Precast Concrete Inlet Box Tops (33 42 31 00-0357)		
33 42 31 00-0380	EA	42" x 102" ID, Precast Concrete Inlet Box Top Slab.....	1,519.44	195.14
33 42 31 00-0381		Frames And Grates For Inlets (33 42 31 00-0226)		
33 42 31 00-0382		Inlet Frames And Grates (33 42 31 00-0381)		
33 42 31 00-0383	EA	24" x 24", Heavy Duty Inlet Grate ..... Note: For type A, B, D, or E inlets.	385.90	45.50
33 42 31 00-0384	EA	47-3/4" x 21-3/4", Bicycle Safe Inlet Grate (US Foundry 6352 GRT)..... Note: For type A, B, D, or E inlets.	503.15	45.50
33 42 31 00-0385	EA	47-3/4" x 21-3/4", Phase II Stormwater Compliant Inlet Grate (US Foundry 6352 GRT)..... Note: Includes legend: Dump No Waste "Drains To Waterways".	503.15	45.50
33 42 31 00-0386	EA	Phase II Storm Water Compliant Grate, Echo Grate, Type "B" And "D" Inlet Covers (US Foundry 6352 GRT)..... Note: Legend: Dump No Waste "Drains To Waterways"	503.15	45.50
33 42 31 00-0387	EA	Parallel Bar Grates For Type A, B, D And E Inlets (Campbell Foundry 2617-0362).....	552.21	45.50
33 42 31 00-0388	EA	Type B Inlet Dirt Plate (US Foundry 5217 BK).....	397.92	91.02
33 42 31 00-0389	EA	Back Plate For Type B Inlets (Campbell Foundry 2548-1942).....	466.60	91.02

**33 Utilities****33 40 Stormwater Utilities****33 42 Stormwater Conveyance**

MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
33 42 31 00-0390 EA Phase II Echo-Safe Bar For Series 2500/2600 Curb Inlets (Campbell Foundry 25419EC4).....	580.79	113.77
Note: Includes cam action clamping system, stainless steel badge labeled to center of plate, steel plate welded to bar with legend: Dump No Waste "Drains to Waterways".		
33 42 31 00-0391 EA 1-1/2" Catch Basin Riser For Type B And D Inlets (General Foundries 6352 EXT).....	492.48	113.77
33 42 31 00-0392 EA 2" Catch Basin Riser For Type B And D Inlets (General Foundries 6352 EXT).....	502.29	113.77
33 42 31 00-0393 EA 2-1/2" Catch Basin Riser For Type B And D Inlets (General Foundries 6352 EXT).....	521.92	113.77
33 42 31 00-0394 EA 3" Catch Basin Riser For Type B And D Inlets (General Foundries 6352 EXT).....	541.54	113.77
33 42 31 00-0395 EA 2" Extension Frame For Type A Inlet (General Foundries 6352 EXT).....	521.92	113.77
33 42 31 00-0396 EA 2-1/2" Extension Frame For Type A Inlet (General Foundries 6352 EXT).....	541.54	113.77
33 42 31 00-0397 EA 3" Extension Frame For Type A Inlet (General Foundries 6352 EXT).....	561.17	113.77
33 42 31 00-0398 EA 2" Extension Frame For Type E Inlet (General Foundries 6352 EXT).....	816.29	113.77
33 42 31 00-0399 EA 2-1/2" Extension Frame For Type E Inlet (General Foundries 6352 EXT).....	855.54	113.77
33 42 31 00-0400 EA 3" Extension Frame For Type E Inlet (General Foundries 6352 EXT).....	894.79	113.77
33 42 31 00-0401 EA 2", 3 Sided Extension Frame For Type A, B, D, And E Inlet (Campbell Foundry 2701).....	600.42	113.77
33 42 31 00-0402 EA 6" Type N Curb Back Piece For Type B And D Inlets (US Foundry 5218N6).....	541.54	113.77
33 42 31 00-0403 EA 8" Type N Curb Back Piece For Type B And D Inlets (US Foundry 5218N8).....	541.54	113.77
33 42 31 00-0404 EA 6" Radius Curb Back Piece For Type B And D Inlets (Campbell Foundry BSCB-6).....	1,131.98	113.77
33 42 31 00-0405 EA 8" Radius Curb Back Piece For Type B And D Inlets (Campbell Foundry BSCB-8).....	1,131.98	113.77
33 42 31 00-0406 EA Safety Bars For Type B And D Inlets (General Foundries 5218 SB).....	446.54	125.15
33 42 31 00-0407 EA 6", Phase II Echo-Safe Catch Basin Curb Inlet Cover (Campbell Foundry ERSS 648).....	632.98	125.15
Note: Includes cam action clamping system and stainless steel badge labeled to center of plate.		
33 42 31 00-0408 EA 8", Phase II Echo-Safe Catch Basin Curb Inlet Cover (Campbell Foundry ERSS 848).....	632.98	125.15
Note: Includes cam action clamping system and stainless steel badge labeled to center of plate.		
33 42 31 00-0409 EA 10", Phase II Echo-Safe Catch Basin Curb Inlet Cover (Campbell Foundry ERSS 1048).....	701.67	125.15
Note: Includes cam action clamping system and stainless steel badge labeled to center of plate.		
33 42 31 00-0410 EA Type B Inlet Frame (US Foundry 5216 FRM).....	809.61	125.15
33 42 31 00-0411 EA Type D Inlet Frame (US Foundry 2999 FRM).....	691.85	125.15
33 42 31 00-0412 EA Type B Inlet Frame (Campbell Foundry 2618-0202).....	996.04	125.15
33 42 31 00-0413 EA Type D Inlet Frame (Campbell Foundry 2617-0002).....	878.29	125.15
33 42 31 00-0414 EA Type A Inlet, Single Frame And Grate (US Foundry 52340).....	1,129.44	182.04
33 42 31 00-0415 EA Type E Inlet, Single Frame And Grate (US Foundry 52342).....	1,835.94	182.04
33 42 31 00-0416 EA Type A Inlet, Single Frame And Grate (General Foundries 52340).....	1,100.00	182.04
33 42 31 00-0417 EA Type E Inlet, Double Frame And Grate (General Foundries 52342).....	1,743.70	182.04
33 42 31 00-0418 EA Oversized Type A Inlet, Single Frame And Reticuline Grate (US Foundry 82340).....	1,851.17	273.04
33 42 31 00-0419 EA Heavy Duty Rectangular Frame And Grate (Campbell Foundry 3084).....	1,884.99	364.06
33 42 31 00-0420 EA 6" Curb Piece, Type B Inlet Frame And Grate (US Foundry 52186).....	2,072.46	364.06
33 42 31 00-0421 EA 8" Curb Piece, Type B Inlet Frame And Grate (US Foundry 52198).....	2,072.46	364.06
33 42 31 00-0422 EA 6" Curb Piece, Type D Inlet Frame And Grate (US Foundry 72266).....	1,827.15	364.06
33 42 31 00-0423 EA 8" Curb Piece, Type D Inlet Frame And Grate (US Foundry 72268).....	1,827.15	364.06
33 42 31 00-0424 EA Type B And C Inlet Frame And Grate With Type N Curb And Back Plate (Campbell Foundry GFI 52198).....	2,150.96	364.06
<b>33 42 31 00-0425 Catch Basin Frames And Covers (33 42 31 00-0001)</b>		
<b>33 42 31 00-0426 Cast Iron Frames And Covers (33 42 31 00-0425)</b>		
33 42 31 00-0427 EA 18" Diameter Cast Iron Catch Basin Frame And Cover.....	567.67	99.45
33 42 31 00-0428 EA 22" Diameter Cast Iron Catch Basin Frame And Cover.....	710.12	112.38
33 42 31 00-0429 EA 24" Diameter Cast Iron Catch Basin Frame And Cover.....	797.14	116.36
33 42 31 00-0430 EA 26" Diameter Cast Iron Catch Basin Frame And Cover.....	895.68	135.26
33 42 31 00-0431 EA 28" Diameter Cast Iron Catch Basin Frame And Cover.....	1,041.37	154.16
33 42 31 00-0432 EA 32" Diameter Cast Iron Catch Basin Frame And Cover.....	1,628.87	161.12
33 42 31 00-0433 EA 16" x 16" Cast Iron Catch Basin Frame And Cover.....	895.11	122.33
33 42 31 00-0434 EA 18" x 24" Cast Iron Catch Basin Frame And Cover.....	1,157.01	141.22
33 42 31 00-0435 EA 20" x 27" Cast Iron Catch Basin Frame And Cover.....	1,301.79	147.19
33 42 31 00-0436 EA 23" x 23" Cast Iron Catch Basin Frame And Cover.....	1,234.34	147.19
33 42 31 00-0437 EA 24" x 24" Cast Iron Catch Basin Frame And Cover.....	1,276.41	153.16
33 42 31 00-0438 EA 26" x 26" Cast Iron Catch Basin Frame And Cover.....	1,367.94	159.13
33 42 31 00-0439 EA 24" x 36" Cast Iron Catch Basin Frame And Cover.....	1,633.84	171.06
<b>33 42 31 00-0440 Concrete Drainage Inlet Structures (CALTRANS) (33 42 31 00-0001)</b>		
<b>33 42 31 00-0441 Type OS Concrete Drainage Inlet Structure (33 42 31 00-0440)</b>		
33 42 31 00-0442 EA 3' Deep Type OS Concrete Drainage Inlet Structure, 6" Wall Thickness.....	3,778.51	
33 42 31 00-0443 EA 4' Deep Type OS Concrete Drainage Inlet Structure, 6" Wall Thickness.....	4,397.56	
33 42 31 00-0444 EA 5' Deep Type OS Concrete Drainage Inlet Structure, 6" Wall Thickness.....	4,975.35	
33 42 31 00-0445 EA 6' Deep Type OS Concrete Drainage Inlet Structure, 6" Wall Thickness.....	5,511.87	
33 42 31 00-0446 EA 7' Deep Type OS Concrete Drainage Inlet Structure, 6" Wall Thickness.....	6,007.10	
33 42 31 00-0447 EA 8' Deep Type OS Concrete Drainage Inlet Structure, 6" Wall Thickness.....	6,461.05	
33 42 31 00-0448 EA 8' Deep Type OS Concrete Drainage Inlet Structure, 8" Wall Thickness.....	8,791.64	
33 42 31 00-0449 EA 10' Deep Type OS Concrete Drainage Inlet Structure, 8" Wall Thickness.....	10,259.33	
33 42 31 00-0450 EA 12' Deep Type OS Concrete Drainage Inlet Structure, 8" Wall Thickness.....	11,618.67	
33 42 31 00-0451 EA 14' Deep Type OS Concrete Drainage Inlet Structure, 8" Wall Thickness.....	12,871.66	
33 42 31 00-0452 EA 16' Deep Type OS Concrete Drainage Inlet Structure, 8" Wall Thickness.....	14,091.70	
33 42 31 00-0453 EA 18' Deep Type OS Concrete Drainage Inlet Structure, 8" Wall Thickness.....	15,221.28	
33 42 31 00-0454 EA 20' Deep Type OS Concrete Drainage Inlet Structure, 8" Wall Thickness.....	16,260.42	
<b>33 42 31 00-0455 Type OL-7 Concrete Drainage Inlet Structure (33 42 31 00-0440)</b>		
33 42 31 00-0456 EA 3' Deep Type OL-7 Concrete Drainage Inlet Structure, 6" Wall Thickness.....	5,145.20	
33 42 31 00-0457 EA 4' Deep Type OL-7 Concrete Drainage Inlet Structure, 6" Wall Thickness.....	5,726.49	
33 42 31 00-0458 EA 5' Deep Type OL-7 Concrete Drainage Inlet Structure, 6" Wall Thickness.....	6,266.50	





		<b>Utilities</b>	<b>33</b>	<b>33</b>
		<b>Stormwater Utilities</b>	<b>33 40</b>	
		<b>Stormwater Conveyance</b>	<b>33 42</b>	

MINOR CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
33 42 31 00-0459	EA	6' Deep Type OL-7 Concrete Drainage Inlet Structure, 6" Wall Thickness.....	6,765.24	
33 42 31 00-0460	EA	7' Deep Type OL-7 Concrete Drainage Inlet Structure, 6" Wall Thickness.....	7,221.70	
33 42 31 00-0461	EA	8' Deep Type OL-7 Concrete Drainage Inlet Structure, 6" Wall Thickness.....	7,637.89	
33 42 31 00-0462	EA	8' Deep Type OL-7 Concrete Drainage Inlet Structure, 8" Wall Thickness.....	9,899.25	
33 42 31 00-0463	EA	10' Deep Type OL-7 Concrete Drainage Inlet Structure, 8" Wall Thickness.....	11,333.78	
33 42 31 00-0464	EA	12' Deep Type OL-7 Concrete Drainage Inlet Structure, 8" Wall Thickness.....	12,659.97	
33 42 31 00-0465	EA	14' Deep Type OL-7 Concrete Drainage Inlet Structure, 8" Wall Thickness.....	13,878.82	
33 42 31 00-0466	EA	16' Deep Type OL-7 Concrete Drainage Inlet Structure, 8" Wall Thickness.....	15,070.94	
33 42 31 00-0467	EA	18' Deep Type OL-7 Concrete Drainage Inlet Structure, 8" Wall Thickness.....	16,172.61	
33 42 31 00-0468	EA	20' Deep Type OL-7 Concrete Drainage Inlet Structure, 8" Wall Thickness.....	17,183.83	
<b>33 42 31 00-0469 Type OL-10 Concrete Drainage Inlet Structure (33 42 31 00-0440)</b>				
33 42 31 00-0470	EA	3' Deep Type OL-10 Concrete Drainage Inlet Structure, 6" Wall Thickness.....	6,404.69	
33 42 31 00-0471	EA	4' Deep Type OL-10 Concrete Drainage Inlet Structure, 6" Wall Thickness.....	6,951.38	
33 42 31 00-0472	EA	5' Deep Type OL-10 Concrete Drainage Inlet Structure, 6" Wall Thickness.....	7,455.81	
33 42 31 00-0473	EA	6' Deep Type OL-10 Concrete Drainage Inlet Structure, 6" Wall Thickness.....	7,919.95	
33 42 31 00-0474	EA	7' Deep Type OL-10 Concrete Drainage Inlet Structure, 6" Wall Thickness.....	8,341.82	
33 42 31 00-0475	EA	8' Deep Type OL-10 Concrete Drainage Inlet Structure, 6" Wall Thickness.....	8,722.43	
33 42 31 00-0476	EA	8' Deep Type OL-10 Concrete Drainage Inlet Structure, 8" Wall Thickness.....	11,006.86	
33 42 31 00-0477	EA	10' Deep Type OL-10 Concrete Drainage Inlet Structure, 8" Wall Thickness.....	12,407.24	
33 42 31 00-0478	EA	12' Deep Type OL-10 Concrete Drainage Inlet Structure, 8" Wall Thickness.....	13,701.28	
33 42 31 00-0479	EA	14' Deep Type OL-10 Concrete Drainage Inlet Structure, 8" Wall Thickness.....	14,886.98	
33 42 31 00-0480	EA	16' Deep Type OL-10 Concrete Drainage Inlet Structure, 8" Wall Thickness.....	16,050.18	
33 42 31 00-0481	EA	18' Deep Type OL-10 Concrete Drainage Inlet Structure, 8" Wall Thickness.....	17,123.94	
33 42 31 00-0482	EA	20' Deep Type OL-10 Concrete Drainage Inlet Structure, 8" Wall Thickness.....	18,106.27	
<b>33 42 31 00-0483 Type OL-14 Concrete Drainage Inlet Structure (33 42 31 00-0440)</b>				
33 42 31 00-0484	EA	3' Deep Type OL-14 Concrete Drainage Inlet Structure, 6" Wall Thickness.....	8,200.14	
33 42 31 00-0485	EA	4' Deep Type OL-14 Concrete Drainage Inlet Structure, 6" Wall Thickness.....	8,696.36	
33 42 31 00-0486	EA	5' Deep Type OL-14 Concrete Drainage Inlet Structure, 6" Wall Thickness.....	9,151.30	
33 42 31 00-0487	EA	6' Deep Type OL-14 Concrete Drainage Inlet Structure, 6" Wall Thickness.....	9,564.97	
33 42 31 00-0488	EA	7' Deep Type OL-14 Concrete Drainage Inlet Structure, 6" Wall Thickness.....	9,937.34	
33 42 31 00-0489	EA	8' Deep Type OL-14 Concrete Drainage Inlet Structure, 6" Wall Thickness.....	10,268.46	
33 42 31 00-0490	EA	8' Deep Type OL-14 Concrete Drainage Inlet Structure, 8" Wall Thickness.....	12,575.98	
33 42 31 00-0491	EA	10' Deep Type OL-14 Concrete Drainage Inlet Structure, 8" Wall Thickness.....	13,929.30	
33 42 31 00-0492	EA	12' Deep Type OL-14 Concrete Drainage Inlet Structure, 8" Wall Thickness.....	15,175.30	
33 42 31 00-0493	EA	14' Deep Type OL-14 Concrete Drainage Inlet Structure, 8" Wall Thickness.....	16,313.95	
33 42 31 00-0494	EA	16' Deep Type OL-14 Concrete Drainage Inlet Structure, 8" Wall Thickness.....	17,438.53	
33 42 31 00-0495	EA	18' Deep Type OL-14 Concrete Drainage Inlet Structure, 8" Wall Thickness.....	18,471.67	
33 42 31 00-0496	EA	20' Deep Type OL-14 Concrete Drainage Inlet Structure, 8" Wall Thickness.....	19,414.35	
<b>33 42 31 00-0497 Type OL-21 Concrete Drainage Inlet Structure (33 42 31 00-0440)</b>				
33 42 31 00-0498	EA	3' Deep Type OL-21 Concrete Drainage Inlet Structure, 6" Wall Thickness.....	11,844.66	
33 42 31 00-0499	EA	4' Deep Type OL-21 Concrete Drainage Inlet Structure, 6" Wall Thickness.....	12,239.82	
33 42 31 00-0500	EA	5' Deep Type OL-21 Concrete Drainage Inlet Structure, 6" Wall Thickness.....	12,593.70	
33 42 31 00-0501	EA	6' Deep Type OL-21 Concrete Drainage Inlet Structure, 6" Wall Thickness.....	12,906.30	
33 42 31 00-0502	EA	7' Deep Type OL-21 Concrete Drainage Inlet Structure, 6" Wall Thickness.....	13,176.62	
33 42 31 00-0503	EA	8' Deep Type OL-21 Concrete Drainage Inlet Structure, 6" Wall Thickness.....	13,406.68	
33 42 31 00-0504	EA	8' Deep Type OL-21 Concrete Drainage Inlet Structure, 8" Wall Thickness.....	15,644.98	
33 42 31 00-0505	EA	10' Deep Type OL-21 Concrete Drainage Inlet Structure, 8" Wall Thickness.....	16,905.85	
33 42 31 00-0506	EA	12' Deep Type OL-21 Concrete Drainage Inlet Structure, 8" Wall Thickness.....	18,059.37	
33 42 31 00-0507	EA	14' Deep Type OL-21 Concrete Drainage Inlet Structure, 8" Wall Thickness.....	19,105.57	
33 42 31 00-0508	EA	16' Deep Type OL-21 Concrete Drainage Inlet Structure, 8" Wall Thickness.....	20,152.20	
33 42 31 00-0509	EA	18' Deep Type OL-21 Concrete Drainage Inlet Structure, 8" Wall Thickness.....	21,107.39	
33 42 31 00-0510	EA	20' Deep Type OL-21 Concrete Drainage Inlet Structure, 8" Wall Thickness.....	21,972.14	
<b>33 42 31 00-0511 Type GOL-7 Concrete Drainage Inlet Structure (33 42 31 00-0440)</b>				
33 42 31 00-0512	EA	3' Deep Type GOL-7 Concrete Drainage Inlet Structure, 6" Wall Thickness.....	6,243.91	
33 42 31 00-0513	EA	4' Deep Type GOL-7 Concrete Drainage Inlet Structure, 6" Wall Thickness.....	6,886.25	
33 42 31 00-0514	EA	5' Deep Type GOL-7 Concrete Drainage Inlet Structure, 6" Wall Thickness.....	7,481.52	
33 42 31 00-0515	EA	6' Deep Type GOL-7 Concrete Drainage Inlet Structure, 6" Wall Thickness.....	8,029.70	
33 42 31 00-0516	EA	7' Deep Type GOL-7 Concrete Drainage Inlet Structure, 6" Wall Thickness.....	8,531.79	
33 42 31 00-0517	EA	8' Deep Type GOL-7 Concrete Drainage Inlet Structure, 6" Wall Thickness.....	8,987.78	
33 42 31 00-0518	EA	8' Deep Type GOL-7 Concrete Drainage Inlet Structure, 8" Wall Thickness.....	11,445.29	
33 42 31 00-0519	EA	10' Deep Type GOL-7 Concrete Drainage Inlet Structure, 8" Wall Thickness.....	13,043.49	
33 42 31 00-0520	EA	12' Deep Type GOL-7 Concrete Drainage Inlet Structure, 8" Wall Thickness.....	14,521.13	
33 42 31 00-0521	EA	14' Deep Type GOL-7 Concrete Drainage Inlet Structure, 8" Wall Thickness.....	15,877.18	
33 42 31 00-0522	EA	16' Deep Type GOL-7 Concrete Drainage Inlet Structure, 8" Wall Thickness.....	17,205.67	
33 42 31 00-0523	EA	18' Deep Type GOL-7 Concrete Drainage Inlet Structure, 8" Wall Thickness.....	18,432.52	
33 42 31 00-0524	EA	20' Deep Type GOL-7 Concrete Drainage Inlet Structure, 8" Wall Thickness.....	19,556.74	
<b>33 42 31 00-0525 Type GOL-10 Concrete Drainage Inlet Structure (33 42 31 00-0440)</b>				
33 42 31 00-0526	EA	3' Deep Type GOL-10 Concrete Drainage Inlet Structure, 6" Wall Thickness.....	7,610.59	
33 42 31 00-0527	EA	4' Deep Type GOL-10 Concrete Drainage Inlet Structure, 6" Wall Thickness.....	8,214.18	
33 42 31 00-0528	EA	5' Deep Type GOL-10 Concrete Drainage Inlet Structure, 6" Wall Thickness.....	8,771.67	

**33 Utilities****33 40 Stormwater Utilities****33 42 Stormwater Conveyance**

MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
33 42 31 00-0529 EA 6' Deep Type GOL-10 Concrete Drainage Inlet Structure, 6" Wall Thickness .....	9,283.07	
33 42 31 00-0530 EA 7' Deep Type GOL-10 Concrete Drainage Inlet Structure, 6" Wall Thickness .....	9,747.38	
33 42 31 00-0531 EA 8' Deep Type GOL-10 Concrete Drainage Inlet Structure, 6" Wall Thickness .....	10,164.62	
33 42 31 00-0532 EA 8' Deep Type GOL-10 Concrete Drainage Inlet Structure, 8" Wall Thickness .....	12,622.13	
33 42 31 00-0533 EA 10' Deep Type GOL-10 Concrete Drainage Inlet Structure, 8" Wall Thickness .....	14,184.55	
33 42 31 00-0534 EA 12' Deep Type GOL-10 Concrete Drainage Inlet Structure, 8" Wall Thickness .....	15,626.40	
33 42 31 00-0535 EA 14' Deep Type GOL-10 Concrete Drainage Inlet Structure, 8" Wall Thickness .....	16,947.67	
33 42 31 00-0536 EA 16' Deep Type GOL-10 Concrete Drainage Inlet Structure, 8" Wall Thickness .....	18,245.93	
33 42 31 00-0537 EA 18' Deep Type GOL-10 Concrete Drainage Inlet Structure, 8" Wall Thickness .....	19,442.56	
33 42 31 00-0538 EA 20' Deep Type GOL-10 Concrete Drainage Inlet Structure, 8" Wall Thickness .....	20,537.56	
<b>33 42 31 00-0539 Type G-1 Concrete Drainage Inlet Structure (33 42 31 00-0440)</b>		
33 42 31 00-0540 EA 3' Deep Type G-1 Concrete Drainage Inlet Structure, 6" Wall Thickness .....	2,545.80	
33 42 31 00-0541 EA 4' Deep Type G-1 Concrete Drainage Inlet Structure, 6" Wall Thickness .....	3,048.64	
33 42 31 00-0542 EA 5' Deep Type G-1 Concrete Drainage Inlet Structure, 6" Wall Thickness .....	3,517.52	
33 42 31 00-0543 EA 6' Deep Type G-1 Concrete Drainage Inlet Structure, 6" Wall Thickness .....	3,954.45	
33 42 31 00-0544 EA 7' Deep Type G-1 Concrete Drainage Inlet Structure, 6" Wall Thickness .....	4,359.40	
33 42 31 00-0545 EA 8' Deep Type G-1 Concrete Drainage Inlet Structure, 6" Wall Thickness .....	4,730.41	
<b>33 42 31 00-0546 Type G-2 Concrete Drainage Inlet Structure (33 42 31 00-0440)</b>		
33 42 31 00-0547 EA 3' Deep Type G-2 Concrete Drainage Inlet Structure, 6" Wall Thickness .....	3,510.52	
33 42 31 00-0548 EA 4' Deep Type G-2 Concrete Drainage Inlet Structure, 6" Wall Thickness .....	4,077.14	
33 42 31 00-0549 EA 5' Deep Type G-2 Concrete Drainage Inlet Structure, 6" Wall Thickness .....	4,606.01	
33 42 31 00-0550 EA 6' Deep Type G-2 Concrete Drainage Inlet Structure, 6" Wall Thickness .....	5,097.08	
33 42 31 00-0551 EA 7' Deep Type G-2 Concrete Drainage Inlet Structure, 6" Wall Thickness .....	5,550.39	
33 42 31 00-0552 EA 8' Deep Type G-2 Concrete Drainage Inlet Structure, 6" Wall Thickness .....	5,964.93	
33 42 31 00-0553 EA 8' Deep Type G-2 Concrete Drainage Inlet Structure, 8" Wall Thickness .....	8,076.31	
33 42 31 00-0554 EA 10' Deep Type G-2 Concrete Drainage Inlet Structure, 8" Wall Thickness .....	9,430.70	
33 42 31 00-0555 EA 12' Deep Type G-2 Concrete Drainage Inlet Structure, 8" Wall Thickness .....	10,686.28	
33 42 31 00-0556 EA 14' Deep Type G-2 Concrete Drainage Inlet Structure, 8" Wall Thickness .....	11,843.07	
33 42 31 00-0557 EA 16' Deep Type G-2 Concrete Drainage Inlet Structure, 8" Wall Thickness .....	12,969.42	
33 42 31 00-0558 EA 18' Deep Type G-2 Concrete Drainage Inlet Structure, 8" Wall Thickness .....	14,012.55	
33 42 31 00-0559 EA 20' Deep Type G-2 Concrete Drainage Inlet Structure, 8" Wall Thickness .....	14,971.47	
<b>33 42 31 00-0560 Type G-3 Concrete Drainage Inlet Structure (33 42 31 00-0440)</b>		
33 42 31 00-0561 EA 3' Deep Type G-3 Concrete Drainage Inlet Structure, 6" Wall Thickness .....	2,760.18	
33 42 31 00-0562 EA 4' Deep Type G-3 Concrete Drainage Inlet Structure, 6" Wall Thickness .....	3,256.67	
33 42 31 00-0563 EA 5' Deep Type G-3 Concrete Drainage Inlet Structure, 6" Wall Thickness .....	3,720.19	
33 42 31 00-0564 EA 6' Deep Type G-3 Concrete Drainage Inlet Structure, 6" Wall Thickness .....	4,151.76	
33 42 31 00-0565 EA 7' Deep Type G-3 Concrete Drainage Inlet Structure, 6" Wall Thickness .....	4,549.37	
33 42 31 00-0566 EA 8' Deep Type G-3 Concrete Drainage Inlet Structure, 6" Wall Thickness .....	4,915.01	
<b>33 42 31 00-0567 Type G-4_24 Concrete Drainage Inlet Structure (33 42 31 00-0440)</b>		
33 42 31 00-0568 EA 3' Deep Type G-4_24 Concrete Drainage Inlet Structure, 6" Wall Thickness .....	3,403.33	
33 42 31 00-0569 EA 4' Deep Type G-4_24 Concrete Drainage Inlet Structure, 6" Wall Thickness .....	3,973.14	
33 42 31 00-0570 EA 5' Deep Type G-4_24 Concrete Drainage Inlet Structure, 6" Wall Thickness .....	4,505.16	
33 42 31 00-0571 EA 6' Deep Type G-4_24 Concrete Drainage Inlet Structure, 6" Wall Thickness .....	4,998.42	
33 42 31 00-0572 EA 7' Deep Type G-4_24 Concrete Drainage Inlet Structure, 6" Wall Thickness .....	5,454.92	
33 42 31 00-0573 EA 8' Deep Type G-4_24 Concrete Drainage Inlet Structure, 6" Wall Thickness .....	5,872.63	
33 42 31 00-0574 EA 8' Deep Type G-4_24 Concrete Drainage Inlet Structure, 8" Wall Thickness .....	8,030.16	
33 42 31 00-0575 EA 10' Deep Type G-4_24 Concrete Drainage Inlet Structure, 8" Wall Thickness .....	9,386.64	
33 42 31 00-0576 EA 12' Deep Type G-4_24 Concrete Drainage Inlet Structure, 8" Wall Thickness .....	10,643.32	
33 42 31 00-0577 EA 14' Deep Type G-4_24 Concrete Drainage Inlet Structure, 8" Wall Thickness .....	11,801.19	
33 42 31 00-0578 EA 16' Deep Type G-4_24 Concrete Drainage Inlet Structure, 8" Wall Thickness .....	12,928.41	
33 42 31 00-0579 EA 18' Deep Type G-4_24 Concrete Drainage Inlet Structure, 8" Wall Thickness .....	13,972.42	
33 42 31 00-0580 EA 20' Deep Type G-4_24 Concrete Drainage Inlet Structure, 8" Wall Thickness .....	14,933.20	
<b>33 42 31 00-0581 Type G-4_18 Concrete Drainage Inlet Structure (33 42 31 00-0440)</b>		
33 42 31 00-0582 EA 3' Deep Type G-4_18 Concrete Drainage Inlet Structure, 6" Wall Thickness .....	3,510.52	
33 42 31 00-0583 EA 4' Deep Type G-4_18 Concrete Drainage Inlet Structure, 6" Wall Thickness .....	4,077.14	
33 42 31 00-0584 EA 5' Deep Type G-4_18 Concrete Drainage Inlet Structure, 6" Wall Thickness .....	4,606.01	
33 42 31 00-0585 EA 6' Deep Type G-4_18 Concrete Drainage Inlet Structure, 6" Wall Thickness .....	5,097.08	
33 42 31 00-0586 EA 7' Deep Type G-4_18 Concrete Drainage Inlet Structure, 6" Wall Thickness .....	5,550.39	
33 42 31 00-0587 EA 8' Deep Type G-4_18 Concrete Drainage Inlet Structure, 6" Wall Thickness .....	5,964.93	
33 42 31 00-0588 EA 8' Deep Type G-4_18 Concrete Drainage Inlet Structure, 8" Wall Thickness .....	8,076.31	
33 42 31 00-0589 EA 10' Deep Type G-4_18 Concrete Drainage Inlet Structure, 8" Wall Thickness .....	9,430.70	
33 42 31 00-0590 EA 12' Deep Type G-4_18 Concrete Drainage Inlet Structure, 8" Wall Thickness .....	10,686.28	
33 42 31 00-0591 EA 14' Deep Type G-4_18 Concrete Drainage Inlet Structure, 8" Wall Thickness .....	11,843.07	
33 42 31 00-0592 EA 16' Deep Type G-4_18 Concrete Drainage Inlet Structure, 8" Wall Thickness .....	12,969.42	
33 42 31 00-0593 EA 18' Deep Type G-4_18 Concrete Drainage Inlet Structure, 8" Wall Thickness .....	14,012.55	
33 42 31 00-0594 EA 20' Deep Type G-4_18 Concrete Drainage Inlet Structure, 8" Wall Thickness .....	14,971.47	
<b>33 42 31 00-0595 Type G-5 Concrete Drainage Inlet Structure (33 42 31 00-0440)</b>		
33 42 31 00-0596 EA 3' Deep Type G-5 Concrete Drainage Inlet Structure, 6" Wall Thickness .....	2,733.38	



		<b>Utilities</b>	<b>33</b>	<b>CS</b>
		Stormwater Utilities	33 40	
		Stormwater Conveyance	33 42	

MINOR CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
33 42 31 00-0597	EA	4' Deep Type G-5 Concrete Drainage Inlet Structure, 6" Wall Thickness .....	3,230.41	
33 42 31 00-0598	EA	5' Deep Type G-5 Concrete Drainage Inlet Structure, 6" Wall Thickness .....	3,695.48	
33 42 31 00-0599	EA	6' Deep Type G-5 Concrete Drainage Inlet Structure, 6" Wall Thickness .....	4,126.60	
33 42 31 00-0600	EA	7' Deep Type G-5 Concrete Drainage Inlet Structure, 6" Wall Thickness .....	4,525.75	
33 42 31 00-0601	EA	8' Deep Type G-5 Concrete Drainage Inlet Structure, 6" Wall Thickness .....	4,891.93	
<b>33 42 31 00-0602 Type G-6 Concrete Drainage Inlet Structure (33 42 31 00-0440)</b>				
33 42 31 00-0603	EA	3' Deep Type G-6 Concrete Drainage Inlet Structure, 6" Wall Thickness .....	2,786.98	
33 42 31 00-0604	EA	4' Deep Type G-6 Concrete Drainage Inlet Structure, 6" Wall Thickness .....	3,282.92	
33 42 31 00-0605	EA	5' Deep Type G-6 Concrete Drainage Inlet Structure, 6" Wall Thickness .....	3,745.91	
33 42 31 00-0606	EA	6' Deep Type G-6 Concrete Drainage Inlet Structure, 6" Wall Thickness .....	4,175.92	
33 42 31 00-0607	EA	7' Deep Type G-6 Concrete Drainage Inlet Structure, 6" Wall Thickness .....	4,572.98	
33 42 31 00-0608	EA	8' Deep Type G-6 Concrete Drainage Inlet Structure, 6" Wall Thickness .....	4,938.09	
<b>33 42 31 00-0609 Type GT1 Concrete Drainage Inlet Structure (33 42 31 00-0440)</b>				
33 42 31 00-0610	EA	3' Deep Type GT1 Concrete Drainage Inlet Structure, 6" Wall Thickness .....	4,662.83	
33 42 31 00-0611	EA	4' Deep Type GT1 Concrete Drainage Inlet Structure, 6" Wall Thickness .....	5,439.69	
33 42 31 00-0612	EA	5' Deep Type GT1 Concrete Drainage Inlet Structure, 6" Wall Thickness .....	6,224.58	
33 42 31 00-0613	EA	6' Deep Type GT1 Concrete Drainage Inlet Structure, 6" Wall Thickness .....	6,838.73	
33 42 31 00-0614	EA	7' Deep Type GT1 Concrete Drainage Inlet Structure, 6" Wall Thickness .....	7,459.90	
33 42 31 00-0615	EA	8' Deep Type GT1 Concrete Drainage Inlet Structure, 6" Wall Thickness .....	8,030.16	
<b>33 42 31 00-0616 Type GT2 Concrete Drainage Inlet Structure (33 42 31 00-0440)</b>				
33 42 31 00-0617	EA	3' Deep Type GT2 Concrete Drainage Inlet Structure, 6" Wall Thickness .....	5,654.36	
33 42 31 00-0618	EA	4' Deep Type GT2 Concrete Drainage Inlet Structure, 6" Wall Thickness .....	6,500.70	
33 42 31 00-0619	EA	5' Deep Type GT2 Concrete Drainage Inlet Structure, 6" Wall Thickness .....	7,289.13	
33 42 31 00-0620	EA	6' Deep Type GT2 Concrete Drainage Inlet Structure, 6" Wall Thickness .....	8,020.63	
33 42 31 00-0621	EA	7' Deep Type GT2 Concrete Drainage Inlet Structure, 6" Wall Thickness .....	8,694.20	
33 42 31 00-0622	EA	8' Deep Type GT2 Concrete Drainage Inlet Structure, 6" Wall Thickness .....	9,310.84	
33 42 31 00-0623	EA	8' Deep Type GT2 Concrete Drainage Inlet Structure, 8" Wall Thickness .....	12,460.60	
33 42 31 00-0624	EA	10' Deep Type GT2 Concrete Drainage Inlet Structure, 8" Wall Thickness .....	14,457.63	
33 42 31 00-0625	EA	12' Deep Type GT2 Concrete Drainage Inlet Structure, 8" Wall Thickness .....	16,307.14	
33 42 31 00-0626	EA	14' Deep Type GT2 Concrete Drainage Inlet Structure, 8" Wall Thickness .....	18,010.16	
33 42 31 00-0627	EA	16' Deep Type GT2 Concrete Drainage Inlet Structure, 8" Wall Thickness .....	19,670.88	
33 42 31 00-0628	EA	18' Deep Type GT2 Concrete Drainage Inlet Structure, 8" Wall Thickness .....	21,207.24	
33 42 31 00-0629	EA	20' Deep Type GT2 Concrete Drainage Inlet Structure, 8" Wall Thickness .....	22,619.22	
<b>33 42 31 00-0630 Type GT3 Concrete Drainage Inlet Structure (33 42 31 00-0440)</b>				
33 42 31 00-0631	EA	3' Deep Type GT3 Concrete Drainage Inlet Structure, 6" Wall Thickness .....	4,636.03	
33 42 31 00-0632	EA	4' Deep Type GT3 Concrete Drainage Inlet Structure, 6" Wall Thickness .....	5,413.44	
33 42 31 00-0633	EA	5' Deep Type GT3 Concrete Drainage Inlet Structure, 6" Wall Thickness .....	6,139.95	
33 42 31 00-0634	EA	6' Deep Type GT3 Concrete Drainage Inlet Structure, 6" Wall Thickness .....	6,814.56	
33 42 31 00-0635	EA	7' Deep Type GT3 Concrete Drainage Inlet Structure, 6" Wall Thickness .....	7,436.28	
33 42 31 00-0636	EA	8' Deep Type GT3 Concrete Drainage Inlet Structure, 6" Wall Thickness .....	8,007.09	
<b>33 42 31 00-0637 Type GT4 Concrete Drainage Inlet Structure (33 42 31 00-0440)</b>				
33 42 31 00-0638	EA	3' Deep Type GT4 Concrete Drainage Inlet Structure, 6" Wall Thickness .....	5,841.93	
33 42 31 00-0639	EA	4' Deep Type GT4 Concrete Drainage Inlet Structure, 6" Wall Thickness .....	6,682.49	
33 42 31 00-0640	EA	5' Deep Type GT4 Concrete Drainage Inlet Structure, 6" Wall Thickness .....	7,466.10	
33 42 31 00-0641	EA	6' Deep Type GT4 Concrete Drainage Inlet Structure, 6" Wall Thickness .....	8,191.77	
33 42 31 00-0642	EA	7' Deep Type GT4 Concrete Drainage Inlet Structure, 6" Wall Thickness .....	8,860.54	
33 42 31 00-0643	EA	8' Deep Type GT4 Concrete Drainage Inlet Structure, 6" Wall Thickness .....	9,472.36	
33 42 31 00-0644	EA	8' Deep Type GT4 Concrete Drainage Inlet Structure, 8" Wall Thickness .....	12,483.68	
33 42 31 00-0645	EA	10' Deep Type GT4 Concrete Drainage Inlet Structure, 8" Wall Thickness .....	14,480.16	
33 42 31 00-0646	EA	12' Deep Type GT4 Concrete Drainage Inlet Structure, 8" Wall Thickness .....	16,329.12	
33 42 31 00-0647	EA	14' Deep Type GT4 Concrete Drainage Inlet Structure, 8" Wall Thickness .....	18,030.60	
33 42 31 00-0648	EA	16' Deep Type GT4 Concrete Drainage Inlet Structure, 8" Wall Thickness .....	19,690.89	
33 42 31 00-0649	EA	18' Deep Type GT4 Concrete Drainage Inlet Structure, 8" Wall Thickness .....	21,226.80	
33 42 31 00-0650	EA	20' Deep Type GT4 Concrete Drainage Inlet Structure, 8" Wall Thickness .....	22,638.35	
<b>33 42 31 00-0651 Type GO Concrete Drainage Inlet Structure (33 42 31 00-0440)</b>				
33 42 31 00-0652	EA	3' Deep Type GO Concrete Drainage Inlet Structure, 6" Wall Thickness .....	3,322.94	
33 42 31 00-0653	EA	4' Deep Type GO Concrete Drainage Inlet Structure, 6" Wall Thickness .....	3,869.13	
33 42 31 00-0654	EA	5' Deep Type GO Concrete Drainage Inlet Structure, 6" Wall Thickness .....	4,378.62	
33 42 31 00-0655	EA	6' Deep Type GO Concrete Drainage Inlet Structure, 6" Wall Thickness .....	4,851.44	
33 42 31 00-0656	EA	7' Deep Type GO Concrete Drainage Inlet Structure, 6" Wall Thickness .....	5,287.58	
33 42 31 00-0657	EA	8' Deep Type GO Concrete Drainage Inlet Structure, 6" Wall Thickness .....	5,688.03	
33 42 31 00-0658	EA	8' Deep Type GO Concrete Drainage Inlet Structure, 8" Wall Thickness .....	7,822.48	
33 42 31 00-0659	EA	10' Deep Type GO Concrete Drainage Inlet Structure, 8" Wall Thickness .....	9,136.09	
33 42 31 00-0660	EA	12' Deep Type GO Concrete Drainage Inlet Structure, 8" Wall Thickness .....	10,352.31	
33 42 31 00-0661	EA	14' Deep Type GO Concrete Drainage Inlet Structure, 8" Wall Thickness .....	11,473.12	
33 42 31 00-0662	EA	16' Deep Type GO Concrete Drainage Inlet Structure, 8" Wall Thickness .....	12,565.71	
33 42 31 00-0663	EA	18' Deep Type GO Concrete Drainage Inlet Structure, 8" Wall Thickness .....	13,576.03	
33 42 31 00-0664	EA	20' Deep Type GO Concrete Drainage Inlet Structure, 8" Wall Thickness .....	14,506.04	

**33 Utilities****33 40 Stormwater Utilities****33 42 Stormwater Conveyance**

MINOR  
CSI UOM DESCRIPTION

TOTAL DIRECT DEMOLITION  
UNIT COST UNIT COST

<b>33 42 31 00-0665</b>		<b>Type GDO Concrete Drainage Inlet Structure</b> (33 42 31 00-0440)			
33 42 31 00-0666	EA	3' Deep Type GDO Concrete Drainage Inlet Structure, 6" Wall Thickness .....	4,341.25		
33 42 31 00-0667	EA	4' Deep Type GDO Concrete Drainage Inlet Structure, 6" Wall Thickness .....	5,059.40		
33 42 31 00-0668	EA	5' Deep Type GDO Concrete Drainage Inlet Structure, 6" Wall Thickness .....	5,729.47		
33 42 31 00-0669	EA	6' Deep Type GDO Concrete Drainage Inlet Structure, 6" Wall Thickness .....	6,352.48		
33 42 31 00-0670	EA	7' Deep Type GDO Concrete Drainage Inlet Structure, 6" Wall Thickness .....	6,926.42		
33 42 31 00-0671	EA	8' Deep Type GDO Concrete Drainage Inlet Structure, 6" Wall Thickness .....	7,453.28		
33 42 31 00-0672	EA	8' Deep Type GDO Concrete Drainage Inlet Structure, 8" Wall Thickness .....	10,060.77		
33 42 31 00-0673	EA	10' Deep Type GDO Concrete Drainage Inlet Structure, 8" Wall Thickness .....	11,754.15		
33 42 31 00-0674	EA	12' Deep Type GDO Concrete Drainage Inlet Structure, 8" Wall Thickness .....	13,323.33		
33 42 31 00-0675	EA	14' Deep Type GDO Concrete Drainage Inlet Structure, 8" Wall Thickness .....	14,769.31		
33 42 31 00-0676	EA	16' Deep Type GDO Concrete Drainage Inlet Structure, 8" Wall Thickness .....	16,177.61		
33 42 31 00-0677	EA	18' Deep Type GDO Concrete Drainage Inlet Structure, 8" Wall Thickness .....	17,481.19		
33 42 31 00-0678	EA	20' Deep Type GDO Concrete Drainage Inlet Structure, 8" Wall Thickness .....	18,680.05		
<b>33 42 33</b>		<b>Stormwater Curb Inlet Frames And Inlets</b> (33 42)			
<b>33 42 33 00-0001</b>		<b>Curb Inlet Frames And Covers</b> (33 42 33)			
<b>33 42 33 00-0002</b>		<b>Cast Iron Curb Inlet Frames And Covers</b> (33 42 33 00-0001)			
33 42 33 00-0003	EA	20" x 22" Cast Iron Curb Inlet Frame And Cover .....	1,106.63		116.36
33 42 33 00-0004	EA	22" x 24" Cast Iron Curb Inlet Frame And Cover .....	1,184.81		135.26
33 42 33 00-0005	EA	24" x 24" Cast Iron Curb Inlet Frame And Cover .....	1,229.00		135.26
33 42 33 00-0006	EA	27" x 27" Cast Iron Curb Inlet Frame And Cover .....	1,346.23		159.13
33 42 33 00-0007	EA	36" x 24" Cast Iron Curb Inlet Frame And Cover .....	1,335.92		170.07
<b>33 42 36</b>		<b>Stormwater Trench Drains</b> (33 42)			
<b>33 42 36 00-0001</b>		<b>Modular Trench Drains</b> (33 42 36)			
		See CSI section 03 31 13 00-0011 for concrete.			
<b>33 42 36 00-0002</b>		<b>Modular Trench Drains</b> (33 42 36 00-0001)			
		Note: Excludes grates. See CSI section 33 42 36 00-00118 for grates.			
<b>33 42 36 00-0003</b>		<b>4" Wide, Modular Trench Drains</b> (33 42 36 00-0002)			
<b>33 42 36 00-0004</b>		<b>4 Wide, High Density Polyethylene, Shallow Modular Trench Drains</b> (33 42 36 00-0003)			
<b>33 42 36 00-0005</b>		<b>4 Wide, High Density Polyethylene, Shallow Modular Trench Drains</b> (33 42 36 00-0004)			
33 42 36 00-0006	LF	4" Wide, High Density Polyethylene, Shallow Modular Trench Drain (Zurn Z844-C) .....	63.33		15.91
		For Extra Heavy Duty Frame Assembly With Anchor Studs And Grate Lockdown, Add .....	99.22		
		For Galvanized Extra Heavy Duty Frame Assembly With Anchor Studs And Grate Lockdown, Add .....	198.45		
		For Stainless Steel Extra Heavy Duty Frame Assembly With Anchor Studs And Grate Lockdown, Add .....	317.52		
		For Type 304 Stainless Steel Top Veneer Frame, Add .....	79.38		
		For Aluminum Veneer Bronze Anodized Frame, Add .....	39.69		
<b>33 42 36 00-0007</b>		<b>Outlet Adapters For 4 Wide, High Density Polyethylene, Shallow Modular Trench Drains</b> (33 42 36 00-0004)			
33 42 36 00-0008	EA	Closed End Cap For 4" Wide, High Density Polyethylene, Shallow Modular Trench Drain .....	48.44		
33 42 36 00-0009	EA	No-Hub End Outlet For 4" Wide, High Density Polyethylene, Shallow Modular Trench Drain .....	58.39		
33 42 36 00-0010	EA	No-Hub Bottom Outlet For 4" Wide, High Density Polyethylene, Shallow Modular Trench Drain .....	58.39		
<b>33 42 36 00-0011</b>		<b>6" Wide, Modular Trench Drains</b> (33 42 36 00-0002)			
<b>33 42 36 00-0012</b>		<b>6" Wide, High Density Polyethylene, Modular Trench Drains</b> (33 42 36 00-0011)			
<b>33 42 36 00-0013</b>		<b>6" Wide, High Density Polyethylene, Modular Trench Drains</b> (33 42 36 00-0012)			
33 42 36 00-0014	LF	6" Wide, High Density Polyethylene, Modular Trench Drain .....	201.50		15.91
		For Extra Heavy Duty Frame Assembly With Anchor Studs And Grate Lockdown, Add .....	99.22		
		For Galvanized Extra Heavy Duty Frame Assembly With Anchor Studs And Grate Lockdown, Add .....	198.45		
		For Stainless Steel Extra Heavy Duty Frame Assembly With Anchor Studs And Grate Lockdown, Add .....	317.52		
		For Type 304 Stainless Steel Top Veneer Frame, Add .....	79.38		
		For Aluminum Veneer Bronze Anodized Frame, Add .....	39.69		
<b>33 42 36 00-0015</b>		<b>Outlet Adapters For 6" Wide, High Density Polyethylene, Modular Trench Drains</b> (33 42 36 00-0012)			
33 42 36 00-0016	EA	Closed End Cap For 6" Wide, High Density Polyethylene, Modular Trench Drains .....	91.33		
33 42 36 00-0017	EA	No-Hub End Outlet For 6" Wide, High Density Polyethylene, Modular Trench Drains .....	101.28		
33 42 36 00-0018	EA	No-Hub Bottom Outlet For 6" Wide, High Density Polyethylene, Modular Trench Drains .....	101.28		
<b>33 42 36 00-0019</b>		<b>Other Fittings For 6" Wide, High Density Polyethylene, Modular Trench Drains</b> (33 42 36 00-0012)			
33 42 36 00-0020	EA	Bottom Dome Strainer For 6" Wide, High Density Polyethylene, Modular Trench Drains .....	177.64		
33 42 36 00-0021	EA	Joint Connector For 6" Wide, High Density Polyethylene, Modular Trench Drains .....	177.64		



		<b>Utilities</b>	<b>33</b>	<b>CS</b>
		<b>Stormwater Utilities</b>	<b>33 40</b>	
		<b>Stormwater Conveyance</b>	<b>33 42</b>	

MINOR CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
33 42 36 00-0022	EA	90 Degree, 45 Degree, Tee Or Side Outlet Charge For 6" Wide, High Density Polyethylene, Modular Trench Drains	843.53	
33 42 36 00-0023	EA	Cross For 6" Wide, High Density Polyethylene, Modular Trench Drains	1,637.33	
33 42 36 00-0024	EA	Cutting Charge For 6" Wide, High Density Polyethylene, Modular Trench Drains	198.45	
33 42 36 00-0025		6" Wide, Fiber Reinforced Polyester, Modular Trench Drains (33 42 36 00-0011)		
33 42 36 00-0026		6" Wide, Fiber Reinforced Polyester, Modular Trench Drains (33 42 36 00-0025)		
33 42 36 00-0027	LF	6" Wide, Fiber Reinforced Polyester, Modular Trench Drain	294.77	15.91
		For Black Acid Resistant Coated Frame, Add	75.41	
		For Galvanized Top Frame Assembly, Add	75.41	
		For Type 304 Stainless Steel Top Frame Assembly, Add	277.83	
33 42 36 00-0028		Outlet Adapters For 6" Wide, Fiber Reinforced Polyester, Modular Trench Drains (33 42 36 00-0025)		
33 42 36 00-0029	EA	Closed End Cap For 6" Wide, Fiber Reinforced Polyester, Modular Trench Drains	99.27	
33 42 36 00-0030	EA	No-Hub End Outlet For 6" Wide, Fiber Reinforced Polyester, Modular Trench Drains	109.22	
33 42 36 00-0031	EA	No-Hub Bottom Outlet For 6" Wide, Fiber Reinforced Polyester, Modular Trench Drains	109.22	
33 42 36 00-0032		Other Fittings For 6" Wide, Fiber Reinforced Polyester, Modular Trench Drains (33 42 36 00-0025)		
33 42 36 00-0033	EA	Bottom Dome Strainer For 6" Wide, Fiber Reinforced Polyester, Modular Trench Drains	177.64	
33 42 36 00-0034	EA	Joint Connector For 6" Wide, Fiber Reinforced Polyester, Modular Trench Drains	177.64	
33 42 36 00-0035	EA	90 Degree, 45 Degree, Tee Or Side Outlet For 6" Wide, Fiber Reinforced Polyester, Modular Trench Drains	843.53	
33 42 36 00-0036	EA	Cross For 6" Wide, Fiber Reinforced Polyester, Modular Trench Drains	1,637.33	
33 42 36 00-0037	EA	Cutting Charge For 6" Wide, Fiber Reinforced Polyester, Modular Trench Drains	198.45	
33 42 36 00-0038		6" Wide, Vinylester Fiberglass, Modular Trench Drains (33 42 36 00-0011)		
33 42 36 00-0039		6" Wide, Vinylester Fiberglass, Modular Trench Drains (33 42 36 00-0038)		
33 42 36 00-0040	LF	6" Wide, Vinylester Fiberglass, Modular Trench Drain	382.09	15.91
		For Black Acid Resistant Coated Frame, Add	75.41	
		For Galvanized Top Frame Assembly, Add	75.41	
		For Type 304 Stainless Steel Top Frame Assembly, Add	277.83	
33 42 36 00-0041		Outlet Adapters For 6" Wide, Vinylester Fiberglass, Modular Trench Drains (33 42 36 00-0038)		
33 42 36 00-0042	EA	Closed End Cap For 6" Wide, Vinylester Fiberglass, Modular Trench Drains	162.77	
33 42 36 00-0043	EA	No-Hub End Outlet For 6" Wide, Vinylester Fiberglass, Modular Trench Drains	172.72	
33 42 36 00-0044	EA	No-Hub Bottom Outlet For 6" Wide, Vinylester Fiberglass, Modular Trench Drains	172.72	
33 42 36 00-0045		Other Fittings For 6" Wide, Vinylester Fiberglass, Modular Trench Drains (33 42 36 00-0038)		
33 42 36 00-0046	EA	Bottom Dome Strainer For 6" Wide, Vinylester Fiberglass, Modular Trench Drains	177.64	
33 42 36 00-0047	EA	Joint Connector For 6" Wide, Vinylester Fiberglass, Modular Trench Drains	177.64	
33 42 36 00-0048	EA	90 Degree, 45 Degree, Tee Or Side Outlet For 6" Wide, Vinylester Fiberglass, Modular Trench Drains	843.53	
33 42 36 00-0049	EA	Cross For 6" Wide, Vinylester Fiberglass, Modular Trench Drains	1,637.33	
33 42 36 00-0050	EA	Cutting Charge For 6" Wide, Vinylester Fiberglass, Modular Trench Drains	198.45	
33 42 36 00-0051		6" Wide, Polymer Concrete, Modular Trench Drains (33 42 36 00-0011)		
33 42 36 00-0052		6" Wide, Polymer Concrete, Modular Trench Drains (33 42 36 00-0051)		
33 42 36 00-0053	LF	6" Wide, Polymer Concrete, Modular Trench Drain	452.54	
33 42 36 00-0054		Outlet Adapters For 6" Wide, Polymer Concrete, Modular Trench Drains (33 42 36 00-0051)		
33 42 36 00-0055	EA	Closed End Cap For 6" Wide, Polymer Concrete, Modular Trench Drain	178.93	
33 42 36 00-0056	EA	No-Hub End Outlet For 6" Wide, Polymer Concrete, Modular Trench Drain	217.58	
33 42 36 00-0057	EA	No-Hub Bottom Outlet For 6" Wide, Polymer Concrete, Modular Trench Drain	67.39	
33 42 36 00-0058		12" Wide, Modular Trench Drains (33 42 36 00-0002)		
33 42 36 00-0059		12" Wide, High Density Polyethylene, Modular Trench Drains (33 42 36 00-0058)		
33 42 36 00-0060		12" Wide, High Density Polyethylene, Modular Trench Drains (33 42 36 00-0059)		
33 42 36 00-0061	LF	12" Wide, High Density Polyethylene, Modular Trench Drain	381.11	21.88
		For Acid Resistant Coated Top Frame, Add	103.19	
		For Galvanized Welded Frame Assembly, Add	108.16	
		For Type 304 Stainless Steel Top Frame, Add	619.16	
33 42 36 00-0062		Outlet Adapters For 12" Wide, High Density Polyethylene, Modular Trench Drains (33 42 36 00-0059)		

**33 Utilities****33 40 Stormwater Utilities****33 42 Stormwater Conveyance**

MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
33 42 36 00-0063 EA End Cap For 12" Wide, High Density Polyethylene, Modular Trench Drains.....	189.25	
33 42 36 00-0064 EA No-Hub End Outlet For 12" Wide, High Density Polyethylene, Modular Trench Drains.....	202.51	
33 42 36 00-0065 EA No-Hub Bottom Outlet For 12" Wide, High Density Polyethylene, Modular Trench Drains.....	202.51	
<b>33 42 36 00-0066 Other Fittings For 12" Wide, High Density Polyethylene, Modular Trench Drains</b> (33 42 36 00-0059)		
33 42 36 00-0067 EA Bottom Dome Strainer For 12" Wide, High Density Polyethylene, Modular Trench Drains.....	318.08	
33 42 36 00-0068 EA Joint Connector For 12" Wide, High Density Polyethylene, Modular Trench Drains.....	417.30	
33 42 36 00-0069 EA 90 Degree, 45 Degree, Tee Or Side Outlet For 12" Wide, High Density Polyethylene, Modular Trench Drains.....	1,664.10	
33 42 36 00-0070 EA Cross For 12" Wide, High Density Polyethylene, Modular Trench Drains.....	3,251.70	
33 42 36 00-0071 EA Cutting Charges For 12" Wide, High Density Polyethylene, Modular Trench Drains.....	396.90	
<b>33 42 36 00-0072 12" Wide, Fiber Reinforced Polyester, Modular Trench Drains</b> (33 42 36 00-0058)		
<b>33 42 36 00-0073 12" Wide, Fiber Reinforced Polyester, Modular Trench Drains</b> (33 42 36 00-0072)		
33 42 36 00-0074 LF 12" Wide, Fiber Reinforced Polyester, Modular Trench Drain.....	480.34	21.88
For Acid Resistant Coated Top Frame, Add	103.19	
For Galvanized Welded Frame Assembly, Add	108.16	
For Type 304 Stainless Steel Top Frame, Add	619.16	
<b>33 42 36 00-0075 Outlet Adapters For 12" Wide, Fiber Reinforced Polyester, Modular Trench Drains</b> (33 42 36 00-0072)		
33 42 36 00-0076 EA End Cap For 12" Wide, Fiber Reinforced Polyester, Modular Trench Drains.....	197.19	
33 42 36 00-0077 EA No-Hub End Outlet For 12" Wide, Fiber Reinforced Polyester, Modular Trench Drains.....	210.45	
33 42 36 00-0078 EA No-Hub Bottom Outlet For 12" Wide, Fiber Reinforced Polyester, Modular Trench Drains.....	210.45	
<b>33 42 36 00-0079 Other Fittings For 12" Wide, Fiber Reinforced Polyester, Modular Trench Drains</b> (33 42 36 00-0072)		
33 42 36 00-0080 EA Bottom Dome Strainer For 12" Wide, Fiber Reinforced Polyester, Modular Trench Drains.....	318.08	
33 42 36 00-0081 EA Joint Connector For 12" Wide, Fiber Reinforced Polyester, Modular Trench Drains.....	417.30	
33 42 36 00-0082 EA 90 Degree, 45 Degree, Tee Or Side Outlet For 12" Wide, Fiber Reinforced Polyester, Modular Trench Drains.....	1,664.10	
33 42 36 00-0083 EA Cross For 12" Wide, Fiber Reinforced Polyester, Modular Trench Drains.....	3,251.70	
33 42 36 00-0084 EA Cutting Charges For 12" Wide, Fiber Reinforced Polyester, Modular Trench Drains.....	396.90	
<b>33 42 36 00-0085 12" Wide, Vinylester Fiberglass, Modular Trench Drains</b> (33 42 36 00-0058)		
<b>33 42 36 00-0086 12" Wide, Vinylester Fiberglass, Modular Trench Drains</b> (33 42 36 00-0085)		
33 42 36 00-0087 LF 12" Wide, Vinylester Fiberglass, Modular Trench Drain.....	678.79	21.88
For Acid Resistant Coated Top Frame, Add	103.19	
For Galvanized Welded Frame Assembly, Add	108.16	
For Type 304 Stainless Steel Top Frame, Add	619.16	
<b>33 42 36 00-0088 Outlet Adapters For 12" Wide, Vinylester Fiberglass, Modular Trench Drains</b> (33 42 36 00-0085)		
33 42 36 00-0089 EA End Cap For 12" Wide, Vinylester Fiberglass, Modular Trench Drains.....	494.86	
33 42 36 00-0090 EA No-Hub End Outlet For 12" Wide, Vinylester Fiberglass, Modular Trench Drains.....	508.12	
33 42 36 00-0091 EA No-Hub Bottom Outlet For 12" Wide, Vinylester Fiberglass, Modular Trench Drains.....	508.12	
<b>33 42 36 00-0092 Other Fittings For 12" Wide, Vinylester Fiberglass, Modular Trench Drains</b> (33 42 36 00-0085)		
33 42 36 00-0093 EA Bottom Dome Strainer For 12" Wide, Vinylester Fiberglass, Modular Trench Drains.....	318.08	
33 42 36 00-0094 EA Joint Connector For 12" Wide, Vinylester Fiberglass, Modular Trench Drains.....	417.30	
33 42 36 00-0095 EA 90 Degree, 45 Degree, Tee Or Side Outlet For 12" Wide, Vinylester Fiberglass, Modular Trench Drains.....	1,664.10	
33 42 36 00-0096 EA Cross For 12" Wide, Vinylester Fiberglass, Modular Trench Drains.....	3,251.70	
33 42 36 00-0097 EA Cutting Charges For 12" Wide, Vinylester Fiberglass, Modular Trench Drains.....	396.90	
<b>33 42 36 00-0098 12" Wide, Polymer Concrete, Modular Trench Drains</b> (33 42 36 00-0058)		
<b>33 42 36 00-0099 12" Wide, Polymer Concrete, Modular Trench Drains</b> (33 42 36 00-0098)		
33 42 36 00-0100 LF 12" Wide, Polymer Concrete, Modular Trench Drain.....	606.99	
<b>33 42 36 00-0101 Outlet Adapters For 12" Wide, Polymer Concrete, Modular Trench Drains</b> (33 42 36 00-0098)		
33 42 36 00-0102 EA Closed End Cap For 12" Wide, Polymer Concrete, Modular Trench Drain.....	304.89	
33 42 36 00-0103 EA No-Hub End Outlet For 12" Wide, Polymer Concrete, Modular Trench Drain.....	525.75	
33 42 36 00-0104 EA No-Hub Bottom Outlet For 12" Wide, Polymer Concrete, Modular Trench Drain.....	119.20	
<b>33 42 36 00-0105 23" Wide, Modular Trench Drains</b> (33 42 36 00-0002)		
<b>33 42 36 00-0106 23" Wide, High Density Polyethylene, Modular Trench Drains</b> (33 42 36 00-0105)		



		<b>Utilities</b>	<b>33</b>	<b>CS</b>
		<b>Stormwater Utilities</b>	<b>33 40</b>	
		<b>Stormwater Conveyance</b>	<b>33 42</b>	

MINOR		TOTAL DIRECT		DEMOLITION
CSI	UOM DESCRIPTION	UNIT COST	UNIT COST	UNIT COST
33 42 36 00-0107 23" Wide, High Density Polyethylene, Modular Trench Drains (33 42 36 00-0106)				
33 42 36 00-0108	LF 23" Wide, High Density Polyethylene, Modular Trench Drain.....	534.63		29.84
	For Acid Resistant Coated Frame, Add	154.79		
	For Galvanized Frame Assembly, Add	154.79		
	For Type 304 Stainless Steel Top Frame, Add	952.56		
33 42 36 00-0109 Outlet Adapters For 23" Wide, High Density Polyethylene, Modular Trench Drains (33 42 36 00-0106)				
33 42 36 00-0110	EA End Cap For 23" Wide, High Density Polyethylene, Modular Trench Drains.....	606.90		
33 42 36 00-0111	EA No-Hub End Outlet For 23" Wide, High Density Polyethylene, Modular Trench Drains.....	882.20		
33 42 36 00-0112	EA No-Hub Bottom Outlet For 23" Wide, High Density Polyethylene, Modular Trench Drains.....	882.20		
33 42 36 00-0113 Other Fittings For 23" Wide, High Density Polyethylene, Modular Trench Drains (33 42 36 00-0106)				
33 42 36 00-0114	EA Bottom Dome Strainer For 23" Wide, High Density Polyethylene, Modular Trench Drains.....	724.41		
33 42 36 00-0115	EA 90 Degree, 45 Degree, Tee Or Side Outlet For 23" Wide, High Density Polyethylene, Modular Trench Drains.....	3,299.51		
33 42 36 00-0116	EA Cross For 23" Wide, High Density Polyethylene, Modular Trench Drains.....	6,474.71		
33 42 36 00-0117	EA Cutting Charges For 23" Wide, High Density Polyethylene, Modular Trench Drains.....	793.80		
33 42 36 00-0118 Modular Trench Drain Grates (33 42 36 00-0001)				
33 42 36 00-0119 4" Wide, Modular Trench Drain Grates (33 42 36 00-0118)				
33 42 36 00-0120	LF 4" Wide, Polypropylene, Silver Heel Proof, Modular Trench Drain Grate (Zurn Z884-P4-HPP) .....	41.37		2.98
33 42 36 00-0121	LF 4" Wide, Class C Cast Iron, Modular Trench Drain Grate (Zurn Z884-P4-CG).....	43.51		2.98
33 42 36 00-0122	LF 4" Wide, Galvanized Steel Slotted, Modular Trench Drain Grate (Zurn Z884-P4-FG) .....	34.94		2.98
33 42 36 00-0123	LF 4" Wide, Stainless Steel Slotted, Modular Trench Drain Grate (Zurn Z884-P4-FS).....	93.82		2.98
33 42 36 00-0124	LF 4" Wide, Galvanized Steel Perforated, Modular Trench Drain Grate (Zurn Z884-P4-FG).....	34.94		2.98
33 42 36 00-0125	LF 4" Wide, Stainless Steel Perforated, Modular Trench Drain Grate (Zurn Z884-P4-FS) .....	93.82		2.98
33 42 36 00-0126 6" Wide, Modular Trench Drain Grates (33 42 36 00-0118)				
33 42 36 00-0127	LF 6" Wide, Galvanized Ductile Iron Cast Bar, Modular Trench Drain Grate.....	195.48		2.98
33 42 36 00-0128	LF 6" Wide, Ductile Iron Cast Bar, Modular Trench Drain Grate.....	165.52		2.98
33 42 36 00-0129	LF 6" Wide, Ductile Iron Solid Cover, Modular Trench Drain Grate .....	173.85		2.98
33 42 36 00-0130	LF 6" Wide, Ductile Iron Slotted, Modular Trench Drain Grate.....	151.82		2.98
33 42 36 00-0131	LF 6" Wide, Galvanized Ductile Iron Slotted, Modular Trench Drain Grate.....	163.73		2.98
33 42 36 00-0132	LF 6" Wide, Heel Proof Ductile Iron, Modular Trench Drain Grate.....	165.71		2.98
33 42 36 00-0133	LF 6" Wide, Ductile Iron Longitudinal Slotted, Modular Trench Drain Grate .....	165.71		2.98
33 42 36 00-0134	LF 6" Wide, Galvanized Cast Iron Slotted, Modular Trench Drain Grate .....	163.73		2.98
33 42 36 00-0135	LF 6" Wide, Galvanized Steel Slotted, Modular Trench Drain Grate.....	143.89		2.98
33 42 36 00-0136	LF 6" Wide, Perforated Galvanized Steel, Modular Trench Drain Grate .....	143.89		2.98
33 42 36 00-0137	LF 6" Wide, Reinforced Galvanized Steel Slotted, Modular Trench Drain Grate .....	153.01		2.98
33 42 36 00-0138	LF 6" Wide, Reinforced Perforated Galvanized Steel, Modular Trench Drain Grate.....	153.01		2.98
33 42 36 00-0139	LF 6" Wide, Fabricated Stainless Steel Slotted, Modular Trench Drain Grate .....	199.45		2.98
33 42 36 00-0140	LF 6" Wide, Perforated Stainless Steel, Modular Trench Drain Grate .....	199.45		2.98
33 42 36 00-0141	LF 6" Wide, Reinforced Stainless Steel Slotted, Modular Trench Drain Grate.....	366.15		2.98
33 42 36 00-0142	LF 6" Wide, Reinforced Perforated Stainless Steel, Modular Trench Drain Grate .....	366.15		2.98
33 42 36 00-0143	LF 6" Wide, Stainless Steel Bar, Modular Trench Drain Grate.....	1,021.03		2.98
33 42 36 00-0144	LF 6" Wide, Heel Proof Polyethylene, Modular Trench Drain Grate .....	135.95		2.98
33 42 36 00-0145	LF 6" Wide, Fiberglass, Modular Trench Drain Grate .....	294.71		2.98
33 42 36 00-0146 12" Wide, Modular Trench Drain Grates (33 42 36 00-0118)				
33 42 36 00-0147	LF 12" Wide, Black Acid Resistant Coated Ductile Iron, Modular Trench Drain Grate.....	541.29		3.23
33 42 36 00-0148	LF 12" Wide, Ductile Iron Solid Cover, Modular Trench Drain Grate .....	517.47		3.23
33 42 36 00-0149	LF 12" Wide, Galvanized Ductile Iron Slotted, Modular Trench Drain Grate.....	450.00		3.23
33 42 36 00-0150	LF 12" Wide, Heel Proof Ductile Iron, Modular Trench Drain Grate.....	472.82		3.23
33 42 36 00-0151	LF 12" Wide, Perforated Galvanized Steel, Modular Trench Drain Grate .....	408.32		3.23
33 42 36 00-0152	LF 12" Wide, Reinforced Galvanized Steel Slotted, Modular Trench Drain Grate .....	800.26		3.23
33 42 36 00-0153	LF 12" Wide, Reinforced Perforated Galvanized Steel, Modular Trench Drain Grate.....	800.26		3.23
33 42 36 00-0154	LF 12" Wide, Fabricated Stainless Steel Slotted, Modular Trench Drain Grate .....	1,021.53		3.23
33 42 36 00-0155	LF 12" Wide, Perforated Stainless Steel, Modular Trench Drain Grate .....	1,021.53		3.23
33 42 36 00-0156	LF 12" Wide, Reinforced Stainless Steel Slotted, Modular Trench Drain Grate.....	1,304.33		3.23
33 42 36 00-0157	LF 12" Wide, Reinforced Perforated Stainless Steel Slotted, Modular Trench Drain Grate .....	1,304.33		3.23
33 42 36 00-0158	LF 12" Wide, Stainless Steel Cast Bar, Modular Trench Drain Grate .....	1,237.84		3.23
33 42 36 00-0159	LF 12" Wide, Fiberglass, Modular Trench Drain Grate .....	583.95		3.23
33 42 36 00-0160 23" Wide, Modular Trench Drain Grates (33 42 36 00-0118)				
33 42 36 00-0161	LF 23" Wide, Ductile Iron Solid Cover, Modular Trench Drain Grate .....	855.34		3.48
33 42 36 00-0162	LF 23" Wide, Ductile Iron Slotted, Modular Trench Drain Grate.....	720.39		3.48
33 42 36 00-0163	LF 23" Wide, Galvanized Ductile Iron Slotted, Modular Trench Drain Grate.....	1,117.29		3.48
33 42 36 00-0164	LF 23" Wide, Heel Proof Longitudinal Ductile Iron, Modular Trench Drain Grate.....	827.55		3.48

## 33 46 Stormwater Management (33 40)

**33 Utilities****33 40 Stormwater Utilities****33 46 Stormwater Management**MINOR  
CSI UOM DESCRIPTIONTOTAL DIRECT UNIT COST DEMOLITION  
UNIT COST**33 46 23 Modular Buried Stormwater Storage Units (33 46)****33 46 23 00-0001 Polypropylene Corrugated Wall Stormwater Collection Chambers****(StormTech™) (33 46 23)**

Note: Includes chambers and end caps delivery to site. Excludes excavation and earthwork, foundation stone, embedment and perimeter stone, geotextile fabrics and cutting holes in chambers. See CSI section 31 05 16 00-0000 for aggregate (foundation, embedment and perimeter stone), 31 23 16 36-0000 for excavation and earth backfill, 31 32 19 16-0000 for woven and non-woven geotextile fabric.

**33 46 23 00-0002 85.4" Long x 51" Wide x 30" High, Polypropylene Corrugated Wall Stormwater Collection Chambers (StormTech™ SC-740) (33 46 23 00-0001)**

33 46 23 00-0003	EA	Up To 10, 85.4" Long x 51" Wide x 30" High, Polypropylene Corrugated Wall Stormwater Collection Chambers (StormTech™ SC-740) .....	579.89
33 46 23 00-0004	EA	>10 To 20, 85.4" Long x 51" Wide x 30" High, Polypropylene Corrugated Wall Stormwater Collection Chambers (StormTech™ SC-740) .....	533.50
33 46 23 00-0005	EA	>20 To 30, 85.4" Long x 51" Wide x 30" High, Polypropylene Corrugated Wall Stormwater Collection Chambers (StormTech™ SC-740) .....	500.62
33 46 23 00-0006	EA	>30, 85.4" Long x 51" Wide x 30" High, Polypropylene Corrugated Wall Stormwater Collection Chambers (StormTech™ SC-740) .....	468.76
33 46 23 00-0007	EA	Up To 10, Polypropylene Corrugated Wall Stormwater Collection Chamber End Cap (StormTech™ SC-740) .....	253.34
33 46 23 00-0008	EA	>10 To 20, Polypropylene Corrugated Wall Stormwater Collection Chamber End Cap (StormTech™ SC-740) .....	223.28
33 46 23 00-0009	EA	>20 To 30, Polypropylene Corrugated Wall Stormwater Collection Chamber End Cap (StormTech™ SC-740) .....	205.91
33 46 23 00-0010	EA	>30, Polypropylene Corrugated Wall Stormwater Collection Chamber End Cap (StormTech™ SC-740) .....	188.79

**33 46 23 00-0011 85.4" Long x 34" Wide x 16" High, Polypropylene Corrugated Wall Stormwater Collection Chambers (StormTech™ SC-310) (33 46 23 00-0001)**

33 46 23 00-0012	EA	Up To 10, 85.4" Long x 34" Wide x 16" High, Polypropylene Corrugated Wall Stormwater Collection Chambers (StormTech™ SC-310) .....	335.29
33 46 23 00-0013	EA	>10 To 20, 85.4" Long x 34" Wide x 16" High, Polypropylene Corrugated Wall Stormwater Collection Chambers (StormTech™ SC-310) .....	306.14
33 46 23 00-0014	EA	>20 To 30, 85.4" Long x 34" Wide x 16" High, Polypropylene Corrugated Wall Stormwater Collection Chambers (StormTech™ SC-310) .....	286.17
33 46 23 00-0015	EA	>30, 85.4" Long x 34" Wide x 16" High, Polypropylene Corrugated Wall Stormwater Collection Chambers (StormTech™ SC-310) .....	267.95
33 46 23 00-0016	EA	Up To 10, Polypropylene Corrugated Wall Stormwater Collection Chamber End Cap (StormTech™ SC-310) .....	199.01
33 46 23 00-0017	EA	>10 To 20, Polypropylene Corrugated Wall Stormwater Collection Chamber End Cap (StormTech™ SC-310) .....	176.65
33 46 23 00-0018	EA	>20 To 30, Polypropylene Corrugated Wall Stormwater Collection Chamber End Cap (StormTech™ SC-310) .....	163.14
33 46 23 00-0019	EA	>30, Polypropylene Corrugated Wall Stormwater Collection Chamber End Cap (StormTech™ SC-310) .....	151.07

**33 46 23 00-0020 90" Long x 77" Wide x 45" High, Polypropylene Corrugated Wall Stormwater Collection Chambers (StormTech™ MC3500) (33 46 23 00-0001)**

33 46 23 00-0021	EA	Up To 10, 90" Long x 77" Wide x 45" High, Polypropylene Corrugated Wall Stormwater Collection Chambers (StormTech™ MC3500) .....	975.53
33 46 23 00-0022	EA	>10 To 20, 90" Long x 77" Wide x 45" High, Polypropylene Corrugated Wall Stormwater Collection Chambers (StormTech™ MC3500) .....	907.20
33 46 23 00-0023	EA	>20 To 30, 90" Long x 77" Wide x 45" High, Polypropylene Corrugated Wall Stormwater Collection Chambers (StormTech™ MC3500) .....	853.30
33 46 23 00-0024	EA	>30, 90" Long x 77" Wide x 45" High, Polypropylene Corrugated Wall Stormwater Collection Chambers (StormTech™ MC3500) .....	804.42
33 46 23 00-0025	EA	Up To 10, 25.7" Long x 75" Wide x 45" High, Polypropylene Corrugated Wall Stormwater Collection Chamber End Cap (StormTech™ MC3500) .....	825.30
33 46 23 00-0026	EA	>10 To 20, 25.7" Long x 75" Wide x 45" High, Polypropylene Corrugated Wall Stormwater Collection Chamber End Cap (StormTech™ MC3500) .....	764.46
33 46 23 00-0027	EA	>20 To 30, 25.7" Long x 75" Wide x 45" High, Polypropylene Corrugated Wall Stormwater Collection Chamber End Cap (StormTech™ MC3500) .....	717.71
33 46 23 00-0028	EA	>30, 25.7" Long x 75" Wide x 45" High, Polypropylene Corrugated Wall Stormwater Collection Chamber End Cap (StormTech™ MC3500) .....	675.61

**33 46 23 00-0029 85.4" Long x 51" Wide x 30" High, Polypropylene Corrugated Wall Stormwater Collection Chambers (StormTech™ DC-780) (33 46 23 00-0001)**

33 46 23 00-0030	EA	Up To 10, 85.4" Long x 51" Wide x 30" High, Polypropylene Corrugated Wall Stormwater Collection Chambers (StormTech™ DC-780) .....	601.43
33 46 23 00-0031	EA	>10 To 20, 85.4" Long x 51" Wide x 30" High, Polypropylene Corrugated Wall Stormwater Collection Chambers (StormTech™ DC-780) .....	553.99
33 46 23 00-0032	EA	>20 To 30, 85.4" Long x 51" Wide x 30" High, Polypropylene Corrugated Wall Stormwater Collection Chambers (StormTech™ DC-780) .....	520.07
33 46 23 00-0033	EA	>30, 85.4" Long x 51" Wide x 30" High, Polypropylene Corrugated Wall Stormwater Collection Chambers (StormTech™ DC-780) .....	487.23
33 46 23 00-0034	EA	Up To 10, Polypropylene Corrugated Wall Stormwater Collection Chamber End Cap (StormTech™ DC-780) .....	253.34
33 46 23 00-0035	EA	>10 To 20, Polypropylene Corrugated Wall Stormwater Collection Chamber End Cap (StormTech™ DC-780) .....	219.20
33 46 23 00-0036	EA	>20 To 30, Polypropylene Corrugated Wall Stormwater Collection Chamber End Cap (StormTech™ DC-780) .....	205.91
33 46 23 00-0037	EA	>30, Polypropylene Corrugated Wall Stormwater Collection Chamber End Cap (StormTech™ DC-780) .....	188.79

**33 46 23 00-0038 52" Long x 100" Wide x 60" High, Polypropylene Corrugated Wall Stormwater Collection Chambers (StormTech™ MC4500) (33 46 23 00-0001)**

33 46 23 00-0039	EA	Up To 10, 52" Long x 100" Wide x 60" High, Polypropylene Corrugated Wall Stormwater Collection Chambers (StormTech™ MC4500) .....	1,015.67
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		<b>Utilities</b>	<b>33</b>	<b>CS</b>
		<b>Stormwater Utilities</b>	<b>33 40</b>	
		<b>Stormwater Management</b>	<b>33 46</b>	

MINOR CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
33 46 23 00-0040	EA	>10 To 20, 52" Long x 100" Wide x 60" High, Polypropylene Corrugated Wall Stormwater Collection Chambers (StormTech™ MC4500).....	943.17	
33 46 23 00-0041	EA	>20 To 30, 52" Long x 100" Wide x 60" High, Polypropylene Corrugated Wall Stormwater Collection Chambers (StormTech™ MC4500).....	885.14	
33 46 23 00-0042	EA	>30, 52" Long x 100" Wide x 60" High, Polypropylene Corrugated Wall Stormwater Collection Chambers (StormTech™ MC4500).....	835.30	
33 46 23 00-0043	EA	Up To 10, 35.1" Long x 90.2" Wide x 59.4" High, Polypropylene Corrugated Wall Stormwater Collection Chamber End Cap (StormTech™ MC4500).....	1,258.89	
33 46 23 00-0044	EA	>10 To 20, 35.1" Long x 90.2" Wide x 59.4" High, Polypropylene Corrugated Wall Stormwater Collection Chamber End Cap (StormTech™ MC4500).....	1,174.22	
33 46 23 00-0045	EA	>20 To 30, 35.1" Long x 90.2" Wide x 59.4" High, Polypropylene Corrugated Wall Stormwater Collection Chamber End Cap (StormTech™ MC4500).....	1,104.65	
33 46 23 00-0046	EA	>30, 35.1" Long x 90.2" Wide x 59.4" High, Polypropylene Corrugated Wall Stormwater Collection Chamber End Cap (StormTech™ MC4500).....	1,043.84	
33 46 23 00-0047		<b>Cut Opening In Polypropylene Corrugated Wall Stormwater Collection Chambers</b> (33 46 23 00-0001)		
33 46 23 00-0048	EA	Cut Up To 6" Diameter Opening, Polypropylene Corrugated Wall Stormwater Collection Chamber Or End Cap .....	67.45	
33 46 23 00-0049	EA	Cut >6" To 12" Diameter Opening, Polypropylene Corrugated Wall Stormwater Collection Chamber Or End Cap .....	86.28	
33 46 23 00-0050	EA	Cut >12" To 24" Diameter Opening, Polypropylene Corrugated Wall Stormwater Collection Chamber Or End Cap .....	111.98	
33 46 23 00-0051	EA	Cut >24" To 36" Diameter Opening, Polypropylene Corrugated Wall Stormwater Collection Chamber Or End Cap .....	141.52	
33 46 23 00-0052	EA	12" x 6" Inspection Port Kit .....	706.48	
		Note: (2712AG6IPKIT)		
33 46 53		<b>Stormwater Leaching Pits</b> (33 46)		
33 46 53 00-0001		<b>Drainage Wells</b> (33 46 53) Note: Includes augering hole.		
33 46 53 00-0002	LF	12" Diameter Drainage Well With Corrugated Metal Liner.....	28.11	
33 46 53 00-0003	LF	18" Diameter Drainage Well With Corrugated Metal Liner.....	34.18	
33 46 53 00-0004	LF	24" Diameter Drainage Well With Corrugated Metal Liner.....	45.46	
33 50		<b>Hydrocarbon Utilities</b> (33)		
33 52		<b>Hydrocarbon Transmission and Distribution</b> (33 50)		
33 52 16		<b>Gas Hydrocarbon Piping</b> (33 52)		
33 52 16 13		<b>Steel Natural Gas Piping</b> (33 52 16)		
33 52 16 13-0001		<b>Gas Distribution Lines</b> (33 52 16 13) Note: Excludes excavation and backfill. See CSI section 31 23 16 00-0000 for excavation, 31 23 16 36-0016 for backfill.		
33 70		<b>Electrical Utilities</b> (33)		
33 71		<b>Electrical Utility Transmission and Distribution</b> (33 70)		
33 71 19		<b>Electrical Underground Ducts, Ductbanks and Manholes</b> (33 71) Note: Excludes excavation and backfill. See CSI section 31 23 16 00-0000 for excavation, 31 23 16 36-0016 for backfill.		
33 71 19 13		<b>Electrical Manholes and Handholes</b> (33 71 19)		
33 71 19 13-0001		<b>Electrical Handholes And Pull Boxes</b> (33 71 19 13)		
33 71 19 13-0002		<b>Electrical Pull Boxes</b> (33 71 19 13-0001) See CSI section 33 05 63 00-0415 for handholes.		
33 71 19 13-0003	EA	24" x 36" x 24", Electric Pull Boxes, Precast Concrete .....	1,970.47	
33 71 19 13-0004	EA	24" x 36" x 36", Electric Pull Boxes, Precast Concrete .....	2,354.75	
33 71 19 13-0005	EA	30" x 48" x 36", Electric Pull Boxes, Precast Concrete .....	2,721.45	
33 71 19 13-0006	EA	36" x 72" x 24", Electric Pull Boxes, Precast Concrete .....	4,206.36	
33 71 19 13-0007	EA	36" x 60" x 36", Electric Pull Boxes, Precast Concrete .....	4,481.13	
33 71 19 13-0008	EA	48" x 48" x 36", Electric Pull Boxes, Precast Concrete .....	4,816.61	
33 71 19 13-0009	EA	48" x 60" x 48", Electric Pull Boxes, Precast Concrete .....	5,539.60	
33 71 19 13-0010	EA	18" x 28" x 34", Electric Pull Boxes, Precast Concrete .....	2,093.19	
33 71 19 13-0011	EA	14" x 20" x 12", Electric Pull Boxes, Precast Concrete .....	1,085.97	
33 71 19 13-0012	EA	18" x 28" x 12", Electric Pull Boxes, Precast Concrete .....	1,323.75	
33 71 19 13-0013	EA	24" x 36" x 12", Electric Pull Boxes, Precast Concrete .....	1,762.35	
33 71 19 13-0014	EA	24" x 3', Round Electric Pull Boxes, Precast Concrete .....	1,091.21	
33 71 19 13-0015	EA	30" x 3', Round Electric Pull Boxes, Precast Concrete .....	1,153.30	
33 71 19 13-0016		<b>Electrical Pull Boxes (CALTRANS)</b> (33 71 19 13-0001)		
33 71 19 13-0017	EA	Body, CALTRANS 3-1/2 Precast Concrete Pull Box.....	127.35	
33 71 19 13-0018	EA	Concrete Cover, CALTRANS 3-1/2 Precast Concrete Pull Box.....	52.05	
33 71 19 13-0019	EA	Bolt Down Concrete Cover, CALTRANS 3-1/2 Precast Concrete Pull Box .....	79.42	
33 71 19 13-0020	EA	Bolt Down Cast Iron Cover, CALTRANS 3-1/2 Precast Concrete Pull Box .....	170.81	
33 71 19 13-0021	EA	Bolt Down Steel Cover, CALTRANS 3-1/2 Precast Concrete Pull Box.....	265.56	
		For Galvanized Steel Cover, Add	45.87	
33 71 19 13-0022	EA	12" Extension, CALTRANS 3-1/2 Precast Concrete Pull Box.....	64.84	

**33 Utilities****33 70 Electrical Utilities****33 71 Electrical Utility Transmission and Distribution**

MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
33 71 19 13-0023 EA Flat Plate Base, CALTRANS 3-1/2 Precast Concrete Pull Box.....	64.84	
33 71 19 13-0024 EA Body, CALTRANS 5 Precast Concrete Pull Box.....	181.77	
33 71 19 13-0025 EA Concrete Cover, CALTRANS 5 Precast Concrete Pull Box.....	69.99	
33 71 19 13-0026 EA Bolt Down Concrete Cover, CALTRANS 5 Precast Concrete Pull Box.....	97.36	
33 71 19 13-0027 EA Bolt Down Steel Cover, CALTRANS 5 Precast Concrete Pull Box.....	353.02	
<i>For Galvanized Steel Cover, Add</i>	<i>84.10</i>	
33 71 19 13-0028 EA 12" Extension, CALTRANS 5 Precast Concrete Pull Box.....	92.87	
33 71 19 13-0029 EA Flat Plate Base, CALTRANS 5 Precast Concrete Pull Box.....	86.70	
33 71 19 13-0030 EA Body, CALTRANS 6 Precast Concrete Pull Box.....	199.71	
33 71 19 13-0031 EA Concrete Cover, CALTRANS 6 Precast Concrete Pull Box.....	94.10	
33 71 19 13-0032 EA Bolt Down Concrete Cover, CALTRANS 6 Precast Concrete Pull Box.....	121.47	
33 71 19 13-0033 EA Bolt Down Steel Cover, CALTRANS 6 Precast Concrete Pull Box.....	485.34	
<i>For Galvanized Steel Cover, Add</i>	<i>117.74</i>	
33 71 19 13-0034 EA 12" Extension, CALTRANS 6 Precast Concrete Pull Box.....	110.81	
33 71 19 13-0035 EA Flat Plate Base, CALTRANS 6 Precast Concrete Pull Box.....	104.09	
33 71 19 13-0036 EA 6" Return Flat Plate Base, CALTRANS 6 Precast Concrete Pull Box.....	144.45	
33 71 19 13-0037 EA Body, CALTRANS 3-1/2-T Precast Concrete Pull Box.....	291.62	
33 71 19 13-0038 EA Bolt Down Concrete Cover, CALTRANS 3-1/2-T Precast Concrete Pull Box.....	424.79	
33 71 19 13-0039 EA 12" Extension, CALTRANS 3-1/2-T Precast Concrete Pull Box.....	133.24	
33 71 19 13-0040 EA Flat Plate Base, CALTRANS 3-1/2-T Precast Concrete Pull Box.....	122.03	
33 71 19 13-0041 EA Body, CALTRANS 5-T Precast Concrete Pull Box.....	379.13	
33 71 19 13-0042 EA Bolt Down Concrete Cover, CALTRANS 5-T Precast Concrete Pull Box.....	615.42	
33 71 19 13-0043 EA 12" Extension, CALTRANS 5-T Precast Concrete Pull Box.....	160.15	
33 71 19 13-0044 EA Flat Plate Base, CALTRANS 5-T Precast Concrete Pull Box.....	155.67	
33 71 19 13-0045 EA Body, CALTRANS 6-T Precast Concrete Pull Box.....	542.84	
33 71 19 13-0046 EA Bolt Down Concrete Cover, CALTRANS 6-T Precast Concrete Pull Box.....	862.11	
33 71 19 13-0047 EA 12" Extension, CALTRANS 6-T Precast Concrete Pull Box.....	272.29	
33 71 19 13-0048 EA Flat Plate Base, CALTRANS 6-T Precast Concrete Pull Box.....	211.73	
<b>33 71 19 13-0049 Precast Concrete Box Extensions (33 71 19 13-0001)</b>		
33 71 19 13-0050 EA 14" x 20" x 12", Precast Concrete Extension.....	305.31	
33 71 19 13-0051 EA 18" x 28" x 12", Precast Concrete Extension.....	382.93	
33 71 19 13-0052 EA 24" x 36" x 12", Precast Concrete Extension.....	494.85	
33 71 19 13-0053 EA 30" x 48" x 12", Precast Concrete Extension.....	595.28	
33 71 19 13-0054 EA 36" x 60" x 12", Precast Concrete Extension.....	1,006.38	
33 71 19 13-0055 EA 36" x 72" x 12", Precast Concrete Extension.....	1,380.58	
33 71 19 13-0056 EA 48" x 48" x 12", Precast Concrete Extension.....	1,608.54	
33 71 19 13-0057 EA 48" x 60" x 12", Precast Concrete Extension.....	1,978.88	
<b>33 71 19 13-0058 Manhole Accessories (33 71 19 13)</b>		
33 71 19 13-0059 EA 6" Precast Grade Ring Riser Casting.....	697.97	
33 71 19 13-0060 EA 12" Precast Grade Ring Riser Casting.....	755.84	
33 71 19 13-0061 EA 36" Opening Cast Iron Frame And Cover (NEENAH #R-1640-D).....	2,757.96	
33 71 19 13-0062 EA 42" Opening Cast Iron Frame And Cover (NEENAH #R-1740-E1).....	3,598.88	
33 71 19 13-0063 EA Cast Iron Adjusting Ring (NEENAH #R-1979).....	1,164.81	
33 71 19 13-0064 EA Cast Iron Frame And Cover (NEENAH #R-1640-B).....	1,480.96	
<b>33 71 19 23 Trenched Electrical Underground Duct and Ductbanks (33 71 19)</b>		
<b>33 71 19 23-0001 Underground Cable Protection Slab And Marking (33 71 19 23)</b>		
33 71 19 23-0002 EA 24" x 12", 2" Concrete, Underground Cable Protection.....	7.41	

**END OF SECTION 33**



Transportation		34	34
Operation and Maintenance of Transportation		34 01	
Operation and Maintenance of Railways		34 01 23	

MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
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## 34 Transportation

### 34 01 Operation and Maintenance of Transportation (34)

#### 34 01 23 Operation and Maintenance of Railways (34 01)

##### 34 01 23 33 Track Realignment (34 01 23)

###### 34 01 23 33-0001 Realign Railroad Track (34 01 23 33)

34 01 23 33-0002	LF	Removal Of Track Rails And Ties And Re-Install Including New Bolts And Spikes .....	92.26	
34 01 23 33-0003	EA	Removal Of Railroad Track Turnouts And Re-install Including New Bolts And Spikes.....	4,505.02	

### 34 10 Guideways/Railways (34)

#### 34 11 Rail Tracks (34 10)

##### 34 11 93 Track Appurtenances and Accessories (34 11)

###### 34 11 93 00-0001 Railroad Crossings (34 11 93)

###### 34 11 93 00-0002 Asphalt Railroad Crossings (34 11 93 00-0001)

Note: Based on 8" thickness x 20' including track and approach.

34 11 93 00-0003	EA	8" Asphalt Railroad Crossing, 12' Roadway 6 CY.....	2,300.91	342.54
34 11 93 00-0004	EA	8" Asphalt Railroad Crossing, 15' Roadway 7.4 CY.....	2,713.81	388.22
34 11 93 00-0005	EA	8" Asphalt Railroad Crossing, 18' Roadway 8.9 CY.....	3,207.48	456.73
34 11 93 00-0006	EA	8" Asphalt Railroad Crossing, 21' Roadway 10.4 CY.....	3,805.54	548.07
34 11 93 00-0007	EA	8" Asphalt Railroad Crossing, 24' Roadway 11.9 CY.....	4,586.26	685.09

###### 34 11 93 00-0008 Railroad Crossings - Precast Concrete Inserts (34 11 93 00-0001)

Note: Based on 6" thickness x standard rail width gauge.

34 11 93 00-0009	EA	Precast Concrete, Railroad Crossing, 12' Road 6" Thick, Standard Gauge.....	8,481.09	156.45
34 11 93 00-0010	EA	Precast Concrete, Railroad Crossing, 15' Road 6" Thick, Standard Gauge.....	10,601.36	189.97
34 11 93 00-0011	EA	Precast Concrete, Railroad Crossing, 18' Road 6" Thick, Standard Gauge.....	12,716.10	234.67
34 11 93 00-0012	EA	Precast Concrete, Railroad Crossing, 21' Road 6" Thick, Standard Gauge.....	14,832.25	268.19
34 11 93 00-0013	EA	Precast Concrete, Railroad Crossing, 24' Road 6" Thick, Standard Gauge.....	16,947.50	312.89

###### 34 11 93 00-0014 Molded Rubber Railroad Crossings With Headers (34 11 93 00-0001)

Note: Based on 3' x 8'-6" sections.

34 11 93 00-0015	EA	Molded Rubber Railroad Crossing, 12' Road 3' x 8'-6" Sections With Headers.....	2,900.36	156.45
34 11 93 00-0016	EA	Molded Rubber Railroad Crossing, 15' Road 3' x 8'-6" Sections With Headers.....	3,449.63	189.97
34 11 93 00-0017	EA	Molded Rubber Railroad Crossing, 18' Road 3' x 8'-6" Sections With Headers.....	3,993.37	234.67
34 11 93 00-0018	EA	Molded Rubber Railroad Crossing, 21' Road 3' x 8'-6" Sections With Headers.....	4,538.52	268.19
34 11 93 00-0019	EA	Molded Rubber Railroad Crossing, 24' Road 3' x 8'-6" Sections With Headers.....	5,082.78	312.89

###### 34 11 93 00-0020 Railroad Trackage Demolition (34 11 93)

34 11 93 00-0021	CY	Removal Of Railroad Track Ballast.....	8.74	
34 11 93 00-0022	LF	Removal Of Railroad Track Rail And Spikes .....	21.85	
34 11 93 00-0023	EA	Removal And Disposal Of Concrete Post Footings .....	134.70	
34 11 93 00-0024	EA	Backfill Holes From Post Removal.....	56.14	

### 34 40 Transportation Signaling and Control Equipment (34)

#### 34 41 Roadway Signaling and Control Equipment (34 40)

##### 34 41 13 Traffic Signals (34 41)

###### 34 41 13 00-0001 Traffic Signals (34 41 13)

34 41 13 00-0002	EA	Single Traffic Signal Head, 4 Way Pattern.....	6,007.15	990.43
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###### 34 41 13 00-0003 Traffic Detector Induction Loop (34 41 13)

34 41 13 00-0004	EA	6' x 6', Type A, 3 Turns Per Loop, Traffic Detector Induction Loop.....	447.06	
Note: Includes saw cutting, 3 turns wire for 1 induction loop circuit, sealing and splicing into leads in street. Excludes lead wire, controller, junction box or conduit.				
34 41 13 00-0005	EA	6' x 6', Type D, 3 Turns Per Loop, Traffic Detector Induction Loop.....	557.59	
Note: Includes saw cutting, 3 turns wire for 1 induction loop circuit, sealing and splicing into leads in street. Excludes lead wire, controller, junction box or conduit.				
34 41 13 00-0006	EA	6' x 6', Type D, 5 Turns Per Loop, Traffic Detector Induction Loop.....	641.34	
Note: Includes saw cutting, 5 turns wire for 1 induction loop circuit, sealing and splicing into leads in street. Excludes lead wire, controller, junction box or conduit.				
34 41 13 00-0007	EA	6' x 6', Type Q, 3 Turns Per Loop, Traffic Detector Induction Loop .....	547.82	
Note: Includes saw cutting, 3 turns wire for 1 induction loop circuit, sealing and splicing into leads in street. Excludes lead wire, controller, junction box or conduit.				

**34 Transportation****34 40 Transportation Signaling and Control Equipment****34 41 Roadway Signaling and Control Equipment**

MINOR CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
34 41 13 00-0008	EA	6' x 20', Type C, 3 Turns Per Loop, Traffic Detector Induction Loop..... Note: Includes saw cutting, 3 turns wire for 1 induction loop circuit, sealing and splicing into leads in street. Excludes lead wire, controller, junction box or conduit.	950.75	
34 41 13 00-0009	EA	6' x 28', Type C, 2 Turns Per Loop, Traffic Detector Induction Loop..... Note: Includes saw cutting, 2 turns wire for 1 induction loop circuit, sealing and splicing into leads in street. Excludes lead wire, controller, junction box or conduit.	1,156.99	
34 41 13 00-0010	EA	6' x 28', Type C, 3 Turns Per Loop, Traffic Detector Induction Loop..... Note: Includes saw cutting, 3 turns wire for 1 induction loop circuit, sealing and splicing into leads in street. Excludes lead wire, controller, junction box or conduit.	1,243.37	
34 41 13 00-0011	EA	6' x 40', Type C, 1 Turn Per Loop, Traffic Detector Induction Loop..... Note: Includes saw cutting, 1 turn wire for 1 induction loop circuit, sealing and splicing into leads in street. Excludes lead wire, controller, junction box or conduit.	1,503.98	
34 41 13 00-0012	EA	6' x 40', Type C, 2 Turns Per Loop, Traffic Detector Induction Loop..... Note: Includes saw cutting, 2 turns wire for 1 induction loop circuit, sealing and splicing into leads in street. Excludes lead wire, controller, junction box or conduit.	1,631.24	
34 41 13 00-0013	EA	6' x 50', Type C, 1 Turn Per Loop, Traffic Detector Induction Loop..... Note: Includes saw cutting, 1 turn wire for 1 induction loop circuit, sealing and splicing into leads in street. Excludes lead wire, controller, junction box or conduit.	1,739.48	
34 41 13 00-0014	EA	6' x 50', Type C, 2 Turns Per Loop, Traffic Detector Induction Loop..... Note: Includes saw cutting, 2 turns wire for 1 induction loop circuit, sealing and splicing into leads in street. Excludes lead wire, controller, junction box or conduit.	1,894.92	
34 41 13 00-0015	LF	In Pavement, Lead Wire For Traffic Signal Detector..... Note: Includes saw cutting, sealing and splicing into traffic signal loop wire in street. Excludes junction box or conduit.	7.69	
34 41 13 00-0016	LF	In Earthwork, Lead Wire For Traffic Signal Detector..... Note: Includes trenching in earthwork and splicing into traffic signal loop wire. Excludes junction box or conduit.	3.74	
34 41 13 00-0017	EA	2 Channel, Rack Mounted, Traffic Loop Vehicle Detector (Reno A&E Model 222).....	281.62	
34 41 13 00-0018	EA	4 Channel, Rack Mounted, Traffic Loop Vehicle Detector (Reno A&E Model E-1100).....	771.13	
34 41 13 00-0019	EA	2 Channel, Rack Mounted, Traffic Loop Bicycle Detector (Reno A&E Model C-1100).....	483.91	
<b>34 41 13 00-0020 Overhead Traffic Signals (34 41 13)</b>				
34 41 13 00-0021	EA	Junction Box, Pole Or Post Mounted.....	473.59	
34 41 13 00-0022	EA	Illuminated Sign, Bracket Mounted, Symbolic.....	3,202.10	
34 41 13 00-0023	EA	Illuminated Sign, Mast Arm Mounted, Symbolic.....	3,369.51	
34 41 13 00-0024	EA	Sign, Message, "BLANK OUT", Bracket Mounted.....	3,484.39	
34 41 13 00-0025	EA	Sign, Message, "BLANK OUT", Mast Arm Mounted.....	3,724.16	
34 41 13 00-0026	EA	30' Type 15TS Signal And Lighting Standard..... Note: 8" diameter base and 3-7/8" diameter top. 0.1793" wall thickness.	5,960.51	
34 41 13 00-0027	EA	35' Type 21TS Signal And Lighting Standard..... Note: 9-3/8" diameter base and 3-9/16" diameter top. 0.1793" wall thickness.	6,821.65	
34 41 13 00-0028	EA	17' Type 18-2-100 Signal And Lighting Standard..... Note: 10-3/4" diameter base and 8-7/16" diameter top. 0.1793" wall thickness.	3,477.36	
34 41 13 00-0029	EA	17' Type 18-3-100 Signal And Lighting Standard..... Note: 10-3/4" diameter base and 8-7/16" diameter top. 0.2391" wall thickness.	3,809.85	
34 41 13 00-0030	EA	17' Type 18-4-100 Or 23-4-100 Signal And Lighting Standard..... Note: 12" diameter base and 9" diameter top. 0.2391" wall thickness.	3,937.30	
34 41 13 00-0031	EA	17' Type 23-3-100 Signal And Lighting Standard..... Note: 12" diameter base and 9-5/8" diameter top. 0.2391" wall thickness.	3,937.30	
34 41 13 00-0032	EA	17' Type 23-4-100 Signal And Lighting Standard..... Note: 12" diameter base and 9-5/8" diameter top. 0.2391" wall thickness.	4,004.22	
34 41 13 00-0033	EA	17' Type 27-3-100 Signal And Lighting Standard..... Note: 12-1/8" diameter base and 9-3/4" diameter top. 0.3125" wall thickness.	4,338.80	
34 41 13 00-0034	EA	17' Type 27-4-100 Signal And Lighting Standard..... Note: 13-1/2" diameter base and 9-3/4" diameter top. 0.3125" wall thickness.	4,415.74	
34 41 13 00-0035	EA	17' Type 28-5-100 Signal And Lighting Standard..... Note: 14" diameter base and 11-11/16" diameter top. 0.3125" wall thickness.	4,573.49	
34 41 13 00-0036	EA	17' Type 60-5-100 Signal And Lighting Standard..... Note: 16" diameter base and 13-11/16" diameter top. 0.3125" wall thickness.	4,821.95	
34 41 13 00-0037	EA	18'-6" Type 16-2-100 Or 16-3-100 Signal And Lighting Standard..... Note: 10-3/4" diameter base and 8-1/4" diameter top. 0.1793" wall thickness.	3,672.95	
34 41 13 00-0038	EA	30' Type 17-2-100 Or 17-3-100 Signal And Lighting Standard..... Note: 10-3/4" diameter base and 6-5/8" diameter top. 0.1793" wall thickness.	6,309.62	
34 41 13 00-0039	EA	30' Type 19-2-100 Signal And Lighting Standard..... Note: 10-3/4" diameter base and 6-5/8" diameter top. 0.2391" wall thickness.	7,007.85	
34 41 13 00-0040	EA	30' Type 19-3-100 Or 24-3-100 Signal And Lighting Standard..... Note: 12" diameter base and 7-7/8" diameter top. 0.2391" wall thickness.	7,275.50	
34 41 13 00-0041	EA	30' Type 19-4-100 Or 24-4-100 Signal And Lighting Standard..... Note: 12" diameter base and 8" diameter top. 0.2391" wall thickness.	7,275.50	
34 41 13 00-0042	EA	30' Type 26-3-100 Signal And Lighting Standard..... Note: 12-1/8" diameter base and 8" diameter top. 0.3125" wall thickness.	8,118.61	
34 41 13 00-0043	EA	30' Type 26-4-100 Signal And Lighting Standard..... Note: 13-1/2" diameter base and 8" diameter top. 0.3125" wall thickness.	8,441.81	
34 41 13 00-0044	EA	30' Type 29-5-100 Signal And Lighting Standard..... Note: 14" diameter base and 9-7/8" diameter top. 0.3125" wall thickness.	8,781.15	
34 41 13 00-0045	EA	30' Type 61-5-100 Signal And Lighting Standard..... Note: 16" diameter base and 11-7/8" diameter top. 0.3125" wall thickness.	9,315.64	
34 41 13 00-0046	EA	35' Type 17A-2-100 Signal And Lighting Standard..... Note: 10-3/4" diameter base and 5-15/16" diameter top. 0.1793" wall thickness.	7,321.82	
34 41 13 00-0047	EA	35' Type 19A-2-100 Signal And Lighting Standard..... Note: 10-3/4" diameter base and 5-15/16" diameter top. 0.2391" wall thickness.	8,136.42	
34 41 13 00-0048	EA	35' Type 19A-3-100 Or 24A-3-100 Signal And Lighting Standard..... Note: 12" diameter base and 7-3/16" diameter top. 0.2391" wall thickness.	8,448.70	



		<b>Transportation</b>	<b>34</b>
		<b>Transportation Signaling and Control Equipment</b>	<b>34 40</b>
		<b>Roadway Signaling and Control Equipment</b>	<b>34 41</b>

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MINOR CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
34 41 13 00-0049	EA	35' Type 19A-4-100 Or 24A-4-100 Signal And Lighting Standard ..... Note: 12" diameter base and 7-5/16" diameter top. 0.2391" wall thickness.	8,448.70	
34 41 13 00-0050	EA	35' Type 26A-3-100 Signal And Lighting Standard ..... Note: 12-1/8" diameter base and 7-5/16" diameter top. 0.3125" wall thickness.	9,432.31	
34 41 13 00-0051	EA	35' Type 26A-4-100 Signal And Lighting Standard ..... Note: 13-1/2" diameter base and 7-5/16" diameter top. 0.3125" wall thickness.	9,809.38	
34 41 13 00-0052	EA	35' Type 29A-5-100 Signal And Lighting Standard ..... Note: 14" diameter base and 9-3/16" diameter top. 0.3125" wall thickness.	10,205.28	
34 41 13 00-0053	EA	35' Type 61A-5-100 Signal And Lighting Standard ..... Note: 16" diameter base and 11" diameter top. 0.3125" wall thickness.	10,828.84	
34 41 13 00-0054	EA	15' Steel Straight Mast Arm, MONOTUBE .....	2,745.18	
34 41 13 00-0055	EA	20' Steel Straight Mast Arm, MONOTUBE .....	2,890.42	
34 41 13 00-0056	EA	25' Steel Straight Mast Arm, MONOTUBE .....	3,070.68	
34 41 13 00-0057	EA	30' Steel Straight Mast Arm, MONOTUBE .....	3,979.28	
34 41 13 00-0058	EA	35' Steel Straight Mast Arm, MONOTUBE .....	4,717.77	
34 41 13 00-0059	EA	40' Steel Straight Mast Arm, MONOTUBE .....	5,042.73	
34 41 13 00-0060	EA	45' Steel Straight Mast Arm, MONOTUBE .....	5,574.84	
34 41 13 00-0061	EA	50' Steel Straight Mast Arm, MONOTUBE .....	6,322.13	
34 41 13 00-0062	EA	55' Steel Straight Mast Arm, MONOTUBE .....	7,260.17	
34 41 13 00-0063	EA	60' Steel Straight Mast Arm, MONOTUBE .....	7,944.05	
34 41 13 00-0064	EA	65' Steel Straight Mast Arm, MONOTUBE .....	9,192.91	
34 41 13 00-0065	EA	4' Steel Curved Luminaire Mast Arm .....	967.49	
34 41 13 00-0066	EA	6' Steel Curved Luminaire Mast Arm .....	1,247.45	
		For High Rise Arm, Add .....	83.12	
34 41 13 00-0067	EA	8' Steel Curved Luminaire Mast Arm .....	1,560.43	
34 41 13 00-0068	EA	10' Steel Curved Luminaire Mast Arm .....	2,230.93	
		For High Rise Arm, Add .....	122.36	
34 41 13 00-0069	EA	12' Steel Curved Luminaire Mast Arm .....	2,422.88	
		For High Rise Arm, Add .....	144.30	
34 41 13 00-0070	EA	15' Steel Curved Luminaire Mast Arm .....	2,488.05	
		For High Rise Arm, Add .....	160.92	
34 41 13 00-0071	EA	20' Steel Curved Luminaire Mast Arm .....	2,786.23	
		For High Rise Arm, Add .....	192.18	
34 41 13 00-0072	EA	CUT-OFF POLE AND CAPPED .....	217.38	
34 41 13 00-0073	EA	1 Channel Loop Detector Amplifier .....	1,282.45	
34 41 13 00-0074	EA	4 Channel Loop Detector Amplifier .....	2,340.94	
34 41 13 00-0075	EA	FLASHING BEACON WITH DOWNLIGHT .....	2,125.15	
34 41 13 00-0076	EA	Flashing Beacon, Bracket Mounted .....	857.60	
34 41 13 00-0077	EA	Flashing Beacon, Mast Arm Mounted .....	857.60	
34 41 13 00-0078	EA	7-WIRE MASTER INTERCONNECT .....	1,232.12	
34 41 13 00-0079	EA	7-WIRE SLAVE INTERCONNECT .....	1,187.78	
34 41 13 00-0080	EA	Service Equipment Enclosure, Type III-AF .....	1,445.71	
34 41 13 00-0081	EA	12", 3 Section Signal, Mast Arm Mounted .....	1,906.80	
34 41 13 00-0082	EA	8", 3 Section Signal, Mast Arm Mounted .....	1,703.02	
34 41 13 00-0083	EA	12" FCV Visor .....	106.06	
34 41 13 00-0084	EA	8" FCV Visor .....	77.22	
34 41 13 00-0085	EA	Eggcrate Visor .....	102.49	
34 41 13 00-0086	EA	Pedestrian H/M .....	1,207.91	
34 41 13 00-0087	EA	Pedestrian Audio .....	1,314.17	
34 41 13 00-0088	EA	Adjustable Pushbutton .....	345.77	
34 41 13 00-0089	EA	ADA Cap And Switch .....	425.16	
34 41 13 00-0090	EA	3 Section 12" Backplate .....	174.38	
34 41 13 00-0091	EA	3 Section 12" MAS Mount Backplate .....	257.29	
34 41 13 00-0092	EA	3 Section 8" Backplate .....	141.81	
34 41 13 00-0093	EA	12" Red LED Lenses .....	293.56	
34 41 13 00-0094	EA	12" Amber LED Lenses .....	313.40	
34 41 13 00-0095	EA	12" Green LED Lenses .....	531.15	
34 41 13 00-0096	EA	12" Red Arrow .....	291.96	
34 41 13 00-0097	EA	12" Amber Arrow .....	277.42	
34 41 13 00-0098	EA	12" Green Arrow .....	404.78	
34 41 13 00-0099	EA	8" Red .....	289.01	
34 41 13 00-0100	EA	8" Amber .....	278.28	
34 41 13 00-0101	EA	8" Green .....	331.25	
34 41 13 00-0102	EA	Hand/Man .....	496.54	
34 41 13 00-0103	EA	Frameworks, 8" TV-1-T .....	606.14	
34 41 13 00-0104	EA	Frameworks, 8" TV-2-T .....	683.25	
34 41 13 00-0105	EA	Frameworks, MAT MT .....	184.38	
34 41 13 00-0106	EA	Frameworks, MAS MT .....	199.80	
34 41 13 00-0107	EA	Frameworks, 3W PT TC .....	357.71	
34 41 13 00-0108	EA	Frameworks, 2W PT TC .....	400.74	
34 41 13 00-0109	EA	Frameworks, 2W SM TC .....	380.17	
34 41 13 00-0110	EA	Frameworks, SV-1 .....	254.72	
34 41 13 00-0111	EA	Frameworks, TV-1 .....	247.01	
34 41 13 00-0112	EA	Type III Service Pedestal .....	4,628.06	
34 41 13 00-0113	EA	Single Fuse Holder .....	48.42	
34 41 13 00-0114	EA	Double Fuse Holder .....	113.16	
34 41 13 00-0115	EA	Pullbox, 1-1/2" x 20" x 14" .....	112.27	
34 41 13 00-0116	EA	Pullbox, 5" x 28" x 18" .....	150.00	
34 41 13 00-0117	EA	Pullbox, 6" x 36" x 23" .....	194.46	
34 41 13 00-0118	EA	Pullbox Lids, FL9D .....	112.45	
34 41 13 00-0119	EA	Pullbox Lids, FL30D .....	206.42	
34 41 13 00-0120	EA	Pullbox Lids, FL36D .....	62.92	

**34 Transportation****34 40 Transportation Signaling and Control Equipment****34 41 Roadway Signaling and Control Equipment**

MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
34 41 13 00-0121 EA LED Enhanced Pedestrian Crossing Symbol Sign..... Note: 2 required per system.	1,972.95	137.44
34 41 13 00-0122 EA 42" Height, 8-1/2" Diameter Automatic Bollard Activation System..... Note: 4 required per system.	5,778.72	824.62
34 41 13 00-0123 EA Power Control Unit With Enclosure (Solar)..... Note: LightGuard Systems solar power equipment Includes: one solar array consisting of 1 Siemens SP70 solar power module (21" x 47" to be pole mounted, pole not included), #14 AWG solar tray cable, mounting hardware, one enclosure (16-1/2" width x 27-1/2" height x 15" depth), two 12V 80AH deep cycle gel cell batteries and a solar power control unit (PCU).	19,404.53	549.74
34 41 13 00-0124 EA Power Control Unit With Enclosure (A/C) .....	12,522.29	549.74
34 41 13 00-0125 EA Push Button Assembly With Sign.....	1,192.27	274.87
34 41 13 00-0126 EA Advanced Warning Signs.....	2,248.88	274.87
34 41 13 00-0127 EA 15' Tubular Aluminum Post .....	1,044.45	
34 41 13 00-0128 EA 17' Tubular Aluminum Post .....	1,123.18	
34 41 13 00-0129 EA 20' Tubular Aluminum Post .....	1,259.55	
34 41 13 00-0130 EA 14' High Galvanized Steel Traffic Signal Pole..... Note: For mast arm.	3,144.87	
34 41 13 00-0131 EA 21' High Galvanized Steel Traffic Signal Pole..... Note: For mast arm.	4,519.16	
34 41 13 00-0132 EA 22' High Galvanized Steel Traffic Signal Pole..... Note: For mast arm and luminare arm.	4,674.32	
34 41 13 00-0133 EA 30' High Galvanized Steel Traffic Signal Pole, Tapered, For >55' Mast Arm .....	6,304.53	
34 41 13 00-0134 EA 32' High Galvanized Steel Traffic Signal Pole, Tapered, For Up To 55' Mast Arm..... Note: For mast arm and luminare arm.	6,469.77	
34 41 13 00-0135 EA 30' High Galvanized Steel Traffic Signal Pole, Tapered, For Up To 55' Mast Arm.....	5,282.34	
34 41 13 00-0136 EA 30' High Galvanized Steel Traffic Signal Pole, Octafute.....	4,777.11	
34 41 13 00-0137 EA 30' (High Spun Aluminum Traffic Signal Pole, Tapered .....	4,012.94	
34 41 13 00-0138 EA Type 26-6-70 Signal Pole With 55' SMA And 20' LMA.....	25,030.31	
34 41 13 00-0139 EA Type 29-6-70 Signal Pole With 65' SMA And 20' LMA.....	28,994.57	
34 41 13 00-0140 EA Wireless Access Point (Proxim Tsunami MP11 954-BSUR-US).....	3,973.84	
34 41 13 00-0141 EA Ruggedized Subscriber Unit (Proxim Tsunami MP11 954-SUA-US) .....	2,148.17	
34 41 13 00-0142 EA Smart Sensor HD (Wavetronix HD125) .....	11,301.76	
34 41 13 00-0143 EA Access Point (Sensys AP240-ES) .....	5,242.60	
Note: RJ45 port supports simultaneous Ethernet and CC card communications (split via Access Box) combined with data relay, statistics-processing and VPN functionality.		
34 41 13 00-0144 EA Sensys Access Point AP240-ESC-VER - RJ45 port supports simultaneous Ethernet and CC card communications (split via Access Box) combined with data relay, statistics-processing and VPN functionality with Integrated 1xRTT cellular data modem for data relay via CDMA.....	9,050.43	
34 41 13 00-0145 EA Mounting Kit for Access Points and Repeaters (KIT-MTG) .....	336.27	
34 41 13 00-0146 EA Repeater (Sensys RP240-B-LL) .....	2,403.15	
Note: Nominal battery capacity of 171 Ah with seven (7) year battery-life.		
34 41 13 00-0147 EA Wireless Flush Mounted Sensor (Sensys VSN240-F) .....	1,098.65	
Note: Excludes coring.		
34 41 13 00-0148 EA Sensor Mounting Bracket, Cable, Lightning Surge Protector, Power Supply, Breaker, AC Surge Protector, Din Rail and Power Plug .....	2,760.64	
34 41 13 00-0149 EA Pole Base Foundation for 17-2-80, 17-2-100, 19-2-80 Poles.....	6,922.03	2.19
34 41 13 00-0150 EA Pole Base Foundation for 17-3-80, 19-3-80, 26-3-80 & 26-4-80 Poles.....	9,064.01	2.19
34 41 13 00-0151 EA Pole Base Foundation for Type 15 and 21 Poles.....	5,399.26	2.19
34 41 13 00-0152 EA Pole Base Foundation for 18-4-100, 19-4-100, 23-4-100, And 24-4-100 Poles.....	6,922.03	2.19
34 41 13 00-0153 EA Pole Base Foundation for 26-4-100 And 27-4-100 Poles.....	9,064.01	2.19
<b>34 41 13 00-0154 Traffic Signal Cable (34 41 13)</b>		
34 41 13 00-0155 LF 16 AWG, 2-Conductor, Solid, Traffic Signal Cable.....	2.52	1.15
34 41 13 00-0156 LF 16 AWG, 3-Conductor, Solid, Traffic Signal Cable.....	2.79	1.24
34 41 13 00-0157 LF 16 AWG, 4-Conductor, Solid, Traffic Signal Cable.....	3.05	1.32
34 41 13 00-0158 LF 16 AWG, 5-Conductor, Solid, Traffic Signal Cable.....	3.30	1.40
34 41 13 00-0159 LF 16 AWG, 6-Conductor, Solid, Traffic Signal Cable.....	3.58	1.48
34 41 13 00-0160 LF 16 AWG, 8-Conductor, Solid, Traffic Signal Cable.....	4.10	1.64
34 41 13 00-0161 LF 16 AWG, 10-Conductor, Solid, Traffic Signal Cable.....	4.80	1.90
34 41 13 00-0162 LF 16 AWG, 12-Conductor, Solid, Traffic Signal Cable.....	5.48	2.14
34 41 13 00-0163 LF 16 AWG, 16-Conductor, Solid, Traffic Signal Cable.....	6.38	2.39
34 41 13 00-0164 LF 16 AWG, 20-Conductor, Solid, Traffic Signal Cable.....	7.40	2.63
34 41 13 00-0165 LF 14 AWG, 2-Conductor, Solid, Traffic Signal Cable.....	2.58	1.15
34 41 13 00-0166 LF 14 AWG, 3-Conductor, Solid, Traffic Signal Cable.....	2.88	1.24
34 41 13 00-0167 LF 14 AWG, 4-Conductor, Solid, Traffic Signal Cable.....	3.15	1.32
34 41 13 00-0168 LF 14 AWG, 5-Conductor, Solid, Traffic Signal Cable.....	3.42	1.40
34 41 13 00-0169 LF 14 AWG, 6-Conductor, Solid, Traffic Signal Cable.....	3.74	1.48
34 41 13 00-0170 LF 14 AWG, 8-Conductor, Solid, Traffic Signal Cable.....	4.31	1.64
34 41 13 00-0171 LF 14 AWG, 10-Conductor, Solid, Traffic Signal Cable.....	5.05	1.90
34 41 13 00-0172 LF 14 AWG, 12-Conductor, Solid, Traffic Signal Cable.....	5.78	2.14
34 41 13 00-0173 LF 14 AWG, 16-Conductor, Solid, Traffic Signal Cable.....	6.78	2.39
34 41 13 00-0174 LF 14 AWG, 20-Conductor, Solid, Traffic Signal Cable.....	7.94	2.63
34 41 13 00-0175 LF 12 AWG, 2-Conductor, Solid, Traffic Signal Cable.....	2.71	1.15
34 41 13 00-0176 LF 12 AWG, 3-Conductor, Solid, Traffic Signal Cable.....	3.07	1.24
34 41 13 00-0177 LF 12 AWG, 4-Conductor, Solid, Traffic Signal Cable.....	3.40	1.32
34 41 13 00-0178 LF 12 AWG, 5-Conductor, Solid, Traffic Signal Cable.....	3.72	1.40
34 41 13 00-0179 LF 12 AWG, 6-Conductor, Solid, Traffic Signal Cable.....	4.11	1.48
34 41 13 00-0180 LF 12 AWG, 8-Conductor, Solid, Traffic Signal Cable.....	4.79	1.64
34 41 13 00-0181 LF 12 AWG, 10-Conductor, Solid, Traffic Signal Cable.....	5.65	1.90
34 41 13 00-0182 LF 12 AWG, 12-Conductor, Solid, Traffic Signal Cable.....	6.50	2.14



Transportation			34	34
Transportation Signaling and Control Equipment			34 40	
Roadway Signaling and Control Equipment			34 41	

MINOR	CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
34 41	13 00-0183	LF	12 AWG, 16-Conductor, Solid, Traffic Signal Cable .....	7.74	2.39
34 41	13 00-0184	LF	12 AWG, 20-Conductor, Solid, Traffic Signal Cable .....	9.21	2.63
<b>34 41 13 00-0185 School Zone Flasher Beacons (34 41 13)</b>					
34 41	13 00-0186	EA	One 8" Amber LED Beacon Head, Solar Panel School Zone Flasher Beacons Assembly..... Note: Includes 365 day timer, aluminum control/battery enclosure, 2 AGM cell batteries, brackets, 30 Watt tilted solar panel, solar regulator, and solid state flasher.	5,843.03	248.89
34 41	13 00-0187	EA	One 12" Amber LED Beacon Head, Solar Panel School Zone Flasher Beacons Assembly..... Note: Includes 365 day timer, aluminum control/battery enclosure, 2 AGM cell batteries, brackets, 30 Watt tilted solar panel, solar regulator, and solid state flasher.	5,884.11	248.89
34 41	13 00-0188	EA	Two 8" Amber LED Beacon Head, Solar Panel School Zone Flasher Beacons Assembly..... Note: Includes 365 day timer, aluminum control/battery enclosure, 2 AGM cell batteries, brackets, 40 Watt tilted solar panel, solar regulator, and solid state flasher.	6,581.71	248.89
34 41	13 00-0189	EA	Two 12" Amber LED Beacon Head, Solar Panel School Zone Flasher Beacons Assembly..... Note: Includes 365 day timer, aluminum control/battery enclosure, 2 AGM cell batteries, brackets, 40 Watt tilted solar panel, solar regulator, and solid state flasher.	6,713.20	248.89
34 41	13 00-0190	EA	10" Digit Radar Display, One 12" Amber LED Beacon Head, Solar Panel School Zone Flasher Beacons Assembly... Note: Includes 365 day timer, aluminum control/battery enclosure, 2 AGM cell batteries, brackets, 80 Watt tilted solar panel, solar regulator, and solid state flasher.	12,266.39	248.89
34 41	13 00-0191	EA	10" Digit Radar Display, Two 12" Amber LED Beacon Head, Solar Panel School Zone Flasher Beacons Assembly... Note: Includes 365 day timer, aluminum control/battery enclosure, 2 AGM cell batteries, brackets, 40 Watt tilted solar panel, solar regulator, and solid state flasher.	12,781.67	248.89
<b>34 41 13 00-0192 Traffic Light Control Synchronization (34 41 13)</b>					
34 41	13 00-0193	EA	ENCOM COMPAK IP Radio/Wireless Ethernet Transceiver, 900 MHz FHSS 1 Watt output power and 128-bit data encryption with 1.1Mbps Throughput.....	5,114.45	
34 41	13 00-0194	EA	ENCOM 5200R 900 MHz Serial Radio Modem, contains one Serial (RS-232 or RS-485) interface and 170/TS1/TS2 detector rack (EPR-5200R) .....	3,844.13	
34 41	13 00-0195	EA	ENCOM Dual 2.4/2.4 GHZ Broadband Radio with Integrated Antenna (COMMPAKBB24/24) .....	9,001.24	
34 41	13 00-0196	EA	5.8 GHZ Broadband Radio with Integrated Antenna (COMMPAKBB58INT) .....	6,067.44	
34 41	13 00-0197	EA	2.4 GHZ Broadband Radio with Integrated Antenna (COMMPAKBB24INT) .....	6,067.44	
34 41	13 00-0198	EA	Solar Cabinet Assembly .....	16,660.41	
34 41	13 00-0199	EA	Data Controller Interface Cable Assembly .....	679.42	
34 41	13 00-0200	EA	900 MHZ Splitter.....	766.54	
34 41	13 00-0201	EA	900 MHz Surge Suppressor.....	273.22	
34 41	13 00-0202	EA	Surge-Radio Lead in Cable.....	171.71	
34 41	13 00-0203	EA	12DB GAIN YAGI Antenna .....	809.09	
34 41	13 00-0204	EA	PELCO Antenna Mounting Bracket .....	558.39	
34 41	13 00-0205	MLF	Coaxial Cable, LMR-400.....	4,170.34	
34 41	13 00-0206	EA	Perle 16 Port Serial Server.....	4,681.17	
34 41	13 00-0207	EA	Serial to Ethernet Card .....	2,363.76	
34 41	13 00-0208	EA	404 Stand Alone Modem (GDI 404).....	2,105.76	
<b>34 41 13 00-0209 Traffic Signal Controls (34 41 13)</b>					
34 41	13 00-0210	EA	Master Card for Type 2070 or NEMA TS2 traffic controllers (CC-TS2) .....	1,888.92	
34 41	13 00-0211	EA	Extension Card for Type 2070 or NEMA traffic controllers (EX-TS2).....	744.33	
34 41	13 00-0212	EA	AccessBox for contract closure master card (CC-ACC) .....	265.21	
34 41	13 00-0213	EA	Flush Mount Wireless Sensor (ATT VSN240-F).....	1,026.34	
34 41	13 00-0214	EA	Flush Mount Wireless Sensor (Speed & Count VSN240-F).....	1,026.34	
34 41	13 00-0215	EA	Epoxy Tube for Installation of Wireless Sensor (VSN240-EPX) .....	159.19	
34 41	13 00-0216	EA	SNAPS License for each enabled AP (SNAPS-PER-AP) .....	430.35	
<b>34 41 13 00-0217 Traffic Signal Devices (34 41 13)</b>					
34 41	13 00-0218	EA	12" Polycarbonate Signal Head Housing (McCain) .....	987.71	123.69
34 41	13 00-0219	EA	16" Polycarbonate Pedestrian Signal Housing (McCain) .....	516.30	96.21
34 41	13 00-0220	EA	Pedestrian Push Button Cap & Switch (McCain M31334) .....	431.36	178.67
34 41	13 00-0221	EA	Pedestrian Push Button Frame Assembly 4" Diameter Pole (McCain M19712) .....	596.29	261.12
34 41	13 00-0222	EA	Pedestrian Push Button Frame Assembly 2" Diameter Pole (McCain M30793) .....	460.43	206.15
34 41	13 00-0223	EA	16 Channel Conflict Monitor (McCain 2010 ECLIP) .....	1,446.47	89.33
34 41	13 00-0224	EA	LED Countdown Head (McCain GTX PS7-CFF1-VLA) .....	303.77	34.36
34 41	13 00-0225	EA	Traffic signal Video Detection Camera (Iteris RZ4-awdr).....	3,254.39	151.18
34 41	13 00-0226	EA	Camera processor card (Iteris Edge Connect).....	7,380.30	219.90
34 41	13 00-0227	EA	Wireless Broadband Radio (Encom BB58) .....	6,968.77	206.15
34 41	13 00-0228	EA	24-port Gigabit and 4-port 1G/10G SFP+ Ethernet Switch (Etherwan EX77900).....	4,614.44	164.93
34 41	13 00-0229	EA	Power Adapter (Mean Well DR-120-48) .....	180.09	51.54
34 41	13 00-0230	LF	14/1 Cal Trans Type 2 Inductive Traffic Detection Loops (Advanced Digital Cable 8452).....	1.13	
34 41	13 00-0231	EA	Radar Detection System (Wavetronix Matrix) .....	13,544.29	522.26
34 41	13 00-0232	EA	Pedestrian Audio Push Button (Polara APS) .....	445.79	130.57
34 41	13 00-0233	EA	Opticom Infrared System - Detector (GTT 711) .....	1,070.64	122.59
34 41	13 00-0234	EA	Opticom Infrared System - Detector (GTT 721) .....	1,197.87	137.16
34 41	13 00-0235	EA	Opticom Infrared System - Detector (GTT 722) .....	1,668.38	191.04
34 41	13 00-0236	EA	Opticom Multimode Phase Selector (GTT 764) .....	5,317.47	112.96
34 41	13 00-0237	LF	Opticom GPS Installation Cable (GTT 1070) .....	1.34	
34 41	13 00-0238	EA	Precast Concrete Traffic Pull Box, 5-T, with steel frame & diamond steel plate lid ("Traffic Signal") (Jensen Precast HT1324) .....	906.06	
34 41	13 00-0239	EA	Precast Concrete Traffic Pull Box, 6-T, with steel frame & diamond steel plate lid ("Traffic Signal") (Jensen Precast HT1730) .....	960.81	

**34 Transportation****34 40 Transportation Signaling and Control Equipment****34 41 Roadway Signaling and Control Equipment**

MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
34 41 13 00-0240 EA UPS Module (Alpha Technologies FXM 350) ..... Note: For battery backup in traffic signal control cabinet	1,460.68	75.20
34 41 13 00-0241 EA Web Connected Relay Switch (Control by Web X-301 WebRelay-Dual) ..... Note: To control flashing "School" signs	475.25	61.85
34 41 13 00-0242 LF Fiber optic cable, 72 strand, single mode, riser non-plenum jacket (Optical Cable Corp DX072DSLX9KR) .....	10.30	0.63
34 41 13 00-0243 LF Fiber optic cable, 12 strand, multi mode, riser non-plenum jacket (Superior Essex W30126G01 MM Fiber) .....	2.62	0.54
34 41 13 00-0244 EA 12" LED Signal Module, Tinted Lens, Red (GE DR6-RTFB-VLA) .....	154.90	61.85
34 41 13 00-0245 EA 12" LED Signal Module, Tinted Lens, Yellow (GE DR6-YTFB-VLA) .....	154.90	61.85
34 41 13 00-0246 EA 12" LED Signal Module, Tinted Lens, Green (GE DR6-GTFF-VLA) .....	154.90	61.85
34 41 13 00-0247 EA 12" LED Signal Module, Clear Lens, Red (GE DR6-RCFB-VLA) .....	154.90	61.85
34 41 13 00-0248 EA 12" LED Signal Module, Clear Lens, Yellow (GE DR6-YCFB-VLA) .....	154.90	61.85
34 41 13 00-0249 EA 12" LED Signal Module, Clear Lens, Green (GE DR6-GCFB-VLA) .....	154.90	61.85
34 41 13 00-0250 EA LED Countdown Pedestrian Signal, 16" x 18" (GE PS7-CFF1-VLA) .....	448.96	158.05
34 41 13 00-0251 EA EOC Switch (Actellis ML688) .....	5,429.02	488.85
34 41 13 00-0252 EA Ethernet Extender Kit (ENABLE-IT 860 Pro) .....	1,454.86	112.81
34 41 13 00-0253 EA #5 pull box lid (Concrete, Bolt down) (Christy N30T) .....	122.15	28.18
34 41 13 00-0254 EA #5 pull box lid (Steel, Bolt down) (Christy N30-61J) .....	418.19	40.79
34 41 13 00-0255 EA #6 pull box lid (Concrete, Bolt down) (Christy N36T) .....	149.75	28.18
34 41 13 00-0256 EA #6 pull box lid (Steel, Bolt down) (Christy N36-61J) .....	503.61	40.79
34 41 13 00-0257 EA Battery Back-up (Alpha FXM110 UPS) .....	3,449.25	150.42
34 41 13 00-0258 EA Battery (Alpha AlphaCell 220GXL) .....	494.98	37.61
34 41 13 00-0259 EA BBS Cabinet (Alpha SE48-1616) .....	4,035.17	338.43
34 41 13 00-0260 LF Fiber 72 Strands (Corning 072ZU4-T3F22D20) .....	7.14	2.94
34 41 13 00-0261 LF Fiber 12 Strands (Corning 012ZU4-T3F22D20) .....	3.16	1.35
34 41 13 00-0262 EA FDU & Splice Cassette with LC connector type (Corning CCH-01U, CCH-CS12-B3-P00RE) .....	1,256.78	112.81
34 41 13 00-0263 EA 12" THREE SECTION HOUSING (McCain M22435) .....	864.06	75.20
34 41 13 00-0264 EA 12" FOUR SECTION HOUSING (McCain M30883) .....	1,117.67	112.81
34 41 13 00-0265 EA 12" FIVE SECTION HOUSING (McCain M31769) .....	1,296.08	112.81
34 41 13 00-0266 EA 12" CLUSTER, WITHOUT MAS (McCain M30987) .....	1,385.28	112.81
34 41 13 00-0267 EA CMU DATAKEY PROGRAMMER, EDI MONITORKEY-USB (McCain M84650) .....	864.06	75.20
34 41 13 00-0268 EA NAVIGATOR iN2 APS 2 WIRE PPB #IN250N0-B (Polara iN250N0-B) .....	864.06	75.20
34 41 13 00-0269 EA NAVIGATOR iN2 CONTROLLER RACK MOUNT ICCU-C (Polara ICCU-C) .....	4,986.70	263.23
34 41 13 00-0270 EA NAVIGATOR iN2 INTERCONNECT BOARD IN2-ICB-C (Polara iN2-ICB-C) .....	253.61	37.61
34 41 13 00-0271 EA NAVIGATOR iN2 POWER SUPPLY IN2-150-WPS-C (Polara iN2-150-WPS-C) .....	253.61	37.61
34 41 13 00-0272 EA NAVIGATOR iN2 CONNECTOR IN2-C4CABLE-C (Polara iN2-c4cable-C) .....	558.83	56.40
34 41 13 00-0273 EA 12" Visor (McCain M19302) .....	47.92	15.04
34 41 13 00-0274 EA LS,2202-HV (iPack), HDSP/FLASHER UNIT,ATC (McCain M36256) .....	469.63	56.40
34 41 13 00-0275 EA SIU,2218 SERIAL INTERFACE UNIT,ATC (McCain M36258) .....	774.86	75.20
34 41 13 00-0276 EA CMU,2212-HV (ip),32 CH W/ ETHERNET PORT, ATC (McCain M36259) .....	1,429.89	112.81
34 41 13 00-0277 EA ATCC-HV, INPUT ASSEMBLY, 24 CH W/ CONN IDC26 (McCain M54487) .....	774.86	75.20
34 41 13 00-0278 EA HARN, SB1/SB2,COMM EXTENSION (McCain M48062) .....	164.40	37.61
34 41 13 00-0279 EA ATCC-HV/LV, FITA ASSEMBLY, 24CH (McCain M54489) .....	469.63	56.40
34 41 13 00-0280 EA CMU DATAKEY PROGRAMMER, EDI MONITORKEY-USB (McCain M84650) .....	864.06	75.20
34 41 13 00-0281 EA 242L ISOLATOR, EDI (McCain M56812) .....	164.40	37.61
34 41 13 00-0282 EA EDI 222 DETECTOR (McCain M11407) .....	209.01	37.61
34 41 13 00-0283 EA ALPHA BBS, INVERTER & BYPASS SWITCH (McCain M59763) .....	3,409.01	188.01
34 41 13 00-0284 EA GENERATOR SWITCH AND PLUG ASS'Y FOR ALPHA BBS (McCain M68752-2) .....	578.60	75.20
34 41 13 00-0285 EA BBS BATTERY, ALPHACELL 165GXL (McCain M59884) .....	774.86	75.20
34 41 13 00-0286 EA Battery Backup Cabinet Anondize 44x26x12 (McCain M64438A) .....	1,608.30	112.81

**34 41 16 Traffic Control Equipment (34 41)****34 41 16 00-0001 Transportation Control Equipment (34 41 16)**

34 41 16 00-0002 EA CONTROLLER/SL/BASE MTD .....	9,542.05	731.27
34 41 16 00-0003 EA CONTROLLER, TS, 12-BAY, "M" CABINET .....	17,368.57	1,258.67
34 41 16 00-0004 EA CONTROLLER, TS, 12-BAY, "P" CABINET .....	18,527.58	1,394.85
34 41 16 00-0005 EA CONTROLLER, TS, 12-BAY "P" CABINET With FO MASTER .....	26,189.00	1,568.19
34 41 16 00-0006 EA CONTROLLER, TS, 16-BAY, "P" CABINET .....	20,925.75	1,485.65
34 41 16 00-0007 EA CONTROLLER, PEDESTRIAN CROSSING, ADD-IN .....	714.56	174.48
34 41 16 00-0008 EA CONCRETE BLOCK PEDESTAL .....	1,096.98	261.97
34 41 16 00-0009 WK MAINTAIN EXIST TS INSTALLATION .....	417.84	208.91
34 41 16 00-0010 EA PDU Equipped netBooster With IEC320 C13 Outlets (Synaccess NP-0808DUH) .....	1,027.98	19.58
34 41 16 00-0011 EA Remote Power Switched netBooster PDU, 8 Independent Outlets (Synaccess NP-0801DU) .....	587.07	19.58

**34 41 16 00-0012 Transportation Cabinets (34 41 16)****34 41 16 00-0013 Transportation Cabinets (Dudlik Enclosures) (34 41 16 00-0012)**

34 41 16 00-0014 EA 50" x 30" x 17", Aluminum CCTV Cabinet (Dudlik Enclosures) .....	2,763.81	225.62
34 41 16 00-0015 EA 66" x 48" x 30", Quad Door, 19" Racks, Aluminum CCTV Cabinet (Dudlik Enclosures) .....	11,528.28	225.62
34 41 16 00-0016 EA 46" x 30" x 20", 19" Rack, Aluminum TTS Cabinet (Dudlik Enclosures) .....	2,588.91	225.62
34 41 16 00-0017 EA 50" x 30" x 17", Aluminum ITS Controller Cabinet (Dudlik Enclosures) .....	2,763.81	225.62
34 41 16 00-0018 EA 60" x 50" x 36", Quad Door, 19" Racks, Aluminum Fiber Cross Connect Cabinet (Dudlik Enclosures) .....	11,916.95	225.62
34 41 16 00-0019 EA 55" x 16" x 17", Aluminum ITS Meter Cabinet (Dudlik Enclosures) .....	1,811.58	225.62

**34 41 16 00-0020 Transportation Cabinets (APX Enclosures) (34 41 16 00-0012)**

34 41 16 00-0021 EA 28" Wide, 16" Depth, 46" High, ITS Controller Cabinet (APX Enclosure LS503017) .....	6,636.25	263.23
Note: 3R, single door, pad mounted aluminum enclosure. Includes natural finish, aluminum back panel, light kit with door switch, thermostatically controlled fan kit, heater kit with thermostat, one aluminum moveable shelf, and one aluminum moveable shelf with slide out drawer. Excludes pad.		





Transportation			34
Transportation Signaling and Control Equipment			34 40
Roadway Signaling and Control Equipment			34 41

MINOR	CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
34 41 16 00-0022			Transportation Cabinets (Transportation Control Systems) (34 41 16 00-0012)		
34 41 16 00-0023	EA		30" Wide, 16" Depth, 48" High, Type 4, Aluminum Transportation Cabinet With Door Vents (Transportation Control Systems B483016B2D2S) .....	2,611.17	225.62
34 41 16 00-0024	EA		30" Wide, 16" Depth, 60" High, Type 4 Stretch, Aluminum Transportation Cabinet With Door Vents (Transportation Control Systems B603016B2D2S) .....	3,241.24	240.66
34 41 16 00-0025			Transportation Cabinets (McCain) (34 41 16 00-0012)		
34 41 16 00-0026	EA		24" Wide, 30" Depth, 67" High, ATC Cabinet (McCain 352i) .....	12,025.47	263.23
			Note: 3R, single door, pad mounted anodized aluminum enclosure. Excludes pad.		
34 41 16 00-0027	EA		24" Wide, 30" Depth, 67" High, ATC Cabinet (McCain 332) .....	12,025.47	263.23
			Note: 3R, single door, pad mounted anodized aluminum enclosure. Excludes pad.		
34 41 16 00-0028	EA		ATC ColdFire Controller (McCain 170) .....	6,221.47	
34 41 16 00-0029			Traffic Control Equipment (34 41 16)		
34 41 16 00-0030	EA		ProStar PWM Charge Controller 12/24 Volt, 15 Amperes Without Display (Morningstar PS-15) .....	332.01	75.20
34 41 16 00-0031	EA		ProStar PWM Charge Controller 12/24 Volt, 15 Amperes With Display (Morningstar PS-15M) .....	430.41	75.20
34 41 16 00-0032	EA		ProStar PWM Charge Controller 12/24 Volt, 30 Amperes With Display (Morningstar PS-30M) .....	492.91	75.20
34 41 16 00-0033	EA		ProStar PWM Charge Controller 12/24 Volt, 30 Amperes Without Display (Morningstar PS-30) .....	386.65	75.20
34 41 16 00-0034	MLF		10 AWG, 2 Conductor, 600V, Type TC, Non-Shielded Control Tray Cable (EnerSys A51002R) .....	3,074.30	824.62
34 41 16 00-0035	EA		Vehicle Detector, Circuit Breaker, 0.2 Amperes, Wavetronix SmartSensor (Wavetronix WX-CLK-210-02) .....	135.20	37.61
34 41 16 00-0036	EA		Vehicle Detector, 2.4 GHz 12 dBi Omni Antenna, Wavetronix SmartSensor (Wavetronix WX-100-0141) .....	585.91	82.96
34 41 16 00-0037	EA		Detection System, Vehicle, Two Sensor Preamsembled Backplate, with AC Power (Wavetronix WX-SSB01-0003) .....	3,017.69	248.89
34 41 16 00-0038	EA		Vehicle Detector, Power Supply, 24 Volt DC, 4 Amperes (Wavetronix WX-CLK-204) .....	545.18	37.61
34 41 16 00-0039	EA		Vehicle Detector, 4-Channel Contact Matrix Closure, Rack Card (Wavetronix WX-CLK-114) .....	775.18	37.61
34 41 16 00-0040	EA		4 Channel Din-Rail Contact Closure Module (Wavetronix WX-CLK-104) .....	900.40	75.20
34 41 16 00-0041	EA		Detection System, Vehicle, Four Sensor Preamsembled Backplate, With AC Power, Wavetronix SmartSensor (Wavetronix WX-SS-B01-0005) .....	3,870.30	75.20
34 41 16 00-0042	EA		50' Wavetronix Wiring Whip (Wavetronix WX-SS-708-060) .....	497.77	248.89
34 41 16 00-0043	EA		60', 6-Conductor Power And Communication Cable With Connector (Wavetronix WX-SS-704-060) .....	574.43	62.22
34 41 16 00-0044	EA		900 MHz 5 dBi Omni Antenna, Wavetronix SmartSensor (Wavetronix WX-100-0119) .....	505.91	82.96
34 41 16 00-0045	EA		900 MHz 9 dBi Yagi Antenna, Wavetronix SmartSensor (Wavetronix WX-100-0120) .....	325.91	82.96
34 41 16 00-0046	EA		Wavetronix Click 201 AC To DC Power Converter (Wavetronix WX-CLK-201) .....	345.19	37.61
34 41 16 00-0047	EA		24 Volt DC 2 Amperes, Wavetronix SmartSensor (Wavetronix WX-CLK-202) .....	415.19	37.61
34 41 16 00-0048	EA		Coax Surge N-Type, Wavetronix SmartSensor (Wavetronix WX-CLK-250) .....	195.20	37.61
34 41 16 00-0049	EA		Power, RS232/RS485 Surge, Wavetronix SmartSensor (Wavetronix WX-CLK-200) .....	555.18	37.61
34 41 16 00-0050	EA		Two Sensor Surge, Wavetronix SmartSensor (Wavetronix WX-CLK-222) .....	625.18	37.61
34 41 16 00-0051	EA		RS232 to RS485 Converter, Wavetronix SmartSensor (Wavetronix WX-CLK-304) .....	775.18	37.61
34 41 16 00-0052	EA		Wavetronix Click 301 Serial To Ethernet Converter (Wavetronix CLK-301) .....	75.20	37.61
34 41 16 00-0053	EA		Sensor Mount, Heavy Duty, 6 inch, 2 Axis Aluminum Bracket (Wavetronix WX-SS-611) .....	515.91	82.96
34 41 16 00-0054	MLF		LF, UV Resistant Polyethylene Jacketed Cable (Times Microwave Systems LMR-400) .....	3,574.29	824.62
34 41 16 00-0055	EA		N-Male (Plug) Clamp Connector (Times Microwave Systems TC-400-NMC) .....	67.12	22.56
34 41 16 00-0056	EA		Spectra IV SE Back Box, Heavy-Duty, Pendant Mount (Pelco BB4HD-PG-E) .....	1,025.09	90.25
34 41 16 00-0057	EA		Spectra III Clear Pendant Lower Dome, Heavy Duty (Pelco Id53hdpb-1) .....	1,003.49	112.81
34 41 16 00-0058	EA		24" Height, Ceiling/Pedestal Mount For Pan/Tilts Or Enclosures (Pelco pm2000 ) .....	206.38	37.61
34 41 16 00-0059	EA		10" Height, Ceiling/Pedestal Mount For Pan/Tilts Or Enclosures (Pelco pm2010) .....	156.56	37.61
34 41 16 00-0060	EA		24 Volt AC, Remote Data Port (Pelco IPS-RDPE-2) .....	530.51	37.61
34 41 16 00-0061	EA		Spectra IV Remote Monitor Interface Cable (Pelco IPS-CABLE) .....	227.10	37.61
34 41 16 00-0062	EA		120 Volt AC, 12.5 Watt, 12 Volt DC, 600 mA, External Plug In Power Supply (Triad Magnetics WDU12-600) .....	97.96	37.61
34 41 16 00-0063	EA		Control Area Network Direct Current Input/Output (Daktronics OP-1247-0009) .....	750.40	75.20
			Note: Input/Output for sign peripherals.		
34 41 16 00-0064	EA		Control Area Network Direct Current Input/Output (Daktronics OP-1247-4009) .....	750.40	75.20
			Note: Input/Output for sign peripherals.		
34 41 16 00-0065	EA		Control Area Network Distribution Board (Daktronics OP-1248-0005) .....	1,400.38	75.20
			Note: Signal distribution point between sign modules and peripherals, and VFC-3000 Field Controller.		
34 41 16 00-0066	EA		Control Area Network Distribution Board (Daktronics OP-1248-0011) .....	1,400.38	75.20
			Note: Signal distribution point between sign modules and peripherals, and VFC-3000 Field Controller.		
34 41 16 00-0067	EA		Control Area Network Temperature And Light Sensor (Daktronics OP-1247-0019) .....	490.41	75.20
			Note: Measures temperature and detects light and reports to CAN Dist Board.		
34 41 16 00-0068	EA		Control Area Network Temperature, Light Sensor, And Humidity (Daktronics OP-1247-0015) .....	690.40	75.20
			Note: Measures temperature and detects light and humidity and reports to CAN Dist board.		
34 41 16 00-0069	EA		Control Area Network Temperature, Light Sensor, And Humidity (Daktronics OP-1247-0021) .....	690.40	75.20
			Note: Measures temperature and detects light and humidity and reports to CAN Dist board.		
34 41 16 00-0070	EA		Control Area Network Temperature And Light Sensor (Daktronics OP-1247-0003) .....	570.41	75.20
			Note: Measures temperature and detects light and reports to CAN Dist board.		
34 41 16 00-0071	EA		Controller, VFC-3000 Field Controller NTCIPv1 (Daktronics OA-1248-0016) .....	9,601.36	300.83
			Note: The "brains" of the sign. Receives information from NTCIP central software and reports status and diagnostic information.		
34 41 16 00-0072	EA		DC/DC, Direct Current to Direct Current Converter (Daktronics OP-1247-0025) .....	415.19	37.61
			Note: Takes 24 Volt DC input from two power supplies and outputs 9 Volt DC for CAN Dist Board, providing power redundancy.		
34 41 16 00-0073	EA		Driver (Daktronics OP-1100-0026) .....	780.31	60.17
			Note: Driver takes data packets from Control Area Network to determine what pixels (LED clusters) are ON and which are OFF.		
34 41 16 00-0074	EA		External Temp Sensor (Daktronics OP-1100-0014) .....	690.31	60.17
			Note: Sensor that measures ambient temperature.		
34 41 16 00-0075	EA		Internal Temp Sensor (Daktronics OP-1100-0038) .....	770.31	60.17
			Note: Sensor that measures sign internal temperature.		

**34 Transportation****34 40 Transportation Signaling and Control Equipment****34 41 Roadway Signaling and Control Equipment**

MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
34 41 16 00-0076 EA Light Level Detector (Daktronics 0P-1151-0002) .....470.32	470.32	60.17
Note: The values from the light sensors are used by the sign controller to determine the appropriate sign brightness.		
34 41 16 00-0077 EA Module (Daktronics 0A-1253-0608) .....1,400.38	1,400.38	75.20
Note: Printed circuit board with pixels (clusters of light emitting diodes) that illuminate on face of display.		
34 41 16 00-0078 EA Module (Daktronics 0A-1253-3018) .....1,750.37	1,750.37	75.20
Note: Printed circuit board with pixels (clusters of light emitting diodes) that illuminate on face of display.		
34 41 16 00-0079 EA Module (Daktronics 0A-1266-5002) .....1,550.37	1,550.37	75.20
Note: Printed circuit board with pixels (clusters of light emitting diodes) that illuminate on face of display.		
34 41 16 00-0080 EA Module (Daktronics 0A-1332-6252) .....2,150.36	2,150.36	75.20
Note: Printed circuit board with pixels (clusters of light emitting diodes) that illuminate on face of display.		
34 41 16 00-0081 EA Module (Daktronics 0A-1332-6455) .....1,750.37	1,750.37	75.20
Note: Printed circuit board with pixels (clusters of light emitting diodes) that illuminate on face of display.		
34 41 16 00-0082 EA Module (Daktronics 0A-1332-6654) .....1,750.37	1,750.37	75.20
Note: Printed circuit board with pixels (clusters of light emitting diodes) that illuminate on face of display.		
34 41 16 00-0083 EA Module (Daktronics 0P-1332-3015) .....950.39	950.39	75.20
Note: Printed circuit board with pixels (clusters of light emitting diodes) that illuminate on face of display.		
34 41 16 00-0084 EA Module (Daktronics 0P-1332-4116) .....950.39	950.39	75.20
Note: Printed circuit board with pixels (clusters of light emitting diodes) that illuminate on face of display.		
34 41 16 00-0085 EA Module (Daktronics 0P-1332-5031) .....950.39	950.39	75.20
Note: Printed circuit board with pixels (clusters of light emitting diodes) that illuminate on face of display.		
34 41 16 00-0086 EA Module (Daktronics 0P-1332-5017) .....950.39	950.39	75.20
Note: Printed circuit board with pixels (clusters of light emitting diodes) that illuminate on face of display.		
34 41 16 00-0087 EA Module Without Pan (Daktronics 0A-1253-0603) .....1,400.38	1,400.38	75.20
Note: Printed circuit board with pixels (clusters of light emitting diodes) that illuminate on face of display; without Pan (pan is the metal bracket that holds the module securely in place in the sign).		
34 41 16 00-0088 EA Module Without Pan (Daktronics 0A-1253-1605) .....1,400.38	1,400.38	75.20
Note: Printed circuit board with pixels (clusters of light emitting diodes) that illuminate on face of display; without Pan (pan is the metal bracket that holds the module securely in place in the sign).		
34 41 16 00-0089 EA Module Without Pan (Daktronics 0A-1254-1601) .....1,400.38	1,400.38	75.20
Note: Printed circuit board with pixels (clusters of light emitting diodes) that illuminate on face of display; without Pan (pan is the metal bracket that holds the module securely in place in the sign).		
34 41 16 00-0090 EA Pixel Strip (Daktronics 0P-1100-0016) .....500.41	500.41	75.20
Note: Pixel Strip is a smaller section of a module. Typically has three pixels (LED clusters) per strip.		
34 41 16 00-0091 EA Pixel Strip (Daktronics 0P-1100-0029) .....580.41	580.41	75.20
Note: Pixel Strip is a smaller section of a module. Typically has three pixels (LED clusters) per strip.		
34 41 16 00-0092 EA Power Supply (Daktronics A-1593) .....1,650.37	1,650.37	75.20
Note: Receives 120 Volt AC input and outputs appropriate Volt DC for modules.		
34 41 16 00-0093 EA Power Supply (Daktronics A-1648) .....1,650.37	1,650.37	75.20
Note: Receives 120 Volt AC input and outputs appropriate Volt DC for modules.		
34 41 16 00-0094 EA Power Supply (Daktronics A-2307) .....650.40	650.40	75.20
Note: Receives 120 Volt AC input and outputs appropriate Volt DC for modules.		
34 41 16 00-0095 EA Surge Suppressor (Daktronics A-1129) .....270.24	270.24	45.12
Note: Receives 120 Volt AC input and outputs appropriate Volt DC for modules.		
34 41 16 00-0096 EA Surge Suppressor (Daktronics A-1412) .....540.24	540.24	45.12
Note: Receives 120 Volt AC input and outputs appropriate Volt DC for modules.		
34 41 16 00-0097 EA Surge Suppressor (Daktronics A-1772) .....540.24	540.24	45.12
Note: Receives 120 Volt AC input and outputs appropriate Volt DC for modules.		
34 41 16 00-0098 EA Surge Suppressor (Daktronics A-2139) .....790.23	790.23	45.12
Note: Receives 120 Volt AC input and outputs appropriate Volt DC for modules.		
34 41 16 00-0099 EA VCB, Vanguard Control Board (Daktronics 0P-1248-0022) .....1,340.38	1,340.38	75.20
Note: Receives high speed serial communication over fiber or CAT5 from VFC-3000 and reports sign status and peripheral diagnostics.		
34 41 16 00-0100 EA VMS I/O, Variable Message Sign Input/Output (Daktronics 0P-1194-0001) .....1,800.37	1,800.37	75.20
Note: Input/Output board for sign peripherals.		
34 41 16 00-0101 EA Power Supply Assembly (Daktronics A-1856R) .....1,200.39	1,200.39	75.20
34 41 16 00-0102 EA Power Supply Isolation Board (Daktronics 0P-1447-2000) .....800.40	800.40	75.20
34 41 16 00-0103 EA Ventilation/Circulation Fan (Daktronics B-1075) .....320.41	320.41	75.20
34 41 16 00-0104 EA VMS Controller (V2) (Daktronics 0A-1248-0028) .....9,601.36	9,601.36	300.83
34 41 16 00-0105 EA Photo/Temp Sensor (Daktronics 0P-1247-0015) .....690.40	690.40	75.20
34 41 16 00-0106 EA Defog Fan (Daktronics B-1053) .....125.20	125.20	37.61
34 41 16 00-0107 EA Defog Heater (Daktronics A-1792) .....155.20	155.20	37.61
34 41 16 00-0108 EA Display Card 1500, 15' Clear (Ver-Mac PB-AFF-06023A-03 PF) .....900.40	900.40	75.20
34 41 16 00-0109 EA Display Card 1500, 30' Amber (Ver-Mac PB-AFF-06023-01 PF) .....900.40	900.40	75.20
34 41 16 00-0110 EA 1-Port Decoder With H.264 And High-Definition Technology (Verint S1801E-R) .....1,163.67	1,163.67	75.30
34 41 16 00-0111 EA 1-Port Video Encoder Featuring H.264 Technology With One Bi-directional Audio Channel And 12V DC Universal Power Supply (Verint S1801E) .....1,163.67	1,163.67	75.30
34 41 16 00-0112 EA 16-Port Video Encoder Featuring H.264 Technology (Verint S1816E) .....6,152.24	6,152.24	75.30
34 41 16 00-0113 EA Encoder H.264 Compact, Hiperfmc (Verint S1802E) .....1,493.96	1,493.96	75.30
34 41 16 00-0114 EA 110 Volt AC To 12 Volt DC At 45 Watt, Transformer (Verint PS1261) .....215.34	215.34	37.61
34 41 16 00-0115 EA 1-Channel Encoder, H.264 Dual-Streaming, SD Card Slot (Bosch VIP-X1XF-E) .....729.58	729.58	75.30
34 41 16 00-0116 EA Single/Quad-Stream Decoder (Bosch VIP-XD) .....1,851.48	1,851.48	75.30
34 41 16 00-0117 EA 1-Output, Outdoor-Rated CCTV Power Supply Unit, 24/26/28 Volt AC (Pelco WCS1-4) .....294.82	294.82	75.20
34 41 16 00-0118 EA 4-Outputs, Outdoor-Rated CCTV Power Supply With Circuit Breaker, 24/28 Volt AC (Pelco WCS4-20B) .....589.50	589.50	75.20
34 41 16 00-0119 EA 12.5KVA, 12 Volt, 75Ah, UPS Battery (UPG UB12750) .....285.10	285.10	18.83
34 41 16 00-0120 EA Managed Ethernet Switch with 4 10/100TX Ports + 4 100FX Fiber Ports (EtherWAN EX71440-B0B) .....3,575.61	3,575.61	150.42
34 41 16 00-0121 EA Power Supply, Hardened, External 100-240 Volt AC Input; TS2 rated; 12 Volt DC Output Power (EtherWAN 41-136046-1) .....233.93	233.93	37.61
34 41 16 00-0122 EA 4kVA / 3.6kW Split-Phase Power Module (Eaton 9PXMSPPM) .....3,220.04	3,220.04	75.20
34 41 16 00-0123 EA 30 Amperes, 600 Volt, 3-Pole, Fusible, NEMA 3R Rainproof, Safety Switch (Square D H361RB) .....1,064.38	1,064.38	195.54
34 41 16 00-0124 EA 30 Amperes, 600 Volt, LKS Fuse (Eaton Bussmann LKS-30) .....29.64	29.64	12.03
34 41 16 00-0125 EA 60 Amperes, 600 Volt, 3-Pole, Fusible, Heavy Duty, Safety Switch (Square D H362DS) .....2,668.56	2,668.56	150.42
34 41 16 00-0126 EA 60 Amperes, 600 Volt, Dual Element, Time-Delay Fuse (Eaton Bussmann FRS-R-60) .....60.00	60.00	12.03
34 41 16 00-0127 EA 50 Mbps, MIMO 2x2, 15 dBi Integrated Antenna (Proxim Wireless TSUNAMI QB-820) .....2,344.09	2,344.09	82.96



		<b>Transportation</b>	<b>34</b>	<b>34</b>
		<b>Transportation Signaling and Control Equipment</b>	<b>34 40</b>	
		<b>Roadway Signaling and Control Equipment</b>	<b>34 41</b>	

MINOR CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
34 41 16 00-0128	EA	Singlemode Loaded Fiber Adapter Panel, 6 Simplex SC/UPC Adapters (Multi-Link 10-4810).....	150.24	57.16
34 41 16 00-0129	EA	12" x 6" x 5-1/2", 2 Panel, 2 Splice Dual Security Door, Compact Wall Mount Fiber Distribution Unit (Multilink 10-4469).....	395.28	75.20
34 41 16 00-0130	EA	Single AC Inlet, 8 Nema 5-15 Outlets, Built-in AC Current Drawing Sensing Module (Synaccess NP-0801DT).....	657.59	19.58
34 41 16 00-0131	EA	Aggregated TRMS AC Current Sensing, One Readout For All Outlets (Synaccess NP-0801DT(H)).....	708.11	19.58
34 41 16 00-0132	EA	550 Watt, 120 Volt AC, Fan Heater With Adjustable Thermostat, 32-140 Degree Fahrenheit (Stego CR-027).....	384.12	30.08
34 41 16 00-0133	EA	10/100M Switch, 4 x 1G Combo, LAN Base (Cisco IE-4000-4TC4G-E).....	4,609.19	180.50
34 41 16 00-0134	EA	12 Port, 2 Panel, Wall Mount, Compact Fiber Distribution Unit (Multilink FWM012XLC).....	179.71	34.59
34 41 16 00-0135	EA	6-Fiber, Singlemode, SC Simplex, Fiber Optic Cable Connector Panel (Multilink MSC-06-SM-C-BLK).....	45.33	7.52
34 41 16 00-0136	EA	170 Watt AC To DC, Industrial Ethernet Family Power Supply (Cisco PWR-IE170W-PC-AC).....	1,443.56	75.20
34 41 16 00-0137	EA	12 Port, Industrial Ethernet Layer 3 Switch Installed In Transportation Control Equipment (Cisco IE-4000-4GC4GP4G-E).....	4,997.70	150.42
34 41 16 00-0138	EA	2 KVA, 1,800 Watt, 120 Volt AC Output, 120 Volt AC Input, Single Phase, On-Line Uninterruptible Power Supply (UPS) (Xtreme Power P90-3000).....	3,445.52	248.18
34 41 16 00-0139	EA	100 Amperes, 16 Circuit, Main Lug Load Center Panelboard, 8-1 AWG, 120/240 Volt, Single Phase (Square D QO816L100DS).....	946.00	430.19
34 41 16 00-0140	EA	70 Amperes, 4 Circuit, Main Lug Load Center Panelboard, 3 Wire, 120/240 Volt, Single Phase (Square D QO24L70S).....	659.93	300.83
34 41 16 00-0141	EA	60 Amperes, 120/240 Volt, 2 Pole Common Trip Miniature Circuit Breaker, Plug On Mounting (Square D QO260).....	129.10	40.61
34 41 16 00-0142	EA	15 Amperes, 120/240 Volt, 1 Pole Thermal Magnetic Miniature Circuit Breaker, Plug On Mounting (Square D QOT1515).....	96.10	27.08
34 41 16 00-0143	EA	15 Amperes, 120/240 Volt, 1 Pole Thermal Magnetic Miniature Circuit Breaker, Plug On Mounting (Square D QO120).....	78.03	27.08
34 41 16 00-0144	EA	20 Amperes, 120/240 Volt, 1 Pole Thermal Magnetic Miniature Circuit Breaker, Plug On Mounting (Square D QO120).....	78.03	27.08
34 41 16 00-0145	EA	One Output Outdoor-rated CCTV Power Supply Unit, 24/26/28 Volt AC At 4 Amperes Total Supply Current, Fuse Protected Output, UL Listed (Pelco WCS1-4).....	294.82	75.20
34 41 16 00-0146	EA	DIN Rail Mount, Switching Power Supply (TKH Security PSR12DC).....	322.88	37.66
34 41 16 00-0147	EA	H.264 Multi-codec Video Encoder With Audio, Data And CC's (TKH Security C-60-E-MC).....	2,897.73	37.66
34 41 16 00-0148	EA	Expansion Power Module For IE-3000-4TC And IE-3000-8TC (Cisco PWR-IE50W-AC-IEC).....	567.08	19.58
34 41 16 00-0149	EA	Traffic Monitoring System (BlueToad Spectra Cellular/Solar Version).....	11,613.67	248.89
34 41 16 00-0150	EA	Ubiquiti Rocket M9 Wireless Access Point (ROCKETM9).....	470.93	82.96

## 34 70 Transportation Construction and Equipment <sup>(34)</sup>

### 34 71 Roadway Construction <sup>(34 70)</sup>

#### 34 71 13 Vehicle Barriers <sup>(34 71)</sup>

##### 34 71 13 13 Vehicle Median Barriers <sup>(34 71 13)</sup>

##### 34 71 13 13-0001 Concrete Median Barrier <sup>(34 71 13 13)</sup>

34 71 13 13-0002	LF	Median Barrier, Precast, 42" High Single Face.....	101.03	3.91
34 71 13 13-0003	LF	Median Barrier, Precast, 32" High, 2' Wide Base, Double Face.....	121.49	3.91
34 71 13 13-0004	LF	Median Barrier, Precast, 42" High, 2' Wide Base, Double Face.....	143.65	3.91
34 71 13 13-0005	LF	Median Barrier, Cast In Place With Steel Forms.....	63.45	6.48
34 71 13 13-0006	LF	Median Barrier, Slipformed Concrete.....	53.51	3.23

##### 34 71 13 16 Vehicle Crash Barriers <sup>(34 71 13)</sup>

##### 34 71 13 16-0001 Impact Barrier (Reflective) <sup>(34 71 13 16)</sup>

##### 34 71 13 16-0002 Sand Barrel Impact Attenuator <sup>(34 71 13 16-0001)</sup>

Note: Includes containers, inserts, and lid. Excludes sand.

34 71 13 16-0003	EA	200, 400 Or 700 LB Sand Barrel.....	624.01	46.57
34 71 13 16-0004	EA	1400 LB Sand Barrel.....	580.94	54.68
34 71 13 16-0005	EA	2100 LB Sand Barrel.....	626.59	62.78

Note: Includes containers, inserts, and lid.

##### 34 71 13 16-0006 Sand For Sand Barrel Impact Attenuator <sup>(34 71 13 16-0001)</sup>

34 71 13 16-0007	LB	Sand for Sand Barrels.....	0.09	
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##### 34 71 13 26 Vehicle Guide Rails <sup>(34 71 13)</sup>

##### 34 71 13 26-0001 Mobilize Guide Rail Crew <sup>(34 71 13 26)</sup>

34 71 13 26-0002	EA	Mobilize Guide Rail Crew.....	1,186.74	
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Note: Excludes equipment mobilization.

##### 34 71 13 26-0003 Corrugated Beam Guide Rail <sup>(34 71 13 26)</sup>

##### 34 71 13 26-0004 Corrugated Beam Guide Railing <sup>(34 71 13 26-0003)</sup>

##### 34 71 13 26-0005 Corrugated Beam Guide Railing. Straight Sections <sup>(34 71 13 26-0004)</sup>

Note: Add additional length for back-up sections.

34 71 13 26-0006	LF	Corrugated Beam Guide Railing.....	17.98	2.12
34 71 13 26-0007	LF	Corrugated Beam Guide Railing (Rustic).....	19.41	2.12

**34 Transportation****34 70 Transportation Construction and Equipment****34 71 Roadway Construction**

MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
<b>34 71 13 26-0008 Corrugated Beam Guide Railing, Shop Curved</b> (34 71 13 26-0004) Note: Add additional length for back-up sections.		
34 71 13 26-0009 LF Shop Curved Corrugated Beam Guide Railing .....	23.59	2.12
34 71 13 26-0010 LF Shop Curved Corrugated Beam Guide Railing (Rustic) .....	25.56	2.12
34 71 13 26-0011 LF Shop Curved Corrugated Beam Guide Railing End .....	60.97	2.12
Note: Treatment for mall barriers driveways, walkways, special end, etc.		
34 71 13 26-0012 LF Shop Curved Corrugated Beam Guide Railing (Rustic) End .....	66.56	2.12
Note: Treatment for mall barriers shop curved corrugated beam guide railing end etc.		
<b>34 71 13 26-0013 Corrugated Beam Guide Railing, Manufactured End Sections</b> (34 71 13 26-0003)		
34 71 13 26-0014 EA Corrugated Beam Guide Railing End Section At Anchor Unit .....	134.00	27.98
34 71 13 26-0015 EA Corrugated Beam Guide Railing End Section (Rustic) At Anchor Unit .....	141.63	27.98
34 71 13 26-0016 EA Corrugated Beam Guide Railing Flared Or 180 Degree End Section .....	179.81	27.98
34 71 13 26-0017 EA Corrugated Beam Guide Railing Flared Or 180 Degree End Section (Rustic) .....	187.44	27.98
34 71 13 26-0018 EA Corrugated Beam Guide Railing 225 Degree End Section .....	179.81	27.98
34 71 13 26-0019 EA Corrugated Beam Guide Railing 225 Degree End Section (Rustic) .....	187.44	27.98
<b>34 71 13 26-0020 Corrugated Beam Guide Rail End Terminal Systems</b> (34 71 13 26-0003) Note: Excludes post. As manufactured and distributed by R. G. Steel Corp.		
34 71 13 26-0021 EA Regent Flared End Terminal Head With Bracket, Type B & C .....	4,616.74	170.31
34 71 13 26-0022 EA Flat Flared End Terminal Head With Bracket .....	3,853.32	27.98
34 71 13 26-0023 EA SKT 350 Tangent End Terminal Head With Bracket .....	4,616.74	170.31
34 71 13 26-0024 EA 12'-6" Corrugated Beam Pre-drilled #1 Panel .....	679.60	80.29
34 71 13 26-0025 EA Terminal Support System, Type SFT .....	919.66	214.67
34 71 13 26-0026 EA Terminal Support System, Type ET .....	4,588.83	607.56
34 71 13 26-0027 EA Terminal Support System, Type SRT .....	4,989.35	607.56
<b>34 71 13 26-0028 Corrugated Beam Guide Rail Posts</b> (34 71 13 26-0003) Note: Includes mounting hardware.		
34 71 13 26-0029 EA Standard Post For Corrugated Beam Guide Rail .....	142.51	15.27
For Installation Without Soil Plate, Deduct	-5.00	
For Installation In Rock, Add	4.07	
34 71 13 26-0030 EA Standard Post For (Rustic) Corrugated Beam Guide Rail .....	150.14	15.27
For Installation Without Soil Plate, Deduct	-5.00	
For Installation In Rock, Add	4.07	
34 71 13 26-0031 EA Extra Long Post For Corrugated Beam Guide Rail .....	157.78	15.27
For Installation Without Soil Plate, Deduct	-5.00	
For Installation In Rock, Add	4.07	
34 71 13 26-0032 EA Extra Long Post (Rustic) for Corrugated Beam Guide Rail .....	165.41	15.27
For Installation Without Soil Plate, Deduct	-5.00	
For Installation In Rock, Add	4.07	
34 71 13 26-0033 EA 6B8-1/2" or Mall Barrier Post for Corrugated Beam Guide Rail .....	142.51	15.27
For Installation Without Soil Plate, Deduct	-5.00	
For Installation In Rock, Add	4.07	
34 71 13 26-0034 EA Post Struts for Corrugated Beam Guide Rail Mall Barrier Post .....	203.58	15.27
For Installation In Rock, Add	4.07	
<b>34 71 13 26-0035 Heavy Post Blocked Out Corrugated Beam Guide Rail Posts</b> (34 71 13 26-0003) Note: Includes mounting hardware. Excludes triangular mounting brackets.		
34 71 13 26-0036 EA Standard Post For Heavy Post Blocked Out Corrugated Beam Guide .....	142.51	15.27
34 71 13 26-0037 EA Standard Rustic Post For Heavy Post Blocked Out Corrugated Beam Guide .....	150.14	15.27
34 71 13 26-0038 EA Extra Long Post for Heavy Post Blocked Out Corrugated Beam Guide .....	157.78	15.27
34 71 13 26-0039 EA Extra Long Post (Rustic) For heavy post blocked out corrugated beam guide rail .....	165.41	15.27
Note: For heavy post blocked out corrugated beam guide (rustic)		
34 71 13 26-0040 EA Type A Post 1630mm Post .....	138.69	15.27
Note: For heavy post blocked out corrugated beam guide rail		
34 71 13 26-0041 EA Type A Post 1630mm Post (Rustic) .....	146.32	15.27
Note: For heavy post blocked out corrugated beam guide rail		
34 71 13 26-0042 EA Type B Post 1460mm .....	131.06	15.27
Note: For heavy post blocked out corrugated beam guide rail		
34 71 13 26-0043 EA Type B Post 1460mm (Rustic) .....	138.69	15.27
Note: For heavy post blocked out corrugated beam guide rail		
34 71 13 26-0044 EA Type C Post 1290mm .....	123.42	15.27
Note: For heavy post blocked out corrugated beam guide rail		
34 71 13 26-0045 EA Type C Post 1290mm (Rustic) .....	131.06	15.27
Note: For heavy post blocked out corrugated beam guide rail		
34 71 13 26-0046 EA Breakaway Wood Or Steel Post In Steel Foundation Tube .....	525.44	15.27
34 71 13 26-0047 EA Wood, Metal, Plastic Or Composite Offset Block Or Beam .....	58.53	15.27
Note: For heavy post blocked out corrugated beam guide rail.		
<b>34 71 13 26-0048 Corrugated Beam Guide Rail Accessories</b> (34 71 13 26-0003)		
34 71 13 26-0049 EA Triangular Mounting Brackets (Galvanized Or Rustic) For All Post Types A, B And C .....	118.73	31.79



Transportation			34	34
Transportation Construction and Equipment			34 70	
Roadway Construction			34 71	

MINOR CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
34 71 13 26-0050		Corrugated Beam Guide Rail Repair for Existing Guide Rail (34 71 13 26-0003) Note: Includes associated hardware.		
34 71 13 26-0051	LF	Removal And Storage Of Corrugated Beam Guide Railing And Post.....	12.42	
34 71 13 26-0052	EA	Install Stored Post For Corrugated Beam Guide Rail .....	42.39	
34 71 13 26-0053	LF	Install Stored Corrugated Beam Guide Railing And Post.....	7.21	
34 71 13 26-0054		Corrugated Thrie Beam Guide Railing (34 71 13 26-0003)		
34 71 13 26-0055		Corrugated Thrie Beam Guide Railing. Straight Sections (34 71 13 26-0054) Note: Add additional length for back-up sections.		
34 71 13 26-0056	LF	Corrugated Thrie Beam Guide Railing.....	42.54	2.67
34 71 13 26-0057	LF	Corrugated Thrie Beam Guide Railing (Rustic).....	44.86	2.67
34 71 13 26-0058		Corrugated Thrie Beam Guide Railing. Shop Curved (34 71 13 26-0054) Note: Add additional length for back-up sections.		
34 71 13 26-0059	LF	Shop Curved Corrugated Thrie Beam Guide Railing.....	51.84	2.67
34 71 13 26-0060	LF	Shop Curved Corrugated Thrie Beam Guide Railing (Rustic).....	54.17	2.67
34 71 13 26-0061		Corrugated Thrie Beam Guide Rail Posts (34 71 13 26-0054) Note: Includes hardware for mounting.		
34 71 13 26-0062	EA	Standard Post For Corrugated Thrie Beam Guide Rail.....	171.51	2.67
		For Installation Without Soil Plate, Deduct	-5.00	
		For 32" Soil Plate, Add	7.00	
34 71 13 26-0063	EA	Standard Post (Rustic) For Corrugated Thrie Beam Guide Rail .....	179.15	2.67
		For Installation Without Soil Plate, Deduct	-5.00	
		For 32" Soil Plate, Add	7.00	
34 71 13 26-0064		Timber Guide Rails (34 71 13 26) Note: Includes drilling and fasteners. Excludes excavation, auguring and concrete.		
34 71 13 26-0065		Timber Guide Rail Posts (34 71 13 26-0064)		
34 71 13 26-0066	EA	6" x 8" Timber Guide Rail Post .....	107.64	10.59
34 71 13 26-0067	EA	6" x 9" Timber Guide Rail Post .....	123.28	10.59
34 71 13 26-0068	EA	10" x 10" Timber Guide Rail Post .....	245.86	10.59
34 71 13 26-0069	EA	10" x 12" Timber Guide Rail Post .....	260.48	10.59
34 71 13 26-0070	EA	12" x 12" Timber Guide Rail Post .....	302.15	10.59
34 71 13 26-0071		Timber Guide Rails (34 71 13 26-0064) Note: Excludes posts, spacer blocks and steel backup plates.		
34 71 13 26-0072	LF	4" x 9" Timber Guide Rail.....	13.37	1.28
34 71 13 26-0073	LF	6" x 10" Timber Guide Rail.....	19.01	1.28
34 71 13 26-0074	LF	6" x 12" Timber Guide Rail.....	22.30	1.28
34 71 13 26-0075		Spacer Blocks For Timber Guide Rails (34 71 13 26-0064)		
34 71 13 26-0076	EA	4" x 9" Spacer Block For Timber Guide Rails .....	17.40	1.70
34 71 13 26-0077	EA	6" x 8" Spacer Block For Timber Guide Rails .....	20.10	1.70
34 71 13 26-0078	EA	8" x 8" Spacer Block For Timber Guide Rails .....	23.54	1.70
34 71 13 26-0079		Weathering Steel Backup Plates For Timber Guide Rails (34 71 13 26-0064)		
34 71 13 26-0080	LF	6" High, Weathering Steel Backup Plate For Timber Guide Rails.....	24.67	1.06
34 71 13 26-0081		Weathering Steel Splice And Bearing Plates For Timber Guide Rails (34 71 13 26-0064)		
34 71 13 26-0082	EA	Weathering Steel Splice Plate For Timber Guide Rails .....	169.02	14.83
34 71 13 26-0083	EA	Weathering Steel Bearing Termination Plate For Timber Guide Rails.....	105.56	10.59
34 71 13 26-0084		Cable Guide Rail (34 71 13 26)		
34 71 13 26-0085		Cable Guide Rail (34 71 13 26-0084)		
34 71 13 26-0086	LF	Cable (Each Cable) .....	9.57	2.29
		Note: Includes tensioning. Excludes splices.		
34 71 13 26-0087	EA	Cable Splice With Wedges .....	250.22	15.90
34 71 13 26-0088		Cable Guide Rail Posts (34 71 13 26-0084) Note: Includes hardware for cable mounting.		
34 71 13 26-0089	EA	Standard Post for Cable Guide Rail.....	182.38	50.90
		For Installation Without Soil Plate, Deduct	-5.00	
		For Installation In Rock, Add	13.57	
34 71 13 26-0090	EA	Standard Post (Rustic) for Cable Guide Rail.....	190.02	50.90
		For Installation Without Soil Plate, Deduct	-5.00	
		For Installation In Rock, Add	13.57	

<b>34</b>	<b>Transportation</b>
<b>34 70</b>	<b>Transportation Construction and Equipment</b>
<b>34 71</b>	<b>Roadway Construction</b>



MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
34 71 13 26-0091 EA Extra Long Post for Cable Guide Rail ..... For Installation Without Soil Plate, Deduct ..... For Installation In Rock, Add ..... 34 71 13 26-0092 EA Extra Long Post (Rustic) for Cable Guide Rail ..... For Installation Without Soil Plate, Deduct ..... For Installation In Rock, Add ..... 34 71 13 26-0093 EA Slip Impact Post Top for Anchor Unit ..... 34 71 13 26-0094 EA Slip Impact Post Base and Keeper Plate ..... Note: For anchor unit.	190.02 -5.00 13.57 197.65 -5.00 13.57 118.76 309.62	50.90   50.90   20.36 20.36
<b>34 71 13 26-0095 Cable Guide Rail Accessories For Breakaway Anchor Angle Systems (34 71 13 26-0094)</b>		
34 71 13 26-0096 EA Turnbuckle Cable End Assembly For Use With Breakaway Anchors ..... 34 71 13 26-0097 EA Turnbuckle Cable End Assembly ..... 34 71 13 26-0098 EA Spring Cable End Assembly (Compensating Device) For Use With Breakaway Anchors ..... 34 71 13 26-0099 EA Spring Cable End Assembly (Compensating Device) Without Turnbuckle ..... 34 71 13 26-0100 EA Breakaway Anchor Angle ..... 34 71 13 26-0101 EA Standard End Post Cap Assembly ..... 34 71 13 26-0102 EA Driveway End Post Cap Assembly ..... 34 71 13 26-0103 EA End Post Ground Support Plates ..... 34 71 13 26-0104 EA 11" Stud Bolt, Cable Guide Rail ..... 34 71 13 26-0105 EA 18" Stud Bolt, Cable Guide Rail ..... 34 71 13 26-0106 EA 25" Stud Bolt, Cable Guide Rail ..... 34 71 13 26-0107 EA 1-1/4" Diameter Turnbuckle, Cable Guide Rail ..... 34 71 13 26-0108 EA 1-1/2" Diameter Turnbuckle, Cable Guide Rail ..... 34 71 13 26-0109 EA 5/8" Diameter Turnbuckle With 12" Take-up And Shackle Ends, Cable Guide Rail ..... 34 71 13 26-0110 EA 5/8" Eye Bolt 18" Long, Cable Guide Rail ..... 34 71 13 26-0111 EA 3/4" Eye Bolt 8'-6" Long, Cable Guide Rail ..... 34 71 13 26-0112 EA 1-5/8" Anchor Rod 10' Long With Plate, Cable Guide Rail .....	542.68 166.84 541.42 556.69 212.65 98.64 83.37 45.20 39.48 47.11 54.74 472.21 502.75 334.80 205.52 212.65 227.31	212.35 10.61 5.28 5.28 10.61 5.28 5.28 5.28 5.28 5.28 5.28 10.61 10.61 10.61 5.28 10.61 15.90
<b>34 71 13 26-0113 Cable Guide Rail Accessories For Slip Impact Post Systems (34 71 13 26-0084)</b>		
34 71 13 26-0114 EA Turnbuckle Cable End Assembly ..... Note: For use with slip impact post. 34 71 13 26-0115 EA Spring Cable End Assembly (Compensating Device) ..... Note: For use with slip impact post. 34 71 13 26-0116 EA Anchor Angle For Slip Impact Post System ..... 34 71 13 26-0117 EA Cable End Assembly Rod ..... Note: Includes cable end, threaded rod and keeper to anchor angle.	381.48  747.92  221.16 182.99	17.00  17.00  17.00 17.00
<b>34 71 13 26-0118 Cable Guide Rail Repair For Existing Guide Rail (34 71 13 26-0084)</b>		
Note: Includes associated hardware. 34 71 13 26-0119 LF Retention Existing Cable (Each Cable) ..... 34 71 13 26-0120 LF Removal And Storage Of Cable Guide Railing ..... 34 71 13 26-0121 EA Install Stored Post For Cable Guide Railing ..... 34 71 13 26-0122 LF Install Stored Cable, (Each Cable) ..... Note: Includes retensioning. Excludes splices.	1.41 8.54 67.87 3.77	
<b>34 71 13 26-0123 6" x 6" Box Beam Guide Rail (34 71 13 26)</b>		
<b>34 71 13 26-0124 Box Beam Guide Rail, 6" x 6" (34 71 13 26-0123)</b>		
<b>34 71 13 26-0125 Straight Sections, Box Beam Guide Rail (34 71 13 26-0124)</b>		
34 71 13 26-0126 LF Box Beam Guide Railing 6" x 6" x 3/16" Galvanized ..... Note: Excludes splices. For Flush Mounting Directly To Structure, Add ..... 34 71 13 26-0127 LF Box Beam Guide Railing 6" x 6" x 3/16" (Rustic) ..... Note: Excludes splices. For Flush Mounting Directly To Structure, Add .....	51.26  1.83 58.24  1.83	2.67   2.67  
<b>34 71 13 26-0128 Shop Curved, Box Beam Guide Rail (34 71 13 26-0124)</b>		
34 71 13 26-0129 LF Shop Curved Box Beam Guide Railing 6" x 6" x 3/16" Galvanized ..... Note: Excludes splices. For Shop Curved At <20' Radius, Add ..... For Flush Mounting Directly To Structure, Add ..... 34 71 13 26-0130 LF Shop Curved Box Beam Guide Railing 6" x 6" x 3/16" (Rustic) ..... Note: Excludes splices. For Shop Curved At <20' Radius, Add ..... For Flush Mounting Directly To Structure, Add .....	78.02  2.44 1.83 85.00  2.44 1.83	2.67   2.67  
<b>34 71 13 26-0131 Box Beam Guide Rail End Treatment Sections (34 71 13 26-0123)</b>		
Note: Includes rail, end cover plate and hardware only. Excludes posts and splice. 34 71 13 26-0132 EA Box Beam End Piece Guide Railing Section ..... Note: Galvanized excludes splices. 34 71 13 26-0133 EA Box Beam End Piece Guide Railing Section (Rustic) ..... Note: Excludes splices. 34 71 13 26-0134 EA Box Beam Guide Railing End Treatment Section At Driveway, Galvanized ..... Note: Excludes splices.	805.81  889.79  760.00	31.79  31.79  31.79



		<b>Transportation</b>	<b>34</b>	<b>34</b>
		<b>Transportation Construction and Equipment</b>	<b>34 70</b>	
		<b>Roadway Construction</b>	<b>34 71</b>	

MINOR CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
34 71 13 26-0135	EA	Box Beam Guide Railing End Treatment Section At Driveway, (Rustic)..... Note: Excludes splices.	790.54	31.79
34 71 13 26-0136		<b>Splices For Box Beam Guide Rail</b> (34 71 13 26-0123)		
34 71 13 26-0137	EA	Splice For Box Beam Guide Rail .....	208.88	47.19
34 71 13 26-0138	EA	Splice For Box Beam Guide Rail (Rustic).....	262.32	47.19
34 71 13 26-0139		<b>Box Beam Guide Rail Posts</b> (34 71 13 26-0123) Note: Includes hardware for box beam mounting.		
34 71 13 26-0140	EA	Standard Post For Box Beam Guide Rail .....	190.02	50.90
		For Installation Without Soil Plate, Deduct	-5.00	
		For Installation In Rock, Add	13.57	
34 71 13 26-0141	EA	Standard Post (Rustic) for Box Beam Guide Railing.....	197.65	50.90
		For Installation Without Soil Plate, Deduct	-5.00	
		For Installation In Rock, Add	13.57	
34 71 13 26-0142	EA	Extra Long Post For Box Beam Guide Rail.....	205.29	50.90
		For Installation Without Soil Plate, Deduct	-5.00	
		For Installation In Rock, Add	13.57	
34 71 13 26-0143	EA	Extra Long Post (Rustic) For Box Beam Guide Rail .....	212.92	50.90
		For Installation Without Soil Plate, Deduct	-5.00	
		For Installation In Rock, Add	13.57	
34 71 13 26-0144	EA	Type I End Assembly Post.....	182.38	50.90
		For Installation Without Soil Plate, Deduct	-5.00	
		For Installation In Rock, Add	13.57	
34 71 13 26-0145	EA	Type I End Assembly Post (Rustic) .....	190.02	50.90
		For Installation Without Soil Plate, Deduct	-5.00	
		For Installation In Rock, Add	13.57	
34 71 13 26-0146	EA	Type II End Assembly Post.....	174.75	50.90
		For Installation Without Soil Plate, Deduct	-5.00	
		For Installation In Rock, Add	13.57	
34 71 13 26-0147	EA	Type II End Assembly Post (Rustic) .....	182.38	50.90
		For Installation Without Soil Plate, Deduct	-5.00	
		For Installation In Rock, Add	13.57	
34 71 13 26-0148		<b>Box Beam Guide Rail Accessories</b> (34 71 13 26-0123)		
34 71 13 26-0149	EA	Box Beam Guide Rail End Cover Plate .....	104.32	9.54
34 71 13 26-0150	EA	Box Beam Guide Rail End Cover Plate (Rustic) .....	111.95	9.54
34 71 13 26-0151		<b>Box Beam Guide Railing Repair, And Resetting</b> (34 71 13 26-0123) Note: For existing guide rail.		
34 71 13 26-0152	LF	Removal And Storage Of Box Beam Guide Rail And Post .....	4.18	
34 71 13 26-0153	LF	Reset Box Beam Guide Rail .....	12.22	
34 71 13 26-0154		<b>6" x 8" Box Beam Median Barrier</b> (34 71 13 26)		
34 71 13 26-0155		<b>Box Beam Median Barrier, 6" x 8"</b> (34 71 13 26-0154)		
34 71 13 26-0156		<b>Straight Sections, Box Beam Median Barrier</b> (34 71 13 26-0155)		
34 71 13 26-0157	LF	Box Beam Median Barrier Galvanized Excludes Splices.....	86.01	9.54
		For Flush Mounting Directly To Structure, Add	1.83	
34 71 13 26-0158	LF	Box Beam Median Barrier (Rustic) Excludes Splices .....	92.99	9.54
		For Flush Mounting Directly To Structure, Add	1.83	
34 71 13 26-0159		<b>Shop Curved, Box Beam Median Barrier</b> (34 71 13 26-0155)		
34 71 13 26-0160	LF	Shop Curved Box Beam Median Barrier Galvanized.....	104.35	9.54
		Note: Excludes splices.		
		For Shop Curved At <20' Radius, Add	2.44	
		For Flush Mounting Directly To Structure, Add	1.83	
34 71 13 26-0161	LF	Shop Curved Box Beam Median Barrier Rustic .....	127.26	9.54
		Note: Excludes splices.		
		For Shop Curved At <20' Radius, Add	2.44	
		For Flush Mounting Directly To Structure, Add	1.83	
34 71 13 26-0162		<b>Box Beam Median Barrier End Treatment Sections</b> (34 71 13 26-0154) Note: Includes rail, end cover plate and hardware. Excludes posts.		
34 71 13 26-0163	EA	Box Beam Median Barrier Type A End Treatment Section, Galvanized.....	2,630.38	31.79
		Note: Excludes splices and post.		
34 71 13 26-0164	EA	Box Beam Median Barrier Type A End Treatment Section (Rustic).....	2,691.46	31.79
		Note: Excludes splices and post.		
34 71 13 26-0165	EA	Box Beam Median Barrier Type B End Treatment Section, Galvanized.....	2,630.38	31.79
		Note: Excludes splices and post.		
34 71 13 26-0166	EA	Box Beam Median Barrier Type B End Treatment Section (Rustic).....	2,691.46	31.79
		Note: Excludes splices and post.		
34 71 13 26-0167		<b>Splices For Box Beam Median Barrier</b> (34 71 13 26-0154)		

**34 Transportation****34 70 Transportation Construction and Equipment****34 71 Roadway Construction**

MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
34 71 13 26-0168 EA Splice for Box Beam Median Barrier.....	201.86	25.43
34 71 13 26-0169 EA Splice for Box Beam Median Barrier (Rustic).....	316.38	25.43
<b>34 71 13 26-0170 Box Beam Median Barrier Posts Driven With Soil Plate</b> (34 71 13 26-0154) Note: Includes all associated hardware.		
34 71 13 26-0171 EA Standard Post for Box Beam Median Barrier .....	190.02	50.90
For Installation Without Soil Plate, Deduct	-5.00	
For Installation In Rock, Add	13.57	
34 71 13 26-0172 EA Standard Post (Rustic) for Box Beam Median Barrier.....	197.65	50.90
For Installation Without Soil Plate, Deduct	-5.00	
For Installation In Rock, Add	13.57	
34 71 13 26-0173 EA Extra Long Post for Box Beam Median Barrier .....	205.29	50.90
For Installation Without Soil Plate, Deduct	-5.00	
For Installation In Rock, Add	13.57	
34 71 13 26-0174 EA Extra Long Post (Rustic) for Box Beam Median Barrier .....	212.92	50.90
For Installation Without Soil Plate, Deduct	-5.00	
For Installation In Rock, Add	13.57	
34 71 13 26-0175 EA Type B End Treatment or Rub Back Anchor Post for Box Beam.....	174.75	50.90
Note: For median barrier.		
For Installation Without Soil Plate, Deduct	-5.00	
For Installation In Rock, Add	13.57	
34 71 13 26-0176 EA Type B End Treatment or Rub Back Anchor Post (Rustic) .....	174.75	50.90
Note: For box beam median barrier.		
For Installation Without Soil Plate, Deduct	-5.00	
For Installation In Rock, Add	13.57	
34 71 13 26-0177 EA Type I End Assembly Post for Box Beam Median Barrier to Concrete .....	205.29	50.90
Note: For median barrier transition.		
For Installation Without Soil Plate, Deduct	-5.00	
For Installation In Rock, Add	13.57	
34 71 13 26-0178 EA Type I End Assembly Post (Rustic) for Box Beam Median Barrier.....	212.92	50.90
Note: For Concrete median barrier transition.		
For Installation Without Soil Plate, Deduct	-5.00	
For Installation In Rock, Add	13.57	
<b>34 71 13 26-0179 Box Beam Median Barrier Accessories</b> (34 71 13 26-0154)		
34 71 13 26-0180 EA Box Beam Median Barrier End Cover Plate.....	129.34	22.38
34 71 13 26-0181 EA Box Beam Median Barrier End Cover Plate (Rustic).....	136.97	22.38
<b>34 71 13 26-0182 Box Beam Median Barrier Repair, And Resetting</b> (34 71 13 26-0154) Note: For existing guide rail.		
34 71 13 26-0183 LF Removal And Storage Of Box Beam Median Barrier and Posts .....	4.33	
34 71 13 26-0184 LF Reset Box Beam Median Barrier.....	12.80	
<b>34 71 13 26-0185 Universal Guide Rail Items</b> (34 71 13 26)		
<b>34 71 13 26-0186 Guide Rail Concrete Anchor Units For All Types Of Guide Rail</b> (34 71 13 26-0185) Note: For cast in place or precast. Includes excavation, formwork, concrete, reinforcement, anchor rods and/or imbedded plate. Excludes anchor angle. For anchor angles and other terminal connections, use accessories section for respective guide rail type.		
34 71 13 26-0187 CY Guide Rail Concrete Anchor Unit.....	745.76	
For Each Additional Set Of Anchor Rods, Add	38.00	
34 71 13 26-0188 EA Reset Existing Anchorage Unit for All Types of Guide Rail.....	486.09	
Note: Includes excavation and backfill.		
34 71 13 26-0189 EA Removal Of Guide Rail Concrete Anchor Unit.....	554.56	
<b>34 71 13 26-0190 Guide Rail Repair For All Types Of Existing Guide Rail</b> (34 71 13 26-0185) Note: Includes associated hardware.		
34 71 13 26-0191 EA Straighten And Reset Driven Post For Guide Rail .....	67.87	
34 71 13 26-0192 EA Straighten And Reset Post Mounted On Concrete For Guide Rail.....	78.86	
Note: With base plate for guide rail. Includes new anchor bolts.		
<b>34 71 13 26-0193 Additional Wood and Steel Posts</b> (34 71 13 26-0185)		
34 71 13 26-0194 LF 4" x 6" Wood Post .....	58.93	17.00
For Installation In Rock, Add	4.53	
34 71 13 26-0195 LF 6" x 8" Wood Post .....	70.38	17.00
For Installation In Rock, Add	4.53	
34 71 13 26-0196 LF 6" x 7/8" Galvanized Steel Post .....	44.30	17.00
For Installation In Rock, Add	4.53	
34 71 13 26-0197 EA Base Plate With Anchor Bolts For Mounting Post On Concrete.....	409.21	17.00
<b>34 71 13 26-0198 Accessories For All Types of Guide Rail</b> (34 71 13 26-0185)		
34 71 13 26-0199 EA Reflector For Guard Rail .....	49.37	
<b>34 71 13 26-0200 Resilient Guard Fence And Light Shield</b> (34 71 13 26)		
34 71 13 26-0201 LF Resilient Guard Fence And Light Shield, Up To 6' High .....	81.88	6.49





		<b>Transportation</b>	<b>34</b>	<b>34</b>
		<b>Transportation Construction and Equipment</b>	<b>34 70</b>	
		<b>Roadway Construction</b>	<b>34 71</b>	

MINOR CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
34 71 13 26-0202		<b>Individual Concrete Guard Rail Posts</b> (34 71 13 26)		
34 71 13 26-0203	EA	6'-5" Concrete Guard Rail Posts, Round.....	126.83	6.49
34 71 13 26-0204	EA	6'-5" Concrete Posts, Square.....	141.49	7.29
34 71 13 26-0205	EA	6'-5" Concrete Posts, Triangular.....	137.11	7.29
34 71 13 26-0206		<b>Guide Rail Transitions</b> (34 71 13 26)		
34 71 13 26-0207		<b>Transition Box Beam Guide Rail To Corrugated Beam</b> (34 71 13 26-0206)		
		Note: Use cable guide rail section for cable, anchor angle and cable end assembly.		
34 71 13 26-0208	EA	Box Beam To Corrugated Beam Rail Bolted Section.....	741.17	
34 71 13 26-0209	EA	Box Beam To Corrugated Beam Rail Bolted Plate .....	435.80	
		Note: For making cable connections.		
34 71 13 26-0210		<b>Transition Box Beam Median Barrier To Corrugated Beam Median</b> (34 71 13 26-0206)		
		Note: Use cable guide rail section for anchor angle and cable end assembly.		
34 71 13 26-0211	EA	Box Beam Median Barrier To Corrugated Beam Bolted Section .....	756.44	
34 71 13 26-0212	EA	Box Beam Median Barrier To Corrugated Beam Harness Plate .....	435.80	
		Note: For making cable connections.		
34 71 13 26-0213		<b>Transition Box Beam Guide Rail To Cable Guide Rail</b> (34 71 13 26-0206)		
		Note: Use cable guide rail section for cable, anchor angle and end connections at anchor unit.		
34 71 13 26-0214	EA	Box Beam to Cable Guide Rail U-bolt And Plate .....	104.65	16.95
34 71 13 26-0215		<b>Transition Box Beam Median Barrier To Concrete Median Barrier</b> (34 71 13 26-0206)		
		Note: For end treatment sections for rub rail turnback, use box beam guide rail end treatments.		
34 71 13 26-0216	EA	Box Beam Median Barrier To Concrete Barrier End Connection.....	1,046.54	
34 71 13 26-0217		<b>Transition Thrie Beam To Concrete Median Barrier</b> (34 71 13 26-0206)		
34 71 13 26-0218	EA	Thrie Beam Terminal Connector At Concrete Median Barrier.....	664.83	
34 71 13 26-0219	EA	Thrie Beam Transition Section To Corrugated Beam Guide Rail.....	855.68	
34 71 16		<b>Impact Attenuating Devices</b> (34 71)		
34 71 16 00-0001		<b>Guard Rail Energy Absorbing Terminals</b> (34 71 16)		
		Note: Crushable foam cartridges surrounded by steel guardrail for narrow hazards. QuadGuard System as manufactured by Energy Absorption Systems, Inc.		
34 71 16 00-0002		<b>24" Wide Guard Rail Energy Absorbing Terminals</b> (34 71 16 00-0001)		
34 71 16 00-0003	EA	24" Wide, 3 Cartridge Bays, Energy Absorbing Crash Attenuator .....	33,679.31	3,388.47
34 71 16 00-0004	EA	24" Wide, 5 Cartridge Bays Energy Absorbing Crash Attenuator .....	46,779.98	4,517.97
34 71 16 00-0005	EA	24" Wide, 7 Cartridge Bays Energy Absorbing Crash Attenuator .....	63,851.02	5,929.83
34 71 16 00-0006	EA	24" Wide, 9 Cartridge Bays Energy Absorbing Crash Attenuator .....	70,948.43	7,341.70
34 71 16 00-0007		<b>30" Wide Guard Rail Energy Absorbing Terminals</b> (34 71 16 00-0001)		
34 71 16 00-0008	EA	30" Wide, 3 Cartridge Bays, Energy Absorbing Crash Attenuator .....	36,261.10	3,812.04
34 71 16 00-0009	EA	30" Wide, 5 Cartridge Bays, Energy Absorbing Crash Attenuator .....	50,518.97	5,082.72
34 71 16 00-0010	EA	30" Wide, 7 Cartridge Bays, Energy Absorbing Crash Attenuator .....	69,340.74	6,776.95
34 71 16 00-0011	EA	30" Wide, 9 Cartridge Bays, Energy Absorbing Crash Attenuator .....	79,398.80	8,188.82
34 71 16 00-0012		<b>36" Wide Guard Rail Energy Absorbing Terminals</b> (34 71 16 00-0001)		
34 71 16 00-0013	EA	36" Wide, 3 Cartridge Bays, Energy Absorbing Crash Attenuator .....	38,872.80	4,235.59
34 71 16 00-0014	EA	36" Wide, 5 Cartridge Bays, Energy Absorbing Crash Attenuator .....	54,287.15	5,647.46
34 71 16 00-0015	EA	36" Wide, 7 Cartridge Bays, Energy Absorbing Crash Attenuator .....	74,237.41	7,482.88
34 71 16 00-0016	EA	36" Wide, 9 Cartridge Bays, Energy Absorbing Crash Attenuator .....	87,818.35	9,035.93
34 71 16 00-0017		<b>69" Wide Guard Rail Energy Absorbing Terminals</b> (34 71 16 00-0001)		
34 71 16 00-0018	EA	69" Wide, 3 Cartridge Bays, Energy Absorbing Crash Attenuator .....	42,091.77	4,659.15
34 71 16 00-0019	EA	69" Wide, 5 Cartridge Bays, Energy Absorbing Crash Attenuator .....	58,292.04	6,212.20
34 71 16 00-0020	EA	69" Wide, 7 Cartridge Bays, Energy Absorbing Crash Attenuator .....	80,079.50	8,188.82
34 71 16 00-0021	EA	69" Wide, 9 Cartridge Bays, Energy Absorbing Crash Attenuator .....	94,283.32	9,883.05
34 71 16 00-0022		<b>90" Wide Guard Rail Energy Absorbing Terminals</b> (34 71 16 00-0001)		
34 71 16 00-0023	EA	90" Wide, 3 Cartridge Bays, Energy Absorbing Crash Attenuator .....	45,398.86	5,082.72
34 71 16 00-0024	EA	90" Wide, 5 Cartridge Bays, Energy Absorbing Crash Attenuator .....	62,400.48	6,776.95
34 71 16 00-0025	EA	90" Wide, 7 Cartridge Bays, Energy Absorbing Crash Attenuator .....	86,693.70	9,035.93
34 71 16 00-0026	EA	90" Wide, 9 Cartridge Bays, Energy Absorbing Crash Attenuator .....	100,930.12	10,730.16
34 71 19		<b>Vehicle Delineators</b> (34 71)		

**34 Transportation****34 70 Transportation Construction and Equipment****34 71 Roadway Construction**

MINOR  
CSI UOM DESCRIPTION

TOTAL DIRECT DEMOLITION  
UNIT COST UNIT COST

**34 71 19 16 Flexible Vehicle Delineators (34 71 19)**

34 71 19 16-0001	EA	2' High, 3" Diameter Flexible Fixed Stanchion Delineator.....	88.42	8.10
34 71 19 16-0002	EA	3' High, 3" Diameter Flexible Fixed Stanchion Delineator.....	89.71	8.10
34 71 19 16-0003	EA	3-1/2' High, 3" Diameter Flexible Fixed Stanchion Delineator.....	90.99	8.10
34 71 19 16-0004	EA	4' High, 3" Diameter Flexible Fixed Stanchion Delineator.....	92.28	8.10

**34 80 Bridges (34)****34 82 Bridge Specialties (34 80)****34 82 23 Bridge Railing (34 82)****34 82 23 00-0001 Metal Bridge Railing (34 82 23)**

Note: Includes hardware for bridge rail mounting.

34 82 23 00-0002	LF	2" x 2" x 1/8" Bridge Railing .....	39.67	3.67
34 82 23 00-0003	LF	3" x 3" x 5/16" Bridge Railing .....	68.44	5.72
34 82 23 00-0004	LF	5" x 3" x 1/4" Bridge Railing .....	87.76	8.38
34 82 23 00-0005	LF	6" x 6" x 3/16" Bridge Railing .....	116.23	10.55
34 82 23 00-0006	LF	5" Outside Diameter x 1/4" Bridge Railing .....	93.61	8.14

**34 82 23 00-0007 Bridge Post (34 82 23)**

Note: Includes hardware for bridge post mounting.

34 82 23 00-0008	EA	6" x 9" x 5'-6" Bridge Post .....	156.41	45.09
34 82 23 00-0009	EA	6" x 9" x 7' Bridge Post .....	194.90	47.92
34 82 23 00-0010	EA	Two Rail With Base Plate Bridge Post Assembly.....	450.07	84.56
34 82 23 00-0011	EA	Two Rail With Curb Bridge Post Assembly .....	553.25	90.19
34 82 23 00-0012	EA	Two Rail (Curbless) Bridge Post Assembly .....	504.50	90.19
34 82 23 00-0013	EA	Two Rail With Optional Handrail Bridge Post Assembly .....	608.28	90.19
34 82 23 00-0014	EA	Four Rail (Curbless) With Base Plate Bridge Post .....	518.87	95.83
34 82 23 00-0015	EA	Four Rail With Base Plate (Sidewalk Type) Bridge Post .....	519.01	95.83
34 82 23 00-0016	EA	Four Rail With Curb Bridge Post Assembly .....	779.85	95.83
34 82 23 00-0017	EA	Four Rail (Curbless) Bridge Post Assembly .....	801.05	95.83
34 82 23 00-0018	EA	Five Rail With Base Plate (Curbless) Bridge Post Assembly .....	577.40	101.47

**34 82 23 00-0019 Bridge Railing Splices (34 82 23)**

Note: Includes hardware for splices.

34 82 23 00-0020	EA	5" Outside Diameter Bridge Railing Splice.....	239.86	21.62
34 82 23 00-0021	EA	5" x 3" Bridge Railing Splice.....	142.14	18.92
34 82 23 00-0022	EA	3" x 3" Bridge Railing Splice.....	87.31	13.51
34 82 23 00-0023	EA	2" x 2" Bridge Railing Splice.....	44.22	9.73
34 82 23 00-0024	EA	5" x 5" x 3' Expansion Splice Tube.....	181.75	20.90
34 82 23 00-0025	EA	4" x 2" x 3' Expansion Splice Bar .....	193.66	20.90
34 82 23 00-0026	EA	5" x 5" x 2' Fixed Splice Tube .....	166.08	20.90
34 82 23 00-0027	EA	4" x 2" x 2' Fixed Splice Bar .....	170.38	20.90
34 82 23 00-0028	EA	6" x 6" x 3/16" Box x 9' Flare Tube .....	245.40	28.24

**34 82 23 00-0029 Transition For Bridge Railing (34 82 23)**

Note: Includes hardware for transition for bridge railing.

34 82 23 00-0030	EA	Two Rail Box Beam To Bridge Transition With Splices.....	1,001.74	112.75
34 82 23 00-0031	EA	Four Rail Box Beam To Bridge Transition With Splices .....	1,243.24	124.01
34 82 23 00-0032	EA	6" x 6" x 16-1/2' Bottom Transition Tube .....	423.12	56.37
34 82 23 00-0033	EA	6" x 6" x 22' Bottom Transition Tube .....	521.67	62.01
34 82 23 00-0034	EA	6" x 6" x 16-1/2' Top Transition Tube .....	433.66	56.37
34 82 23 00-0035	EA	6" x 6" x 21-1/2' Top Transition Tube .....	512.97	62.01

**34 82 23 00-0036 Anchor Plates And End Caps For Bridge Railing (34 82 23)**

34 82 23 00-0037	EA	14" x 14" Bridge Railing Anchor Plate .....	44.70	5.41
34 82 23 00-0038	EA	18" x 22" Deck Anchor Plate .....	269.67	27.03
34 82 23 00-0039	EA	2" x 2" Bridge Railing End Cap .....	36.25	2.71
34 82 23 00-0040	EA	3" x 3" Bridge Railing End Cap .....	22.71	2.71
34 82 23 00-0041	EA	5" O.D Bridge Railing End Cap .....	22.55	2.71

**34 82 26 Bridge Slope Protection (34 82)****34 82 26 00-0001 Bridge Slope Protection (34 82 26)**

Note: Solid concrete masonry unit installed in sand bedding.

34 82 26 00-0002	SF	8" x 16" x 4" Solid Concrete Block, Bridge Slope Protection.....	14.31	5.37
34 82 26 00-0003	SF	8" x 16" x 6" Solid Concrete Block, Bridge Slope Protection.....	17.15	5.92
34 82 26 00-0004	SF	8" x 16" x 8" Solid Concrete Block, Bridge Slope Protection.....	19.00	6.29



Transportation		34	34
Bridges		34 80	
Bridge Specialties		34 82	

MINOR			TOTAL DIRECT	DEMOLITION
CSI	UOM	DESCRIPTION	UNIT COST	UNIT COST

END OF SECTION 34

34	34	Transportation
	34 80	Bridges
	34 82	Bridge Specialties



MINOR				TOTAL DIRECT		DEMOLITION
CSI UOM DESCRIPTION				UNIT COST		UNIT COST

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Custom Standards And Assemblies			50
CALTRANS Custom Standards And Assemblies			50 89
CALTRANS Construction Performance Requirements			50 89 80

MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
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## 50 Custom Standards And Assemblies

### 50 89 CALTRANS Custom Standards And Assemblies <sup>(50)</sup>

Note: Use as directed by owner only.

#### 50 89 80 CALTRANS Construction Performance Requirements <sup>(50 89)</sup>

Note: Refer to [www.dot.ca.gov](http://www.dot.ca.gov) for CALTRANS Standard Plans and Specifications

##### 50 89 81 CALTRANS DIVISION I - GENERAL PROVISIONS <sup>(50 89 80)</sup>

###### 50 89 81 01 PAYMENT <sup>(50 89 81)</sup>

Note: Includes equipment mobilization, hauling over 25 miles, overtime, specialty labor, specialty equipment, reimbursables and permits per CALTRANS Standard. See CSI section 01 22 16 00-0001 for Reimbursable fees and permits, 01 22 20 00-0000 for specialty labor, 01 22 23 00-0000 for specialty equipment, 01 71 13 00-0000 for equipment mobilization, 01 74 19 00-0015 for hauling >25 miles.

50 89 81 01-0001	EA	CALTRANS 999990 MOBILIZATION .....	0.00
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Note: (One Time Per Job) See CSI section 01 71 13 00-0000 for mobilization of equipment.

##### 50 89 82 CALTRANS DIVISION II - GENERAL CONSTRUCTION <sup>(50 89 80)</sup>

###### 50 89 82 12 TEMPORARY TRAFFIC CONTROL <sup>(50 89 82)</sup>

Note: Includes flagging, apparel, temporary traffic control devices, and equipment for flaggers, must comply with the latest California MUTCD per CALTRANS Standard.

50 89 82 12-0001	EA	CALTRANS 120110 FLASHING ARROW SIGN .....	1,226.95
50 89 82 12-0002	EA	CALTRANS 120116 TYPE II BARRICADE .....	42.08
50 89 82 12-0003	EA	CALTRANS 120119 TRAFFIC CONE .....	11.76
50 89 82 12-0004	EA	CALTRANS 120120 TYPE III BARRICADE .....	81.84
50 89 82 12-0005	EA	CALTRANS 120140 BARRICADE (LEFT IN PLACE) .....	74.03
50 89 82 12-0006	SF	CALTRANS 120149 TEMPORARY PAVEMENT MARKING (PAINT) .....	3.38
50 89 82 12-0007	LF	CALTRANS 120151 TEMPORARY TRAFFIC STRIPE (TAPE) .....	4.94
50 89 82 12-0008	SF	CALTRANS 120152 TEMPORARY PAVEMENT MARKING (TAPE) .....	12.35
50 89 82 12-0009	LF	CALTRANS 120159 TEMPORARY TRAFFIC STRIPE (PAINT) .....	0.74
50 89 82 12-0010	EA	CALTRANS 120165 CHANNELIZER (SURFACE MOUNTED) .....	29.01
50 89 82 12-0011	EA	CALTRANS 120166 CHANNELIZER (SURFACE MOUNTED) (LEFT IN PLACE) .....	65.40
50 89 82 12-0012	EA	CALTRANS 120182 PORTABLE DELINEATOR .....	23.23
50 89 82 12-0013	EA	CALTRANS 120198 PLASTIC TRAFFIC DRUMS .....	35.23
50 89 82 12-0014	EA	CALTRANS 120200 FLASHING BEACON (PORTABLE) .....	43.26
50 89 82 12-0015	EA	CALTRANS 120300 TEMPORARY PAVEMENT MARKER .....	3.35
50 89 82 12-0016	MO	CALTRANS 128651 PORTABLE CHANGEABLE MESSAGE SIGN (EA) .....	2,752.29
50 89 82 12-0017	MO	CALTRANS 129100 TEMPORARY CRASH CUSHION MODULE .....	657.24

###### 50 89 82 13 WATER POLLUTION CONTROL <sup>(50 89 82)</sup>

Note: Includes preventing, controlling, and abating water pollution within waters of the State per CALTRANS Standard.

50 89 82 13-0001	EA	CALTRANS 130310 RAIN EVENT ACTION PLAN .....	546.48
50 89 82 13-0002	EA	CALTRANS 130320 STORM WATER SAMPLING AND ANALYSIS DAY .....	450.09
50 89 82 13-0003	EA	CALTRANS 130330 STORM WATER ANNUAL REPORT .....	2,185.92
50 89 82 13-0004	SY	CALTRANS 130500 TEMPORARY EROSION CONTROL BLANKET .....	5.41
50 89 82 13-0005	EA	CALTRANS 130505 MOVE-IN/MOVE-OUT (TEMPORARY EROSION CONTROL) .....	839.39
50 89 82 13-0006	SY	CALTRANS 130510 TEMPORARY MULCH .....	4.67
50 89 82 13-0007	SY	CALTRANS 130520 TEMPORARY HYDRAULIC MULCH .....	0.88
50 89 82 13-0008	SY	CALTRANS 130530 TEMPORARY HYDRAULIC MULCH (BONDED FIBER MATRIX) .....	0.42
50 89 82 13-0009	SY	CALTRANS 130535 TEMPORARY HYDRAULIC MULCH (CEMENTITIOUS BINDER) .....	14.13
50 89 82 13-0010	SY	CALTRANS 130540 TEMPORARY TACKED STRAW .....	0.28
50 89 82 13-0011	SY	CALTRANS 130550 TEMPORARY HYDROSEED .....	0.88
50 89 82 13-0012	SY	CALTRANS 130560 TEMPORARY SOIL BINDER .....	0.49
50 89 82 13-0013	SY	CALTRANS 130570 TEMPORARY COVER .....	7.48
50 89 82 13-0014	EA	CALTRANS 130620 TEMPORARY DRAINAGE INLET PROTECTION .....	93.32
50 89 82 13-0015	LF	CALTRANS 130640 TEMPORARY FIBER ROLL .....	10.40
Note: 12" Diameter, Type 1			
For >1,000 To 10,000, Deduct			-0.92
For >10,000, Deduct			-1.58
For 9" Diameter, Deduct			-1.43
50 89 82 13-0016	LF	CALTRANS 130640 TEMPORARY FIBER ROLL .....	8.77
Note: 12" Diameter, Type 2			
For >1,000 To 10,000, Deduct			-0.68
For >10,000, Deduct			-1.17
For 9" Diameter, Deduct			-1.43
50 89 82 13-0017	LF	CALTRANS 130650 TEMPORARY GRAVEL BAG BERM .....	13.39
50 89 82 13-0018	LF	CALTRANS 130670 TEMPORARY REINFORCED SILT FENCE .....	8.85
50 89 82 13-0019	LF	CALTRANS 130680 TEMPORARY SILT FENCE .....	2.50
50 89 82 13-0020	LF	CALTRANS 130690 TEMPORARY STRAW BALE BARRIER .....	4.03
50 89 82 13-0021	EA	CALTRANS 130710 TEMPORARY CONSTRUCTION ENTRANCE .....	1,686.10
50 89 82 13-0022	SY	CALTRANS 130720 TEMPORARY CONSTRUCTION ROADWAY .....	40.70
50 89 82 13-0023	EA	CALTRANS 131103 WATER QUALITY SAMPLING AND ANALYSIS DAY .....	450.09
50 89 82 13-0024	EA	CALTRANS 131104 WATER QUALITY MONITORING REPORT .....	751.41
50 89 82 13-0025	EA	CALTRANS 131105 WATER QUALITY ANNUAL REPORT .....	804.54

**50 Custom Standards And Assemblies****50 89 CALTRANS Custom Standards And Assemblies****50 89 80 CALTRANS Construction Performance Requirements**

MINOR  
CSI UOM DESCRIPTION

TOTAL DIRECT DEMOLITION  
UNIT COST UNIT COST

**50 89 83 CALTRANS DIVISION III - GRADING (50 89 80)****50 89 83 17 GENERAL (50 89 83)**

Note: Includes clear all construction areas above original ground of (1) all vegetation such as trees, logs, upturned stumps, roots of downed trees, brush, grass, and weeds and (2) other objectionable material including concrete, masonry, and debris. Grub all construction areas to a depth necessary to remove all trees, existing stumps, roots, buried logs, and other objectionable material, except embankment areas where the grading plane is 2 feet or more above original ground per CALTRAN Standard.

50 89 83 17-0001	ACR CALTRANS 170105 CLEARING AND GRUBBING (ACRE).....	12,562.41
Note: Includes grub and removal of stump. In embankment areas where the grading plane is 2 feet or more above original ground, cut off trees, stumps, and roots not more than 1 foot above original ground, except remove trees, stumps, and roots completely where work includes any of the following: 1. Structure construction, 2. Pile construction, 3. Subdrainage trench excavation, 4. Removal of unsuitable material, 5. Cutting into slopes of original hillsides, old or new fill		

**50 89 83 19 EARTHWORK (50 89 83)**

Note: Includes earthwork activities includes removal of unsuitable material or a buried man-made object if the removal is described. Excavate and dispose of unsuitable material encountered below the natural ground surface in embankment areas or below the grading plane in excavation areas. Backfill the space resulting from excavating unsuitable material with material suitable for the planned use. Place and compact suitable material. Remove and dispose of a buried man-made object encountered in an excavation as part of the excavation work. Roadway excavation consists of all excavation involved in the grading and construction of the roadway except structure excavation per CALTRAN Standard.

50 89 83 19-0001	CY CALTRANS 190101 ROADWAY EXCAVATION .....	19.74
	For >1,000, Deduct .....	-2.96
50 89 83 19-0002	CY CALTRANS 190161 ROCK EXCAVATION .....	37.88
50 89 83 19-0003	TON CALTRANS 190185 SHOULDER BACKING .....	125.36
50 89 83 19-0004	CY CALTRANS 192502 SAND BEDDING .....	42.05
	For Up To 8, Add .....	8.41
	For >8 To 16, Add .....	4.21
	For >16 To 32, Deduct .....	-3.00
	For >32 To 64, Deduct .....	-5.10
	For >64 To 96, Deduct .....	-7.20
50 89 83 19-0005	CY CALTRANS 193118 CONCRETE BACKFILL .....	324.42
50 89 83 19-0006	CY CALTRANS 198010 IMPORTED BORROW (CY) .....	42.58
50 89 83 19-0007	TON CALTRANS 198011 IMPORTED BORROW (TON) .....	59.62
50 89 83 19-0008	SY CALTRANS 198206 SUBGRADE ENHANCEMENT GEOTEXTILE, CLASS A1 .....	6.74
	For Up To 50, Add .....	1.40
	For >50 To 150, Add .....	1.05
	For >150 To 250, Add .....	0.69
	For >250 To 500, Add .....	0.35
50 89 83 19-0009	SY CALTRANS 198207 SUBGRADE ENHANCEMENT GEOTEXTILE, CLASS A2 .....	2.76
	For Up To 50, Add .....	0.59
	For >50 To 150, Add .....	0.44
	For >150 To 250, Add .....	0.29
	For >250 To 500, Add .....	0.14
50 89 83 19-0010	SY CALTRANS 198208 SUBGRADE ENHANCEMENT GEOTEXTILE, CLASS B1 .....	7.85
	For Up To 50, Add .....	1.62
	For >50 To 150, Add .....	1.21
	For >150 To 250, Add .....	0.80
	For >250 To 500, Add .....	0.40
50 89 83 19-0011	SY CALTRANS 198209 SUBGRADE ENHANCEMENT GEOTEXTILE, CLASS B2 .....	3.80
	For Up To 50, Add .....	0.80
	For >50 To 150, Add .....	0.60
	For >150 To 250, Add .....	0.39
	For >250 To 500, Add .....	0.20
50 89 83 19-0012	SY CALTRANS 198210 SUBGRADE ENHANCEMENT GEOTEXTILE, CLASS B3 .....	3.57
	For Up To 50, Add .....	0.77
	For >50 To 150, Add .....	0.57
	For >150 To 250, Add .....	0.37
	For >250 To 500, Add .....	0.19
50 89 83 19-0013	SY CALTRANS 198215 SUBGRADE ENHANCEMENT GEOGRID .....	5.96
	For Up To 50, Add .....	1.29
	For >50 To 150, Add .....	0.96
	For >150 To 250, Add .....	0.63
	For >250 To 500, Add .....	0.31
50 89 83 19-0014	SY CALTRANS 198250 GEOSYNTHETIC REINFORCEMENT .....	2.08

**50 89 83 20 LANDSCAPE (50 89 83)**

Note: Includes materials and placement per CALTRAN Standard. Underground pipe includes pipe, fittings, trenching, backfill and compaction. Aboveground pipe include pipe, fittings and supports.

50 89 83 20-0001	SF CALTRANS 200114 ROCK BLANKET .....	15.13
	For >5,000, Deduct .....	-1.95
50 89 83 20-0002	SY CALTRANS 200122 WEED GERMINATION .....	0.60
50 89 83 20-0003	SY CALTRANS 200123 CULTIVATION .....	2.67
50 89 83 20-0004	LB CALTRANS 202004 IRON SULFATE (LB) .....	6.87
50 89 83 20-0005	CY CALTRANS 202006 SOIL AMENDMENT .....	112.64
50 89 83 20-0006	EA CALTRANS 202026 RELOCATE BACKFLOW PREVENTER ASSEMBLY .....	1,360.93
50 89 83 20-0007	EA CALTRANS 202027 RELOCATE WATER METER .....	1,360.93
50 89 83 20-0008	EA CALTRANS 202028 RELOCATE IRRIGATION CONTROLLER .....	1,294.07
50 89 83 20-0009	LB CALTRANS 202037 ORGANIC FERTILIZER .....	6.97
50 89 83 20-0010	EA CALTRANS 202038 PACKET FERTILIZER .....	1.10
50 89 83 20-0011	LB CALTRANS 202039 SLOW-RELEASE FERTILIZER .....	3.50
50 89 83 20-0012	EA CALTRANS 204003 PLANT (GROUP C) (6' To 8' B&B) .....	393.32



Custom Standards And Assemblies		50
CALTRANS Custom Standards And Assemblies		50 89
CALTRANS Construction Performance Requirements		50 89 80

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MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
50 89 83 20-0013 EA CALTRANS 204003 PLANT (GROUP C) (10' To 14' B&B) .....	716.85	
50 89 83 20-0014 EA CALTRANS 204003 PLANT (GROUP C) (16' To 20' B&B) .....	1,101.35	
50 89 83 20-0015 EA CALTRANS 204003 PLANT (GROUP C) (22' To 26' B&B) .....	1,700.41	
50 89 83 20-0016 EA CALTRANS 204005 PLANT (GROUP E) .....	3.17	
For >100 To 1,000, Deduct	-0.18	
For >1,000 To 5,000, Deduct	-0.29	
For >5,000, Deduct	-0.37	
50 89 83 20-0017 EA CALTRANS 204006 PLANT (GROUP F) .....	2.20	
For >100 To 1,000, Deduct	-0.14	
For >1,000 To 5,000, Deduct	-0.23	
For >5,000, Deduct	-0.28	
50 89 83 20-0018 EA CALTRANS 204008 PLANT (GROUP H) .....	6.06	
For >10 To 100, Deduct	-0.61	
For >100 To 1,000, Deduct	-1.36	
For >1,000 To 10,000, Deduct	-2.12	
For >10,000 To 25,000, Deduct	-3.03	
For >25,000, Deduct	-4.24	
50 89 83 20-0019 EA CALTRANS 204009 PLANT (GROUP I) .....	22.77	
For >100 To 1,000, Deduct	-1.54	
For >1,000 To 5,000, Deduct	-2.52	
For >5,000, Deduct	-3.09	
50 89 83 20-0020 EA CALTRANS 204011 PLANT (GROUP K) .....	522.75	
50 89 83 20-0021 EA CALTRANS 204013 PLANT (GROUP M) .....	7.75	
For >100 To 1,000, Deduct	-0.45	
For >1,000 To 5,000, Deduct	-0.70	
For >5,000, Deduct	-0.90	
50 89 83 20-0022 EA CALTRANS 204015 PLANT (GROUP S) .....	8.55	
For >100 To 1,000, Deduct	-0.53	
For >1,000 To 5,000, Deduct	-0.86	
For >5,000, Deduct	-1.07	
50 89 83 20-0023 EA CALTRANS 204020 PLANT (GROUP P) .....	7.34	
For >100 To 1,000, Deduct	-0.42	
For >1,000 To 5,000, Deduct	-0.65	
For >5,000, Deduct	-0.84	
50 89 83 20-0024 EA CALTRANS 204030 TRANSPLANT TREE .....	3,673.04	
For >5 To 10, Deduct	-183.65	
For >10 To 20, Deduct	-367.30	
For >20, Deduct	-550.96	
50 89 83 20-0025 EA CALTRANS 204035 PLANT (GROUP A) .....	30.87	
50 89 83 20-0026 EA CALTRANS 204036 PLANT (GROUP B) .....	78.42	
50 89 83 20-0027 EA CALTRANS 204038 PLANT (GROUP U) .....	205.35	
50 89 83 20-0028 SY CALTRANS 204045 SOD .....	19.04	
50 89 83 20-0029 SF CALTRANS 205033 GRAVEL MULCH .....	1.09	
50 89 83 20-0030 SF CALTRANS 205034 DECOMPOSED GRANITE .....	1.64	
50 89 83 20-0031 CY CALTRANS 205035 WOOD MULCH .....	93.73	
For >5 To 20, Deduct	-8.08	
For >20 To 50, Deduct	-12.13	
For >50, Deduct	-16.81	
50 89 83 20-0032 EA CALTRANS 205051 FOLIAGE PROTECTOR .....	37.61	
50 89 83 20-0033 EA CALTRANS 205052 ROOT PROTECTOR .....	26.48	
50 89 83 20-0034 LF CALTRANS 205062 ROOT BARRIER .....	12.17	
50 89 83 20-0035 LF CALTRANS 206005 EDGING .....	16.61	
50 89 83 20-0036 EA CALTRANS 206561 3/4" REMOTE CONTROL VALVE .....	457.42	
50 89 83 20-0037 EA CALTRANS 206562 1" REMOTE CONTROL VALVE .....	664.57	
50 89 83 20-0038 EA CALTRANS 206563 1 1/4" REMOTE CONTROL VALVE .....	718.42	
50 89 83 20-0039 EA CALTRANS 206564 1 1/2" REMOTE CONTROL VALVE .....	776.88	
50 89 83 20-0040 EA CALTRANS 206565 2" REMOTE CONTROL VALVE .....	853.86	
50 89 83 20-0041 EA CALTRANS 206566 2 1/2" REMOTE CONTROL VALVE .....	1,277.38	
50 89 83 20-0042 EA CALTRANS 206567 3" REMOTE CONTROL VALVE .....	1,700.90	
50 89 83 20-0043 EA CALTRANS 206571 REMOTE CONTROL VALVE WITH PRESSURE REGULATOR .....	938.27	
50 89 83 20-0044 EA CALTRANS 206630 3/4" WYE STRAINER ASSEMBLY .....	378.33	
50 89 83 20-0045 EA CALTRANS 206631 1" WYE STRAINER ASSEMBLY .....	409.23	
50 89 83 20-0046 EA CALTRANS 206632 1 1/4" WYE STRAINER ASSEMBLY .....	454.94	
50 89 83 20-0047 EA CALTRANS 206633 1 1/2" WYE STRAINER ASSEMBLY .....	481.26	
50 89 83 20-0048 EA CALTRANS 206634 2" WYE STRAINER ASSEMBLY .....	569.39	
50 89 83 20-0049 EA CALTRANS 206635 2-1/2" WYE STRAINER ASSEMBLY .....	845.98	
50 89 83 20-0050 EA CALTRANS 206636 3" WYE STRAINER ASSEMBLY .....	972.44	
50 89 83 20-0051 EA CALTRANS 206747 4 STATION IRRIGATION CONTROLLER (WALL MOUNTED) .....	827.22	
50 89 83 20-0052 EA CALTRANS 206749 8 STATION IRRIGATION CONTROLLER (WALL MOUNTED) .....	1,149.81	
50 89 83 20-0053 EA CALTRANS 206751 12 STATION IRRIGATION CONTROLLER (WALL MOUNTED) .....	1,530.34	
50 89 83 20-0054 EA CALTRANS 206757 16-18 STATION IRRIGATION CONTROLLER (WALL MOUNTED) .....	1,958.36	
50 89 83 20-0055 EA CALTRANS 206758 24-32 STATION IRRIGATION CONTROLLER (WALL MOUNTED) .....	2,601.34	
50 89 83 20-0056 EA CALTRANS 206759 30-42 STATION IRRIGATION CONTROLLER (WALL MOUNTED) .....	3,241.33	
50 89 83 20-0057 LF CALTRANS 207050 1/2" COPPER PIPE (SUPPLY LINE) .....	11.77	
For >1,000, Deduct	-0.59	
50 89 83 20-0058 LF CALTRANS 207051 3/4" COPPER PIPE (SUPPLY LINE) .....	15.41	
For >1,000, Deduct	-0.77	
50 89 83 20-0059 LF CALTRANS 207052 1" COPPER PIPE (SUPPLY LINE) .....	18.92	
For >1,000, Deduct	-0.95	
50 89 83 20-0060 LF CALTRANS 207053 1 1/4" COPPER PIPE (SUPPLY LINE) .....	24.53	
For >1,000, Deduct	-1.23	
50 89 83 20-0061 LF CALTRANS 207054 1 1/2" COPPER PIPE (SUPPLY LINE) .....	29.47	
For >1,000, Deduct	-1.47	

**50 Custom Standards And Assemblies****50 89 CALTRANS Custom Standards And Assemblies****50 89 80 CALTRANS Construction Performance Requirements**

MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
50 89 83 20-0062 LF CALTRANS 207055 2" COPPER PIPE (SUPPLY LINE) .....	39.89	
For >1,000, Deduct	-1.99	
50 89 83 20-0063 LF CALTRANS 207056 3" COPPER PIPE (SUPPLY LINE) .....	77.38	
For >1,000, Deduct	-3.87	
50 89 83 20-0064 LF CALTRANS 207057 4" COPPER PIPE (SUPPLY LINE) .....	120.61	
For >1,000, Deduct	-6.03	
50 89 83 20-0065 LF CALTRANS 207058 2 1/2" COPPER PIPE (SUPPLY LINE) .....	52.23	
For >1,000, Deduct	-2.61	
50 89 83 20-0066 LF CALTRANS 208001 1/2" GALVANIZED PIPE (SUPPLY LINE) .....	14.45	
For >1,000, Deduct	-0.72	
50 89 83 20-0067 LF CALTRANS 208002 3/4" GALVANIZED PIPE (SUPPLY LINE) .....	16.82	
For >1,000, Deduct	-0.84	
50 89 83 20-0068 LF CALTRANS 208003 1" GALVANIZED PIPE (SUPPLY LINE) .....	19.82	
For >1,000, Deduct	-0.99	
50 89 83 20-0069 LF CALTRANS 208004 1 1/4" GALVANIZED PIPE (SUPPLY LINE) .....	23.48	
For >1,000, Deduct	-1.17	
50 89 83 20-0070 LF CALTRANS 208005 1 1/2" GALVANIZED PIPE (SUPPLY LINE) .....	27.43	
For >1,000, Deduct	-1.37	
50 89 83 20-0071 LF CALTRANS 208006 2" GALVANIZED PIPE (SUPPLY LINE) .....	34.82	
For >1,000, Deduct	-1.74	
50 89 83 20-0072 LF CALTRANS 208007 2 1/2" GALVANIZED PIPE (SUPPLY LINE) .....	53.44	
For >1,000, Deduct	-2.67	
50 89 83 20-0073 LF CALTRANS 208008 3" GALVANIZED PIPE (SUPPLY LINE) .....	74.73	
For >1,000, Deduct	-3.74	
50 89 83 20-0074 LF CALTRANS 208009 4" GALVANIZED PIPE (SUPPLY LINE) .....	113.94	
For >1,000, Deduct	-5.70	
50 89 83 20-0075 LF CALTRANS 208026 2" SUPPLY LINE (BRIDGE) .....	56.14	
50 89 83 20-0076 LF CALTRANS 208027 2 1/2" SUPPLY LINE (BRIDGE) .....	68.88	
50 89 83 20-0077 LF CALTRANS 208028 3" SUPPLY LINE (BRIDGE) .....	83.54	
50 89 83 20-0078 LF CALTRANS 208029 4" SUPPLY LINE (BRIDGE) .....	121.62	
50 89 83 20-0079 LF CALTRANS 208030 6" SUPPLY LINE (BRIDGE) .....	303.46	
50 89 83 20-0080 LF CALTRANS 208033 8" SUPPLY LINE (BRIDGE) .....	665.99	
50 89 83 20-0081 LF CALTRANS 208042 2" GALVANIZED STEEL PIPE (SUPPLY LINE ON BRIDGE) .....	41.89	
50 89 83 20-0082 LF CALTRANS 208043 2 1/2" GALVANIZED STEEL PIPE (SUPPLY LINE ON BRIDGE) .....	61.07	
50 89 83 20-0083 LF CALTRANS 208044 3" GALVANIZED STEEL PIPE (SUPPLY LINE ON BRIDGE) .....	74.98	
50 89 83 20-0084 LF CALTRANS 208046 4" GALVANIZED STEEL PIPE (SUPPLY LINE ON BRIDGE) .....	113.18	
50 89 83 20-0085 LF CALTRANS 208220 1/2" DRIP IRRIGATION TUBING .....	2.90	
50 89 83 20-0086 LF CALTRANS 208221 3/4" DRIP IRRIGATION TUBING .....	3.08	
50 89 83 20-0087 EA CALTRANS 208301 IRRIGATION CONTROLLER ENCLOSURE CABINET .....	3,636.21	
50 89 83 20-0088 EA CALTRANS 208422 3/4" BACKFLOW PREVENTER ASSEMBLY .....	2,053.60	
50 89 83 20-0089 EA CALTRANS 208423 1" BACKFLOW PREVENTER ASSEMBLY .....	2,172.32	
50 89 83 20-0090 EA CALTRANS 208424 1 1/4" BACKFLOW PREVENTER ASSEMBLY .....	2,833.34	
50 89 83 20-0091 EA CALTRANS 208425 1 1/2" BACKFLOW PREVENTER ASSEMBLY .....	3,082.21	
50 89 83 20-0092 EA CALTRANS 208426 2" BACKFLOW PREVENTER ASSEMBLY .....	4,101.91	
50 89 83 20-0093 EA CALTRANS 208427 2 1/2" BACKFLOW PREVENTER ASSEMBLY .....	8,919.54	
50 89 83 20-0094 EA CALTRANS 208428 3" BACKFLOW PREVENTER ASSEMBLY .....	10,333.32	
50 89 83 20-0095 EA CALTRANS 208429 4" BACKFLOW PREVENTER ASSEMBLY .....	11,240.08	
50 89 83 20-0096 EA CALTRANS 208440 BACKFLOW PREVENTER ENCLOSURE .....	2,866.55	
50 89 83 20-0097 EA CALTRANS 208442 FLOW SENSOR .....	1,626.80	
50 89 83 20-0098 EA CALTRANS 208447 POP-UP SPRINKLER ASSEMBLY (GEAR DRIVEN) .....	87.70	16.33
50 89 83 20-0099 EA CALTRANS 208448 RISER SPRINKLER ASSEMBLY .....	58.44	16.33
50 89 83 20-0100 EA CALTRANS 208449 POP-UP SPRINKLER ASSEMBLY .....	57.59	16.33
50 89 83 20-0101 EA CALTRANS 208562 CAM COUPLER ASSEMBLY .....	533.14	
50 89 83 20-0102 EA CALTRANS 208569 1/2" GATE VALVE .....	342.84	
50 89 83 20-0103 EA CALTRANS 208570 3/4" GATE VALVE .....	365.05	
50 89 83 20-0104 EA CALTRANS 208572 1" GATE VALVE .....	397.12	
50 89 83 20-0105 EA CALTRANS 208573 1 1/4" GATE VALVE .....	437.15	
50 89 83 20-0106 EA CALTRANS 208574 1 1/2" GATE VALVE .....	464.02	
50 89 83 20-0107 EA CALTRANS 208575 2" GATE VALVE .....	526.52	
50 89 83 20-0108 EA CALTRANS 208576 2 1/2" GATE VALVE .....	827.45	
50 89 83 20-0109 EA CALTRANS 208588 3" GATE VALVE .....	942.02	
50 89 83 20-0110 EA CALTRANS 208589 4" GATE VALVE .....	1,270.91	
50 89 83 20-0111 EA CALTRANS 208590 6" GATE VALVE .....	1,647.40	
50 89 83 20-0112 EA CALTRANS 208591 8" GATE VALVE .....	2,347.63	
50 89 83 20-0113 LF CALTRANS 208593 1/2" PLASTIC PIPE (SCHEDULE 40) (SUPPLY LINE) .....	6.92	
For >1,000, Deduct	-0.35	
For Schedule 80, Add	0.13	
50 89 83 20-0114 LF CALTRANS 208594 3/4" PLASTIC PIPE (SCHEDULE 40) (SUPPLY LINE) .....	7.05	
For >1,000, Deduct	-0.35	
For Schedule 80, Add	0.17	
50 89 83 20-0115 LF CALTRANS 208595 1" PLASTIC PIPE (SCHEDULE 40) (SUPPLY LINE) .....	7.91	
For >1,000, Deduct	-0.40	
For Schedule 80, Add	0.27	
50 89 83 20-0116 LF CALTRANS 208596 1 1/4" PLASTIC PIPE (SCHEDULE 40) (SUPPLY LINE) .....	9.42	
For >1,000, Deduct	-0.47	
For Schedule 80, Add	0.40	
50 89 83 20-0117 LF CALTRANS 208597 1 1/2" PLASTIC PIPE (SCHEDULE 40) (SUPPLY LINE) .....	9.59	
For >1,000, Deduct	-0.48	
For Schedule 80, Add	0.54	
50 89 83 20-0118 LF CALTRANS 208598 2" PLASTIC PIPE (SCHEDULE 40) (SUPPLY LINE) .....	11.29	
For >1,000, Deduct	-0.56	
For Schedule 80, Add	0.90	





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MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
50 89 83 20-0119 LF CALTRANS 208599 2 1/2" PLASTIC PIPE (SCHEDULE 40) (SUPPLY LINE) .....	13.41	
For >1,000, Deduct	-0.67	
For Schedule 80, Add	1.17	
50 89 83 20-0120 LF CALTRANS 208600 3" PLASTIC PIPE (SCHEDULE 40) (SUPPLY LINE) .....	17.58	
For >1,000, Deduct	-0.88	
For Schedule 80, Add	1.64	
50 89 83 20-0121 LF CALTRANS 208601 4" PLASTIC PIPE (SCHEDULE 40) (SUPPLY LINE) .....	21.90	
For >1,000, Deduct	-1.10	
For Schedule 80, Add	2.51	
50 89 83 20-0122 LF CALTRANS 208602 6" PLASTIC PIPE (SCHEDULE 40) (SUPPLY LINE) .....	29.23	
For >1,000, Deduct	-1.46	
For Schedule 80, Add	5.59	
50 89 83 20-0123 LF CALTRANS 208603 8" PLASTIC PIPE (SCHEDULE 40) (SUPPLY LINE) .....	33.98	
For >1,000, Deduct	-1.70	
For Schedule 80, Add	8.57	
50 89 83 20-0124 LF CALTRANS 208604 10" PLASTIC PIPE (SCHEDULE 40) (SUPPLY LINE) .....	62.71	
For >1,000, Deduct	-3.14	
For Schedule 80, Add	26.66	
50 89 83 20-0125 LF CALTRANS 208605 2" PLASTIC PIPE (CLASS 315) (SUPPLY LINE) .....	11.76	
For >1,000, Deduct	-0.59	
50 89 83 20-0126 LF CALTRANS 208606 2 1/2" PLASTIC PIPE (CLASS 315) (SUPPLY LINE) .....	14.17	
For >1,000, Deduct	-0.71	
50 89 83 20-0127 LF CALTRANS 208607 3" PLASTIC PIPE (CLASS 315) (SUPPLY LINE) .....	17.58	
For >1,000, Deduct	-0.88	
50 89 83 20-0128 LF CALTRANS 208608 4" PLASTIC PIPE (CLASS 315) (SUPPLY LINE) .....	21.90	
For >1,000, Deduct	-1.10	
50 89 83 20-0129 LF CALTRANS 208609 6" PLASTIC PIPE (CLASS 315) (SUPPLY LINE) .....	29.57	
For >1,000, Deduct	-1.48	
50 89 83 20-0130 EA CALTRANS 208631 3/4" PRESSURE RELIEF VALVE .....	967.51	
50 89 83 20-0131 EA CALTRANS 208632 1 1/2" PRESSURE RELIEF VALVE .....	1,475.08	
50 89 83 20-0132 EA CALTRANS 208633 1" PRESSURE RELIEF VALVE .....	1,142.52	
50 89 83 20-0133 EA CALTRANS 208634 2" PRESSURE RELIEF VALVE .....	1,669.62	
50 89 83 20-0134 EA CALTRANS 208640 PRESSURE REGULATING VALVE (3/4") .....	290.70	
50 89 83 20-0135 EA CALTRANS 208640 PRESSURE REGULATING VALVE (1") .....	377.75	
50 89 83 20-0136 EA CALTRANS 208640 PRESSURE REGULATING VALVE (1-1/4") .....	636.07	
50 89 83 20-0137 EA CALTRANS 208640 PRESSURE REGULATING VALVE (1-1/2") .....	859.74	
50 89 83 20-0138 EA CALTRANS 208640 PRESSURE REGULATING VALVE (2") .....	1,234.78	
50 89 83 20-0139 EA CALTRANS 208649 QUICK COUPLING VALVE .....	559.36	
50 89 83 20-0140 EA CALTRANS 208670 1/2" CHECK VALVE .....	356.94	
50 89 83 20-0141 EA CALTRANS 208670 3/4" CHECK VALVE .....	382.70	
50 89 83 20-0142 EA CALTRANS 208670 1" CHECK VALVE .....	415.48	
50 89 83 20-0143 EA CALTRANS 208670 1 1/4" CHECK VALVE .....	465.99	
50 89 83 20-0144 EA CALTRANS 208670 1 1/2" CHECK VALVE .....	514.90	
50 89 83 20-0145 EA CALTRANS 208670 2" CHECK VALVE .....	584.34	
50 89 83 20-0146 EA CALTRANS 208670 2 1/2" CHECK VALVE .....	889.05	
50 89 83 20-0147 EA CALTRANS 208670 3" CHECK VALVE .....	975.06	
50 89 83 20-0148 EA CALTRANS 208670 4" CHECK VALVE .....	1,406.30	
50 89 83 20-0149 EA CALTRANS 208670 6" CHECK VALVE .....	1,932.31	
50 89 83 20-0150 EA CALTRANS 208670 8" CHECK VALVE .....	3,771.65	
50 89 83 20-0151 EA CALTRANS 208683 1/2" BALL VALVE .....	324.46	
50 89 83 20-0152 EA CALTRANS 208683 3/4" BALL VALVE .....	356.27	
50 89 83 20-0153 EA CALTRANS 208683 1" BALL VALVE .....	367.40	
50 89 83 20-0154 EA CALTRANS 208683 1 1/4" BALL VALVE .....	405.61	
50 89 83 20-0155 EA CALTRANS 208683 1 1/2" BALL VALVE .....	425.00	
50 89 83 20-0156 EA CALTRANS 208683 2" BALL VALVE .....	466.93	
50 89 83 20-0157 EA CALTRANS 208683 2 1/2" BALL VALVE .....	529.15	
50 89 83 20-0158 LF CALTRANS 208690 PVC PIPE CONDUIT (SLEEVE) .....	33.98	
For >1,000, Deduct	-1.70	
50 89 83 20-0159 LF CALTRANS 208702 8" ABS COMPOSITE PIPE CONDUIT .....	43.67	
For >1,000, Deduct	-2.18	
50 89 83 20-0160 LF CALTRANS 208703 10" ABS COMPOSITE PIPE CONDUIT .....	59.46	
For >1,000, Deduct	-2.97	
50 89 83 20-0161 LF CALTRANS 208738 8" CORRUGATED HIGH DENSITY POLYETHYLENE PIPE CONDUIT .....	23.25	
50 89 83 20-0162 LF CALTRANS 208739 10" CORRUGATED HIGH DENSITY POLYETHYLENE PIPE CONDUIT .....	29.66	
50 89 83 20-0163 LF CALTRANS 208740 12" CORRUGATED HIGH DENSITY POLYETHYLENE PIPE CONDUIT .....	34.43	
50 89 83 20-0164 LF CALTRANS 208756 6" CORRUGATED STEEL PIPE CONDUIT (.064" THICK) .....	23.63	
50 89 83 20-0165 LF CALTRANS 208758 8" CORRUGATED STEEL PIPE CONDUIT (.064" THICK) .....	29.25	
50 89 83 20-0166 LF CALTRANS 208760 10" CORRUGATED STEEL PIPE CONDUIT (.064" THICK) .....	36.18	
50 89 83 20-0167 LF CALTRANS 208762 12" CORRUGATED STEEL PIPE CONDUIT (.064" THICK) .....	40.62	
50 89 83 20-0168 LF CALTRANS 208813 1 1/4" WELDED STEEL PIPE CONDUIT .....	26.08	
For >1,000, Deduct	-1.30	
50 89 83 20-0169 LF CALTRANS 208814 1 1/2" WELDED STEEL PIPE CONDUIT .....	30.32	
For >1,000, Deduct	-1.52	
50 89 83 20-0170 LF CALTRANS 208815 2" WELDED STEEL PIPE CONDUIT .....	35.06	
For >1,000, Deduct	-1.75	
50 89 83 20-0171 LF CALTRANS 208816 3" WELDED STEEL PIPE CONDUIT .....	46.17	
For >1,000, Deduct	-2.31	
50 89 83 20-0172 LF CALTRANS 208817 4" WELDED STEEL PIPE CONDUIT .....	60.85	
For >1,000, Deduct	-3.04	
50 89 83 20-0173 LF CALTRANS 208818 6" WELDED STEEL PIPE CONDUIT .....	83.63	
For >1,000, Deduct	-4.18	
50 89 83 20-0174 LF CALTRANS 208819 8" WELDED STEEL PIPE CONDUIT .....	118.40	
For >1,000, Deduct	-5.92	

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50 89 83 20-0175 LF CALTRANS 208820 10" WELDED STEEL PIPE CONDUIT.....	153.07	
For >1,000, Deduct	-7.65	
50 89 83 20-0176 LF CALTRANS 208821 12" WELDED STEEL PIPE CONDUIT.....	192.72	
For >1,000, Deduct	-9.64	
<b>50 89 83 21 EROSION CONTROL (50 89 83)</b>		
Note: Includes applying permanent erosion control measures to the soil surface per CALTRAN Standard.		
50 89 83 21-0001 EA CALTRANS 210010 MOVE-IN/MOVE-OUT (EROSION CONTROL).....	335.76	
50 89 83 21-0002 CY CALTRANS 210110 IMPORTED TOPSOIL (CY).....	42.58	
50 89 83 21-0003 TON CALTRANS 210111 IMPORTED TOPSOIL (TON).....	53.22	
50 89 83 21-0004 SF CALTRANS 210212 DRY SEED (SQFT).....	0.10	
50 89 83 21-0005 ACR CALTRANS 210213 DRY SEED (ACRE).....	4,246.94	
For >5 To 20, Deduct	-300.41	
For >20 To 45, Deduct	-582.71	
For >45, Deduct	-953.08	
50 89 83 21-0006 SY CALTRANS 210222 DRILL SEED (SQYD).....	0.35	
50 89 83 21-0007 ACR CALTRANS 210223 DRILL SEED (ACRE).....	1,680.22	
50 89 83 21-0008 SF CALTRANS 210252 BONDED FIBER MATRIX (SQFT).....	0.09	
50 89 83 21-0009 ACR CALTRANS 210253 BONDED FIBER MATRIX (ACRE).....	4,008.35	
50 89 83 21-0010 SF CALTRANS 210260 ROLLED EROSION CONTROL PRODUCT (JUTE MESH).....	0.42	
50 89 83 21-0011 SF CALTRANS 210270 ROLLED EROSION CONTROL PRODUCT (NETTING).....	1.66	
50 89 83 21-0012 SF CALTRANS 210280 ROLLED EROSION CONTROL PRODUCT (BLANKET).....	0.54	
50 89 83 21-0013 SF CALTRANS 210290 ROLLED EROSION CONTROL PRODUCT (TRM).....	1.52	
50 89 83 21-0014 SF CALTRANS 210300 HYDROMULCH.....	0.09	
50 89 83 21-0015 LF CALTRANS 210350 FIBER ROLL.....	10.40	
Note: 12" Diameter, Type 1		
For >1,000 To 10,000, Deduct	-0.92	
For >10,000, Deduct	-1.58	
For 9" Diameter, Deduct	-1.43	
50 89 83 21-0016 LF CALTRANS 210350 FIBER ROLL.....	8.77	
Note: 12" Diameter, Type 2		
For >1,000 To 10,000, Deduct	-0.68	
For >10,000, Deduct	-1.17	
For 9" Diameter, Deduct	-1.43	
50 89 83 21-0017 LF CALTRANS 210360 COMPOST SOCK.....	10.81	
50 89 83 21-0018 SF CALTRANS 210420 STRAW.....	0.15	
50 89 83 21-0019 SF CALTRANS 210430 HYDROSEED.....	0.09	
50 89 83 21-0020 CY CALTRANS 210610 COMPOST (CY).....	87.32	
For >100 To 1,000, Deduct	-14.56	
For >1,000, Deduct	-22.32	
50 89 83 21-0021 SF CALTRANS 210630 INCORPORATE MATERIALS.....	0.05	
<b>50 89 84 CALTRANS DIVISION IV - SUBBASES AND BASES (50 89 80)</b>		
<b>50 89 84 24 STABILIZED SOILS (50 89 84)</b>		
50 89 84 24-0001 SY CALTRANS 240105 LIME STABILIZED SOIL.....	13.01	
For 4% Lime Instead Of 5%, Deduct	-0.40	
For 6% Lime Instead Of 5%, Add	0.40	
50 89 84 24-0002 SY CALTRANS 240300 CEMENT STABILIZED SOIL.....	15.18	
<b>50 89 84 25 AGGREGATE SUBBASES (50 89 84)</b>		
Note: Includes aggregate, placing aggregate subbase, water, geosynthetic materials, spreading, compacting per CALTRAN Standard.		
50 89 84 25-0001 CY CALTRANS 250101 CLASS 1 AGGREGATE SUBBASE.....	119.20	
50 89 84 25-0002 CY CALTRANS 250201 CLASS 2 AGGREGATE SUBBASE.....	89.87	
50 89 84 25-0003 CY CALTRANS 250301 CLASS 3 AGGREGATE SUBBASE.....	86.97	
50 89 84 25-0004 CY CALTRANS 250401 CLASS 4 AGGREGATE SUBBASE.....	86.94	
50 89 84 25-0005 CY CALTRANS 250501 CLASS 5 AGGREGATE SUBBASE.....	86.90	
<b>50 89 84 26 AGGREGATE BASES (50 89 84)</b>		
Note: Includes aggregate, placing aggregate, water, geosynthetic materials, spreading, compacting per CALTRAN Standard.		
50 89 84 26-0001 CY CALTRANS 260200 AGGREGATE BASE.....	118.18	
For Recycled Aggregate Base, Deduct	-7.90	
50 89 84 26-0002 TON CALTRANS 260202 CLASS 2 AGGREGATE BASE (TON).....	85.79	
50 89 84 26-0003 CY CALTRANS 260203 CLASS 2 AGGREGATE BASE (CY).....	89.87	
50 89 84 26-0004 TON CALTRANS 260302 CLASS 3 AGGREGATE BASE (TON).....	81.83	
50 89 84 26-0005 CY CALTRANS 260303 CLASS 3 AGGREGATE BASE (CY).....	86.97	
<b>50 89 84 27 CEMENT TREATED BASES (50 89 84)</b>		
Note: Includes aggregate, Type II portland cement, mixing, placing cement treated base, spreading, compaction, contact joints and curing per CALTRAN Standard.		
50 89 84 27-0001 TON CALTRANS 270002 CEMENT TREATED BASE (ROAD-MIXED, CLASS A) (TON).....	51.33	
For Up To 500, Add	15.09	
For >500 To 1,000, Add	5.13	
For >5,000 To 10,000, Deduct	-1.95	
For >10,000, Deduct	-3.34	



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50 89 84 27-0002 CY CALTRANS 270003 CEMENT TREATED BASE (ROAD-MIXED, CLASS A) (CY).....	69.57	
For Up To 500, Add	20.48	
For >500 To 1,000, Add	6.96	
For >5,000 To 10,000, Deduct	-2.64	
For >10,000, Deduct	-4.52	
50 89 84 27-0003 TON CALTRANS 270013 CEMENT TREATED BASE (PLANT-MIXED, CLASS A) (TON).....	42.69	
For Up To 500, Add	12.50	
For >500 To 1,000, Add	4.27	
For >5,000 To 10,000, Deduct	-1.62	
For >10,000, Deduct	-2.77	
50 89 84 27-0004 CY CALTRANS 270014 CEMENT TREATED BASE (PLANT-MIXED, CLASS A) (CY).....	60.93	
For Up To 500, Add	17.89	
For >500 To 1,000, Add	6.09	
For >5,000 To 10,000, Deduct	-2.32	
For >10,000, Deduct	-3.96	
<b>50 89 84 28 CONCRETE BASES</b> (50 89 84)		
Note: Includes constructing concrete bases and placing concrete per CALTRAN Standard.		
50 89 84 28-0001 CY CALTRANS 280001 CONCRETE BASE .....	348.87	
<b>50 89 84 29 TREATED PERMEABLE BASES</b> (50 89 84)		
Note: Includes constructing treated permeable bases, spreading, and placement per CALTRAN Standard.		
50 89 84 29-0001 CY CALTRANS 290301 CEMENT TREATED PERMEABLE BASE.....	904.68	
For >5,000 To 30,000, Deduct	-95.85	
For >30,000 To 100,000, Deduct	-174.46	
For >100,000, Deduct	-216.68	
<b>50 89 84 30 RECLAIMED PAVEMENT</b> (50 89 84)		
Note: Includes constructing reclaimed pavement bases, surface preparation, grading, compaction, finishing and placement per CALTRAN Standard.		
50 89 84 30-0001 SF CALTRANS 300100 FULL DEPTH RECLAMATION-FOAMED ASPHALT .....	22.17	
50 89 84 30-0002 SY CALTRANS 303000 PULVERIZED ROADBED.....	5.11	
<b>50 89 85 CALTRANS DIVISION V - SURFACINGS AND PAVEMENTS</b> (50 89 80)		
<b>50 89 85 37 BITUMINOUS SEALS</b> (50 89 85)		
Note: Includes applying bituminous seals, surface preparation, placement, spreading, finishing and seal coat per CALTRAN Standard.		
50 89 85 37-0001 SY CALTRANS 370001 SAND COVER (SEAL).....	1.37	
50 89 85 37-0002 SY CALTRANS 374002 ASPHALTIC EMULSION (FOG SEAL COAT) .....	0.76	
50 89 85 37-0003 LNMI CALTRANS 374207 CRACK TREATMENT .....	6,479.83	
50 89 85 37-0004 SY CALTRANS 374491 NONPOLYMER ASPHALTIC EMULSION (SEAL COAT) .....	4.30	
50 89 85 37-0005 SY CALTRANS 374493 POLYMER ASPHALTIC EMULSION (SEAL COAT) .....	8.32	
50 89 85 37-0006 TON CALTRANS 375001 SCREENINGS .....	84.46	
For Up To 14, Add	23.26	
For >14 To 35, Add	8.45	
50 89 85 37-0007 SY CALTRANS 375009 TACK COAT (SEAL).....	0.90	
For Up To 150, Add	0.19	
For >150 To 300, Add	0.09	
For >300 To 500, Add	0.05	
For >3,500 To 5,000, Deduct	-0.02	
For >5,000, Deduct	-0.06	
50 89 85 37-0008 SY CALTRANS 377501 SLURRY SEAL (TYPE I) .....	2.73	
Note: 1/8" thick.		
For Each 0.5% Of Latex Addition, Add	0.24	
50 89 85 37-0009 SY CALTRANS 377501 SLURRY SEAL (TYPE II) .....	3.59	
Note: 1/4" thick, 14 to 18 Lbs/SY.		
For Each 0.5% Of Latex Addition, Add	0.36	
50 89 85 37-0010 SY CALTRANS 377501 SLURRY SEAL (TYPE III) .....	4.60	
Note: 3/8" thick, 25 to 30 Lbs/SY.		
For Each 0.5% Of Latex Addition, Add	0.58	
50 89 85 37-0011 SY CALTRANS 378000 MICRO-SURFACING.....	9.13	
<b>50 89 85 39 ASPHALT CONCRETE</b> (50 89 85)		
Note: Includes hot mix asphalt, preparation, placement, finishing, compaction and testing per CALTRAN Standard.		
50 89 85 39-0001 TON CALTRANS 390100 PRIME COAT .....	1,155.43	
50 89 85 39-0002 TON CALTRANS 390132 HOT MIX ASPHALT (TYPE A) .....	178.91	
50 89 85 39-0003 TON CALTRANS 390135 HOT MIX ASPHALT (LEVELING) (UP TO 25) .....	342.71	
50 89 85 39-0004 TON CALTRANS 390135 HOT MIX ASPHALT (LEVELING) (>25 - 100) .....	301.50	
50 89 85 39-0005 TON CALTRANS 390135 HOT MIX ASPHALT (LEVELING) (>100 - 250) .....	259.00	
50 89 85 39-0006 TON CALTRANS 390135 HOT MIX ASPHALT (LEVELING) (>250) .....	220.20	
50 89 85 39-0007 TON CALTRANS 390136 MINOR HOT MIX ASPHALT (UP TO 25) .....	350.44	
50 89 85 39-0008 TON CALTRANS 390137 RUBBERIZED HOT MIX ASPHALT (GAP GRADED) .....	212.01	
Note: Includes placement, rolling, finishing and sweeping.		

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50 89 85 39-0009 SY CALTRANS 393004 GEOSYNTHETIC PAVEMENT INTERLAYER (PAVING FABRIC).....	2.32	
Note: 4.1 Oz/SY, 100# 1-Inch Grab Tensile, Nonwoven Polypropylene		
For Up To 50, Add	0.50	
For >50 To 150, Add	0.37	
For >150 To 250, Add	0.25	
For >250 To 500, Add	0.12	
50 89 85 39-0010 LF CALTRANS 394072 PLACE HOT MIX ASPHALT DIKE (TYPE B).....	10.53	
50 89 85 39-0011 LF CALTRANS 394073 PLACE HOT MIX ASPHALT DIKE (TYPE A).....	7.61	
50 89 85 39-0012 LF CALTRANS 394074 PLACE HOT MIX ASPHALT DIKE (TYPE C).....	3.80	
50 89 85 39-0013 LF CALTRANS 394075 PLACE HOT MIX ASPHALT DIKE (TYPE D).....	16.93	
50 89 85 39-0014 LF CALTRANS 394076 PLACE HOT MIX ASPHALT DIKE (TYPE E).....	10.98	
50 89 85 39-0015 LF CALTRANS 394077 PLACE HOT MIX ASPHALT DIKE (TYPE F).....	5.61	
50 89 85 39-0016 SY CALTRANS 394090 PLACE HOT MIX ASPHALT (MISCELLANEOUS AREA) Up To 2".....	19.66	
For Up To 500, Add	2.86	
For >500 To 1,000, Add	1.60	
For >5,000 To 10,000, Deduct	-0.83	
For >10,000 To 24,000, Deduct	-1.52	
For >24,000 To 48,000, Deduct	-2.36	
For >48,000, Deduct	-3.39	
50 89 85 39-0017 SY CALTRANS 394090 PLACE HOT MIX ASPHALT (MISCELLANEOUS AREA) >2" To 3".....	27.85	
For Up To 300, Add	3.83	
For >300 To 600, Add	3.22	
For >3,000 To 6,000, Deduct	-1.22	
For >6,000 To 16,000, Deduct	-2.22	
For >16,000 To 32,000, Deduct	-3.44	
For >32,000, Deduct	-4.93	
50 89 85 39-0018 SY CALTRANS 394090 PLACE HOT MIX ASPHALT (MISCELLANEOUS AREA) >3" To 4".....	38.46	
For Up To 250, Add	4.96	
For >250 To 500, Add	2.70	
For >2,500 To 5,000, Deduct	-1.74	
For >5,000 To 12,000, Deduct	-3.15	
For >12,000 To 24,000, Deduct	-4.89	
For >24,000, Deduct	-7.01	
50 89 85 39-0019 SY CALTRANS 394090 PLACE HOT MIX ASPHALT (MISCELLANEOUS AREA) >4" To 6".....	57.70	
For Up To 160, Add	7.44	
For >160 To 320, Add	4.05	
For >1,600 To 3,200, Deduct	-2.61	
For >3,200 To 8,000, Deduct	-4.73	
For >8,000 To 16,000, Deduct	-7.34	
For >16,000, Deduct	-10.52	
50 89 85 39-0020 TON CALTRANS 395020 RUBBERIZED HOT MIX ASPHALT-GAP GRADED (BONDED WEARING COURSE).....	212.01	
50 89 85 39-0021 TON CALTRANS 397005 TACK COAT .....	695.60	
50 89 85 39-0022 SF CALTRANS 398000 REMOVE ASPHALT CONCRETE PAVEMENT (CY).....	188.73	
For >500 To 1,000, Deduct	-18.87	
For >1,000 To 2,500, Deduct	-33.97	
For >2,500 To 5,000, Deduct	-49.07	
For >5,000 To 10,000, Deduct	-64.17	
For >10,000, Deduct	-79.27	
50 89 85 39-0023 SF CALTRANS 398001 REMOVE ASPHALT CONCRETE PAVEMENT (SQFT) .....	3.20	
For >500 To 1,000, Deduct	-0.32	
For >1,000 To 2,500, Deduct	-0.58	
For >2,500 To 5,000, Deduct	-0.83	
For >5,000 To 10,000, Deduct	-1.09	
For >10,000, Deduct	-1.34	
50 89 85 39-0024 LF CALTRANS 398100 REMOVE ASPHALT CONCRETE DIKE.....	5.27	
50 89 85 39-0025 SY CALTRANS 398200 COLD PLANE ASPHALT CONCRETE PAVEMENT (Up To 3").....	4.58	
For Up To 2,500, Add	3.44	
For >2,500 To 5,000, Add	1.15	
For >10,000 To 25,000, Deduct	-0.46	
For >25,000, Deduct	-0.69	
50 89 85 39-0026 SY CALTRANS 398200 COLD PLANE ASPHALT CONCRETE PAVEMENT (>3" To 6") .....	6.11	
For Up To 2,500, Add	4.58	
For >2,500 To 5,000, Add	1.53	
For >10,000 To 25,000, Deduct	-0.61	
For >25,000, Deduct	-0.92	

**50 89 85 40 CONCRETE PAVEMENT (50 89 85)**

Note: Includes concrete pavement, reinforcing, placement, finishing, compaction and testing per CALTRAN Standard.

50 89 85 40-0001 CY CALTRANS 400050 CONTINUOUSLY REINFORCED CONCRETE PAVEMENT .....	487.38	
For >1,000 To 5,000, Deduct	-16.96	
For >5,000, Deduct	-49.80	
50 89 85 40-0002 CY CALTRANS 401050 JOINTED PLAIN CONCRETE PAVEMENT.....	475.15	
For >1,000 To 5,000, Deduct	-16.96	
For >5,000, Deduct	-49.19	

**50 89 85 41 EXISTING CONCRETE PAVEMENT (50 89 85)**

Note: Includes work on existing concrete pavement, placement and finishing per CALTRAN Standard.

50 89 85 41-0001 EA CALTRANS 410096 DRILL AND BOND (DOWEL BAR) .....	29.96	
50 89 85 41-0002 SY CALTRANS 410121 SPALL REPAIR (FAST-SETTING CONCRETE) .....	464.24	
For Up To 100, Add	515.98	
For >100 To 250, Add	257.99	
50 89 85 41-0003 LF CALTRANS 414222 REPLACE JOINT SEAL (PREFORMED COMPRESSION, 7/16" TO 13/16") .....	12.78	
50 89 85 41-0004 LF CALTRANS 414223 REPLACE JOINT SEAL (PREFORMED COMPRESSION, 1" TO 1-1/4") .....	14.90	



Custom Standards And Assemblies			50
CALTRANS Custom Standards And Assemblies			50 89
CALTRANS Construction Performance Requirements			50 89 80

MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
50 89 85 41-0005 LF CALTRANS 414224 REPLACE JOINT SEAL (PREFORMED COMPRESSION, 1-5/8" TO 2").....	21.78	
50 89 85 41-0006 LF CALTRANS 414241 ISOLATION JOINT SEAL (SILICONE).....	11.08	
50 89 85 41-0007 LF CALTRANS 414242 ISOLATION JOINT SEAL (PREFORMED COMPRESSION).....	14.16	
50 89 85 41-0008 SY CALTRANS 416101 PAVEMENT TRANSITION TAPER .....	78.39	
For Up To 100, Add	26.77	
For >100 To 250, Add	15.92	
For >250 To 500, Add	7.96	
For >1,000 To 2,000, Deduct	-2.53	
For >2,000 To 5,000, Deduct	-4.49	
For >5,000 To 10,000, Deduct	-6.45	
For >10,000 To 20,000, Deduct	-8.41	
For >20,000, Deduct	-10.37	
50 89 85 41-0009 CY CALTRANS 418002 REMOVE CONCRETE PAVEMENT AND BASE .....	44.75	
50 89 85 41-0010 SY CALTRANS 418005 REMOVE CONCRETE PAVEMENT (SQYD).....	22.88	
For >500 To 1,000, Deduct	-2.29	
For >1,000 To 2,500, Deduct	-4.12	
For >2,500 To 5,000, Deduct	-5.95	
For >5,000 To 10,000, Deduct	-7.78	
For >10,000, Deduct	-9.61	
<b>50 89 85 42 GROOVE AND GRIND CONCRETE (50 89 85)</b>		
Note: Includes grooving and grinding concrete roadway surfaces per CALTRANS Standard.		
50 89 85 42-0001 SY CALTRANS 420102 GROOVE EXISTING CONCRETE PAVEMENT.....	1.75	
50 89 85 42-0002 SY CALTRANS 420104 GROOVE EXISTING BRIDGE DECK.....	2.63	
50 89 85 42-0003 SY CALTRANS 420201 GRIND EXISTING CONCRETE PAVEMENT.....	4.58	
For Up To 2,500, Add	3.44	
For >2,500 To 5,000, Add	1.15	
For >10,000 To 25,000, Deduct	-0.46	
For >25,000, Deduct	-0.69	
50 89 85 42-0004 SY CALTRANS 420203 GRIND EXISTING BRIDGE DECK.....	28.96	
For >100 To 1,000, Deduct	-14.48	
For >1,000, Deduct	-21.72	
<b>50 89 86 CALTRANS DIVISION VI - STRUCTURES (50 89 80)</b>		
<b>50 89 86 56 OVERHEAD SIGN STRUCTURES, STANDARDS, AND POLES (50 89 86)</b>		
50 89 86 56-0001 SF CALTRANS 560248 FURNISH SINGLE SHEET ALUMINUM SIGN (0.063"-UNFRAMED) .....	15.70	22.25
<b>50 89 86 60 EXISTING STRUCTURES (50 89 86)</b>		
50 89 86 60-0001 LF CALTRANS 600063 CORE CONCRETE (1").....	116.29	
For Horizontal Cores, Add	22.98	
For Overhead Ceiling Cores (Where Not Accessible From Above), Add	45.97	
50 89 86 60-0002 LF CALTRANS 600064 CORE CONCRETE (2").....	143.25	
For Horizontal Cores, Add	28.38	
For Overhead Ceiling Cores (Where Not Accessible From Above), Add	56.75	
50 89 86 60-0003 LF CALTRANS 600065 CORE CONCRETE (3").....	157.24	
For Horizontal Cores, Add	31.07	
For Overhead Ceiling Cores (Where Not Accessible From Above), Add	62.14	
50 89 86 60-0004 LF CALTRANS 600066 CORE CONCRETE (4").....	209.60	
For Horizontal Cores, Add	41.43	
For Overhead Ceiling Cores (Where Not Accessible From Above), Add	82.86	
50 89 86 60-0005 LF CALTRANS 600067 CORE CONCRETE (5").....	241.38	
For Horizontal Cores, Add	47.67	
For Overhead Ceiling Cores (Where Not Accessible From Above), Add	95.34	
50 89 86 60-0006 LF CALTRANS 600068 CORE CONCRETE (6").....	272.59	
For Horizontal Cores, Add	53.91	
For Overhead Ceiling Cores (Where Not Accessible From Above), Add	107.83	
50 89 86 60-0007 LF CALTRANS 600069 CORE CONCRETE (7").....	356.68	
For Horizontal Cores, Add	70.51	
For Overhead Ceiling Cores (Where Not Accessible From Above), Add	141.02	
50 89 86 60-0008 LF CALTRANS 600070 CORE CONCRETE (8").....	439.68	
For Horizontal Cores, Add	87.11	
For Overhead Ceiling Cores (Where Not Accessible From Above), Add	174.22	
50 89 86 60-0009 LF CALTRANS 600071 CORE CONCRETE (9").....	50.67	
For Horizontal Cores, Add	9.04	
For Overhead Ceiling Cores (Where Not Accessible From Above), Add	18.08	
50 89 86 60-0010 LF CALTRANS 600072 CORE CONCRETE (10").....	473.67	
For Horizontal Cores, Add	93.64	
For Overhead Ceiling Cores (Where Not Accessible From Above), Add	187.28	
50 89 86 60-0011 LF CALTRANS 600074 CORE CONCRETE (12").....	545.70	
For Horizontal Cores, Add	107.83	
For Overhead Ceiling Cores (Where Not Accessible From Above), Add	215.65	
50 89 86 60-0012 LF CALTRANS 600081 CORE CONCRETE (1 1/2").....	129.06	
For Horizontal Cores, Add	25.54	
For Overhead Ceiling Cores (Where Not Accessible From Above), Add	51.08	
50 89 86 60-0013 LF CALTRANS 600083 CORE CONCRETE (2 1/2").....	150.50	
For Horizontal Cores, Add	29.72	
For Overhead Ceiling Cores (Where Not Accessible From Above), Add	59.44	
<b>50 89 87 CALTRANS DIVISION VII - DRAINAGE FACILITIES (50 89 80)</b>		

**50 Custom Standards And Assemblies****50 89 CALTRANS Custom Standards And Assemblies****50 89 80 CALTRANS Construction Performance Requirements**MINOR  
CSI UOM DESCRIPTIONTOTAL DIRECT DEMOLITION  
UNIT COST UNIT COST**50 89 87 64****PLASTIC PIPE** (50 89 87)

Note: Includes installing plastic pipe, excavation, backfill, compaction, connection of new pipe to new or existing facilities, reinforcement, concrete collars or tees, testing, and other connecting devices per CALTRANS Standard.

50 89 87 64-0001	LF	CALTRANS 641101 12" PLASTIC PIPE.....	46.92
		Note: Includes 0.37 CY of excavated material per LF of pipe.	
		For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe	0.87
		For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe	1.41
50 89 87 64-0002	LF	CALTRANS 641104 15" PLASTIC PIPE.....	58.73
		Note: Includes 0.53 CY of excavated material per LF of pipe.	
		For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe	0.87
		For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe	1.41
50 89 87 64-0003	LF	CALTRANS 641107 18" PLASTIC PIPE.....	73.65
		Note: Includes 0.64 CY of excavated material per LF of pipe.	
		For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe	0.87
		For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe	1.41
50 89 87 64-0004	LF	CALTRANS 641110 21" PLASTIC PIPE.....	88.09
		Note: Includes 0.80 CY of excavated material per LF of pipe.	
		For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe	0.87
		For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe	1.41
50 89 87 64-0005	LF	CALTRANS 641113 24" PLASTIC PIPE.....	102.12
		Note: Includes 0.89 CY of excavated material per LF of pipe.	
		For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe	0.87
		For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe	1.41
50 89 87 64-0006	LF	CALTRANS 641119 30" PLASTIC PIPE.....	145.52
		Note: Includes 1.08 CY of excavated material per LF of pipe.	
		For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe	0.87
		For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe	1.41
50 89 87 64-0007	LF	CALTRANS 641125 36" PLASTIC PIPE.....	177.13
		Note: Includes 1.30 CY of excavated material per LF of pipe.	
		For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe	0.87
		For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe	1.41
50 89 87 64-0008	LF	CALTRANS 641128 42" PLASTIC PIPE.....	258.83
		Note: Includes 1.53 CY of excavated material per LF of pipe.	
		For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe	0.87
		For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe	1.41
50 89 87 64-0009	LF	CALTRANS 641131 48" PLASTIC PIPE.....	314.38
		Note: Includes 1.78 CY of excavated material per LF of pipe.	
		For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe	0.87
		For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe	1.41

**50 89 87 65****CONCRETE PIPE** (50 89 87)

Note: Includes installing concrete pipe, excavation, backfill, compaction, connection of new pipe to new or existing facilities, reinforcement, concrete collars or tees, testing, and other connecting devices per CALTRANS Standard.

50 89 87 65-0001	LF	CALTRANS 650010 12" REINFORCED CONCRETE PIPE.....	62.22
		Note: Includes 0.37 CY of excavated material per LF of pipe.	
		For >1,000, Deduct	-3.11
		For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe	0.87
		For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe	1.41
50 89 87 65-0002	LF	CALTRANS 650012 15" REINFORCED CONCRETE PIPE.....	77.55
		Note: Includes 0.53 CY of excavated material per LF of pipe.	
		For >1,000, Deduct	-3.88
		For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe	0.87
		For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe	1.41
50 89 87 65-0003	LF	CALTRANS 650014 18" REINFORCED CONCRETE PIPE.....	88.60
		Note: Includes 0.64 CY of excavated material per LF of pipe.	
		For >1,000, Deduct	-4.43
		For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe	0.87
		For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe	1.41
50 89 87 65-0004	LF	CALTRANS 650016 21" REINFORCED CONCRETE PIPE.....	114.53
		Note: Includes 0.80 CY of excavated material per LF of pipe.	
		For >1,000, Deduct	-5.73
		For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe	0.87
		For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe	1.41
50 89 87 65-0005	LF	CALTRANS 650018 24" REINFORCED CONCRETE PIPE.....	132.12
		Note: Includes 0.89 CY of excavated material per LF of pipe.	
		For >1,000, Deduct	-6.61
		For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe	0.87
		For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe	1.41
50 89 87 65-0006	LF	CALTRANS 650019 27" REINFORCED CONCRETE PIPE.....	162.86
		Note: Includes 0.98 CY of excavated material per LF of pipe.	
		For >1,000, Deduct	-8.14
		For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe	0.87
		For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe	1.41
50 89 87 65-0007	LF	CALTRANS 650022 30" REINFORCED CONCRETE PIPE.....	174.19
		Note: Includes 1.08 CY of excavated material per LF of pipe.	
		For >1,000, Deduct	-8.71
		For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe	0.87
		For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe	1.41
50 89 87 65-0008	LF	CALTRANS 650024 33" REINFORCED CONCRETE PIPE.....	194.66
		Note: Includes 1.19 CY of excavated material per LF of pipe.	
		For >1,000, Deduct	-9.73
		For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe	0.87
		For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe	1.41



Custom Standards And Assemblies			50
CALTRANS Custom Standards And Assemblies			50 89
CALTRANS Construction Performance Requirements			50 89 80

MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
50 89 87 65-0009 LF CALTRANS 650026 36" REINFORCED CONCRETE PIPE.....	214.95	
Note: Includes 1.30 CY of excavated material per LF of pipe.		
For >1,000, Deduct	-10.75	
For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe	0.87	
For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe	1.41	
50 89 87 65-0010 LF CALTRANS 650030 42" REINFORCED CONCRETE PIPE.....	278.38	
Note: Includes 1.53 CY of excavated material per LF of pipe.		
For >1,000, Deduct	-13.92	
For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe	0.87	
For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe	1.41	
50 89 87 65-0011 LF CALTRANS 650034 48" REINFORCED CONCRETE PIPE.....	334.77	
Note: Includes 1.78 CY of excavated material per LF of pipe.		
For >1,000, Deduct	-16.74	
For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe	0.87	
For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe	1.41	
50 89 87 65-0012 LF CALTRANS 650038 54" REINFORCED CONCRETE PIPE.....	411.66	
Note: Includes 2.05 CY of excavated material per LF of pipe.		
For >1,000, Deduct	-20.58	
For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe	0.87	
For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe	1.41	
50 89 87 65-0013 LF CALTRANS 650042 60" REINFORCED CONCRETE PIPE.....	493.85	
Note: Includes 2.33 CY of excavated material per LF of pipe.		
For >1,000, Deduct	-24.69	
For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe	0.87	
For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe	1.41	
50 89 87 65-0014 LF CALTRANS 650046 66" REINFORCED CONCRETE PIPE.....	735.13	
Note: Includes 2.64 CY of excavated material per LF of pipe.		
For >1,000, Deduct	-36.76	
For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe	0.87	
For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe	1.41	
50 89 87 65-0015 LF CALTRANS 650050 72" REINFORCED CONCRETE PIPE.....	853.60	
Note: Includes 2.96 CY of excavated material per LF of pipe.		
For >1,000, Deduct	-42.68	
For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe	0.87	
For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe	1.41	
50 89 87 65-0016 LF CALTRANS 650054 78" REINFORCED CONCRETE PIPE.....	1,019.08	
Note: Includes 3.31 CY of excavated material per LF of pipe.		
For >1,000, Deduct	-50.95	
For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe	0.87	
For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe	1.41	
50 89 87 65-0017 LF CALTRANS 650058 84" REINFORCED CONCRETE PIPE.....	1,297.57	
Note: Includes 3.67 CY of excavated material per LF of pipe.		
For >1,000, Deduct	-64.88	
For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe	0.87	
For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe	1.41	
50 89 87 65-0018 LF CALTRANS 650065 96" REINFORCED CONCRETE PIPE.....	1,584.71	
Note: Includes 4.44 CY of excavated material per LF of pipe.		
For >1,000, Deduct	-79.24	
For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe	0.87	
For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe	1.41	
50 89 87 65-0019 LF CALTRANS 650211 18" REINFORCED CONCRETE PIPE (CLASS II).....	86.68	
Note: Includes 0.64 CY of excavated material per LF of pipe.		
For >1,000, Deduct	-4.33	
For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe	0.87	
For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe	1.41	
50 89 87 65-0020 LF CALTRANS 650220 30" REINFORCED CONCRETE PIPE (CLASS II).....	170.33	
Note: Includes 1.08 CY of excavated material per LF of pipe.		
For >1,000, Deduct	-8.52	
For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe	0.87	
For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe	1.41	
50 89 87 65-0021 LF CALTRANS 650222 33" REINFORCED CONCRETE PIPE (CLASS II).....	190.11	
Note: Includes 1.19 CY of excavated material per LF of pipe.		
For >1,000, Deduct	-9.51	
For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe	0.87	
For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe	1.41	
50 89 87 65-0022 LF CALTRANS 650224 36" REINFORCED CONCRETE PIPE (CLASS II).....	209.71	
Note: Includes 1.30 CY of excavated material per LF of pipe.		
For >1,000, Deduct	-10.49	
For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe	0.87	
For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe	1.41	
50 89 87 65-0023 LF CALTRANS 650307 12" REINFORCED CONCRETE PIPE (CLASS III).....	62.22	
Note: Includes 0.37 CY of excavated material per LF of pipe.		
For >1,000, Deduct	-3.11	
For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe	0.87	
For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe	1.41	
50 89 87 65-0024 LF CALTRANS 650309 15" REINFORCED CONCRETE PIPE (CLASS III).....	77.55	
Note: Includes 0.53 CY of excavated material per LF of pipe.		
For >1,000, Deduct	-3.88	
For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe	0.87	
For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe	1.41	
50 89 87 65-0025 LF CALTRANS 650311 18" REINFORCED CONCRETE PIPE (CLASS III).....	88.60	
Note: Includes 0.64 CY of excavated material per LF of pipe.		
For >1,000, Deduct	-4.43	
For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe	0.87	
For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe	1.41	

**50 Custom Standards And Assemblies****50 89 CALTRANS Custom Standards And Assemblies****50 89 80 CALTRANS Construction Performance Requirements**

MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
50 89 87 65-0026 LF CALTRANS 650316 24" REINFORCED CONCRETE PIPE (CLASS III).....	132.12	
Note: Includes 0.89 CY of excavated material per LF of pipe.		
For >1,000, Deduct	-6.61	
For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe	0.87	
For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe	1.41	
50 89 87 65-0027 LF CALTRANS 650318 27" REINFORCED CONCRETE PIPE (CLASS III).....	162.86	
Note: Includes 0.98 CY of excavated material per LF of pipe.		
For >1,000, Deduct	-8.14	
For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe	0.87	
For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe	1.41	
50 89 87 65-0028 LF CALTRANS 650320 30" REINFORCED CONCRETE PIPE (CLASS III).....	174.19	
Note: Includes 1.08 CY of excavated material per LF of pipe.		
For >1,000, Deduct	-8.71	
For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe	0.87	
For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe	1.41	
50 89 87 65-0029 LF CALTRANS 650324 36" REINFORCED CONCRETE PIPE (CLASS III).....	214.95	
Note: Includes 1.30 CY of excavated material per LF of pipe.		
For >1,000, Deduct	-10.75	
For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe	0.87	
For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe	1.41	
50 89 87 65-0030 LF CALTRANS 650328 42" REINFORCED CONCRETE PIPE (CLASS III).....	278.38	
Note: Includes 1.53 CY of excavated material per LF of pipe.		
For >1,000, Deduct	-13.92	
For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe	0.87	
For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe	1.41	
50 89 87 65-0031 LF CALTRANS 650336 54" REINFORCED CONCRETE PIPE (CLASS III).....	411.66	
Note: Includes 2.05 CY of excavated material per LF of pipe.		
For >1,000, Deduct	-20.58	
For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe	0.87	
For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe	1.41	
50 89 87 65-0032 LF CALTRANS 650407 12" REINFORCED CONCRETE PIPE (CLASS IV).....	64.93	
Note: Includes 0.37 CY of excavated material per LF of pipe.		
For >1,000, Deduct	-3.25	
For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe	0.87	
For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe	1.41	
50 89 87 65-0033 LF CALTRANS 650409 15" REINFORCED CONCRETE PIPE (CLASS IV).....	81.03	
Note: Includes 0.53 CY of excavated material per LF of pipe.		
For >1,000, Deduct	-4.05	
For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe	0.87	
For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe	1.41	
50 89 87 65-0034 LF CALTRANS 650411 18" REINFORCED CONCRETE PIPE (CLASS IV).....	92.26	
Note: Includes 0.64 CY of excavated material per LF of pipe.		
For >1,000, Deduct	-4.61	
For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe	0.87	
For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe	1.41	
50 89 87 65-0035 LF CALTRANS 650416 24" REINFORCED CONCRETE PIPE (CLASS IV).....	137.50	
Note: Includes 0.89 CY of excavated material per LF of pipe.		
For >1,000, Deduct	-6.88	
For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe	0.87	
For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe	1.41	
50 89 87 65-0036 LF CALTRANS 650420 30" REINFORCED CONCRETE PIPE (CLASS IV).....	181.54	
Note: Includes 1.08 CY of excavated material per LF of pipe.		
For >1,000, Deduct	-9.08	
For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe	0.87	
For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe	1.41	
50 89 87 65-0037 LF CALTRANS 650424 36" REINFORCED CONCRETE PIPE (CLASS IV).....	224.92	
Note: Includes 1.30 CY of excavated material per LF of pipe.		
For >1,000, Deduct	-11.25	
For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe	0.87	
For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe	1.41	
50 89 87 65-0038 LF CALTRANS 650432 48" REINFORCED CONCRETE PIPE (CLASS IV).....	352.65	
Note: Includes 1.78 CY of excavated material per LF of pipe.		
For >1,000, Deduct	-17.63	
For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe	0.87	
For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe	1.41	
50 89 87 65-0039 LF CALTRANS 650436 54" REINFORCED CONCRETE PIPE (CLASS IV).....	434.88	
Note: Includes 2.05 CY of excavated material per LF of pipe.		
For >1,000, Deduct	-21.74	
For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe	0.87	
For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe	1.41	
50 89 87 65-0040 LF CALTRANS 650440 60" REINFORCED CONCRETE PIPE (CLASS IV).....	522.40	
Note: Includes 2.33 CY of excavated material per LF of pipe.		
For >1,000, Deduct	-26.12	
For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe	0.87	
For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe	1.41	
50 89 87 65-0041 LF CALTRANS 650507 12" REINFORCED CONCRETE PIPE (CLASS V).....	67.93	
Note: Includes 0.37 CY of excavated material per LF of pipe.		
For >1,000, Deduct	-3.40	
For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe	0.87	
For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe	1.41	
50 89 87 65-0042 LF CALTRANS 650511 18" REINFORCED CONCRETE PIPE (CLASS V).....	96.31	
Note: Includes 0.64 CY of excavated material per LF of pipe.		
For >1,000, Deduct	-4.82	
For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe	0.87	
For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe	1.41	





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MINOR CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
50 89 87 65-0043	LF	CALTRANS 650516 24" REINFORCED CONCRETE PIPE (CLASS V) ..... Note: Includes 0.89 CY of excavated material per LF of pipe.	143.45	
		For >1,000, Deduct	-7.17	
		For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe	0.87	
		For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe	1.41	
50 89 87 65-0044	LF	CALTRANS 650520 30" REINFORCED CONCRETE PIPE (CLASS V) ..... Note: Includes 1.08 CY of excavated material per LF of pipe.	174.19	
		For >1,000, Deduct	-8.71	
		For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe	0.87	
		For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe	1.41	
50 89 87 65-0045	LF	CALTRANS 650524 36" REINFORCED CONCRETE PIPE (CLASS V) ..... Note: Includes 1.30 CY of excavated material per LF of pipe.	235.93	
		For >1,000, Deduct	-11.80	
		For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe	0.87	
		For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe	1.41	
50 89 87 65-0046	LF	CALTRANS 650528 42" REINFORCED CONCRETE PIPE (CLASS V) ..... Note: Includes 1.53 CY of excavated material per LF of pipe.	278.38	
		For >1,000, Deduct	-13.92	
		For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe	0.87	
		For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe	1.41	
50 89 87 65-0047	LF	CALTRANS 650536 54" REINFORCED CONCRETE PIPE (CLASS V) ..... Note: Includes 2.05 CY of excavated material per LF of pipe.	460.54	
		For >1,000, Deduct	-23.03	
		For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe	0.87	
		For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe	1.41	
50 89 87 65-0048	LF	CALTRANS 650540 60" REINFORCED CONCRETE PIPE (CLASS V) ..... Note: Includes 2.33 CY of excavated material per LF of pipe.	493.85	
		For >1,000, Deduct	-24.69	
		For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe	0.87	
		For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe	1.41	
50 89 87 65-0049	LF	CALTRANS 650548 72" REINFORCED CONCRETE PIPE (CLASS V) ..... Note: Includes 2.96 CY of excavated material per LF of pipe.	853.60	
		For >1,000, Deduct	-42.68	
		For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe	0.87	
		For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe	1.41	
50 89 87 65-0050	LF	CALTRANS 652207 12" REINFORCED CONCRETE PIPE (CLASS II, RUBBER GASKET JOINT) ..... Note: Includes 0.37 CY of excavated material per LF of pipe.	61.13	
		For >1,000, Deduct	-3.06	
		For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe	0.87	
		For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe	1.41	
50 89 87 65-0051	LF	CALTRANS 652215 24" REINFORCED CONCRETE PIPE (CLASS II, RUBBER GASKET JOINT) ..... Note: Includes 0.89 CY of excavated material per LF of pipe.	133.26	
		For >1,000, Deduct	-6.66	
		For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe	0.87	
		For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe	1.41	
50 89 87 65-0052	LF	CALTRANS 652307 12" REINFORCED CONCRETE PIPE (CLASS III, RUBBER GASKET JOINT) ..... Note: Includes 0.37 CY of excavated material per LF of pipe.	64.36	
		For >1,000, Deduct	-3.22	
		For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe	0.87	
		For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe	1.41	
50 89 87 65-0053	LF	CALTRANS 652311 18" REINFORCED CONCRETE PIPE (CLASS III, RUBBER GASKET JOINT) ..... Note: Includes 0.64 CY of excavated material per LF of pipe.	91.49	
		For >1,000, Deduct	-4.57	
		For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe	0.87	
		For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe	1.41	
50 89 87 65-0054	LF	CALTRANS 652314 21" REINFORCED CONCRETE PIPE (CLASS III, RUBBER GASKET JOINT) ..... Note: Includes 0.80 CY of excavated material per LF of pipe.	118.29	
		For >1,000, Deduct	-5.91	
		For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe	0.87	
		For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe	1.41	
50 89 87 65-0055	LF	CALTRANS 652316 24" REINFORCED CONCRETE PIPE (CLASS III, RUBBER GASKET JOINT) ..... Note: Includes 0.89 CY of excavated material per LF of pipe.	136.37	
		For >1,000, Deduct	-6.82	
		For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe	0.87	
		For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe	1.41	
50 89 87 65-0056	LF	CALTRANS 652320 30" REINFORCED CONCRETE PIPE (CLASS III, RUBBER GASKET JOINT) ..... Note: Includes 1.08 CY of excavated material per LF of pipe.	179.99	
		For >1,000, Deduct	-9.00	
		For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe	0.87	
		For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe	1.41	
50 89 87 65-0057	LF	CALTRANS 652324 36" REINFORCED CONCRETE PIPE (CLASS III, RUBBER GASKET JOINT) ..... Note: Includes 1.30 CY of excavated material per LF of pipe.	222.82	
		For >1,000, Deduct	-11.14	
		For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe	0.87	
		For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe	1.41	
50 89 87 65-0058	LF	CALTRANS 652328 42" REINFORCED CONCRETE PIPE (CLASS III, RUBBER GASKET JOINT) ..... Note: Includes 1.53 CY of excavated material per LF of pipe.	289.76	
		For >1,000, Deduct	-14.49	
		For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe	0.87	
		For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe	1.41	
50 89 87 65-0059	LF	CALTRANS 652332 48" REINFORCED CONCRETE PIPE (CLASS III, RUBBER GASKET JOINT) ..... Note: Includes 1.78 CY of excavated material per LF of pipe.	348.88	
		For >1,000, Deduct	-17.44	
		For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe	0.87	
		For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe	1.41	

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MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
50 89 87 65-0060 LF CALTRANS 652348 72" REINFORCED CONCRETE PIPE (CLASS III, RUBBER GASKET JOINT).....	900.02	
Note: Includes 2.96 CY of excavated material per LF of pipe.		
For >1,000, Deduct	-45.00	
For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe	0.87	
For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe	1.41	
50 89 87 65-0061 LF CALTRANS 652416 24" REINFORCED CONCRETE PIPE (CLASS IV, RUBBER GASKET JOINT).....	142.15	
Note: Includes 0.89 CY of excavated material per LF of pipe.		
For >1,000, Deduct	-7.11	
For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe	0.87	
For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe	1.41	
50 89 87 65-0062 LF CALTRANS 652420 30" REINFORCED CONCRETE PIPE (CLASS IV, RUBBER GASKET JOINT).....	187.88	
Note: Includes 1.08 CY of excavated material per LF of pipe.		
For >1,000, Deduct	-9.39	
For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe	0.87	
For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe	1.41	
50 89 87 65-0063 LF CALTRANS 652424 36" REINFORCED CONCRETE PIPE (CLASS IV, RUBBER GASKET JOINT).....	233.51	
Note: Includes 1.30 CY of excavated material per LF of pipe.		
For >1,000, Deduct	-11.68	
For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe	0.87	
For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe	1.41	
50 89 87 65-0064 LF CALTRANS 652428 42" REINFORCED CONCRETE PIPE (CLASS IV, RUBBER GASKET JOINT).....	305.24	
Note: Includes 1.53 CY of excavated material per LF of pipe.		
For >1,000, Deduct	-15.26	
For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe	0.87	
For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe	1.41	
50 89 87 65-0065 LF CALTRANS 652444 66" REINFORCED CONCRETE PIPE (CLASS IV, RUBBER GASKET JOINT).....	827.41	
Note: Includes 2.64 CY of excavated material per LF of pipe.		
For >1,000, Deduct	-41.37	
For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe	0.87	
For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe	1.41	
50 89 87 65-0066 LF CALTRANS 654311 18" REINFORCED CONCRETE PRESSURE PIPE (CLASS III) .....	151.74	
Note: Includes 0.64 CY of excavated material per LF of pipe.		
For >1,000, Deduct	-7.59	
For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe	0.87	
For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe	1.41	
50 89 87 65-0067 LF CALTRANS 654316 24" REINFORCED CONCRETE PRESSURE PIPE (CLASS III) .....	187.23	
Note: Includes 0.89 CY of excavated material per LF of pipe.		
For >1,000, Deduct	-9.36	
For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe	0.87	
For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe	1.41	
50 89 87 65-0068 LF CALTRANS 654324 36" REINFORCED CONCRETE PRESSURE PIPE (CLASS III) .....	248.05	
Note: Includes 1.30 CY of excavated material per LF of pipe.		
For >1,000, Deduct	-12.40	
For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe	0.87	
For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe	1.41	
50 89 87 65-0069 LF CALTRANS 657213 24" X 38" OVAL SHAPED REINFORCED CONCRETE PIPE (CLASS II) .....	259.28	
Note: Includes 1.08 CY of excavated material per LF of pipe.		
For >1,000, Deduct	-12.96	
For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe	0.87	
For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe	1.41	
50 89 87 65-0070 LF CALTRANS 657329 34" X 53" OVAL SHAPED REINFORCED CONCRETE PIPE (CLASS III) .....	448.68	
Note: Includes 1.78 CY of excavated material per LF of pipe.		
For >1,000, Deduct	-22.43	
For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe	0.87	
For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe	1.41	
50 89 87 65-0071 LF CALTRANS 659108 18" NON-REINFORCED CONCRETE PIPE .....	80.90	
Note: Includes 0.64 CY of excavated material per LF of pipe.		
For >1,000, Deduct	-4.05	
For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe	0.87	
For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe	1.41	
50 89 87 65-0072 LF CALTRANS 659109 24" NON-REINFORCED CONCRETE PIPE .....	120.80	
Note: Includes 0.89 CY of excavated material per LF of pipe.		
For >1,000, Deduct	-6.04	
For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe	0.87	
For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe	1.41	
50 89 87 65-0073 LF CALTRANS 659110 30" NON-REINFORCED CONCRETE PIPE .....	158.73	
Note: Includes 1.08 CY of excavated material per LF of pipe.		
For >1,000, Deduct	-7.94	
For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe	0.87	
For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe	1.41	
50 89 87 65-0074 LF CALTRANS 659111 36" NON-REINFORCED CONCRETE PIPE .....	193.98	
Note: Includes 1.30 CY of excavated material per LF of pipe.		
For >1,000, Deduct	-9.70	
For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe	0.87	
For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe	1.41	
<b>50 89 87 66 CORRUGATED METAL PIPE</b> (50 89 87)		
Note: Includes installing corrugated metal pipe and pipe arches, excavation, backfill, compaction, connection of new pipe to new or existing facilities, reinforcement, concrete collars or tees, testing, and other connecting devices per CALTRANS Standard.		
50 89 87 66-0001 LF CALTRANS 665002 6" CORRUGATED STEEL PIPE (.064" THICK) .....	24.38	
Note: Includes 0.29 CY of excavated material per LF of pipe.		
For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe	0.87	
For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe	1.41	



MINOR CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
50 89 87 66-0002	LF	CALTRANS 665003 6" CORRUGATED STEEL PIPE (.079" THICK) ..... Note: Includes 0.29 CY of excavated material per LF of pipe. For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe	26.07 0.87 1.41	
50 89 87 66-0003	LF	CALTRANS 665005 8" CORRUGATED STEEL PIPE (.064" THICK) ..... Note: Includes 0.29 CY of excavated material per LF of pipe. For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe	33.05 0.87 1.41	
50 89 87 66-0004	LF	CALTRANS 665006 8" CORRUGATED STEEL PIPE (.079" THICK) ..... Note: Includes 0.29 CY of excavated material per LF of pipe. For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe	35.27 0.87 1.41	
50 89 87 66-0005	LF	CALTRANS 665008 10" CORRUGATED STEEL PIPE (.064" THICK) ..... Note: Includes 0.32 CY of excavated material per LF of pipe. For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe	40.51 0.87 1.41	
50 89 87 66-0006	LF	CALTRANS 665009 10" CORRUGATED STEEL PIPE (.079" THICK) ..... Note: Includes 0.32 CY of excavated material per LF of pipe. For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe	42.32 0.87 1.41	
50 89 87 66-0007	LF	CALTRANS 665011 12" CORRUGATED STEEL PIPE (.064" THICK) ..... Note: Includes 0.37 CY of excavated material per LF of pipe. For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe	45.60 0.87 1.41	
50 89 87 66-0008	LF	CALTRANS 665012 12" CORRUGATED STEEL PIPE (.079" THICK) ..... Note: Includes 0.37 CY of excavated material per LF of pipe. For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe	48.49 0.87 1.41	
50 89 87 66-0009	LF	CALTRANS 665013 15" CORRUGATED STEEL PIPE (.064" THICK) ..... Note: Includes 0.53 CY of excavated material per LF of pipe. For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe	56.89 0.87 1.41	
50 89 87 66-0010	LF	CALTRANS 665014 15" CORRUGATED STEEL PIPE (.079" THICK) ..... Note: Includes 0.53 CY of excavated material per LF of pipe. For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe	60.46 0.87 1.41	
50 89 87 66-0011	LF	CALTRANS 665015 15" CORRUGATED STEEL PIPE (.109" THICK) ..... Note: Includes 0.53 CY of excavated material per LF of pipe. For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe	67.82 0.87 1.41	
50 89 87 66-0012	LF	CALTRANS 665016 18" CORRUGATED STEEL PIPE (.064" THICK) ..... Note: Includes 0.64 CY of excavated material per LF of pipe. For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe	66.09 0.87 1.41	
50 89 87 66-0013	LF	CALTRANS 665017 18" CORRUGATED STEEL PIPE (.079" THICK) ..... Note: Includes 0.64 CY of excavated material per LF of pipe. For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe	70.40 0.87 1.41	
50 89 87 66-0014	LF	CALTRANS 665018 18" CORRUGATED STEEL PIPE (.109" THICK) ..... Note: Includes 0.64 CY of excavated material per LF of pipe. For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe	79.32 0.87 1.41	
50 89 87 66-0015	LF	CALTRANS 665019 21" CORRUGATED STEEL PIPE (.064" THICK) ..... Note: Includes 0.80 CY of excavated material per LF of pipe. For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe	79.07 0.87 1.41	
50 89 87 66-0016	LF	CALTRANS 665020 21" CORRUGATED STEEL PIPE (.079" THICK) ..... Note: Includes 0.80 CY of excavated material per LF of pipe. For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe	84.05 0.87 1.41	
50 89 87 66-0017	LF	CALTRANS 665021 21" CORRUGATED STEEL PIPE (.109" THICK) ..... Note: Includes 0.80 CY of excavated material per LF of pipe. For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe	94.42 0.87 1.41	
50 89 87 66-0018	LF	CALTRANS 665022 24" CORRUGATED STEEL PIPE (.064" THICK) ..... Note: Includes 0.89 CY of excavated material per LF of pipe. For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe	87.24 0.87 1.41	
50 89 87 66-0019	LF	CALTRANS 665023 24" CORRUGATED STEEL PIPE (.079" THICK) ..... Note: Includes 0.89 CY of excavated material per LF of pipe. For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe	93.36 0.87 1.41	
50 89 87 66-0020	LF	CALTRANS 665024 24" CORRUGATED STEEL PIPE (.109" THICK) ..... Note: Includes 0.89 CY of excavated material per LF of pipe. For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe	105.18 0.87 1.41	
50 89 87 66-0021	LF	CALTRANS 665025 24" CORRUGATED STEEL PIPE (.138" THICK) ..... Note: Includes 0.89 CY of excavated material per LF of pipe. For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe	115.10 0.87 1.41	
50 89 87 66-0022	LF	CALTRANS 665026 27" CORRUGATED STEEL PIPE (.064" THICK) ..... Note: Includes 0.98 CY of excavated material per LF of pipe. For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe	100.07 0.87 1.41	

**50 Custom Standards And Assemblies****50 89 CALTRANS Custom Standards And Assemblies****50 89 80 CALTRANS Construction Performance Requirements**

MINOR	CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
50 89 87 66-0023	LF		CALTRANS 665027 27" CORRUGATED STEEL PIPE (.079" THICK) .....106.83 Note: Includes 0.98 CY of excavated material per LF of pipe. For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe 0.87 For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe 1.41		
50 89 87 66-0024	LF		CALTRANS 665030 30" CORRUGATED STEEL PIPE (.064" THICK) .....115.61 Note: Includes 1.08 CY of excavated material per LF of pipe. For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe 0.87 For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe 1.41		
50 89 87 66-0025	LF		CALTRANS 665031 30" CORRUGATED STEEL PIPE (.079" THICK) .....122.68 Note: Includes 1.08 CY of excavated material per LF of pipe. For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe 0.87 For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe 1.41		
50 89 87 66-0026	LF		CALTRANS 665032 30" CORRUGATED STEEL PIPE (.109" THICK) .....137.29 Note: Includes 1.08 CY of excavated material per LF of pipe. For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe 0.87 For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe 1.41		
50 89 87 66-0027	LF		CALTRANS 665033 30" CORRUGATED STEEL PIPE (.138" THICK) .....149.91 Note: Includes 1.08 CY of excavated material per LF of pipe. For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe 0.87 For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe 1.41		
50 89 87 66-0028	LF		CALTRANS 665035 36" CORRUGATED STEEL PIPE (.064" THICK) .....151.00 Note: Includes 1.30 CY of excavated material per LF of pipe. For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe 0.87 For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe 1.41		
50 89 87 66-0029	LF		CALTRANS 665036 36" CORRUGATED STEEL PIPE (.079" THICK) .....159.59 Note: Includes 1.30 CY of excavated material per LF of pipe. For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe 0.87 For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe 1.41		
50 89 87 66-0030	LF		CALTRANS 665037 36" CORRUGATED STEEL PIPE (.109" THICK) .....176.92 Note: Includes 1.30 CY of excavated material per LF of pipe. For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe 0.87 For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe 1.41		
50 89 87 66-0031	LF		CALTRANS 665038 36" CORRUGATED STEEL PIPE (.138" THICK) .....193.15 Note: Includes 1.30 CY of excavated material per LF of pipe. For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe 0.87 For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe 1.41		
50 89 87 66-0032	LF		CALTRANS 665039 36" CORRUGATED STEEL PIPE (.168" THICK) .....212.32 Note: Includes 1.30 CY of excavated material per LF of pipe. For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe 0.87 For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe 1.41		
50 89 87 66-0033	LF		CALTRANS 665040 42" CORRUGATED STEEL PIPE (.064" THICK) .....176.44 Note: Includes 1.53 CY of excavated material per LF of pipe. For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe 0.87 For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe 1.41		
50 89 87 66-0034	LF		CALTRANS 665041 42" CORRUGATED STEEL PIPE (.079" THICK) .....186.27 Note: Includes 1.53 CY of excavated material per LF of pipe. For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe 0.87 For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe 1.41		
50 89 87 66-0035	LF		CALTRANS 665042 42" CORRUGATED STEEL PIPE (.109" THICK) .....206.30 Note: Includes 1.53 CY of excavated material per LF of pipe. For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe 0.87 For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe 1.41		
50 89 87 66-0036	LF		CALTRANS 665043 42" CORRUGATED STEEL PIPE (.138" THICK) .....225.29 Note: Includes 1.53 CY of excavated material per LF of pipe. For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe 0.87 For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe 1.41		
50 89 87 66-0037	LF		CALTRANS 665045 48" CORRUGATED STEEL PIPE (.064" THICK) .....202.29 Note: Includes 1.78 CY of excavated material per LF of pipe. For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe 0.87 For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe 1.41		
50 89 87 66-0038	LF		CALTRANS 665046 48" CORRUGATED STEEL PIPE (.079" THICK) .....213.54 Note: Includes 1.78 CY of excavated material per LF of pipe. For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe 0.87 For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe 1.41		
50 89 87 66-0039	LF		CALTRANS 665047 48" CORRUGATED STEEL PIPE (.109" THICK) .....236.50 Note: Includes 1.78 CY of excavated material per LF of pipe. For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe 0.87 For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe 1.41		
50 89 87 66-0040	LF		CALTRANS 665048 48" CORRUGATED STEEL PIPE (.138" THICK) .....258.04 Note: Includes 1.78 CY of excavated material per LF of pipe. For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe 0.87 For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe 1.41		
50 89 87 66-0041	LF		CALTRANS 665049 48" CORRUGATED STEEL PIPE (.168" THICK) .....283.43 Note: Includes 1.78 CY of excavated material per LF of pipe. For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe 0.87 For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe 1.41		
50 89 87 66-0042	LF		CALTRANS 665050 54" CORRUGATED STEEL PIPE (.079" THICK) .....258.01 Note: Includes 2.05 CY of excavated material per LF of pipe. For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe 0.87 For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe 1.41		
50 89 87 66-0043	LF		CALTRANS 665051 54" CORRUGATED STEEL PIPE (.109" THICK) .....283.36 Note: Includes 2.05 CY of excavated material per LF of pipe. For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe 0.87 For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe 1.41		



<b>Custom Standards And Assemblies</b>			<b>50</b>
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MINOR CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
50 89 87 66-0044	LF	CALTRANS 665052 54" CORRUGATED STEEL PIPE (.138" THICK) ..... Note: Includes 2.05 CY of excavated material per LF of pipe. For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe	307.49  0.87 1.41	
50 89 87 66-0045	LF	CALTRANS 665053 54" CORRUGATED STEEL PIPE (.168" THICK) ..... Note: Includes 2.05 CY of excavated material per LF of pipe. For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe	337.56  0.87 1.41	
50 89 87 66-0046	LF	CALTRANS 665055 60" CORRUGATED STEEL PIPE (.109" THICK) ..... Note: Includes 2.33 CY of excavated material per LF of pipe. For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe	325.83  0.87 1.41	
50 89 87 66-0047	LF	CALTRANS 665056 60" CORRUGATED STEEL PIPE (.138" THICK) ..... Note: Includes 2.33 CY of excavated material per LF of pipe. For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe	352.70  0.87 1.41	
50 89 87 66-0048	LF	CALTRANS 665057 60" CORRUGATED STEEL PIPE (.168" THICK) ..... Note: Includes 2.33 CY of excavated material per LF of pipe. For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe	385.72  0.87 1.41	
50 89 87 66-0049	LF	CALTRANS 665058 66" CORRUGATED STEEL PIPE (.109" THICK) ..... Note: Includes 2.64 CY of excavated material per LF of pipe. For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe	388.76  0.87 1.41	
50 89 87 66-0050	LF	CALTRANS 665059 66" CORRUGATED STEEL PIPE (.138" THICK) ..... Note: Includes 2.64 CY of excavated material per LF of pipe. For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe	418.28  0.87 1.41	
50 89 87 66-0051	LF	CALTRANS 665061 72" CORRUGATED STEEL PIPE (.109" THICK) ..... Note: Includes 2.96 CY of excavated material per LF of pipe. For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe	517.40  0.87 1.41	
50 89 87 66-0052	LF	CALTRANS 665062 72" CORRUGATED STEEL PIPE (.138" THICK) ..... Note: Includes 2.96 CY of excavated material per LF of pipe. For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe	559.24  0.87 1.41	
50 89 87 66-0053	LF	CALTRANS 665064 78" CORRUGATED STEEL PIPE (.138" THICK) ..... Note: Includes 3.31 CY of excavated material per LF of pipe. For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe	605.52  0.87 1.41	
50 89 87 66-0054	LF	CALTRANS 665066 84" CORRUGATED STEEL PIPE (.138" THICK) ..... Note: Includes 3.67 CY of excavated material per LF of pipe. For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe	648.89  0.87 1.41	
50 89 87 66-0055	LF	CALTRANS 665067 84" CORRUGATED STEEL PIPE (.168" THICK) ..... Note: Includes 3.67 CY of excavated material per LF of pipe. For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe	711.78  0.87 1.41	
50 89 87 66-0056	LF	CALTRANS 665068 90" CORRUGATED STEEL PIPE (.138" THICK) ..... Note: Includes 4.05 CY of excavated material per LF of pipe. For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe	698.10  0.87 1.41	
50 89 87 66-0057	LF	CALTRANS 665070 96" CORRUGATED STEEL PIPE (.168" THICK) ..... Note: Includes 4.44 CY of excavated material per LF of pipe. For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe	743.57  0.87 1.41	
50 89 87 66-0058	LF	CALTRANS 665075 18" CORRUGATED STEEL PIPE (.138" THICK) ..... Note: Includes 0.64 CY of excavated material per LF of pipe. For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe	86.72  0.87 1.41	
50 89 87 66-0059	LF	CALTRANS 665094 18" BITUMINOUS COATED CORRUGATED STEEL PIPE (.138" THICK) ..... Note: Includes 0.64 CY of excavated material per LF of pipe. For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe	93.69  0.87 1.41	
50 89 87 66-0060	LF	CALTRANS 665103 6" BITUMINOUS COATED CORRUGATED STEEL PIPE (.079" THICK) ..... For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe	27.96  0.87 1.41	
50 89 87 66-0061	LF	CALTRANS 665105 8" BITUMINOUS COATED CORRUGATED STEEL PIPE (.064" THICK) ..... For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe	35.52  0.87 1.41	
50 89 87 66-0062	LF	CALTRANS 665106 8" BITUMINOUS COATED CORRUGATED STEEL PIPE (.079" THICK) ..... For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe	37.75  0.87 1.41	
50 89 87 66-0063	LF	CALTRANS 665108 10" BITUMINOUS COATED CORRUGATED STEEL PIPE (.064" THICK) ..... For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe	43.62  0.87 1.41	
50 89 87 66-0064	LF	CALTRANS 665109 10" BITUMINOUS COATED CORRUGATED STEEL PIPE (.079" THICK) ..... For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe	46.42  0.87 1.41	
50 89 87 66-0065	LF	CALTRANS 665111 12" BITUMINOUS COATED CORRUGATED STEEL PIPE (.064" THICK) ..... Note: Includes 0.37 CY of excavated material per LF of pipe. For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe	48.88  0.87 1.41	

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MINOR CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
50 89 87 66-0087	LF	CALTRANS 665138 36" BITUMINOUS COATED CORRUGATED STEEL PIPE (.138" THICK) ..... Note: Includes 1.30 CY of excavated material per LF of pipe. For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe	208.49  0.87 1.41	
50 89 87 66-0088	LF	CALTRANS 665139 36" BITUMINOUS COATED CORRUGATED STEEL PIPE (.168" THICK) ..... Note: Includes 1.30 CY of excavated material per LF of pipe. For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe	231.06  0.87 1.41	
50 89 87 66-0089	LF	CALTRANS 665140 42" BITUMINOUS COATED CORRUGATED STEEL PIPE (.064" THICK) ..... Note: Includes 1.53 CY of excavated material per LF of pipe. For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe	189.33  0.87 1.41	
50 89 87 66-0090	LF	CALTRANS 665141 42" BITUMINOUS COATED CORRUGATED STEEL PIPE (.079" THICK) ..... Note: Includes 1.53 CY of excavated material per LF of pipe. For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe	199.02  0.87 1.41	
50 89 87 66-0091	LF	CALTRANS 665142 42" BITUMINOUS COATED CORRUGATED STEEL PIPE (.109" THICK) ..... Note: Includes 1.53 CY of excavated material per LF of pipe. For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe	220.43  0.87 1.41	
50 89 87 66-0092	LF	CALTRANS 665143 42" BITUMINOUS COATED CORRUGATED STEEL PIPE (.138" THICK) ..... Note: Includes 1.53 CY of excavated material per LF of pipe. For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe	243.26  0.87 1.41	
50 89 87 66-0093	LF	CALTRANS 665145 48" BITUMINOUS COATED CORRUGATED STEEL PIPE (.064" THICK) ..... Note: Includes 1.78 CY of excavated material per LF of pipe. For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe	216.73  0.87 1.41	
50 89 87 66-0094	LF	CALTRANS 665146 48" BITUMINOUS COATED CORRUGATED STEEL PIPE (.079" THICK) ..... Note: Includes 1.78 CY of excavated material per LF of pipe. For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe	227.86  0.87 1.41	
50 89 87 66-0095	LF	CALTRANS 665147 48" BITUMINOUS COATED CORRUGATED STEEL PIPE (.109" THICK) ..... Note: Includes 1.78 CY of excavated material per LF of pipe. For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe	252.45  0.87 1.41	
50 89 87 66-0096	LF	CALTRANS 665148 48" BITUMINOUS COATED CORRUGATED STEEL PIPE (.138" THICK) ..... Note: Includes 1.78 CY of excavated material per LF of pipe. For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe	278.35  0.87 1.41	
50 89 87 66-0097	LF	CALTRANS 665149 48" BITUMINOUS COATED CORRUGATED STEEL PIPE (.168" THICK) ..... Note: Includes 1.78 CY of excavated material per LF of pipe. For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe	308.24  0.87 1.41	
50 89 87 66-0098	LF	CALTRANS 665150 54" BITUMINOUS COATED CORRUGATED STEEL PIPE (.079" THICK) ..... Note: Includes 2.05 CY of excavated material per LF of pipe. For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe	275.62  0.87 1.41	
50 89 87 66-0099	LF	CALTRANS 665151 54" BITUMINOUS COATED CORRUGATED STEEL PIPE (.109" THICK) ..... Note: Includes 2.05 CY of excavated material per LF of pipe. For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe	302.49  0.87 1.41	
50 89 87 66-0100	LF	CALTRANS 665152 54" BITUMINOUS COATED CORRUGATED STEEL PIPE (.138" THICK) ..... Note: Includes 2.05 CY of excavated material per LF of pipe. For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe	331.55  0.87 1.41	
50 89 87 66-0101	LF	CALTRANS 665153 54" BITUMINOUS COATED CORRUGATED STEEL PIPE (.168" THICK) ..... Note: Includes 2.05 CY of excavated material per LF of pipe. For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe	366.95  0.87 1.41	
50 89 87 66-0102	LF	CALTRANS 665155 60" BITUMINOUS COATED CORRUGATED STEEL PIPE (.109" THICK) ..... Note: Includes 2.33 CY of excavated material per LF of pipe. For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe	346.82  0.87 1.41	
50 89 87 66-0103	LF	CALTRANS 665156 60" BITUMINOUS COATED CORRUGATED STEEL PIPE (.138" THICK) ..... Note: Includes 2.33 CY of excavated material per LF of pipe. For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe	379.12  0.87 1.41	
50 89 87 66-0104	LF	CALTRANS 665157 60" BITUMINOUS COATED CORRUGATED STEEL PIPE (.168" THICK) ..... Note: Includes 2.33 CY of excavated material per LF of pipe. For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe	417.99  0.87 1.41	
50 89 87 66-0105	LF	CALTRANS 665158 66" BITUMINOUS COATED CORRUGATED STEEL PIPE (.109" THICK) ..... Note: Includes 2.64 CY of excavated material per LF of pipe. For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe	414.27  0.87 1.41	
50 89 87 66-0106	LF	CALTRANS 665159 66" BITUMINOUS COATED CORRUGATED STEEL PIPE (.138" THICK) ..... Note: Includes 2.64 CY of excavated material per LF of pipe. For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe	448.81  0.87 1.41	
50 89 87 66-0107	LF	CALTRANS 665160 66" BITUMINOUS COATED CORRUGATED STEEL PIPE (.168" THICK) ..... Note: Includes 2.64 CY of excavated material per LF of pipe. For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe	496.39  0.87 1.41	

**50 Custom Standards And Assemblies****50 89 CALTRANS Custom Standards And Assemblies****50 89 80 CALTRANS Construction Performance Requirements**

MINOR	CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
50 89 87 66-0108	LF		CALTRANS 665161 72" BITUMINOUS COATED CORRUGATED STEEL PIPE (.109" THICK) .....559.14 Note: Includes 2.96 CY of excavated material per LF of pipe. For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe 0.87 For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe 1.41		
50 89 87 66-0109	LF		CALTRANS 665162 72" BITUMINOUS COATED CORRUGATED STEEL PIPE (.138" THICK) .....609.35 Note: Includes 2.96 CY of excavated material per LF of pipe. For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe 0.87 For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe 1.41		
50 89 87 66-0110	LF		CALTRANS 665163 72" BITUMINOUS COATED CORRUGATED STEEL PIPE (.168" THICK) .....666.98 Note: Includes 2.96 CY of excavated material per LF of pipe. For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe 0.87 For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe 1.41		
50 89 87 66-0111	LF		CALTRANS 665164 78" BITUMINOUS COATED CORRUGATED STEEL PIPE (.138" THICK) .....657.61 Note: Includes 3.31 CY of excavated material per LF of pipe. For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe 0.87 For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe 1.41		
50 89 87 66-0112	LF		CALTRANS 665165 78" BITUMINOUS COATED CORRUGATED STEEL PIPE (.168" THICK) .....720.55 Note: Includes 3.31 CY of excavated material per LF of pipe. For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe 0.87 For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe 1.41		
50 89 87 66-0113	LF		CALTRANS 665166 84" BITUMINOUS COATED CORRUGATED STEEL PIPE (.138" THICK) .....706.06 Note: Includes 3.67 CY of excavated material per LF of pipe. For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe 0.87 For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe 1.41		
50 89 87 66-0114	LF		CALTRANS 665167 84" BITUMINOUS COATED CORRUGATED STEEL PIPE (.168" THICK) .....781.52 Note: Includes 3.67 CY of excavated material per LF of pipe. For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe 0.87 For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe 1.41		
50 89 87 66-0115	LF		CALTRANS 665168 90" BITUMINOUS COATED CORRUGATED STEEL PIPE (.138" THICK) .....758.79 Note: Includes 4.05 CY of excavated material per LF of pipe. For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe 0.87 For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe 1.41		
50 89 87 66-0116	LF		CALTRANS 665180 24" BITUMINOUS COATED CORRUGATED STEEL PIPE (.168" THICK) .....141.40 Note: Includes 0.89 CY of excavated material per LF of pipe. For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe 0.87 For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe 1.41		
50 89 87 66-0117	LF		CALTRANS 665223 24" BITUMINOUS COATED PAVED INVERT CORRUGATED STEEL PIPE (.079" THICK) .....108.94 Note: Includes 0.89 CY of excavated material per LF of pipe. For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe 0.87 For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe 1.41		
50 89 87 66-0118	LF		CALTRANS 665224 24" BITUMINOUS COATED PAVED INVERT CORRUGATED STEEL PIPE (.109" THICK) .....119.03 Note: Includes 0.89 CY of excavated material per LF of pipe. For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe 0.87 For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe 1.41		
50 89 87 66-0119	LF		CALTRANS 665237 36" BITUMINOUS COATED PAVED INVERT CORRUGATED STEEL PIPE (.109" THICK) .....198.70 Note: Includes 1.30 CY of excavated material per LF of pipe. For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe 0.87 For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe 1.41		
50 89 87 66-0120	LF		CALTRANS 665323 24" BITUMINOUS LINED CORRUGATED STEEL PIPE (.079" THICK) .....100.09 Note: Includes 0.89 CY of excavated material per LF of pipe. For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe 0.87 For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe 1.41		
50 89 87 66-0121	LF		CALTRANS 665334 30" BITUMINOUS LINED CORRUGATED STEEL PIPE (.168" THICK) .....183.35 Note: Includes 1.08 CY of excavated material per LF of pipe. For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe 0.87 For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe 1.41		
50 89 87 66-0122	LF		CALTRANS 665336 36" BITUMINOUS LINED CORRUGATED STEEL PIPE (.079" THICK) .....170.41 Note: Includes 1.30 CY of excavated material per LF of pipe. For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe 0.87 For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe 1.41		
50 89 87 66-0123	LF		CALTRANS 665711 12" SLOTTED CORRUGATED STEEL PIPE (.064" THICK) .....55.45 Note: Includes 0.37 CY of excavated material per LF of pipe. For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe 0.87 For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe 1.41		
50 89 87 66-0124	LF		CALTRANS 665712 12" SLOTTED CORRUGATED STEEL PIPE (.079" THICK) .....59.40 Note: Includes 0.37 CY of excavated material per LF of pipe. For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe 0.87 For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe 1.41		
50 89 87 66-0125	LF		CALTRANS 665713 12" SLOTTED CORRUGATED STEEL PIPE (.109" THICK) .....71.73 Note: Includes 0.37 CY of excavated material per LF of pipe. For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe 0.87 For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe 1.41		
50 89 87 66-0126	LF		CALTRANS 665716 18" SLOTTED CORRUGATED STEEL PIPE (.064" THICK) .....99.01 Note: Includes 0.64 CY of excavated material per LF of pipe. For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe 0.87 For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe 1.41		
50 89 87 66-0127	LF		CALTRANS 665717 18" SLOTTED CORRUGATED STEEL PIPE (.079" THICK) .....108.08 Note: Includes 0.64 CY of excavated material per LF of pipe. For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe 0.87 For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe 1.41		
50 89 87 66-0128	LF		CALTRANS 665718 18" SLOTTED CORRUGATED STEEL PIPE (.168" THICK) .....185.71 Note: Includes 0.64 CY of excavated material per LF of pipe. For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe 0.87 For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe 1.41		





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MINOR CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
50 89 87 66-0129	LF	CALTRANS 665722 24" SLOTTED CORRUGATED STEEL PIPE (.064" THICK)..... Note: Includes 0.89 CY of excavated material per LF of pipe. For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe	107.34  0.87 1.41	
50 89 87 66-0130	LF	CALTRANS 665723 24" SLOTTED CORRUGATED STEEL PIPE (.079" THICK)..... Note: Includes 0.89 CY of excavated material per LF of pipe. For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe	115.38  0.87 1.41	
50 89 87 66-0131	LF	CALTRANS 665811 12" BITUMINOUS COATED SLOTTED CORRUGATED STEEL PIPE (.064" THICK)..... Note: Includes 0.37 CY of excavated material per LF of pipe. For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe	61.07  0.87 1.41	
50 89 87 66-0132	LF	CALTRANS 665812 12" BITUMINOUS COATED SLOTTED CORRUGATED STEEL PIPE (.079" THICK)..... Note: Includes 0.37 CY of excavated material per LF of pipe. For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe	65.98  0.87 1.41	
50 89 87 66-0133	LF	CALTRANS 665816 18" BITUMINOUS COATED SLOTTED CORRUGATED STEEL PIPE (.064" THICK)..... Note: Includes 0.64 CY of excavated material per LF of pipe. For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe	111.91  0.87 1.41	
50 89 87 66-0134	LF	CALTRANS 665817 18" BITUMINOUS COATED SLOTTED CORRUGATED STEEL PIPE (.079" THICK)..... Note: Includes 0.64 CY of excavated material per LF of pipe. For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe	123.16  0.87 1.41	
50 89 87 66-0135	LF	CALTRANS 665818 18" BITUMINOUS COATED SLOTTED CORRUGATED STEEL PIPE (.109" THICK)..... Note: Includes 0.64 CY of excavated material per LF of pipe. For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe	158.33  0.87 1.41	
50 89 87 66-0136	LF	CALTRANS 665820 18" BITUMINOUS COATED SLOTTED CORRUGATED STEEL PIPE (.138" THICK)..... Note: Includes 0.64 CY of excavated material per LF of pipe. For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe	185.88  0.87 1.41	
50 89 87 66-0137	LF	CALTRANS 665822 24" BITUMINOUS COATED SLOTTED CORRUGATED STEEL PIPE (.079" THICK)..... Note: Includes 0.89 CY of excavated material per LF of pipe. For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe	128.75  0.87 1.41	
50 89 87 66-0138	LF	CALTRANS 665828 18" BITUMINOUS COATED SLOTTED CORRUGATED STEEL PIPE (.168" THICK)..... Note: Includes 0.64 CY of excavated material per LF of pipe. For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe	219.59  0.87 1.41	
50 89 87 66-0139	LF	CALTRANS 667001 17" X 13" CORRUGATED STEEL PIPE ARCH (.079" THICK)..... Note: Includes 0.53 CY of excavated material per LF of pipe. For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe	62.96  0.87 1.41	
50 89 87 66-0140	LF	CALTRANS 667005 21" X 15" CORRUGATED STEEL PIPE ARCH (.079" THICK)..... Note: Includes 0.64 CY of excavated material per LF of pipe. For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe	76.71  0.87 1.41	
50 89 87 66-0141	LF	CALTRANS 667006 21" X 15" CORRUGATED STEEL PIPE ARCH (.109" THICK)..... Note: Includes 0.64 CY of excavated material per LF of pipe. For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe	85.57  0.87 1.41	
50 89 87 66-0142	LF	CALTRANS 667009 24" X 18" CORRUGATED STEEL PIPE ARCH (.079" THICK)..... Note: Includes 0.80 CY of excavated material per LF of pipe. For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe	90.95  0.87 1.41	
50 89 87 66-0143	LF	CALTRANS 667010 24" X 18" CORRUGATED STEEL PIPE ARCH (.109" THICK)..... Note: Includes 0.80 CY of excavated material per LF of pipe. For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe	101.38  0.87 1.41	
50 89 87 66-0144	LF	CALTRANS 667013 28" X 20" CORRUGATED STEEL PIPE ARCH (.079" THICK)..... Note: Includes 0.89 CY of excavated material per LF of pipe. For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe	95.31  0.87 1.41	
50 89 87 66-0145	LF	CALTRANS 667014 28" X 20" CORRUGATED STEEL PIPE ARCH (.109" THICK)..... Note: Includes 0.89 CY of excavated material per LF of pipe. For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe	113.36  0.87 1.41	
50 89 87 66-0146	LF	CALTRANS 667015 28" X 20" CORRUGATED STEEL PIPE ARCH (.138" THICK)..... Note: Includes 0.89 CY of excavated material per LF of pipe. For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe	123.70  0.87 1.41	
50 89 87 66-0147	LF	CALTRANS 667018 35" X 24" CORRUGATED STEEL PIPE ARCH (.079" THICK)..... Note: Includes 1.08 CY of excavated material per LF of pipe. For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe	132.99  0.87 1.41	
50 89 87 66-0148	LF	CALTRANS 667019 35" X 24" CORRUGATED STEEL PIPE ARCH (.109" THICK)..... Note: Includes 1.08 CY of excavated material per LF of pipe. For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe	147.56  0.87 1.41	
50 89 87 66-0149	LF	CALTRANS 667020 35" X 24" CORRUGATED STEEL PIPE ARCH (.138" THICK)..... Note: Includes 1.08 CY of excavated material per LF of pipe. For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe	160.59  0.87 1.41	

**50 Custom Standards And Assemblies****50 89 CALTRANS Custom Standards And Assemblies****50 89 80 CALTRANS Construction Performance Requirements**

MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
50 89 87 66-0150 LF CALTRANS 667023 42" X 29" CORRUGATED STEEL PIPE ARCH (.079" THICK).....162.85 Note: Includes 1.30 CY of excavated material per LF of pipe. For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe 0.87 For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe 1.41		
50 89 87 66-0151 LF CALTRANS 667024 42" X 29" CORRUGATED STEEL PIPE ARCH (.109" THICK).....180.09 Note: Includes 1.30 CY of excavated material per LF of pipe. For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe 0.87 For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe 1.41		
50 89 87 66-0152 LF CALTRANS 667025 42" X 29" CORRUGATED STEEL PIPE ARCH (.138" THICK).....196.31 Note: Includes 1.30 CY of excavated material per LF of pipe. For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe 0.87 For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe 1.41		
50 89 87 66-0153 LF CALTRANS 667028 49" X 33" CORRUGATED STEEL PIPE ARCH (.079" THICK).....190.92 Note: Includes 1.53 CY of excavated material per LF of pipe. For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe 0.87 For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe 1.41		
50 89 87 66-0154 LF CALTRANS 667029 49" X 33" CORRUGATED STEEL PIPE ARCH (.109" THICK).....210.81 Note: Includes 1.53 CY of excavated material per LF of pipe. For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe 0.87 For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe 1.41		
50 89 87 66-0155 LF CALTRANS 667030 49" X 33" CORRUGATED STEEL PIPE ARCH (.138" THICK).....229.73 Note: Includes 1.53 CY of excavated material per LF of pipe. For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe 0.87 For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe 1.41		
50 89 87 66-0156 LF CALTRANS 667033 57" X 38" CORRUGATED STEEL PIPE ARCH (.079" THICK).....228.90 Note: Includes 1.78 CY of excavated material per LF of pipe. For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe 0.87 For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe 1.41		
50 89 87 66-0157 LF CALTRANS 667034 57" X 38" CORRUGATED STEEL PIPE ARCH (.109" THICK).....246.56 Note: Includes 1.78 CY of excavated material per LF of pipe. For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe 0.87 For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe 1.41		
50 89 87 66-0158 LF CALTRANS 667035 57" X 38" CORRUGATED STEEL PIPE ARCH (.138" THICK).....268.00 Note: Includes 1.78 CY of excavated material per LF of pipe. For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe 0.87 For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe 1.41		
50 89 87 66-0159 LF CALTRANS 667037 64" X 43" CORRUGATED STEEL PIPE ARCH (.079" THICK).....266.07 Note: Includes 2.05 CY of excavated material per LF of pipe. For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe 0.87 For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe 1.41		
50 89 87 66-0160 LF CALTRANS 667038 64" X 43" CORRUGATED STEEL PIPE ARCH (.109" THICK).....285.58 Note: Includes 2.05 CY of excavated material per LF of pipe. For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe 0.87 For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe 1.41		
50 89 87 66-0161 LF CALTRANS 667041 71" X 47" CORRUGATED STEEL PIPE ARCH (.109" THICK).....330.77 Note: Includes 2.33 CY of excavated material per LF of pipe. For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe 0.87 For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe 1.41		
50 89 87 66-0162 LF CALTRANS 667042 71" X 47" CORRUGATED STEEL PIPE ARCH (.138" THICK).....355.19 Note: Includes 2.33 CY of excavated material per LF of pipe. For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe 0.87 For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe 1.41		
50 89 87 66-0163 LF CALTRANS 667048 83" X 57" CORRUGATED STEEL PIPE ARCH (.138" THICK).....534.49 Note: Includes 2.64 CY of excavated material per LF of pipe. For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe 0.87 For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe 1.41		
50 89 87 66-0164 LF CALTRANS 667114 28" X 20" BITUMINOUS COATED CORRUGATED STEEL PIPE ARCH (.109" THICK) .....121.49 Note: Includes 0.89 CY of excavated material per LF of pipe. For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe 0.87 For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe 1.41		
50 89 87 66-0165 LF CALTRANS 667326 42" X 29" BITUMINOUS COATED CORRUGATED STEEL PIPE ARCH (.168" THICK) .....234.79 Note: Includes 1.30 CY of excavated material per LF of pipe. For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe 0.87 For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe 1.41		
50 89 87 66-0166 LF CALTRANS 669012 12" CORRUGATED STEEL PIPE CONDUIT (.079" THICK) .....48.49 Note: Includes 0.37 CY of excavated material per LF of pipe. For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe 0.87 For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe 1.41		
50 89 87 66-0167 LF CALTRANS 669016 18" CORRUGATED STEEL PIPE CONDUIT (.064" THICK) .....66.09 For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe 0.87 For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe 1.41		
50 89 87 66-0168 LF CALTRANS 669017 18" CORRUGATED STEEL PIPE CONDUIT (.079" THICK) .....70.40 For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe 0.87 For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe 1.41		
50 89 87 66-0169 LF CALTRANS 669018 18" CORRUGATED STEEL PIPE CONDUIT (.109" THICK) .....79.32 For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe 0.87 For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe 1.41		
50 89 87 66-0170 LF CALTRANS 669055 8" BITUMINOUS COATED CORRUGATED STEEL PIPE CONDUIT (.064" THICK).....35.52 For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe 0.87 For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe 1.41		
50 89 87 66-0171 LF CALTRANS 669072 24" BITUMINOUS COATED CORRUGATED STEEL PIPE CONDUIT (.079" THICK).....100.09 Note: Includes 0.89 CY of excavated material per LF of pipe. For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe 0.87 For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe 1.41		



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MINOR CSI UOM DESCRIPTION		TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
<b>50 89 87 67 STRUCTURAL PLATE CULVERTS</b> <small>(50 89 87)</small>			
Note: Includes structural metal plate pipe, arches and pipe arches, excavation, backfill, compaction, connection of new pipe to new or existing facilities, testing, and other connecting devices per CALTRAN Standard.			
50 89 87 67-0001	LF CALTRANS 670602 90" STRUCTURAL STEEL PLATE PIPE (.138" THICK) .....	891.71	
Note: Includes 4.05 CY of excavated material per LF of pipe.			
For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe		0.87	
For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe		1.41	
50 89 87 67-0002	LF CALTRANS 670901 108" STRUCTURAL STEEL PLATE PIPE (.109" THICK) .....	973.79	
Note: Includes 5.30 CY of excavated material per LF of pipe.			
For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe		0.87	
For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe		1.41	
50 89 87 67-0003	LF CALTRANS 671101 120" STRUCTURAL STEEL PLATE PIPE (.109" THICK) .....	1,079.85	
Note: Includes 6.22 CY of excavated material per LF of pipe.			
For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe		0.87	
For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe		1.41	
50 89 87 67-0004	LF CALTRANS 674351 11'-10" X 7'-7" STRUCTURAL STEEL PLATE PIPE ARCH (.109" THICK) .....	1,241.46	
Note: Includes 0.32 CY of excavated material per LF of pipe.			
For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe		0.87	
For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe		1.41	
<b>50 89 87 68 SUBSURFACE DRAINS</b> <small>(50 89 87)</small>			
Note: Includes subsurface drains, excavation, backfill and compaction per CALTRAN Standard.			
50 89 87 68-0001	LF CALTRANS 680402 6" PERFORATED STEEL PIPE UNDERDRAIN (.064" THICK) .....	30.16	
For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe		0.87	
For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe		1.41	
50 89 87 68-0002	LF CALTRANS 680405 8" PERFORATED STEEL PIPE UNDERDRAIN (.064" THICK) .....	40.69	
For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe		0.87	
For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe		1.41	
50 89 87 68-0003	LF CALTRANS 680406 8" PERFORATED STEEL PIPE UNDERDRAIN (.079" THICK) .....	44.59	
For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe		0.87	
For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe		1.41	
50 89 87 68-0004	LF CALTRANS 680411 12" PERFORATED STEEL PIPE UNDERDRAIN (.064" THICK) .....	57.08	
Note: Includes 0.37 CY of excavated material per LF of pipe.			
For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe		0.87	
For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe		1.41	
50 89 87 68-0005	LF CALTRANS 680412 12" PERFORATED STEEL PIPE UNDERDRAIN (.079" THICK) .....	62.19	
Note: Includes 0.37 CY of excavated material per LF of pipe.			
For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe		0.87	
For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe		1.41	
50 89 87 68-0006	LF CALTRANS 680436 8" BITUMINOUS COATED PERFORATED STEEL PIPE UNDERDRAIN (.079" THICK) .....	48.96	
For Additional Excavation, Backfill And Compaction, Add Per CF Amount Required Per LF Of Pipe		0.87	
For Bedding Material Below Pipe, Add Per CF Amount Required Per LF Of Pipe		1.41	
<b>50 89 87 69 OVERSIDE DRAINS</b> <small>(50 89 87)</small>			
Note: Includes constructing outside drains, excavation, backfill, compaction and anchors per CALTRAN Standard.			
50 89 87 69-0001	LF CALTRANS 690103 6" CORRUGATED STEEL PIPE DOWNDRAIN (.079" THICK) .....	25.32	
50 89 87 69-0002	LF CALTRANS 690105 8" CORRUGATED STEEL PIPE DOWNDRAIN (.064" THICK) .....	31.78	
50 89 87 69-0003	LF CALTRANS 690106 8" CORRUGATED STEEL PIPE DOWNDRAIN (.079" THICK) .....	34.00	
50 89 87 69-0004	LF CALTRANS 690107 10" CORRUGATED STEEL PIPE DOWNDRAIN .....	40.59	
50 89 87 69-0005	LF CALTRANS 690111 12" CORRUGATED STEEL PIPE DOWNDRAIN (.064" THICK) .....	43.50	
50 89 87 69-0006	LF CALTRANS 690112 12" CORRUGATED STEEL PIPE DOWNDRAIN (.079" THICK) .....	46.40	
50 89 87 69-0007	LF CALTRANS 690114 15" CORRUGATED STEEL PIPE DOWNDRAIN (.079" THICK) .....	57.61	
50 89 87 69-0008	LF CALTRANS 690115 15" CORRUGATED STEEL PIPE DOWNDRAIN (.109" THICK) .....	64.97	
50 89 87 69-0009	LF CALTRANS 690116 18" CORRUGATED STEEL PIPE DOWNDRAIN (.064" THICK) .....	62.82	
50 89 87 69-0010	LF CALTRANS 690117 18" CORRUGATED STEEL PIPE DOWNDRAIN (.079" THICK) .....	67.13	
50 89 87 69-0011	LF CALTRANS 690118 18" CORRUGATED STEEL PIPE DOWNDRAIN (.109" THICK) .....	76.05	
50 89 87 69-0012	LF CALTRANS 690122 24" CORRUGATED STEEL PIPE DOWNDRAIN (.064" THICK) .....	81.36	
50 89 87 69-0013	LF CALTRANS 690123 24" CORRUGATED STEEL PIPE DOWNDRAIN (.079" THICK) .....	87.15	
50 89 87 69-0014	LF CALTRANS 690124 24" CORRUGATED STEEL PIPE DOWNDRAIN (.109" THICK) .....	98.96	
50 89 87 69-0015	LF CALTRANS 690125 24" CORRUGATED STEEL PIPE DOWNDRAIN (.138" THICK) .....	108.89	
50 89 87 69-0016	LF CALTRANS 690131 30" CORRUGATED STEEL PIPE DOWNDRAIN (.079" THICK) .....	115.70	
50 89 87 69-0017	LF CALTRANS 690132 30" CORRUGATED STEEL PIPE DOWNDRAIN (.109" THICK) .....	130.32	
50 89 87 69-0018	LF CALTRANS 690134 30" CORRUGATED STEEL PIPE DOWNDRAIN (.138" THICK) .....	142.94	
50 89 87 69-0019	LF CALTRANS 690136 36" CORRUGATED STEEL PIPE DOWNDRAIN (.079" THICK) .....	151.77	
50 89 87 69-0020	LF CALTRANS 690137 36" CORRUGATED STEEL PIPE DOWNDRAIN (.109" THICK) .....	169.10	
50 89 87 69-0021	LF CALTRANS 690138 36" CORRUGATED STEEL PIPE DOWNDRAIN (.138" THICK) .....	185.33	
50 89 87 69-0022	LF CALTRANS 690142 42" CORRUGATED STEEL PIPE DOWNDRAIN (.109" THICK) .....	194.88	
50 89 87 69-0023	LF CALTRANS 690147 48" CORRUGATED STEEL PIPE DOWNDRAIN (.109" THICK) .....	220.95	
50 89 87 69-0024	LF CALTRANS 690148 48" CORRUGATED STEEL PIPE DOWNDRAIN (.138" THICK) .....	242.50	
50 89 87 69-0025	LF CALTRANS 690150 54" CORRUGATED STEEL PIPE DOWNDRAIN (.109" THICK) .....	266.48	
50 89 87 69-0026	LF CALTRANS 690205 8" BITUMINOUS COATED CORRUGATED STEEL PIPE DOWNDRAIN (.064" THICK) .....	34.26	
50 89 87 69-0027	LF CALTRANS 690206 8" BITUMINOUS COATED CORRUGATED STEEL PIPE DOWNDRAIN (.079" THICK) .....	36.49	
50 89 87 69-0028	LF CALTRANS 690211 12" BITUMINOUS COATED CORRUGATED STEEL PIPE DOWNDRAIN (.064" THICK) .....	46.79	
50 89 87 69-0029	LF CALTRANS 690212 12" BITUMINOUS COATED CORRUGATED STEEL PIPE DOWNDRAIN (.079" THICK) .....	49.69	
50 89 87 69-0030	LF CALTRANS 690216 18" BITUMINOUS COATED CORRUGATED STEEL PIPE DOWNDRAIN (.064" THICK) .....	67.76	
50 89 87 69-0031	LF CALTRANS 690217 18" BITUMINOUS COATED CORRUGATED STEEL PIPE DOWNDRAIN (.079" THICK) .....	72.13	
50 89 87 69-0032	LF CALTRANS 690218 18" BITUMINOUS COATED CORRUGATED STEEL PIPE DOWNDRAIN (.109" THICK) .....	81.77	
50 89 87 69-0033	LF CALTRANS 690222 24" BITUMINOUS COATED CORRUGATED STEEL PIPE DOWNDRAIN (.064" THICK) .....	88.01	
50 89 87 69-0034	LF CALTRANS 690223 24" BITUMINOUS COATED CORRUGATED STEEL PIPE DOWNDRAIN (.079" THICK) .....	93.87	
50 89 87 69-0035	LF CALTRANS 690224 24" BITUMINOUS COATED CORRUGATED STEEL PIPE DOWNDRAIN (.109" THICK) .....	106.63	
50 89 87 69-0036	LF CALTRANS 690225 24" BITUMINOUS COATED CORRUGATED STEEL PIPE DOWNDRAIN (.138" THICK) .....	118.23	

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MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
50 89 87 69-0037 LF CALTRANS 690231 30" BITUMINOUS COATED CORRUGATED STEEL PIPE DOWNDRAIN (.079" THICK) .....	124.34	
50 89 87 69-0038 LF CALTRANS 690232 30" BITUMINOUS COATED CORRUGATED STEEL PIPE DOWNDRAIN (.109" THICK) .....	140.07	
50 89 87 69-0039 LF CALTRANS 690235 36" BITUMINOUS COATED CORRUGATED STEEL PIPE DOWNDRAIN (.064" THICK) .....	154.08	
50 89 87 69-0040 LF CALTRANS 690237 36" BITUMINOUS COATED CORRUGATED STEEL PIPE DOWNDRAIN (.109" THICK) .....	181.16	
50 89 87 69-0041 LF CALTRANS 690238 36" BITUMINOUS COATED CORRUGATED STEEL PIPE DOWNDRAIN (.138" THICK) .....	200.67	
50 89 87 69-0042 LF CALTRANS 690242 42" BITUMINOUS COATED CORRUGATED STEEL PIPE DOWNDRAIN (.109" THICK) .....	209.01	
50 89 87 69-0043 LF CALTRANS 690247 48" BITUMINOUS COATED CORRUGATED STEEL PIPE DOWNDRAIN (.109" THICK) .....	236.91	
50 89 87 69-0044 LF CALTRANS 690253 30" BITUMINOUS COATED CORRUGATED STEEL PIPE DOWNDRAIN (.138" THICK) .....	154.82	
50 89 87 69-0045 LF CALTRANS 690260 12" BITUMINOUS COATED CORRUGATED STEEL PIPE DOWNDRAIN (.138" THICK) .....	62.17	
50 89 87 69-0046 LF CALTRANS 690263 18" BITUMINOUS COATED CORRUGATED STEEL PIPE DOWNDRAIN (.138" THICK) .....	90.52	
50 89 87 69-0047 LF CALTRANS 690318 18" BITUMINOUS COATED PAVED INVERT CORRUGATED STEEL PIPE DOWNDRAIN (.109" THICK) .....	86.38	
50 89 87 69-0048 LF CALTRANS 690324 24" BITUMINOUS COATED PAVED INVERT CORRUGATED STEEL PIPE DOWNDRAIN (.109" THICK) .....	112.81	
50 89 87 69-0049 LF CALTRANS 690341 42" BITUMINOUS COATED PAVED INVERT CORRUGATED STEEL PIPE DOWNDRAIN (.079" THICK) .....	187.60	
50 89 87 69-0050 LF CALTRANS 690351 54" BITUMINOUS COATED PAVED INVERT CORRUGATED STEEL PIPE DOWNDRAIN (.109" THICK) .....	301.03	
50 89 87 69-0051 LF CALTRANS 690960 12" PLASTIC PIPE DOWNDRAIN .....	44.82	
50 89 87 69-0052 LF CALTRANS 690964 18" PLASTIC PIPE DOWNDRAIN .....	70.38	
50 89 87 69-0053 EA CALTRANS 692303 8" ANCHOR ASSEMBLY .....	597.89	
50 89 87 69-0054 EA CALTRANS 692305 12" ANCHOR ASSEMBLY .....	749.98	
50 89 87 69-0055 EA CALTRANS 692306 15" ANCHOR ASSEMBLY .....	842.66	
50 89 87 69-0056 EA CALTRANS 692307 18" ANCHOR ASSEMBLY .....	941.72	
50 89 87 69-0057 EA CALTRANS 692309 24" ANCHOR ASSEMBLY .....	1,157.13	
50 89 87 69-0058 EA CALTRANS 692311 30" ANCHOR ASSEMBLY .....	1,386.57	
50 89 87 69-0059 EA CALTRANS 692313 36" ANCHOR ASSEMBLY .....	1,616.28	
50 89 87 69-0060 EA CALTRANS 692319 54" ANCHOR ASSEMBLY .....	2,307.31	
<b>50 89 87 70 MISCELLANEOUS DRAINAGE FACILITIES (50 89 87)</b>		
50 89 87 70-0001 LF CALTRANS 700637 36" CORRUGATED STEEL PIPE INLET (.064" THICK) .....	159.59	
50 89 87 70-0002 LF CALTRANS 700638 36" CORRUGATED STEEL PIPE INLET (.079" THICK) .....	159.59	
50 89 87 70-0003 LF CALTRANS 700639 36" CORRUGATED STEEL PIPE INLET (.109" THICK) .....	176.92	
50 89 87 70-0004 LF CALTRANS 700640 36" CORRUGATED STEEL PIPE INLET (.138" THICK) .....	193.15	
50 89 87 70-0005 LF CALTRANS 700641 36" CORRUGATED STEEL PIPE INLET (.168" THICK) .....	229.75	
50 89 87 70-0006 LF CALTRANS 700655 48" CORRUGATED STEEL PIPE INLET (.109" THICK) .....	236.50	
50 89 87 70-0007 LF CALTRANS 700656 48" CORRUGATED STEEL PIPE INLET (.138" THICK) .....	258.04	
50 89 87 70-0008 LF CALTRANS 700837 36" BITUMINOUS COATED CORRUGATED STEEL PIPE INLET (.064" THICK) .....	161.89	
50 89 87 70-0009 LF CALTRANS 700838 36" BITUMINOUS COATED CORRUGATED STEEL PIPE INLET (.079" THICK) .....	169.41	
50 89 87 70-0010 LF CALTRANS 700839 36" BITUMINOUS COATED CORRUGATED STEEL PIPE INLET (.109" THICK) .....	188.98	
50 89 87 70-0011 LF CALTRANS 700840 36" BITUMINOUS COATED CORRUGATED STEEL PIPE INLET (.138" THICK) .....	208.49	
50 89 87 70-0012 LF CALTRANS 700854 48" BITUMINOUS COATED CORRUGATED STEEL PIPE INLET (.079" THICK) .....	252.45	
50 89 87 70-0013 LF CALTRANS 703516 8" WELDED STEEL PIPE (.188" THICK) .....	123.19	30.32
For >1,000, Deduct .....	-6.16	
50 89 87 70-0014 LF CALTRANS 703525 10" WELDED STEEL PIPE (.250" THICK) .....	173.49	33.07
For >1,000, Deduct .....	-8.67	
50 89 87 70-0015 LF CALTRANS 703533 12" WELDED STEEL PIPE (.250" THICK) .....	197.32	34.65
For >1,000, Deduct .....	-9.87	
50 89 87 70-0016 LF CALTRANS 703555 18" WELDED STEEL PIPE (.250" THICK) .....	280.41	45.47
For >1,000, Deduct .....	-14.02	
50 89 87 70-0017 LF CALTRANS 703557 18" WELDED STEEL PIPE (.375" THICK) .....	375.21	82.21
For >1,000, Deduct .....	-18.76	
50 89 87 70-0018 LF CALTRANS 703564 20" WELDED STEEL PIPE (.375" THICK) .....	411.05	82.21
For >1,000, Deduct .....	-20.55	
50 89 87 70-0019 LF CALTRANS 703576 24" WELDED STEEL PIPE (.375" THICK) .....	523.88	94.87
For >1,000, Deduct .....	-26.19	
50 89 87 70-0020 LF CALTRANS 703600 30" WELDED STEEL PIPE (.375" THICK) .....	608.30	110.68
For >1,000, Deduct .....	-30.42	
50 89 87 70-0021 LF CALTRANS 703620 36" WELDED STEEL PIPE (.375" THICK) .....	811.98	132.81
For >1,000, Deduct .....	-40.60	
50 89 87 70-0022 LF CALTRANS 703646 42" WELDED STEEL PIPE (.375" THICK) .....	1,394.50	148.63
For >1,000, Deduct .....	-69.73	
50 89 87 70-0023 LF CALTRANS 703656 48" WELDED STEEL PIPE (.375" THICK) .....	1,601.71	167.60
For >1,000, Deduct .....	-80.09	
50 89 87 70-0024 EA CALTRANS 705007 12" STEEL FLARED END SECTION .....	375.58	63.71
50 89 87 70-0025 EA CALTRANS 705009 15" STEEL FLARED END SECTION .....	433.89	68.27
50 89 87 70-0026 EA CALTRANS 705011 18" STEEL FLARED END SECTION .....	518.53	72.81
50 89 87 70-0027 EA CALTRANS 705013 21" STEEL FLARED END SECTION .....	641.10	79.64
50 89 87 70-0028 EA CALTRANS 705015 24" STEEL FLARED END SECTION .....	831.89	86.47
50 89 87 70-0029 EA CALTRANS 705016 27" STEEL FLARED END SECTION .....	1,032.79	86.47
50 89 87 70-0030 EA CALTRANS 705019 30" STEEL FLARED END SECTION .....	1,238.24	97.85
50 89 87 70-0031 EA CALTRANS 705023 36" STEEL FLARED END SECTION .....	2,089.63	117.08
50 89 87 70-0032 EA CALTRANS 705027 42" STEEL FLARED END SECTION .....	2,670.30	136.60
50 89 87 70-0033 EA CALTRANS 705031 48" STEEL FLARED END SECTION .....	3,805.74	156.11
50 89 87 70-0034 EA CALTRANS 705035 54" STEEL FLARED END SECTION .....	4,232.39	195.14
50 89 87 70-0035 EA CALTRANS 705037 60" STEEL FLARED END SECTION .....	5,679.73	234.16
50 89 87 70-0036 EA CALTRANS 705039 66" STEEL FLARED END SECTION .....	6,433.63	351.24
50 89 87 70-0037 EA CALTRANS 705041 72" STEEL FLARED END SECTION .....	7,519.01	468.32
50 89 87 70-0038 EA CALTRANS 705057 12" BITUMINOUS COATED STEEL FLARED END SECTION .....	433.65	63.71
50 89 87 70-0039 EA CALTRANS 705059 15" BITUMINOUS COATED STEEL FLARED END SECTION .....	503.20	68.27
50 89 87 70-0040 EA CALTRANS 705061 18" BITUMINOUS COATED STEEL FLARED END SECTION .....	599.42	72.81



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MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
50 89 87 70-0041 EA CALTRANS 705063 21" BITUMINOUS COATED STEEL FLARED END SECTION .....	752.54	79.64
50 89 87 70-0042 EA CALTRANS 705065 24" BITUMINOUS COATED STEEL FLARED END SECTION .....	985.56	86.47
50 89 87 70-0043 EA CALTRANS 705067 27" BITUMINOUS COATED STEEL FLARED END SECTION .....	1,232.22	86.47
50 89 87 70-0044 EA CALTRANS 705069 30" BITUMINOUS COATED STEEL FLARED END SECTION .....	1,483.42	97.85
50 89 87 70-0045 EA CALTRANS 705073 36" BITUMINOUS COATED STEEL FLARED END SECTION .....	2,527.48	117.08
50 89 87 70-0046 EA CALTRANS 705077 42" BITUMINOUS COATED STEEL FLARED END SECTION .....	3,234.66	136.60
50 89 87 70-0047 EA CALTRANS 705081 48" BITUMINOUS COATED STEEL FLARED END SECTION .....	4,629.24	156.11
50 89 87 70-0048 EA CALTRANS 705084 54" BITUMINOUS COATED STEEL FLARED END SECTION .....	5,134.28	195.14
50 89 87 70-0049 EA CALTRANS 705201 12" CONCRETE FLARED END SECTION .....	758.14	113.67
50 89 87 70-0050 EA CALTRANS 705202 15" CONCRETE FLARED END SECTION .....	914.56	141.66
50 89 87 70-0051 EA CALTRANS 705204 18" CONCRETE FLARED END SECTION .....	1,110.68	179.33
50 89 87 70-0052 EA CALTRANS 705205 21" CONCRETE FLARED END SECTION .....	1,276.59	214.46
50 89 87 70-0053 EA CALTRANS 705206 24" CONCRETE FLARED END SECTION .....	1,553.35	248.21
50 89 87 70-0054 EA CALTRANS 705207 27" CONCRETE FLARED END SECTION .....	1,882.99	396.42
50 89 87 70-0055 EA CALTRANS 705208 30" CONCRETE FLARED END SECTION .....	1,976.49	545.79
50 89 87 70-0056 EA CALTRANS 705210 36" CONCRETE FLARED END SECTION .....	2,666.95	688.82
50 89 87 70-0057 EA CALTRANS 705212 42" CONCRETE FLARED END SECTION .....	3,213.43	864.25
50 89 87 70-0058 EA CALTRANS 705214 48" CONCRETE FLARED END SECTION .....	3,495.02	974.69
50 89 87 70-0059 EA CALTRANS 705216 54" CONCRETE FLARED END SECTION .....	3,924.04	1,091.68
50 89 87 70-0060 EA CALTRANS 705217 60" CONCRETE FLARED END SECTION .....	4,345.47	1,091.68
50 89 87 70-0061 EA CALTRANS 705403 21" X 15" STEEL FLARED END PIPE ARCH SECTION .....	545.26	72.81
50 89 87 70-0062 EA CALTRANS 705405 24" X 18" STEEL FLARED END PIPE ARCH SECTION .....	598.96	79.64
50 89 87 70-0063 EA CALTRANS 705407 28" X 20" STEEL FLARED END PIPE ARCH SECTION .....	646.15	86.47
50 89 87 70-0064 EA CALTRANS 705409 35" X 24" STEEL FLARED END PIPE ARCH SECTION .....	959.63	97.85
50 89 87 70-0065 EA CALTRANS 705411 42" X 29" STEEL FLARED END PIPE ARCH SECTION .....	1,807.15	117.08
50 89 87 70-0066 EA CALTRANS 705413 49" X 33" STEEL FLARED END PIPE ARCH SECTION .....	2,418.13	136.60
50 89 87 70-0067 EA CALTRANS 705415 57" X 38" STEEL FLARED END PIPE ARCH SECTION .....	3,707.53	156.11
50 89 87 70-0068 EA CALTRANS 705417 64" X 43" STEEL FLARED END PIPE ARCH SECTION .....	4,259.05	195.14
50 89 87 70-0069 EA CALTRANS 705419 71" X 47" STEEL FLARED END PIPE ARCH SECTION .....	5,138.29	234.16

## 50 89 87 71

## EXISTING DRAINAGE FACILITIES (50 89 87)

Note: For work on culverts, inlets, headwalls, endwalls, aprons, drains, pipes, gutters, gutter depressions, junction structures, spillways, and check dams. Includes cleaning and preparing, inspecting and evaluating, repairing, rehabilitating, and reinspecting culverts, drain pipes, conduit, risers, downdrains, median drainage inlets, and underdrains per CALTRANS Standard.

50 89 87 71-0001 EA CALTRANS 710208 ADJUST FRAME AND COVER TO GRADE .....	398.75
50 89 87 71-0002 LF CALTRANS 710360 CLEANING, INSPECTING, AND PREPARING CULVERT (LF) .....	51.48
For >250 To 500, Deduct	-2.29
For >500 To 1,000, Deduct	-4.58
For >1,000 To 2,000, Deduct	-6.87
For >2,000 To 5,000, Deduct	-9.15
For >5,000, Deduct	-11.44
50 89 87 71-0003 CY CALTRANS 710368 CULVERT SLURRY-CEMENT BACKFILL .....	324.42
50 89 87 71-0004 CY CALTRANS 710370 SAND BACKFILL .....	59.78
For Up To 10, Add	16.19
For >10 To 25, Add	5.98
50 89 87 71-0005 LF CALTRANS 710372 8" CURED-IN-PLACE PIPELINER .....	80.17
For >10 To 25, Add	58.59
For >25 To 50, Add	38.30
For >50 To 100, Add	19.15
For >500 To 1,000, Deduct	-2.55
For >1,000 To 2,000, Deduct	-4.66
For >2,000 To 5,000, Deduct	-7.21
For >5,000, Deduct	-11.44
50 89 87 71-0006 LF CALTRANS 710374 10" CURED-IN-PLACE PIPELINER .....	113.33
For >10 To 25, Add	70.25
For >25 To 50, Add	46.89
For >50 To 100, Add	23.44
For >500 To 1,000, Deduct	-3.29
For >1,000 To 2,000, Deduct	-6.12
For >2,000 To 5,000, Deduct	-9.41
For >5,000, Deduct	-15.06
50 89 87 71-0007 LF CALTRANS 710376 12" CURED-IN-PLACE PIPELINER .....	134.89
For >10 To 25, Add	79.98
For >25 To 50, Add	53.71
For >50 To 100, Add	26.85
For >500 To 1,000, Deduct	-3.83
For >1,000 To 2,000, Deduct	-7.14
For >2,000 To 5,000, Deduct	-10.97
For >5,000, Deduct	-17.60
50 89 87 71-0008 LF CALTRANS 710378 15" CURED-IN-PLACE PIPELINER .....	213.46
For >10 To 25, Add	105.77
For >25 To 50, Add	72.97
For >50 To 100, Add	36.48
For >500 To 1,000, Deduct	-5.55
For >1,000 To 2,000, Deduct	-10.52
For >2,000 To 5,000, Deduct	-16.07
For >5,000, Deduct	-26.00

**50 Custom Standards And Assemblies****50 89 CALTRANS Custom Standards And Assemblies****50 89 80 CALTRANS Construction Performance Requirements**

MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
50 89 87 71-0009 LF CALTRANS 710380 18" CURED-IN-PLACE PIPELINER.....	255.75	
For >10 To 25, Add	123.14	
For >25 To 50, Add	85.35	
For >50 To 100, Add	42.68	
For >500 To 1,000, Deduct	-6.56	
For >1,000 To 2,000, Deduct	-12.47	
For >2,000 To 5,000, Deduct	-19.03	
For >5,000, Deduct	-30.84	
50 89 87 71-0010 LF CALTRANS 710382 21" CURED-IN-PLACE PIPELINER.....	329.93	
For >10 To 25, Add	146.61	
For >25 To 50, Add	103.04	
For >50 To 100, Add	51.52	
For >500 To 1,000, Deduct	-8.17	
For >1,000 To 2,000, Deduct	-15.62	
For >2,000 To 5,000, Deduct	-23.79	
For >5,000, Deduct	-38.69	
50 89 87 71-0011 LF CALTRANS 710384 24" CURED-IN-PLACE PIPELINER.....	414.15	
For >10 To 25, Add	173.51	
For >25 To 50, Add	123.26	
For >50 To 100, Add	61.63	
For >500 To 1,000, Deduct	-9.99	
For >1,000 To 2,000, Deduct	-19.21	
For >2,000 To 5,000, Deduct	-29.20	
For >5,000, Deduct	-47.64	
50 89 87 71-0012 LF CALTRANS 710386 27" CURED-IN-PLACE PIPELINER.....	552.28	
For >10 To 25, Add	219.14	
For >25 To 50, Add	157.30	
For >50 To 100, Add	78.65	
For >500 To 1,000, Deduct	-13.03	
For >1,000 To 2,000, Deduct	-25.15	
For >2,000 To 5,000, Deduct	-38.18	
For >5,000, Deduct	-62.43	
50 89 87 71-0013 LF CALTRANS 710388 30" CURED-IN-PLACE PIPELINER.....	615.16	
For >10 To 25, Add	243.81	
For >25 To 50, Add	175.05	
For >50 To 100, Add	87.52	
For >500 To 1,000, Deduct	-14.50	
For >1,000 To 2,000, Deduct	-28.01	
For >2,000 To 5,000, Deduct	-42.51	
For >5,000, Deduct	-69.52	
50 89 87 71-0014 LF CALTRANS 710390 36" CURED-IN-PLACE PIPELINER.....	737.90	
For >10 To 25, Add	285.59	
For >25 To 50, Add	206.00	
For >50 To 100, Add	103.00	
For >500 To 1,000, Deduct	-17.23	
For >1,000 To 2,000, Deduct	-33.34	
For >2,000 To 5,000, Deduct	-50.57	
For >5,000, Deduct	-82.78	
50 89 87 71-0015 LF CALTRANS 710392 42" CURED-IN-PLACE PIPELINER.....	862.16	
For >10 To 25, Add	331.15	
For >25 To 50, Add	239.23	
For >50 To 100, Add	119.61	
For >500 To 1,000, Deduct	-20.07	
For >1,000 To 2,000, Deduct	-38.85	
For >2,000 To 5,000, Deduct	-58.92	
For >5,000, Deduct	-96.49	
50 89 87 71-0016 LF CALTRANS 710394 48" CURED-IN-PLACE PIPELINER.....	988.61	
For >10 To 25, Add	382.20	
For >25 To 50, Add	275.75	
For >50 To 100, Add	137.87	
For >500 To 1,000, Deduct	-23.07	
For >1,000 To 2,000, Deduct	-44.65	
For >2,000 To 5,000, Deduct	-67.72	
For >5,000, Deduct	-110.87	
50 89 87 71-0017 LF CALTRANS 710396 54" CURED-IN-PLACE PIPELINER.....	1,293.59	
For >10 To 25, Add	493.27	
For >25 To 50, Add	356.87	
For >50 To 100, Add	178.43	
For >500 To 1,000, Deduct	-30.02	
For >1,000 To 2,000, Deduct	-58.16	
For >2,000 To 5,000, Deduct	-88.19	
For >5,000, Deduct	-144.46	
50 89 87 71-0018 LF CALTRANS 710398 60" CURED-IN-PLACE PIPELINER.....	1,649.14	
For >10 To 25, Add	644.13	
For >25 To 50, Add	463.78	
For >50 To 100, Add	231.89	
For >500 To 1,000, Deduct	-38.65	
For >1,000 To 2,000, Deduct	-74.72	
For >2,000 To 5,000, Deduct	-113.37	
For >5,000, Deduct	-185.52	
50 89 87 71-0019 LF CALTRANS 710400 18" DEFORMED/RE-FORMED HDPE PIPELINER .....	155.60	
For >500 To 1,000, Deduct	-1.58	
For >1,000 To 2,000, Deduct	-3.16	
For >2,000, Deduct	-6.32	



MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
50 89 87 71-0020 LF CALTRANS 710402 21" DEFORMED/RE-FORMED HDPE PIPELINER.....	175.63	
For >500 To 1,000, Deduct	-1.71	
For >1,000 To 2,000, Deduct	-3.42	
For >2,000, Deduct	-6.85	
50 89 87 71-0021 LF CALTRANS 710404 24" DEFORMED/RE-FORMED HDPE PIPELINER.....	213.20	
For >500 To 1,000, Deduct	-1.87	
For >1,000 To 2,000, Deduct	-3.74	
For >2,000, Deduct	-7.48	
50 89 87 71-0022 LF CALTRANS 710434 12" MACHINE SPIRAL WOUND PVC PIPELINER (EXPANDABLE DIAMETER).....	29.39	
50 89 87 71-0023 LF CALTRANS 710436 15" MACHINE SPIRAL WOUND PVC PIPELINER (EXPANDABLE DIAMETER).....	44.22	
50 89 87 71-0024 LF CALTRANS 710438 18" MACHINE SPIRAL WOUND PVC PIPELINER (EXPANDABLE DIAMETER).....	59.61	
50 89 87 71-0025 LF CALTRANS 710440 21" MACHINE SPIRAL WOUND PVC PIPELINER (EXPANDABLE DIAMETER).....	73.99	
50 89 87 71-0026 LF CALTRANS 710442 24" MACHINE SPIRAL WOUND PVC PIPELINER (EXPANDABLE DIAMETER).....	97.11	
50 89 87 71-0027 LF CALTRANS 710444 27" MACHINE SPIRAL WOUND PVC PIPELINER (EXPANDABLE DIAMETER).....	116.61	
50 89 87 71-0028 LF CALTRANS 710446 30" MACHINE SPIRAL WOUND PVC PIPELINER (EXPANDABLE DIAMETER).....	133.52	
50 89 87 71-0029 LF CALTRANS 710448 12" CEMENTITIOUS PIPELINER.....	88.55	
50 89 87 71-0030 LF CALTRANS 710450 15" CEMENTITIOUS PIPELINER.....	102.65	
50 89 87 71-0031 LF CALTRANS 710452 18" CEMENTITIOUS PIPELINER.....	110.70	
50 89 87 71-0032 LF CALTRANS 710454 21" CEMENTITIOUS PIPELINER.....	119.89	
50 89 87 71-0033 LF CALTRANS 710456 24" CEMENTITIOUS PIPELINER.....	128.81	
50 89 87 71-0034 LF CALTRANS 710458 27" CEMENTITIOUS PIPELINER.....	136.47	
50 89 87 71-0035 LF CALTRANS 710460 30" CEMENTITIOUS PIPELINER.....	143.90	
50 89 87 71-0036 LF CALTRANS 710462 36" CEMENTITIOUS PIPELINER.....	134.86	
50 89 87 71-0037 LF CALTRANS 710478 36" WELDED STEEL PIPELINER.....	684.54	
50 89 87 71-0038 LF CALTRANS 710480 42" WELDED STEEL PIPELINER.....	789.95	
50 89 87 71-0039 LF CALTRANS 710482 48" WELDED STEEL PIPELINER.....	898.25	
50 89 87 71-0040 LF CALTRANS 710484 54" WELDED STEEL PIPELINER.....	1,095.76	
50 89 87 71-0041 LF CALTRANS 710486 60" WELDED STEEL PIPELINER.....	1,185.68	
50 89 87 71-0042 LF CALTRANS 710488 66" WELDED STEEL PIPELINER.....	1,295.27	
50 89 87 71-0043 LF CALTRANS 710490 72" WELDED STEEL PIPELINER.....	1,546.10	
50 89 87 71-0044 LF CALTRANS 710491 78" WELDED STEEL PIPELINER.....	1,631.69	
50 89 87 71-0045 LF CALTRANS 710492 84" WELDED STEEL PIPELINER.....	1,727.70	
50 89 87 71-0046 LF CALTRANS 710494 MACHINE SPIRAL WOUND PVC LINER (GROUTED, ARCH, 42" X 29").....	273.54	
50 89 87 71-0047 LF CALTRANS 710496 MACHINE SPIRAL WOUND PVC LINER (GROUTED, ARCH, 49" X 33").....	340.04	
50 89 87 71-0048 LF CALTRANS 710498 MACHINE SPIRAL WOUND PVC LINER (GROUTED, ARCH, 57" X 38").....	420.38	
50 89 87 71-0049 LF CALTRANS 710500 MACHINE SPIRAL WOUND PVC LINER (GROUTED, ARCH, 64" X 43").....	504.23	
50 89 87 71-0050 LF CALTRANS 710522 83" X 57" WELDED STEEL PIPELINER (ARCH).....	1,730.23	
50 89 87 71-0051 LF CALTRANS 710524 HDPE PLASTIC PIPELINER (16" OD SDR 32.5).....	56.88	
50 89 87 71-0052 LF CALTRANS 710526 HDPE PLASTIC PIPELINER (18" OD SDR 32.5).....	71.50	
50 89 87 71-0053 LF CALTRANS 710528 HDPE PLASTIC PIPELINER (20" OD SDR 32.5).....	87.71	
50 89 87 71-0054 LF CALTRANS 710530 HDPE PLASTIC PIPELINER (22" OD SDR 32.5).....	101.15	
50 89 87 71-0055 LF CALTRANS 710532 HDPE PLASTIC PIPELINER (24" OD SDR 32.5).....	115.75	
50 89 87 71-0056 LF CALTRANS 710534 HDPE PLASTIC PIPELINER (26" OD SDR 32.5).....	132.11	
50 89 87 71-0057 LF CALTRANS 710536 HDPE PLASTIC PIPELINER (28" OD SDR 32.5).....	149.02	
50 89 87 71-0058 LF CALTRANS 710538 HDPE PLASTIC PIPELINER (30" OD SDR 32.5).....	172.57	
50 89 87 71-0059 LF CALTRANS 710540 HDPE PLASTIC PIPELINER (32" OD SDR 32.5).....	197.28	
50 89 87 71-0060 LF CALTRANS 710542 HDPE PLASTIC PIPELINER (34" OD SDR 32.5).....	218.04	
50 89 87 71-0061 LF CALTRANS 710544 HDPE PLASTIC PIPELINER (36" OD SDR 32.5).....	238.79	
50 89 87 71-0062 LF CALTRANS 710546 HDPE PLASTIC PIPELINER (39.5" OD SDR 32.5).....	272.92	
50 89 87 71-0063 LF CALTRANS 710548 HDPE PLASTIC PIPELINER (42" OD SDR 32.5).....	307.05	
50 89 87 71-0064 LF CALTRANS 710550 HDPE PLASTIC PIPELINER (48" OD SDR 32.5).....	394.90	
50 89 87 71-0065 LF CALTRANS 710552 HDPE PLASTIC PIPELINER (54" OD SDR 32.5).....	481.61	
50 89 87 71-0066 LF CALTRANS 710554 HDPE PLASTIC PIPELINER (55.3" OD SDR 32.5).....	508.59	
50 89 87 71-0067 LF CALTRANS 710556 HDPE PLASTIC PIPELINER (63.2" OD SDR 32.5).....	637.43	
50 89 87 71-0068 LF CALTRANS 710558 HDPE PLASTIC PIPELINER (16" OD SDR 26).....	67.81	
50 89 87 71-0069 LF CALTRANS 710660 HDPE PLASTIC PIPELINER (18" OD SDR 26).....	85.25	
50 89 87 71-0070 LF CALTRANS 710662 HDPE PLASTIC PIPELINER (20" OD SDR 26).....	104.87	
50 89 87 71-0071 LF CALTRANS 710664 HDPE PLASTIC PIPELINER (22" OD SDR 26).....	121.05	
50 89 87 71-0072 LF CALTRANS 710666 HDPE PLASTIC PIPELINER (24" OD SDR 26).....	138.66	
50 89 87 71-0073 LF CALTRANS 710668 HDPE PLASTIC PIPELINER (26" OD SDR 26).....	158.45	
50 89 87 71-0074 LF CALTRANS 710670 HDPE PLASTIC PIPELINER (28" OD SDR 26).....	178.94	
50 89 87 71-0075 LF CALTRANS 710672 HDPE PLASTIC PIPELINER (30" OD SDR 26).....	207.66	
50 89 87 71-0076 LF CALTRANS 710674 HDPE PLASTIC PIPELINER (32" OD SDR 26).....	237.80	
50 89 87 71-0077 LF CALTRANS 710666 HDPE PLASTIC PIPELINER (34" OD SDR 26).....	263.05	
50 89 87 71-0078 LF CALTRANS 710768 HDPE PLASTIC PIPELINER (36" OD SDR 26).....	288.31	
50 89 87 71-0079 LF CALTRANS 710770 HDPE PLASTIC PIPELINER (39.5" OD SDR 26).....	330.13	
50 89 87 71-0080 LF CALTRANS 710772 HDPE PLASTIC PIPELINER (42" OD SDR 26).....	371.97	
50 89 87 71-0081 LF CALTRANS 710774 HDPE PLASTIC PIPELINER (48" OD SDR 26).....	480.41	
50 89 87 71-0082 LF CALTRANS 710776 HDPE PLASTIC PIPELINER (54" OD SDR 26).....	587.44	
50 89 87 71-0083 LF CALTRANS 710778 HDPE PLASTIC PIPELINER (55.3" OD SDR 26).....	620.42	
50 89 87 71-0084 LF CALTRANS 710780 HDPE PLASTIC PIPELINER (63.2" OD SDR 26).....	779.21	
50 89 87 71-0085 LF CALTRANS 710882 HDPE PLASTIC PIPELINER (16" OD SDR 21).....	81.91	
50 89 87 71-0086 LF CALTRANS 710884 HDPE PLASTIC PIPELINER (18" OD SDR 21).....	103.01	
50 89 87 71-0087 LF CALTRANS 710886 HDPE PLASTIC PIPELINER (20" OD SDR 21).....	127.02	
50 89 87 71-0088 LF CALTRANS 710888 HDPE PLASTIC PIPELINER (22" OD SDR 21).....	146.74	
50 89 87 71-0089 LF CALTRANS 710890 HDPE PLASTIC PIPELINER (24" OD SDR 21).....	168.25	
50 89 87 71-0090 LF CALTRANS 710891 HDPE PLASTIC PIPELINER (26" OD SDR 21).....	192.48	
50 89 87 71-0091 LF CALTRANS 710892 HDPE PLASTIC PIPELINER (28" OD SDR 21).....	217.58	
50 89 87 71-0092 LF CALTRANS 710893 HDPE PLASTIC PIPELINER (30" OD SDR 21).....	252.97	
50 89 87 71-0093 LF CALTRANS 710894 HDPE PLASTIC PIPELINER (32" OD SDR 21).....	290.14	
50 89 87 71-0094 LF CALTRANS 710895 HDPE PLASTIC PIPELINER (34" OD SDR 21).....	321.20	
50 89 87 71-0095 LF CALTRANS 710896 HDPE PLASTIC PIPELINER (36" OD SDR 21).....	352.26	

**50 Custom Standards And Assemblies****50 89 CALTRANS Custom Standards And Assemblies****50 89 80 CALTRANS Construction Performance Requirements**

MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
50 89 87 71-0096 LF CALTRANS 710897 HDPE PLASTIC PIPELINER (39.5" OD SDR 21).....	404.04	
50 89 87 71-0097 LF CALTRANS 710898 HDPE PLASTIC PIPELINER (42" OD SDR 21).....	455.82	
50 89 87 71-0098 LF CALTRANS 710899 HDPE PLASTIC PIPELINER (48" OD SDR 21).....	590.86	
50 89 87 71-0099 LF CALTRANS 710900 HDPE PLASTIC PIPELINER (54" OD SDR 21).....	724.15	
50 89 87 71-0100 LF CALTRANS 710902 HDPE PLASTIC PIPELINER (55.3" OD SDR 21).....	764.86	
50 89 87 71-0101 LF CALTRANS 710904 HDPE PLASTIC PIPELINER (63.2" OD SDR 21).....	962.33	
<b>50 89 88 CALTRANS DIVISION VIII - MISCELLANEOUS CONSTRUCTION (50 89 80)</b>		
<b>50 89 88 73 CONCRETE CURBS AND SIDEWALKS (50 89 88)</b>		
50 89 88 73-0001 LF CALTRANS 730010 MINOR CONCRETE (CURB) (LF), 6" x 18".....	29.75	
For Up To 20, Add	16.80	
For >20 To 50, Add	9.49	
For >50 To 100, Add	3.66	
For >500 To 1,000, Deduct	-3.66	
For >1,000, Deduct	-6.23	
50 89 88 73-0002 LF CALTRANS 730010 MINOR CONCRETE (CURB) (LF), 6" x 24".....	34.67	
For Up To 20, Add	18.87	
For >20 To 50, Add	10.63	
For >50 To 100, Add	4.12	
For >500 To 1,000, Deduct	-4.12	
For >1,000, Deduct	-7.05	
50 89 88 73-0003 LF CALTRANS 730010 MINOR CONCRETE (CURB) (LF), 8" x 18".....	32.16	
For Up To 20, Add	17.36	
For >20 To 50, Add	9.77	
For >50 To 100, Add	3.79	
For >500 To 1,000, Deduct	-3.79	
For >1,000, Deduct	-6.49	
50 89 88 73-0004 LF CALTRANS 730010 MINOR CONCRETE (CURB) (LF), 8" x 24".....	38.07	
For Up To 20, Add	19.55	
For >20 To 50, Add	10.97	
For >50 To 100, Add	4.29	
For >500 To 1,000, Deduct	-4.29	
For >1,000, Deduct	-7.39	
50 89 88 73-0005 LF CALTRANS 730010 MINOR CONCRETE (CURB) (LF), 8" x 36".....	53.52	
For Up To 20, Add	26.81	
For >20 To 50, Add	15.02	
For >50 To 100, Add	5.90	
For >500 To 1,000, Deduct	-5.90	
For >1,000, Deduct	-10.19	
50 89 88 73-0006 LF CALTRANS 730010 MINOR CONCRETE (CURB) (LF), 12" x 24".....	47.84	
For Up To 20, Add	22.99	
For >20 To 50, Add	12.84	
For >50 To 100, Add	5.08	
For >500 To 1,000, Deduct	-5.08	
For >1,000, Deduct	-8.81	
50 89 88 73-0007 LF CALTRANS 730010 MINOR CONCRETE (CURB) (LF), 12" x 36".....	68.08	
For Up To 20, Add	31.92	
For >20 To 50, Add	17.79	
For >50 To 100, Add	7.06	
For >500 To 1,000, Deduct	-7.06	
For >1,000, Deduct	-12.30	
50 89 88 73-0008 LF CALTRANS 730040 MINOR CONCRETE (GUTTER) (LF) 6" x 18".....	39.65	
For Up To 20, Add	26.60	
For >20 To 50, Add	14.70	
For >50 To 100, Add	5.95	
For >500 To 1,000, Deduct	-4.79	
For >1,000, Deduct	-8.17	
50 89 88 73-0009 LF CALTRANS 730040 MINOR CONCRETE (GUTTER) (LF) 6" x 24".....	48.26	
For Up To 20, Add	32.34	
For >20 To 50, Add	17.86	
For >50 To 100, Add	7.24	
For >500 To 1,000, Deduct	-5.80	
For >1,000, Deduct	-9.91	
50 89 88 73-0010 LF CALTRANS 730040 MINOR CONCRETE (GUTTER) (LF) 6" x 30".....	62.99	
For Up To 20, Add	42.24	
For >20 To 50, Add	23.34	
For >50 To 100, Add	9.45	
For >500 To 1,000, Deduct	-7.59	
For >1,000, Deduct	-12.97	
50 89 88 73-0011 LF CALTRANS 730040 MINOR CONCRETE (GUTTER) (LF) 6" x 36".....	66.57	
For Up To 20, Add	44.60	
For >20 To 50, Add	24.63	
For >50 To 100, Add	9.99	
For >500 To 1,000, Deduct	-7.99	
For >1,000, Deduct	-13.64	
50 89 88 73-0012 SF CALTRANS 730070 DETECTABLE WARNING SURFACE.....	54.66	
50 89 88 73-0013 CY CALTRANS 731502 MINOR CONCRETE (MISCELLANEOUS CONSTRUCTION).....	306.53	
For Up To 20, Add	12.62	
For >20 To 50, Add	4.73	
For >100 To 200, Deduct	-6.13	
For >200 To 400, Deduct	-12.26	
For >400, Deduct	-18.39	





Custom Standards And Assemblies			50
CALTRANS Custom Standards And Assemblies			50 89
CALTRANS Construction Performance Requirements			50 89 80

MINOR CSI UOM DESCRIPTION		TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
50 89 88 73-0014	SF CALTRANS 731525 MINOR CONCRETE (SIDEWALK) (SF) 4"..... For Up To 100, Add For >100 To 500, Add For >1,000 To 5,000, Deduct For >5,000, Deduct	11.02 4.44 1.22 -0.67 -1.56	
50 89 88 73-0015	SF CALTRANS 731525 MINOR CONCRETE (SIDEWALK) (SF) 6"..... For Up To 100, Add For >100 To 500, Add For >1,000 To 5,000, Deduct For >5,000, Deduct	13.40 5.16 1.39 -0.72 -1.75	
50 89 88 73-0016	LF CALTRANS 731700 REMOVE CURB .....	11.71	
50 89 88 73-0017	LF CALTRANS 731710 REMOVE CONCRETE CURB (LF) .....	17.90	
	For Up To 20, Add For >20 To 50, Add For >50 To 100, Add For >500 To 1,000, Deduct For >1,000, Deduct	12.53 7.16 2.69 -2.69 -4.48	
50 89 88 73-0018	SY CALTRANS 731780 REMOVE CONCRETE SIDEWALK (SQYD) .....	120.65	
	For Up To 100, Add For >100 To 500, Add For >1,000 To 5,000, Deduct For >5,000, Deduct	46.45 12.55 -6.51 -15.80	
50 89 88 73-0019	LF CALTRANS 731840 REMOVE CONCRETE (CURB AND GUTTER) .....	29.34	
	For Up To 20, Add For >20 To 50, Add For >50 To 100, Add For >500 To 1,000, Deduct For >1,000, Deduct	20.54 11.74 4.40 -4.40 -7.34	
<b>50 89 88 78 INCIDENTAL CONSTRUCTION (50 89 88)</b>			
50 89 88 78-0001	EA CALTRANS 780210 SURVEY MONUMENT (TYPE A) .....	563.40	
50 89 88 78-0002	EA CALTRANS 780250 ADJUST MONUMENT COVER TO GRADE .....	216.40	
50 89 88 78-0003	SF CALTRANS 780433 PAINT CURB (2-COAT).....	5.25	
50 89 88 78-0004	SF CALTRANS 780460 ANTI-GRAFFITI COATING..... For Up To 100, Add For >100 To 250, Add For >250 To 500, Add	1.68 0.97 0.47 0.20	
50 89 88 78-0005	EA CALTRANS 780500 PARKING BUMPER (PRECAST CONCRETE) .....	55.96	20.25
<b>50 89 88 80 FENCES (50 89 88)</b>			
Note: Includes constructing fences and gates, excavation, concrete footing, posts, bracing, tension wire, hardware and grounding material per CALTRANS Standard.			
50 89 88 80-0001	LF CALTRANS 800004 FENCE (TYPE BW, 5-STRAND, WOOD POST) .....	12.47	
50 89 88 80-0002	LF CALTRANS 800006 FENCE (TYPE BW, 6-STRAND, WOOD POST) .....	13.20	
50 89 88 80-0003	LF CALTRANS 800007 FENCE (TYPE BW, 5-STRAND, METAL POST) .....	14.89	
50 89 88 80-0004	LF CALTRANS 800008 FENCE (TYPE BW, 4-STRAND, METAL POST) .....	13.81	
50 89 88 80-0005	LF CALTRANS 800010 FENCE (TYPE BW, 4-STRAND, WOOD POST) .....	11.73	
50 89 88 80-0006	LF CALTRANS 800016 FENCE (TYPE BW, 6-STRAND, METAL POST) .....	15.64	
50 89 88 80-0007	LF CALTRANS 800103 TEMPORARY FENCE (TEMPORARY FENCE (TYPE CL-6)).....	7.10	
50 89 88 80-0008	LF CALTRANS 800302 CHAIN LINK FENCE (TYPE CL-3, VINYL-CLAD) .....	42.54	
	For Up To 100, Add For >100 To 250, Add For >2,500 To 5,000, Deduct For >5,000, Deduct	8.04 2.96 -1.48 -2.96	
50 89 88 80-0009	LF CALTRANS 800310 CHAIN LINK FENCE (TYPE CL-3.5) .....	41.22	
	For Up To 100, Add For >100 To 250, Add For >2,500 To 5,000, Deduct For >5,000, Deduct	7.82 2.88 -1.44 -2.88	
50 89 88 80-0010	LF CALTRANS 800320 CHAIN LINK FENCE (TYPE CL-4) .....	42.60	
	For Up To 100, Add For >100 To 250, Add For >2,500 To 5,000, Deduct For >5,000, Deduct	8.05 2.96 -1.48 -2.96	
50 89 88 80-0011	LF CALTRANS 800321 CHAIN LINK FENCE (TYPE CL-4, VINYL-CLAD) .....	44.19	
	For Up To 100, Add For >100 To 250, Add For >2,500 To 5,000, Deduct For >5,000, Deduct	8.29 3.04 -1.52 -3.04	
50 89 88 80-0012	LF CALTRANS 800340 CHAIN LINK FENCE (TYPE CL-5) .....	45.85	
	For Up To 100, Add For >100 To 250, Add For >2,500 To 5,000, Deduct For >5,000, Deduct	8.59 3.15 -1.57 -3.15	
50 89 88 80-0013	LF CALTRANS 800341 CHAIN LINK FENCE (TYPE CL-5, VINYL-CLAD) .....	47.86	
	For Up To 100, Add For >100 To 250, Add For >2,500 To 5,000, Deduct For >5,000, Deduct	8.89 3.25 -1.62 -3.25	

**50 Custom Standards And Assemblies****50 89 CALTRANS Custom Standards And Assemblies****50 89 80 CALTRANS Construction Performance Requirements**

MINOR CSI UOM DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
50 89 88 80-0014 LF CALTRANS 800360 CHAIN LINK FENCE (TYPE CL-6) .....	49.71	
For Up To 100, Add	9.28	
For >100 To 250, Add	3.40	
For >2,500 To 5,000, Deduct	-1.70	
For >5,000, Deduct	-3.40	
50 89 88 80-0015 LF CALTRANS 800361 CHAIN LINK FENCE (TYPE CL-6, VINYL-CLAD) .....	53.77	
For Up To 100, Add	9.89	
For >100 To 250, Add	3.60	
For >2,500 To 5,000, Deduct	-1.80	
For >5,000, Deduct	-3.60	
50 89 88 80-0016 LF CALTRANS 800363 CHAIN LINK FENCE (TYPE CL-6, EXTENSION ARM) .....	50.64	
For Up To 100, Add	9.42	
For >100 To 250, Add	3.44	
For >2,500 To 5,000, Deduct	-1.72	
For >5,000, Deduct	-3.44	
50 89 88 80-0017 LF CALTRANS 800365 CHAIN LINK FENCE (TYPE CL-6, SLATTED) .....	107.91	
For Up To 100, Add	18.47	
For >100 To 250, Add	6.54	
For >2,500 To 5,000, Deduct	-3.27	
For >5,000, Deduct	-6.54	
50 89 88 80-0018 LF CALTRANS 800400 CHAIN LINK FENCE (TYPE CL-8) .....	58.57	
For Up To 100, Add	10.80	
For >100 To 250, Add	3.94	
For >2,500 To 5,000, Deduct	-1.97	
For >5,000, Deduct	-3.94	
50 89 88 80-0019 EA CALTRANS 802100 4' CHAIN LINK GATE (TYPE CL-4) .....	436.06	
50 89 88 80-0020 EA CALTRANS 802110 5' CHAIN LINK GATE (TYPE CL-4) .....	516.46	
50 89 88 80-0021 EA CALTRANS 802120 6' CHAIN LINK GATE (TYPE CL-4) .....	607.31	
50 89 88 80-0022 EA CALTRANS 802180 12' CHAIN LINK GATE (TYPE CL-4) .....	1,476.35	
50 89 88 80-0023 EA CALTRANS 802340 8' CHAIN LINK GATE (TYPE CL-5) .....	922.10	
50 89 88 80-0024 EA CALTRANS 802400 14' CHAIN LINK GATE (TYPE CL-5) .....	2,090.92	
50 89 88 80-0025 EA CALTRANS 802420 16' CHAIN LINK GATE (TYPE CL-5) .....	2,414.63	
50 89 88 80-0026 EA CALTRANS 802440 18' CHAIN LINK GATE (TYPE CL-5) .....	2,698.88	
50 89 88 80-0027 EA CALTRANS 802500 3' CHAIN LINK GATE (TYPE CL-6) .....	443.99	
50 89 88 80-0028 EA CALTRANS 802501 4' CHAIN LINK GATE (TYPE CL-6) .....	564.16	
50 89 88 80-0029 EA CALTRANS 802502 4' CHAIN LINK GATE (TYPE CL-6, VINYL-CLAD) .....	278.19	
50 89 88 80-0030 EA CALTRANS 802503 4' CHAIN LINK GATE (TYPE CL-6, EXTENSION ARM) .....	573.23	
50 89 88 80-0031 EA CALTRANS 802504 4' CHAIN LINK GATE (TYPE CL-6, SLATTED) .....	599.92	
50 89 88 80-0032 EA CALTRANS 802510 5' CHAIN LINK GATE (TYPE CL-6) .....	661.08	
50 89 88 80-0033 EA CALTRANS 802520 6' CHAIN LINK GATE (TYPE CL-6) .....	767.43	
50 89 88 80-0034 EA CALTRANS 802540 8' CHAIN LINK GATE (TYPE CL-6) .....	984.98	
50 89 88 80-0035 EA CALTRANS 802543 8' CHAIN LINK GATE (TYPE CL-6, EXTENSION ARM) .....	995.12	
50 89 88 80-0036 EA CALTRANS 802550 9' CHAIN LINK GATE (TYPE CL-6) .....	1,092.02	
50 89 88 80-0037 EA CALTRANS 802560 10' CHAIN LINK GATE (TYPE CL-6) .....	1,622.37	
50 89 88 80-0038 EA CALTRANS 802580 12' CHAIN LINK GATE (TYPE CL-6) .....	1,925.35	
50 89 88 80-0039 EA CALTRANS 802601 14' CHAIN LINK GATE (TYPE CL-6) .....	2,287.64	
50 89 88 80-0040 EA CALTRANS 802620 16' CHAIN LINK GATE (TYPE CL-6) .....	2,595.89	
50 89 88 80-0041 EA CALTRANS 802640 18' CHAIN LINK GATE (TYPE CL-6) .....	2,912.81	
50 89 88 80-0042 EA CALTRANS 802660 20' CHAIN LINK GATE (TYPE CL-6) .....	3,233.93	
50 89 88 80-0043 EA CALTRANS 802670 24' CHAIN LINK GATE (TYPE CL-6) .....	3,886.42	
50 89 88 80-0044 EA CALTRANS 802840 18' CHAIN LINK GATE (TYPE CL-7) .....	3,073.71	
50 89 88 80-0045 LF CALTRANS 802900 CHAIN LINK FENCE (TYPE CL-8, EXTENSION ARM) .....	59.50	
For Up To 100, Add	10.94	
For >100 To 250, Add	3.98	
For >2,500 To 5,000, Deduct	-1.99	
For >5,000, Deduct	-3.98	
50 89 88 80-0046 EA CALTRANS 802901 4' CHAIN LINK GATE (TYPE CL-8) .....	697.22	
50 89 88 80-0047 EA CALTRANS 802902 4' CHAIN LINK GATE (TYPE CL-8, EXTENSION ARM) .....	706.29	
50 89 88 80-0048 EA CALTRANS 802920 6' CHAIN LINK GATE (TYPE CL-8) .....	934.05	
50 89 88 80-0049 EA CALTRANS 802941 8' CHAIN LINK GATE (TYPE CL-8, EXTENSION ARM) .....	1,204.76	
50 89 88 80-0050 EA CALTRANS 803010 14' CHAIN LINK GATE (TYPE CL-10, VINYL-CLAD) .....	1,556.14	
50 89 88 80-0051 LF CALTRANS 803050 REMOVE CHAIN LINK FENCE .....	6.17	
For Up To 100, Add	1.54	
For >100 To 250, Add	0.62	
For >2,500 To 5,000, Deduct	-0.31	
For >5,000, Deduct	-0.62	
50 89 88 80-0052 EA CALTRANS 803060 REMOVE GATE .....	277.85	
50 89 88 80-0053 EA CALTRANS 803160 RESET GATE .....	1,294.07	
50 89 88 80-0054 LF CALTRANS 803180 RELOCATE CHAIN LINK FENCE .....	28.44	

**50 89 89 CALTRANS DIVISION IX - TRAFFIC CONTROL DEVICES (50 89 80)****50 89 89 81 MISCELLANEOUS TRAFFIC CONTROL DEVICES (50 89 89)**

50 89 89 81-0001 EA CALTRANS 810120 REMOVE PAVEMENT MARKER .....	2.45	
For >100, Deduct	-0.25	
50 89 89 81-0002 EA CALTRANS 810220 PAVEMENT MARKER (NON-REFLECTIVE) .....	5.27	2.45
For >100, Deduct	-0.53	
For >100, Deduct	-0.53	
50 89 89 81-0003 EA CALTRANS 810230 PAVEMENT MARKER (RETROREFLECTIVE) .....	6.02	2.45
For >100, Deduct	-0.60	
For >100, Deduct	-0.60	
50 89 89 81-0004 EA CALTRANS 810250 PAVEMENT MARKER (RETROREFLECTIVE-RECESSED) .....	70.19	29.67



Custom Standards And Assemblies			50
CALTRANS Custom Standards And Assemblies			50 89
CALTRANS Construction Performance Requirements			50 89 80

MINOR CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
<b>50 89 89 82 SIGNS AND MARKERS (50 89 89)</b>				
50 89 89 82-0001	EA	CALTRANS 820110 MILEPOST MARKER .....	187.80	
50 89 89 82-0002	SF	CALTRANS 820750 FURNISH SINGLE SHEET ALUMINUM SIGN (0.063"-UNFRAMED) .....	16.26	34.37
50 89 89 82-0003	SF	CALTRANS 820760 FURNISH SINGLE SHEET ALUMINUM SIGN (0.080"-UNFRAMED) .....	16.90	22.25
<b>50 89 89 83 RAILINGS AND BARRIERS (50 89 89)</b>				
50 89 89 83-0001	LF	CALTRANS 832006 MIDWEST GUARDRAIL SYSTEM (STEEL POST) .....	45.24	9.72
50 89 89 83-0002	LF	CALTRANS 832007 MIDWEST GUARDRAIL SYSTEM (WOOD POST) .....	94.51	15.82
50 89 89 83-0003	LF	CALTRANS 839303 SINGLE THRIE BEAM BARRIER (STEEL POST) .....	71.12	2.67
50 89 89 83-0004	LF	CALTRANS 839752 REMOVE GUARDRAIL .....	9.72	
<b>50 89 89 84 MARKINGS (50 89 89)</b>				
50 89 89 84-0001	LF	CALTRANS 840505 6" THERMOPLASTIC TRAFFIC STRIPE .....	1.93	
		For Up To 5,000 LF, Add .....	0.39	
		For >25,000 LF, Deduct .....	-0.29	
50 89 89 84-0002	LF	CALTRANS 840506 8" THERMOPLASTIC TRAFFIC STRIPE .....	2.55	
		For Up To 5,000 LF, Add .....	0.51	
		For >25,000 LF, Deduct .....	-0.38	
50 89 89 84-0003	LF	CALTRANS 840507 6" THERMOPLASTIC TRAFFIC STRIPE (BROKEN 8-4) .....	1.16	
		For Up To 5,000 LF, Add .....	0.23	
		For >25,000 LF, Deduct .....	-0.17	
50 89 89 84-0004	LF	CALTRANS 840508 8" THERMOPLASTIC TRAFFIC STRIPE (BROKEN 12-3) .....	1.02	
		For Up To 5,000 LF, Add .....	0.20	
		For >25,000 LF, Deduct .....	-0.15	
50 89 89 84-0005	SF	CALTRANS 840515 THERMOPLASTIC PAVEMENT MARKING .....	8.75	
50 89 89 84-0006	SF	CALTRANS 840519 THERMOPLASTIC CROSSWALK AND PAVEMENT MARKING .....	8.75	
50 89 89 84-0007	LF	CALTRANS 840522 6" THERMOPLASTIC TRAFFIC STRIPE (BROKEN 6-1) .....	0.68	
		For Up To 5,000 LF, Add .....	0.14	
		For >25,000 LF, Deduct .....	-0.10	
50 89 89 84-0008	LF	CALTRANS 840528 6" THERMOPLASTIC TRAFFIC STRIPE (BROKEN 12-3) .....	0.78	
		For Up To 5,000 LF, Add .....	0.16	
		For >25,000 LF, Deduct .....	-0.12	
50 89 89 84-0009	LF	CALTRANS 840529 6" THERMOPLASTIC TRAFFIC STRIPE (BROKEN 36-12) .....	0.91	
		For Up To 5,000 LF, Add .....	0.18	
		For >25,000 LF, Deduct .....	-0.14	
50 89 89 84-0010	LF	CALTRANS 840530 6" THERMOPLASTIC TRAFFIC STRIPE (BROKEN 17-7) .....	1.03	
		For Up To 5,000 LF, Add .....	0.21	
		For >25,000 LF, Deduct .....	-0.15	
50 89 89 84-0011	LF	CALTRANS 840531 6" THERMOPLASTIC TRAFFIC STRIPE (BROKEN 18-12) .....	1.42	
		For Up To 5,000 LF, Add .....	0.28	
		For >25,000 LF, Deduct .....	-0.21	
50 89 89 84-0012	LF	CALTRANS 840550 8" THERMOPLASTIC TRAFFIC STRIPE (BROKEN 36-12) .....	1.19	
		For Up To 5,000 LF, Add .....	0.24	
		For >25,000 LF, Deduct .....	-0.18	
50 89 89 84-0013	LF	CALTRANS 840583 6" TWO-COMPONENT PAINT TRAFFIC STRIPE .....	0.74	
		For Up To 5,000 LF, Add .....	0.15	
		For >25,000 LF, Deduct .....	-0.11	
50 89 89 84-0014	LF	CALTRANS 840584 8" TWO-COMPONENT PAINT TRAFFIC STRIPE .....	0.90	
		For Up To 5,000 LF, Add .....	0.18	
		For >25,000 LF, Deduct .....	-0.14	
50 89 89 84-0015	LF	CALTRANS 840610 8" TWO-COMPONENT PAINT TRAFFIC STRIPE (BROKEN 12-3) .....	0.52	
		For Up To 5,000 LF, Add .....	0.10	
		For >25,000 LF, Deduct .....	-0.08	
50 89 89 84-0016	LF	CALTRANS 840612 6" TWO-COMPONENT PAINT TRAFFIC STRIPE (BROKEN 6-1) .....	0.47	
		For Up To 5,000 LF, Add .....	0.09	
		For >25,000 LF, Deduct .....	-0.07	
50 89 89 84-0017	LF	CALTRANS 840614 6" TWO-COMPONENT PAINT TRAFFIC STRIPE (BROKEN 12-3) .....	0.51	
		For Up To 5,000 LF, Add .....	0.10	
		For >25,000 LF, Deduct .....	-0.08	
50 89 89 84-0018	LF	CALTRANS 840616 6" TWO-COMPONENT PAINT TRAFFIC STRIPE (BROKEN 36-12) .....	0.41	
		For Up To 5,000 LF, Add .....	0.08	
		For >25,000 LF, Deduct .....	-0.06	
50 89 89 84-0019	LF	CALTRANS 840618 6" TWO-COMPONENT PAINT TRAFFIC STRIPE (BROKEN 17-7) .....	0.51	
		For Up To 5,000 LF, Add .....	0.10	
		For >25,000 LF, Deduct .....	-0.08	
50 89 89 84-0020	LF	CALTRANS 840620 6" TWO-COMPONENT PAINT TRAFFIC STRIPE (BROKEN 18-12) .....	0.58	
		For Up To 5,000 LF, Add .....	0.12	
		For >25,000 LF, Deduct .....	-0.09	
50 89 89 84-0021	LF	CALTRANS 840622 6" TWO-COMPONENT PAINT TRAFFIC STRIPE (BROKEN 8-4) .....	0.51	
		For Up To 5,000 LF, Add .....	0.10	
		For >25,000 LF, Deduct .....	-0.08	
50 89 89 84-0022	LF	CALTRANS 840624 8" TWO-COMPONENT PAINT TRAFFIC STRIPE (BROKEN 36-12) .....	0.64	
		For Up To 5,000 LF, Add .....	0.13	
		For >25,000 LF, Deduct .....	-0.10	
50 89 89 84-0023	SF	CALTRANS 840637 TWO-COMPONENT PAINT PAVEMENT MARKING .....	7.24	
50 89 89 84-0024	SF	CALTRANS 840651 PAINTED STALL LINES AND PAVEMENT MARKINGS .....	5.90	
50 89 89 84-0025	LF	CALTRANS 840655 PAINT TRAFFIC STRIPE (1-COAT) - 4" Wide .....	0.32	
		For Up To 5,000 LF, Add .....	0.06	
		For >25,000 LF, Deduct .....	-0.05	

**50 Custom Standards And Assemblies****50 89 CALTRANS Custom Standards And Assemblies****50 89 80 CALTRANS Construction Performance Requirements**

MINOR	CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
50 89 89 84-0026	LF		CALTRANS 840655 PAINT TRAFFIC STRIPE (1-COAT) - 6" Wide .....	0.41	
			For Up To 5,000 LF, Add	0.08	
			For >25,000 LF, Deduct	-0.06	
50 89 89 84-0027	LF		CALTRANS 840655 PAINT TRAFFIC STRIPE (1-COAT) - 8" Wide .....	0.52	
			For Up To 5,000 LF, Add	0.10	
			For >25,000 LF, Deduct	-0.08	
50 89 89 84-0028	LF		CALTRANS 840656 PAINT TRAFFIC STRIPE (2-COAT) - 4" Wide .....	0.63	
			For Up To 5,000 LF, Add	0.13	
			For >25,000 LF, Deduct	-0.09	
50 89 89 84-0029	LF		CALTRANS 840656 PAINT TRAFFIC STRIPE (2-COAT) - 6" Wide .....	0.80	
			For Up To 5,000 LF, Add	0.16	
			For >25,000 LF, Deduct	-0.12	
50 89 89 84-0030	LF		CALTRANS 840656 PAINT TRAFFIC STRIPE (2-COAT) - 8" Wide .....	1.04	
			For Up To 5,000 LF, Add	0.21	
			For >25,000 LF, Deduct	-0.16	
50 89 89 84-0031	SF		CALTRANS 840665 PAINT PAVEMENT MARKING (1-COAT) .....	5.92	
50 89 89 84-0032	SF		CALTRANS 840666 PAINT PAVEMENT MARKING (2-COAT) .....	9.00	
50 89 89 84-0033	LF		CALTRANS 846020 REMOVE PAINTED TRAFFIC STRIPE .....	2.01	
			For Up To 250, Add	1.01	
			For >250 To 1,000, Add	0.50	
			For >5,000 To 10,000, Deduct	-0.30	
			For >10,000 To 25,000, Deduct	-0.50	
			For >25,000 To 50,000, Deduct	-0.70	
			For >50,000, Deduct	-0.80	
50 89 89 84-0034	SF		CALTRANS 846025 REMOVE PAINTED PAVEMENT MARKING .....	3.47	
			For Up To 250, Add	1.74	
			For >250 To 1,000, Add	0.87	
			For >5,000 To 10,000, Deduct	-0.52	
			For >10,000 To 25,000, Deduct	-0.87	
			For >25,000 To 50,000, Deduct	-1.21	
			For >50,000, Deduct	-1.39	
50 89 89 84-0035	LF		CALTRANS 846030 REMOVE THERMOPLASTIC TRAFFIC STRIPE .....	3.05	
			For Up To 250, Add	1.53	
			For >250 To 1,000, Add	0.76	
			For >5,000 To 10,000, Deduct	-0.46	
			For >10,000 To 25,000, Deduct	-0.76	
			For >25,000 To 50,000, Deduct	-1.07	
			For >50,000, Deduct	-1.22	
50 89 89 84-0036	SF		CALTRANS 846035 REMOVE THERMOPLASTIC PAVEMENT MARKING .....	4.42	
			For Up To 250, Add	2.21	
			For >250 To 1,000, Add	1.11	
			For >5,000 To 10,000, Deduct	-0.66	
			For >10,000 To 25,000, Deduct	-1.11	
			For >25,000 To 50,000, Deduct	-1.55	
			For >50,000, Deduct	-1.77	

**END OF SECTION 50**

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