

# JOB ORDER CONTRACT

ITB\_JOC-**CSCHS**-2024-XX (JOC XX)

# JOB ORDER CONTRACT

ITB\_JOC-**FAF**-2024-XX (JOC XX)

BID DOCUMENTS

## PROJECT MANUAL



COUNTY OF SANTA CLARA

F A F / C a p i t a l P r o g r a m s D i v i s i o n

2310 N. First Street, Suite 200

San Jose, CA 95131

408.993.4600

DOCUMENT 00 01 01

COUNTY OF SANTA CLARA

Project Manual for Job Order Contract

**Owner's Authorized Representative:**

**[Deputy Director]**

County of Santa Clara  
Facilities and Fleet Department  
2310 North First Street, Suite 200  
San José, CA 95131

**HHS:**

County of Santa Clara Health System  
777 Turner Drive, Suite 310  
San José, CA 95126

**Owner's Project Manager:**

To be determined. Project Manager assignments shall be specific to each individual Job Order, and may vary.

**Job Order Contract (JOC) Program Coordinator:**

Gerry Zimmerman, Chief of Construction Services  
County of Santa Clara  
Facilities and Fleet Department  
[Gerry.Zimmerman@faf.sccgov.org](mailto:Gerry.Zimmerman@faf.sccgov.org)

**HHS:**

Marsh Mendez, Senior Facilities Engineer  
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**DOCUMENT 00 11 00  
NOTICE TO BIDDERS**

**[Periscope No. (JOC [ ] )]**

**ARTICLE 1 — GENERAL**

- 1.01** NOTICE IS HEREBY GIVEN that sealed Bids will be accepted by the Clerk of the Board of Supervisors of the County of Santa Clara, State of California, in the office of the Clerk of the Board of Supervisors, 10th Floor, East Wing of the County Government Center, 70 West Hedding Street, San José, CA, 95110 **before 2:00 PM, on [DATE] for Job Order Contract [Periscope No. (JOC [ ] )]**, in accordance with Bid Documents on file for the Work in the Office of the Clerk of the Board of Supervisors. **Failure to specify the exact address may result in the Clerk of the Board of Supervisors not receiving the bid, or not receiving the bid by the deadline. All bids must be in the possession of the Clerk of the Board of Supervisors by the specified deadline.**

**Prequalification Requirement:**

The County will only accept bid from pre-qualified general contractors. Pursuant to **RFSQ-JOC-2022-XX**, Prequalification for JOC Contractors, the County had deemed the following contractors qualified to submit their bid.

- **[CONTRACTORS]**

**1.02 THE WORK**

The Work will be located at various County facilities within the geographical boundaries of Santa Clara County as specified in individual Job Orders issued under the Job Order Contract. Only one (1) bid per Contractor may be submitted. The Work will consist of:

- .A** The Job Order Contract (JOC) is an indefinite quantity contract pursuant to which Contractor will perform an ongoing variety of individual Projects, consisting of specific construction tasks, at different locations throughout the County. This Contract is for construction work and related services to be performed within a designated area of the County. However, if the need arises, Owner reserves the right to require Contractor to work at any location or facility under the jurisdiction of Owner. The scope of this JOC Contract is for general construction, repair, remodel, and other repetitive related work to be performed for the County of Santa Clara Facilities and Fleet Department. The County has published a Construction Task Catalog® (CTC) containing a series of construction tasks with preset Unit Prices. The CTC was developed using experienced labor and high-quality materials. All Unit Prices are based on local labor, material, and equipment prices including the current prevailing wages and are for the direct cost of construction. The Contractor will bid two sets of two Adjustment Factors to be applied to the Unit Prices. The first set of Adjustment Factors is for performing work in General Facilities and the second for **detention facilities/HCAI facilities**. Each set of Adjustment Factors will include Adjustment Factors for performing work during Normal Working Hours and a second Adjustment Factor for performing work during Other Than Normal Working Hours. The price of an individual project will be determined by multiplying the preset Unit Prices and the appropriate quantities by the appropriate Adjustment Factor. These Adjustment Factors shall apply to every Pre-Priced task in the Construction Task Catalog®. This Contract will be awarded to the lowest, responsive, responsible bidder. The Other than Normal Working Hours Adjustment Factor must be equal to or greater than the Normal Working Hours Adjustment Factor.

- .B** The scope of Work for the Contract will be determined by the Detailed Scopes of Work issued in

connection with individual Job Orders. Contractor is required to complete each Detailed Scope of Work for the Job Order Price within the Job Order Completion Time. The scope of work for each project will be explained to Contractor at a Joint Scope Meeting. County will provide a Request for Job Order Proposal and Detailed Scope of Work to Contractor. Contractor will be required to review the Detailed Scope of Work and develop a Job Order Proposal for the Project including a Job Order Price Proposal using appropriate tasks, quantities, and the applicable Adjustment Factor, as well as drawings, sketches, a list of subcontractors and suppliers, construction schedule, and other requested documentation. The Job Order Price shall equal the value of the approved Job Order Price Proposal. The value of the Job Order Price Proposal shall be calculated by summing the total of the calculation for each Pre-Priced Task (Unit Price x quantity x Adjustment Factor) plus the value of all Non Pre-Priced Tasks.

- .C The County will review Contractor's Proposal in detail and if found to be reasonable and acceptable, a Job Order may be issued. The agreed upon price will be fixed price for the performance of the Detailed Scope of Work.
- .D A Job Order will reference the Detailed Scope of Work and set forth the Job Order Completion Time, and the Job Order Price. The Job Order Price shall be a lump sum, fixed price for the completion of the Detailed Scope of Work. A separate Job Order will be issued for each Project. Extra work, credits, and deletions will be contained in a Supplemental Job Order.

### 1.03 SPECIAL INSPECTIONS/PERMITS

Job Order requires special inspections and permits by the County Building Official and the County Fire Marshal. See Section 01 80 10 ("Inspection by Building Official") and Section 01 33 20 ("Office of the Fire Marshal"). Inspections and/or acceptance by the Fire Marshal and Building Official do not relieve Contractor from any obligation to comply with the full scope of the Contract Documents.

### 1.04 MINIMUM AND MAXIMUM CONTRACT VALUES

The Minimum Contract Value is \$50,000 for [Periscope No. (JOC [ ])].

- .A The Contractor has the opportunity to perform Job Orders totaling at least \$50,000 during the Contract term. The Maximum Contract Value is \$5,797,275.
- .B The Contractor will not be issued Job Orders which in total exceed the Maximum Contract Value. The County does not guarantee the Contractor will receive any volume of Work.

### 1.05 CONTRACT TIME

- .A The contract term commences on the effective date of the Job Order Contract Notice to Proceed issued by the County.
- .B The term of the Job Order Contract will be either for one year or when issued Job Orders totaling the Maximum Contract Value have been completed, whichever occurs first. All Job Orders must be issued but not necessarily completed within one calendar year of the commencement date of the Contract.
- .C Each Job Order will specify a Job Order Completion Time as stated on the Job Order Notice to Proceed.
- .D All Job Orders issued during the term of this Contract shall be valid and in effect notwithstanding that the Detailed Scope of Work may be performed, payments may be made, and the guarantee period may continue, after such period has expired. All terms and conditions of the Contract apply to each

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Job Order.

#### 1.06 LIQUIDATED DAMAGES

- .A Agreed Amount of Damages: It is understood and agreed by both parties to the Contract that in case all the Work specified or indicated in the Contract Documents is not completed within the specified limits of the Job Order Completion Time, or within such time limits as extended, damages will be sustained by the County in the event of and by reason of such delay. It is, and will be, impractical and extremely difficult to determine the actual damage which the County will sustain by reason of the delay. It is therefore agreed that Contractor will pay, at a minimum, to the County the sum of money stipulated per day in the Job Order for each day's delay in completing the work beyond the time prescribed.
- .B Application of Liquidated Damages and the value of liquidated damages will be determined by the County on a Job Order by Job Order basis. Each Request for Proposal will state whether Liquidated Damages will be applied to an individual Job Order. A typical range for Liquidated Damages is, but not limited to, \$50-\$3,000 per Day.
- .C Owner may withhold Liquidated Damages from payments to Contractor as such damages accrue, or, at Owner's discretion, withhold Liquidated Damages from any payments due or that become due pursuant to the Contract, including Retention and final payment (pursuant to California Government Code section 53069.85). A credit Supplemental Job Order shall be executed to assess liquidated damages.

#### 1.07 BIDS MUST BE ADDRESSED TO the President of the Board of Supervisors of the County of Santa Clara, and bear the Project name and Project number as they appear on the cover of the Project Manual.

#### 1.08 BIDDER'S SECURITY

- .A Each Bid must be accompanied by cash, a certified or cashier's check, or a bond in the sum of not less than ten percent (10%) of the Contract Sum.
- .B For the purpose of the security for this bid, the Contract Sum is five million, four hundred two thousand, eight hundred sixty-five dollars (\$5,402,865).
- .C The check or bond must be made payable to "The County of Santa Clara."

#### 1.09 BID OPENING

- .A The Clerk of the Board of Supervisors will open Bids at the time and place stated in Document 00 11 00, Part 1.01.
- .B The Clerk will post the results of the Bid at <https://boardclerk.sccgov.org/bid-opening-results> following the date of the opening of the Bids.

#### 1.10 ERRORS OR DISCREPANCIES IN THE BIDS

The Board of Supervisors reserves the right to reject any and all Bids and to waive any errors or discrepancies in the Bids.

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**ARTICLE 2 — OTHER NOTICES****2.01 CONTRACTOR'S LICENSING REQUIREMENT**

- .A Pursuant to Document 00 21 13 ("Instructions to Bidders"), Article 3 ("Compliance with Contractor's License Law"), Contractor must possess a Class B – General Building Contractor's License issued by the California Contractors State License Board.
- .B Contractor must possess the required classification(s) of Contractor's License at the time the Bid is submitted (per Business and Professions Code section 7028.15).
- .C If federal funds are involved in this Project as indicated below, Contractor must possess the required classification of Contractor's License at the time of the Contract Award (per Public Contract Code section 20103.5). Federal funds:
  - 1. ☐ Are involved in the Project.
  - 2. ☒ Are NOT involved in the Project.

**2.02 PREVAILING WAGE REQUIREMENT**

- .A Pursuant to Document 00 73 43, "Labor and Wage Rate Requirements," all workers employed in the Work are subject to payment of not less than prevailing wages under California Labor Code section 1770 *et seq.* The rates are available on the State of California Department of Industrial Relations website at California Department of Industrial Relations Home Page. <http://www.dir.ca.gov/DLSR/PWD/index.htm>
- .B The work is subject to compliance monitoring and enforcement by the Department of Industrial Relations. All contractors must be registered with the Department of Industrial Relations pursuant to Labor Code section 1725.5 in order to submit a Bid. All subcontractors must also be registered with the Department of Industrial Relations. No contractor or subcontractor may be awarded a contract for public work on a public works project unless registered with the Department of Industrial Relations. Additional information regarding prevailing wage requirements is available on the State of California Department of Industrial Relations Web Site: [www.dir.ca.gov](http://www.dir.ca.gov).
- .C In submitting a Bid, Contractor represents and warrants that it is registered with the Department of Industrial Relations. Contractor further represents and warrants that it shall maintain its registration with the Department of Industrial Relations throughout the course of the Work. Contractor is responsible for verifying that each Subcontractor, including any Subcontractor not listed on the Bid proposal for the Project, is registered with the Department of Industrial Relations at the time the Subcontractor performs Work on the Project. If any Subcontractor is not registered at the time the Subcontractor is to commence Work, Contractor shall require the Subcontractor to register and may not permit the Subcontractor to commence Work until the Subcontractor's registration is complete.
- .D The Labor Commissioner's Office, also called the Division of Labor Standards Enforcement (DLSE), is part of the California Department of Industrial Relations. The Public Works Unit of the Labor Commissioner's Office actively monitors public works projects and may investigate asserted violations. Any member of the public can report an alleged violation of the State's labor laws on a public works project to the Labor Commissioner's website: [www.dir.ca.gov/dlse/HowToFilePWComplaint.htm](http://www.dir.ca.gov/dlse/HowToFilePWComplaint.htm). The Labor Commissioner's Office in the County of Santa Clara can also provide instruction on how to file a complaint and where a violation should be reported. The Labor Commissioner's Office in the County of Santa Clara is located at the following address:

Division of Labor Standards Enforcement (DLSE)  
100 Paseo de San Antonio, Room 120  
San José, CA 95113  
(408) 277-1266

- .E Contractor must comply with all applicable requirements of Division 2, Part 7, Chapter 1 of the California Labor Code.
- .F Any Job Order, including its Supplemental Job Orders, that results in an individual Job Order value of two million dollars (\$2,000,000) or more, shall be subject to the provisions of the current County of Santa Clara Project Labor Agreement (PLA) as stated in Document 00 73 49 Labor Stabilization Requirements.

A copy of the PLA is included in the Contract Documents as a Contract Form. If awarded an individual Job Order exceeds two million dollars (including any Supplemental Job Orders), the Contractor must agree to be bound by the terms of the PLA. Except as otherwise superseded by the PLA, all the Prevailing Wage requirements in the Contract Documents, and Division 2, Part 7, Chapter 1 of the California Labor Code, remain in full force and effect.

## 2.03 BONDS AND INSURANCE

The successful Bidder must deliver signed Contract Bonds (payment bond and performance bond), and all required insurance documents to the Clerk of the Board of Supervisors for acceptance before Owner will execute the Agreement and issue a Notice to Proceed with the Work.

## 2.04 PRESERVATION OF CULTURAL RESOURCES

If the Project Site is deemed "Archaeologically Sensitive" as indicated below, the provisions in Document 00 73 10 ("Site Conditions"), Article 6 ("Preservation of Cultural Resources") will apply.

- 1. ☒ The Project Site has not been deemed "Archaeologically Sensitive."
- 2. ☐ The Project Site has been deemed "Archaeologically Sensitive."

## 2.05 RETENTION FROM PAYMENTS DURING CONTRACT TIME

Pursuant to Document 00 72 00 ("General Conditions"), Article 9 ("Retentions"), Contractor may substitute securities for any money withheld from progress payments, using the attached Escrow Agreement form, Document 00 62 90 ("Sample Escrow Agreement for Security Deposit In Lieu of Retention").

## 2.06 AVAILABILITY OF BID DOCUMENTS

- .A Bid Documents are available via [Periscope Holdings](https://prod.bidsync.com/bidsync-login) at <https://prod.bidsync.com/bidsync-login> bid number [Periscope No. (JOC [ ] )]. **Any interpretation or correction to the Project Manual will be made only by written addendum distributed solely via Periscope.**
- .B Bidders may obtain copies of the Bid Documents from Prints Charles Reprographics, 1643 South Main Street, Milpitas, CA 95035 or their [Online Planroom at www.printscharlesplanroom.com](http://www.printscharlesplanroom.com). Plans will be available in the Public Plan Room under [Periscope No. (JOC [ ] )].
- .C Following Award of the Contract, Owner will furnish the successful Bidder with five (5) copies of the Contract Documents without charge. Additional copies may be obtained from Owner at the successful Bidder's expense.

## 2.07 PRE-BID CONFERENCE

- .A A Pre-Bid Conference/site visit will be held [DATE] at [TIME] at [Address]

- .B Attendance by the Bidder at the Pre-Bid Conference is:

1. ☐ Mandatory
2. ☒ Not Mandatory

## 2.08 PROJECT MANAGER

The County's Project Manager for this Project is [JOC Administrator] at phone number [E-Mail to: [\[email address\]](#)].

## 2.09 OWNER'S AUTHORIZED REPRESENTATIVE

- .A The Owner's Authorized Representative for this Project, who has authority as set forth in the Contract Documents is the Deputy Director of Facilities and Fleet Department, or designee.
- .B Owner selected The Gordian Group's (Gordian) Job Order Contracting (JOC) Solution (Gordian JOC Solution) for its JOC program. The Gordian JOC Solution includes Gordian's proprietary eGordian® JOC Applications and Construction Task Catalog®, which shall be used by Contractor to prepare and submit Job Order Proposals, subcontractor lists, and other requirements specified by Owner. Contractor shall be required to execute Gordian's JOC System License and Fee Agreement, and pay a 1% JOC System License Fee to obtain access to the Gordian JOC Solution.

## 2.10 BID PERIOD CLARIFICATIONS AND ADDENDA

- .A Contractor must submit all requests for clarification, or interpretation of the Bid Documents in writing at least ten (10) Days before the deadline for receipt of Bids.
- .B Owner may issue written Addenda as appropriate for clarification or other reasons during the bidding period.
- .C Addenda will be issued solely via Periscope. Bidders are responsible for ensuring they receive all Addenda. Bidders will be required to confirm at the time of bid their bid proposals include all issued Addenda.
- .D Owner is not responsible for any explanation or interpretation of the Bid Documents not communicated to Bidders in an Addendum.
- .E Unless otherwise clarified in an Addendum, resolution of supposed discrepancies, conflicts, omissions or errors in the Bid Documents are governed by Document 00 72 00 ("General Conditions"), Part 1.04 ("Interpretation of the Contract Documents").

## 2.11 SUBSTITUTIONS

- .A Contractor may offer any material, process, article, or equipment that is substantially equal or better in every respect to that so indicated or specified; provided, however, that if the material, process, article, or equipment offered by Contractor is not, in the opinion of the Owner's Authorized Representative, substantially equal or better in any respect to that specified, then Contractor must furnish that material, process, article, or equipment specified or one that in the opinion of the Owner's Authorized Representative is substantially equal or better in every respect.
- .B Proposals for alternative material(s), process, article(s), or equipment must be submitted in writing, in accordance with the requirements of Section 01 60 00 ("Product Requirements") and Section 01 25 00 ("Substitution Procedures").

**2.12 OPERATIONS AND MAINTENANCE (“O&M”) MANUALS**

Contractor’s attention is directed to Section 01 78 23 (“Operation and Maintenance Data”) of the Project Manual. In addition to the requirement of the Operations and Maintenance (O&M) manuals as a specific Milestone in the contract, the requirements for detailed and comprehensive O&M manuals as described in Section 01 78 23 should be noted by bidding Contractors.

**2.13 MANUFACTURER CERTIFICATION AND APPROVAL OF CONTRACTOR**

Contractor must submit, as required by Section of the Technical Specifications, written approval from the manufacturer of the Equipment affirming that the Contractor is certified and approved for system installation and service required by the Bid Documents. After Contract Award by Owner and before Owner will issue a Notice to Proceed, Contractor must submit such certification and approval documentation to the Owner’s Project Manager for approval and acceptance.

**2.14 COVID-19 VACCINATION REQUIREMENTS**

The County of Santa Clara requires contractors and subcontractors to comply with all County requirements in effect relating to COVID-19 for their personnel who routinely perform services for County onsite and share airspace with or proximity to other people at a County facility as part of their services for County as set forth in a County Health Order (or similar directives) available at <https://covid19.sccgov.org/home>. Proposer acknowledges that if awarded a contract resulting from this solicitation, Proposer and any subcontractor (at any tier) shall, for the duration of the contract, comply with any County COVID-19 requirements in effect as set forth in the COVID-19 REQUIREMENTS contract term in the contract template incorporated into this solicitation.

**2.15 LEVINE ACT**

If applicable, the successful Contractor and its agents shall comply with California Government Code section 84308 (“Levine Act”) and the applicable regulations of the Fair Political Practices Commission concerning campaign disclosure (2 California Code of Regulations sections 18438.1 – 18438.8), which (1) require a party to a proceeding involving a contract to disclose on the record of the proceeding any contribution, as defined by Government Code section 84308(a)(6), of more than \$250 that the party or their agent has made within the prior 12 months, and (2) prohibit a party to a proceeding involving a contract from making a contribution, as defined by Government Code section 84308(a)(6), of more than \$250 to any County officer during the proceeding and for 12 months following the final decision in the proceeding. Disclosures pursuant to the Levine Act must be submitted online at the Office of the Clerk of the Board of Supervisors website at <http://www.sccgov.org/levineact>.

**END OF DOCUMENT 00 11 00**

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**DOCUMENT 00 21 13**  
**INSTRUCTIONS TO BIDDERS**

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**ARTICLE 1 — GENERAL**

- 1.01** Bidder must examine these Instructions to Bidders carefully and respond to all requirements and conditions.
- 1.02** Bidders must be aware of the requirements of Codes and Laws referenced in the Bid Documents.

**ARTICLE 2 — COMPETENCE OF BIDDERS**

- 2.01** Bidders must meet all qualification requirements contained in the Bid Documents.
- 2.02** Any Bidder may be required to furnish evidence satisfactory to Owner that the Bidder and its proposed Subcontractors have sufficient means and experience in the type of Work required to assure satisfactory completion of all the requirements of the Contract Documents.

**ARTICLE 3 — COMPLIANCE WITH CONTRACTOR'S LICENSE LAWS**

- 3.01** Bidders' attention is directed to the provisions of Chapter 9 of Division 3 of the California Business and Professions Code ("Contractors"), and Section 3300 of the California Public Contract Code. The Contractor must possess the required classification of Contractor's License at the time the Bid is submitted (per Business and Professions Code Section 7028.15). If federal funds are involved in this project, the Contractor must possess the required classification of Contractor's License at the time of the Contract Award (per Public Contract Code Section 20103.5).
- 3.02** If a Bidder does not possess the required Contractor's License at the time a Bid is submitted, in accordance with Business and Professions Code Section 7028.15, the Bid will be considered non-responsive and will be rejected by Owner and Owner may require forfeiture of the Bidder's Bond.
- 3.03** Joint venture Bidders must possess a joint venture license. Each party to a joint venture must be properly licensed for the Work of this Project.

**ARTICLE 4 — PRIOR DISQUALIFICATION**

- 4.01** Bid may be rejected on the basis of a Bidder, any officer of such Bidder, or any employee of such Bidder who has a proprietary interest in such Bidder, having been disqualified, removed or otherwise prevented from Bidding on, or completing a federal, state or local project because of a violation of a law or a safety regulation.
- 4.02** Owner will review the circumstances presented in the Bid Form certification. Owner will determine if acceptance of the Bid is in its best interest.

**ARTICLE 5 — EXAMINATION OF BID DOCUMENTS AND PROJECT SITE**

- 5.01** It is the responsibility of each Bidder before submitting a Bid to:
- A.** Examine and carefully study the Bidding Documents, and any data and reference items identified in the Bidding Documents.
  - B.** Visit the Site, conduct a thorough examination of the Site and adjacent areas, and become familiar with and satisfy itself as to the general, local, and Site conditions that may affect cost, progress, and performance of the Work.
  - C.** Become familiar with and satisfy itself as to all Codes and Laws that may affect cost, progress, and performance of the Work.
  - D.** Carefully study all (1) reports of explorations and tests of subsurface conditions at or adjacent to the Site and all drawings of physical conditions relating to existing surface or subsurface structures at the Site that have been identified in the Supplementary Conditions, especially with respect to Technical Data in such reports and drawings; and (2) reports and drawings relating to hazardous environmental conditions, if any, at or adjacent to the Site that have been identified in the Series 00 30 00 Documents (Available Site Information) including without limitation, Document 00 31 00 (Available Project Information), especially with respect to Technical Data in such reports and drawings.

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- E. Consider the information known to Bidder itself; information commonly known to contractors doing business in the locality of the Site; the information and observations obtained from visits to the Site; the Bidding Documents; and the Site-related reports and drawings identified in the Bidding Documents with respect to the effect of such information, observations, and documents on (1) the cost, progress, and performance of the Work; (2) the means, methods, techniques, sequences, and procedures of construction to be employed by Bidder; and (3) Bidder's safety precautions and programs.
  - F. Promptly give Owner written notice of all conflicts, errors, ambiguities, or discrepancies that Bidder discovers in the Bidding Documents and confirm that the written resolution thereof by Owner is acceptable to Bidder.
  - G. Become aware of the general nature of the work to be performed by Owner and others at the Site that relates to the Work as indicated in the Bidding Documents.
  - H. Determine that the Bidding Documents are generally sufficient to indicate and convey understanding of all terms and conditions for the performance and furnishing of the Work.
  - I. Examine carefully Document 00 73 10 (Site Conditions) defining terms and conditions regarding bidding and construction pertaining to site conditions, including without limitation, expected investigations by Bidder and the information and knowledge that would result from a reasonable investigation which knowledge is charged to Bidders by the act of submitting a Bid, use and reliance on Owner supplied information and standards regarding Site conditions, Codes and Laws pertaining to use of the Site.
- 5.02** The submission of a Bid will be conclusive evidence that the Bidder has investigated and is fully aware of the conditions and difficulties that may be encountered including the availability of labor and materials to be provided, the character, quality, and quantities of Work to be performed, and of the requirements of all Bid Documents.
- 5.03** Failure by Bidder to educate itself with available information, including information that could have been obtained by a thorough Site investigation, will not relieve Bidder from responsibility for estimating properly the difficulty or cost of successfully performing the Work.
- 5.04** Bidders are required to inform themselves fully of the conditions relating to the construction and labor under which the Work will be or is now performed, and, so far as possible, the successful Bidder must employ such means and methods in carrying out its Work as will not cause any interruption or interference with any other contractor.

#### **ARTICLE 6 — DISCREPANCIES, CONFLICTS, OMISSIONS, OR ERRORS**

- 6.01** If any person contemplating submitting a Bid is in doubt as to the intended meaning of any part of the Bid Documents, or finds discrepancies in, or omissions in the Bid Documents, that person must submit a written request for an interpretation or correction thereof at least ten (10) Days before the deadline for receipt of Bids.
- 6.02** Inquiries must be addressed to the Project Manager with a copy to Owner's Representative identified in the Notice to Bidders.
- 6.03** Any request received fewer than ten (10) Days before the said deadline may not be answered. The person submitting the request will be responsible for its prompt delivery.
- 6.04** Any interpretation or correction of the Bid Documents will be made only by Addendum, which will become part of the Bid Documents, and will be mailed or delivered to each person included on the Owner's plan holders list for the Project.
- 6.05** Owner is not responsible for any explanation or interpretation of the Bid Documents not communicated to Bidders in an Addendum. If no Addenda are issued relating to supposed discrepancy, conflict, omissions, or errors in figuring the Work, the supposed discrepancies, conflicts, or omissions are governed by Document 00 72 00 (General Conditions).
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**ARTICLE 7 — BIDDER'S SECURITY**

- 7.01** Each Bid must be accompanied by cash, a certified or cashier's check, or an original Bidder's Security in an amount not less than ten percent (10%) of the Maximum Contract Value (see Document 00 11 00 (Notice to Bidders)).
- 7.02** A Bid will be considered non-responsive if not accompanied by proper Bidder's Security.
- 7.03** The original Bidder's Security must be provided by an admitted Surety insurer, authorized to issue Surety bonds in the State of California, and it must execute the Bid Bond.
- 7.04** Bonds and checks must be made payable to "The County of Santa Clara."
- 7.05** All bonds must be provided on the forms included with the Bid Documents, including Document 00 43 13, Bidder's Bond Forms and Supplements, or the Bid will be considered non-responsive.

**ARTICLE 8 — BID FORM AND BID SUBMISSION**

- 8.01** Prospective Bidders are furnished Bid Form (Document 00 41 00). A Bid Form may contain a schedule of items requesting lump sum prices. It may also state estimated quantities of various kinds of Work to be performed, including materials to be Provided, with a schedule of items for which unit prices are required.
- 8.02** Reference Section 01 29 00 (Payment Procedures) on scope of Contract sum, including without limitation unit prices and/or lump sum pricing.
- 8.03** All Bids must be submitted on the forms furnished by Owner. A Bid not submitted on the forms furnished by Owner will be considered non-responsive.
- 8.04** Completing the Bid Form:
- A.** Bidder's name must be the same as listed on Bidder's California State Contractor's license.
  - B.** Bid price(s) must be in the manner required by the Bid Form.
  - C.** Bid Form must be signed by Bidder or duly authorized representative.
    - 1.** If Bidder is an individual, name must be stated.
    - 2.** If Bidder is a partnership, name of the partnership must be stated and one or more partners must sign the Bid Form.
    - 3.** If Bidder is a corporation, name of the corporation must be stated, the state of incorporation must be listed, the title of the person with authority to sign and bind corporation, must be stated, and the corporate seal must be affixed.
    - 4.** If Bidder is a joint venture, name of the joint venture must be stated and each member of the joint venture must sign the Bid Form. If any member of the joint venture is a corporation, Bidder must comply with the requirements of subsection 3 above.
    - 5.** Bidder's business and mailing address must be stated.
- 8.05** Required Listing of Proposed Subcontractors:
- A.** Bidders shall list the name, the location of the place of business, and the California contractor license number of each Subcontractor who will perform work or labor or render service to the prime contractor in or about the construction of the work or improvement, or a Subcontractor licensed by the State of California who, under subcontract to the prime contractor, specially fabricates and installs a portion of the work or improvement according to detailed drawings contained in the plans and specifications, in an amount in excess of one-half of one percent (½%) of the prime contractor's total bid or, in the case of bids or offers for the construction of streets or highways, including bridges, in excess of one-half of one percent (½%) of the prime contractor's total bid or ten thousand dollars (\$10,000), whichever is greater.
  - B.** Bidders' attention is directed to the provisions of the Subletting and Subcontracting Fair Practices Act, beginning with Public Contract Code Section 4100, related to penalties for use of unauthorized

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Subcontractors or by making unauthorized substitutions.

**8.06 Bid Submissions**

- A.** Document 00 42 83 (Bidder's Contract and Job Order Management Plan). Bidder must submit a statement of bidder's management capacity, as well as contract/job order management plan.
- B.** Document 00 42 85 (Bidder's Safety Plan). Bidder must submit a safety plan for the contemplated job orders, including Bidder's company safety programs, as well as identify an subcontractor involvement.
- C.** Document 00 42 86 (Bidder's Staffing/Resources Plan). Bidder must submit a staffing/resources plan to manage Job Orders. The plan should include key personnel, including Project Manager, superintendent, scheduler, cost estimator, and/or staff with expertise necessary to perform the Work under the Job Orders. The plan shall also include a subcontractor selection process and management plan, including bonding and insurance requirements imposed on any subcontractors, and assignment and coordination of any subcontractors.

**ARTICLE 9 — CONTRACTING PRINCIPLES**

- 9.01** Pursuant to the Resolution on Contracting Principles adopted by the Board of Supervisors on October 28, 1997, all bidders are required to sign and submit with their Bid a completed "Contracting Principles Declaration of Contractor/Bidder" form (Document 00 41 00.8, Document 00 41 00, Bidder's Certifications, Section 7), which has been included in the Bid Forms.
- 9.02** The successful Bidder must, during the Contract Time:
  - A.** Comply with all applicable federal, state, and local rules, regulations and laws; and,
  - B.** Maintain financial records adequate to show that the Owner's funds paid pursuant to the Contract were used for purposes consistent with the terms of the Contract.

**ARTICLE 10 — SUBMISSION OF BID FORMS**

- 10.01** Bid Forms must be completed in ink, completely filled out, and submitted on the Bid Form furnished as part of the Bid Documents. Faxed Bids or modifications will not be considered by Owner.
- 10.02** It is the sole responsibility of the Bidder to ensure that its Bid is received at the proper time and at the proper location. Bids received after the time fixed for receiving them will not be considered.
- 10.03** Late Bids will be returned by Owner to the Bidder unopened.
- 10.04** Each Bid must be addressed to the President of the Board of Supervisors of the County of Santa Clara, and must be delivered to the Clerk of the Board of Supervisors before the date and time set for the opening of Bids in the published Notice to Bidders.
- 10.05** Each Bid must be enclosed in a sealed envelope bearing the title of the Project, Project number, the name of the Bidder and the date and time of the opening. Failure to do so may result in a premature opening of, or failure to open, such bid. Bid Forms improperly marked may be disregarded.

**ARTICLE 11 — WITHDRAWAL OF BID FORMS**

- 11.01** Any Bid may be withdrawn at any time before the time fixed in the Notice to Bidders for the opening of Bids only by written request of the Bidder or a duly authorized representative.
- 11.02** Withdrawal of a Bid does not prejudice the right of the Bidder to file a new Bid at any time prior to the time fixed for receiving Bids in the Notice to Bidders.
- 11.03** Whether or not Bids are opened exactly at the time stated in the Notice to Bidders, a Bid will not be accepted after the time stated.
- 11.04** After the opening of Bids, Bids may only be withdrawn in accordance with the provisions of Public Contract Code Sections 5100 through 5107.

**ARTICLE 12 — PUBLIC OPENING OF BIDS**

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- 12.01** Bids will be opened and read publicly at the time and place indicated in the Notice to Bidders. Bidders or their authorized agents are invited to be present.

**ARTICLE 13 — REJECTION OF IRREGULAR OR “QUALIFIED” BIDS**

- 13.01** Owner may reject any Bid if there appears to be any alteration of the Bid Form, any addition or condition not called for, if the Bid is limited in any manner, incomplete, or if there is erasure or irregularity of any kind.
- 13.02** Bids not completed in ink will be rejected.
- 13.03** If the Bid amount or other material information is changed, the change must be initialed.

**ARTICLE 14 — COMPETITIVE BIDDING**

- 14.01** More than one Bid from an individual, firm, partnership, corporation, or combination thereof, as a principal, under the same or different names will not be considered. Reasonable basis for believing that any individual, firm, partnership, corporation, or combination thereof is a principal in more than one Bid for the Work contemplated may cause the rejection of all Bids in which such individual, firm, partnership, corporation, or combination thereof is a principal.
- 14.02** If there is a reason for believing that collusion exists among the Bidders, any or all Bids may be rejected.
- 14.03** Bids in which unit prices are significantly unbalanced may be rejected.
- 14.04** Bidders are put on notice that any collusive agreement fixing the prices to be Bid so as to control or affect Awarding of the Contract is in violation of competitive bidding requirements of the Public Contract Code and may render void any Contract let under such circumstances.

**ARTICLE 15 — ESTIMATED QUANTITIES**

- 15.01** The quantities stated in a schedule of items for which unit prices are asked to be Bid are approximate only.
- 15.02** The quantities are given as a basis for the comparison of Bids.
- 15.03** Owner does not, expressly or by implication, represent that the actual amount of Work will correspond with quantities given and reserves the right to increase or decrease the quantities of Work for any Bid item, or to omit portions of the Work, as Owner may deem necessary or advisable.

**ARTICLE 16 — SUBSTITUTION OF ALTERNATIVE MATERIALS, ARTICLES, OR EQUIPMENT**

- 16.01** Bids must be based upon the expected use of items named in the Bid Documents.
- 16.02** In certain cases, specific items have been named (Named Products) because of operational or maintenance considerations; approval of proposed equals should not be assumed.
- 16.03** Pursuant to Public Contract Code section 3400, alternative material(s), article(s), or equipment that are of equal quality and of required characteristics for the purpose intended may be proposed provided the Bidder complies with the following requirements:
- A.** The proposal will not be considered unless the submittal is accompanied by complete information and descriptive data necessary to determine equality of offered material(s), article(s) or equipment;
  - B.** Samples must be submitted when requested by Owner;
  - C.** Burden of proof as to comparative quality, suitability, and performance of offered material(s), article(s), or equipment is the responsibility of the Bidder submitting the proposal; and,
  - D.** Requests for approval must comply with the requirements of Section 01 25 00, “Substitution Procedures.”
- 16.04** Owner’s Authorized Representative is the sole judge as to the acceptability of a proposed Alternative. In the event Owner’s Authorized Representative rejects the use of such Alternative(s), Contractor must furnish one of the particular Named Products originally specified in the Bid Documents.

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- 16.05** Proposals for Alternative material(s), process, article(s), or equipment will not be accepted during the Bid period.

**ARTICLE 17 — RETURN OF BIDDER'S SECURITY**

- 17.01** If Owner does not accept the Bid within the period of Days after the Bid opening stated in Document 00 41 00 - Bid Form, Owner will return Bidder's Security to all Bidders.
- 17.02** If the Bidder to whom the Contract is Awarded executes and delivers to Owner all the required documents, Owner will return Bidder's Security to all Bidders.

**ARTICLE 18 — RELIEF OF BIDDERS**

- 18.01** Attention is directed to the provisions of California Public Contract Code sections 5100 through 5107 that set forth the criteria and procedures for relief of Bidders, and for authorizing Contract Award to another Bidder.

**ARTICLE 19 — AWARD OF CONTRACT**

- 19.01** The Contract, if Awarded, will be to that responsible Bidder submitting the lowest responsive Price Criteria Figure subject to Owner's right to reject any or all Bids and to waive any informality or irregularity in the Bids or in the bidding procedures. Procedures for award Alternates, if used, will be published in conformance with the Public Contract Code.
- 19.02** Subject to California Public Contract Code sections 5100 through 5107, no Bidder may withdraw its Bid for the period of Days stated in Document 00 41 00, "Bid Form," after the date set for the opening thereof, and the Bid will be subject to acceptance by Owner throughout this period.
- 19.03** The time period within which Award of Contract may be made is subject to an extension of such further period as may be agreed upon in writing between the Owner and the apparent lowest responsive responsible Bidder.
- 19.04** No Contract is formed until all Contract Bonds in the form provided in the Project Manual, Document 00 62 13.13 (Performance Bond Form) and Document 00 62 13.16 (Payment Bond Form), and Insurance documents have been accepted by Owner; the Contractor submits the signed Contractor's Certification regarding Worker's Compensation; and the Agreement is signed by Owner.

**ARTICLE 20 — CONTRACT BONDS**

- 20.01** The successful Contractor must pay all Contract Bond premiums, costs thereof, and incidental thereto.
- 20.02** Each Contract Bond must be in the form provided in the Project Manual, Document 00 62 13.13 (Performance Bond Form), and Document 00 62 13.16 (Payment Bond Form), and signed by both Contractor and the Sureties.
- 20.03** As a condition to Owner signing the Agreement, the successful Bidder must file with Owner on the approved forms, the two Surety bonds in the amounts and for the purposes noted below, duly executed by a Surety company meeting the requirements of Article 20 herein.
- 20.04** The successful Bidder shall provide a payment bond for public works in the form provided in the Project Manual, Document 00 62 13.16 (Payment Bond form), in an amount of one hundred percent (100%) of the Contract Sum and shall insure to the benefit of persons performing labor or furnishing materials in connection with the Work. This bond must be maintained in full force and effect until all Work is completed and Accepted by Owner, and until all claims for materials and labor have been paid.
- 20.05** The successful Bidder shall provide a performance bond in the form provided in the Project Manual, Document 00 62 13.13 (Performance Bond form), in an amount of one hundred percent (100%) of the Contract Sum and must be so conditioned as to ensure the faithful performance by Contractor of all Work. This bond must be maintained in full force and effect for the term of the Contract.
- 20.06** If any Surety or Sureties are deemed unsatisfactory at any time by Owner, Owner will notify Contractor, and Contractor must forthwith substitute a new Surety or Sureties satisfactory to Owner. No further



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payment from Owner to Contractor will be deemed due or made until the replacement Sureties qualify and are accepted by Owner.

**20.07** All changes to the Contract Sum, Contract Time, or Contract Documents may be made without securing the consent of the Surety or Sureties on the Contract Bonds.

**20.08** Sureties must be California admitted Sureties.

#### **ARTICLE 21 — INSURANCE**

**21.01** Contractor will be required to furnish to Owner, concurrently with execution of the Agreement, insurance documents evidencing coverage as required by Document 00 72 00 (General Conditions), Article 11 Indemnification and Insurance.

#### **ARTICLE 22 — EXECUTION OF CONTRACT AGREEMENT**

**22.01** The form of Agreement which the successful Bidder, as Contractor, must execute, and the form of Contract Bonds and insurance coverage that it must provide are included in the Bid Documents and must be carefully examined by each Bidder. All Contract Bonds, policies or certificates of insurance, and insurance policy endorsements must be delivered with or before the delivery of the signed Agreement form, and must be acceptable to Owner.

**22.02** The Bidder to whom the Contract is Awarded by Owner must, within ten (10) Days after the Notice of Award, sign and deliver the following documents to the Deputy Director, Facilities and Fleet for Capital Programs, at 2310 N. 1<sup>st</sup> Street, San José, 95131:

- A.** One (1) original and one (1) copy of the signed Agreement form furnished by Owner in the Bid Documents. (Document 00 52 00, "Agreement");
- B.** One (1) original and two (2) copies of the Performance Bond. (Document 00 61 13.13, "Performance Bond Form");
- C.** One (1) original and two (2) copies of the Payment Bond for Public Works. (Document 00 61 16, "Payment Bond Form");
- D.** Policies of Insurance, Insurance certificates and endorsements as required by the Bid Documents, including Document 00 62 20 (Insurance Endorsement); and,
- E.** Worker's Compensation Certification document.

**22.03** Should Contractor begin Work in advance of the start date for the Work, as stated in the Notice to Proceed, the Work will be considered as having been done at Contractor's risk as a volunteer.

#### **ARTICLE 23 — FAILURE TO EXECUTE CONTRACT AGREEMENT**

**23.01** If Bidder to whom Contract is awarded shall, within the period described in Article 22 of this Document 00 21 13, fail or neglect to execute and deliver all required Contract Documents and file all required bonds, insurance certificates, and other documents, in the form and containing the signatures required, Owner may, in its sole discretion, foreclose on Bidder's Bid Bond, or deposit Bidder's cashier's check or certified check for collection.

**23.02** Bidder is liable for any difference by which the cost of procuring the Work exceeds the amount of its Bid.

#### **ARTICLE 24 — NO ORAL AGREEMENTS**

**24.01** No conversation with any officer, employee, agent, or consultant of Owner, either before, during, or after the execution of the Agreement, affects or modifies any terms or obligations contained in the Contract Documents, nor entitle Contractor to any adjustment in the Contract Time or Contract Sum whatsoever.

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**ARTICLE 25 — PROTEST PROCEDURES FOR PUBLIC WORKS**

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- 25.01** This protest procedure applies to all public works procurements, whether Invitation to Bid, Request for Proposals, Prequalification, or other form of competitive procurement, formal or informal. The words “bid” and “bidder” shall be interchangeable with “proposal and “proposer” respectively, as appropriate for the specific procurement.
- 25.02** Only a person or entity who has submitted a bid is eligible to lodge a protest. Bid protests will not be accepted from non-bidders, including, but not limited to, subcontractors, subconsultants, or other third parties. A bidder may also not rely on the protest submitted by another bidder, but instead must timely pursue its own protest.
- 25.03** Protest Regarding the Legal Sufficiency of Procurement Documents and Process. Any protest (including supporting documentation) relating to the legal sufficiency of the procurement documents or the procurement solicitation process must be emailed so that it is received by the Owner’s Project Manager identified in the procurement documents before 5:00 p.m. of the 5th business day after the release of the solicitation. Any protest not received by the deadline, or sent to any person other than Owner’s Project Manager, may be rejected or dismissed in Owner’s sole discretion. The protest must be in writing and state the specific legal authority establishing the deficiency in the procurement documents or procurement solicitation process. Any bidder who fails to submit a timely protest subject to this provision shall be deemed to have waived any such protest. Owner may respond by any reasonable means, including, without limitation, by issuing an addendum, issuing a letter to the protester, or canceling the procurement.
- 25.04** Protest of Owner Rejection of Bid as Non-Responsive or Bidder as Non-Responsible. If Owner determines that the apparent lowest bid(s) are non-responsive or the lowest bidder(s) are non-responsible (after conducting a non-responsibility hearing or bidder waiving any objection to a non-responsibility determination), Owner shall reject the bid. Owner will notify the bidder in writing that the bid has been rejected, and state the basis for the rejection. The rejected bidder may protest Owner’s decision. The protest must be in writing and emailed to Owner’s Project Manager before 5:00 p.m. within 5 business days of the issuance of the rejection.
- 25.05** Protest Regarding Award
1. The Owner’s Project Manager or designee will send an email or otherwise provide an announcement to all bidders informing each of the bid(s) that was/were selected or deemed to be a finalist. The announcement may take any reasonable form in the Owner’s discretion, including, but not limited to, providing an email to bidders, and/or posting results on Periscope or other similar electronic bidding platform utilized by the County.
  2. The written protest and all supporting documentation must be emailed to the Owner’s Project Manager listed in the procurement documents so that it is received before 5:00 p.m. on the 5th business day after the announcement in the preceding section. Owner will not consider, and immediately dismiss, bid protests that are lodged before Owner issues the notice of intent to award, or notice of finalist(s). Any protest not received by the deadline, or sent to any person other than the Owner’s Project Manager, may be rejected or dismissed by Owner in Owner’s sole discretion.
- 25.06** For all protests, a protest received on or after 5:00 p.m. shall be considered received as of the next business day. A business day does not include weekends or County observed holidays.
- 25.07** Contents of Protest.
1. All protests lodged, regardless of basis, must conform to the following content requirements.
  2. The protest must be in writing. The following must be written on the cover or subject line of the protest: “Protest Relating to [SOLICITATION NUMBER].” The written protest must contain the following information: (1) the name, street address, electronic mail address, and telephone and facsimile number of the protester; (2) signature of the protester or its representative; (3) clearly-



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stated grounds for the protest and supporting information that forms the basis of the protest, including the specific portions of the bid documents, plans, specification, bid proposal, and/or applicable law or regulation that was not complied with; (4) copies of all relevant documents; and, (5) the form of relief requested. Protests should be concise and logically arranged. All documents submitted by the protester are public records subject to disclosure under the California Public Records Act.

3. The protester may not present any additional grounds or arguments after submission, unless requested by Owner. All protest documents shall be public records.
4. If a protest contends there was an error made by Owner officials or evaluation team members, a difference of opinion regarding the scoring or points to be awarded to a proposal in any or all categories does not constitute for protest purposes an error, an abuse of discretion or process, or misconduct.

#### **25.08 Protest Resolution Process**

1. Upon receipt of a timely protest, the department will attempt to informally resolve the protest. This will include providing a copy of the protest to the protested bidder, and request a response within a time frame set by Owner, typically 5 calendar days.
2. The director of the department or its designee overseeing the procurement will render its final decision in writing. The director or designee may, consistent with applicable law and in its sole discretion, use any available resources and information to resolve the protest. The director or designee has the discretion to contact the protester, protested bidder, schedule a meeting, or conduct an informal hearing.

#### **25.09 Protest Remedies**

1. In accordance with applicable law, Owner has no obligation to delay or otherwise postpone an award of contract based on a bidder's protest.
2. The remedies available pursuant to these procedures may include, but are not limited to, the reevaluation or the cancellation of a solicitation. However, no remedy may require Owner to execute a contract with any entity, which authority is solely reserved for the Board of Supervisors or an official with appropriate delegated authority.
3. The procedures and time limits set forth herein are mandatory and are each bidder's sole and exclusively remedy in the event of a protest. A bidder's failure to timely complete the procedures set forth herein shall be deemed a failure to exhaust administrative remedies. Failure to exhaust administrative remedies, or failure to comply with the protest procedures, shall constitute a waiver of any right to further pursue a bid protest, including the filing of any claim or legal proceedings.

**END OF DOCUMENT 00 21 13**

DOCUMENT 00 41 00

**BID FORM**  
**JOB ORDER CONTRACT**  
**[BIDSYNC NUMBER]**

THIS BID IS SUBMITTED BY:

Company Name: \_\_\_\_\_

Address: \_\_\_\_\_

Contact Person: \_\_\_\_\_

Telephone #: \_\_\_\_\_ Fax #: \_\_\_\_\_

Email Address: \_\_\_\_\_

- .1 The undersigned Bidder proposes and agrees, if this Bid is accepted, to enter into an agreement with the COUNTY OF SANTA CLARA (Owner) in the form included in the Contract Documents, Document 00 52 00 (Agreement – Job Order Contract), to perform and furnish all Work as specified or indicated in the Contract Documents for the Contract Sum and within the Contract Time indicated in this Bid and in accordance with all other terms and conditions of the Contract Documents.
- .2 Bidder accepts all of the terms and conditions of the Contract Documents, Document 00 11 00 (Notice Inviting Bids), and Document 00 21 13 (Instructions to Bidders) including, without limitation, those dealing with the disposition of Bid Security. This Bid will remain subject to acceptance for 90 Days after the day of Bid opening.
- .3 Bid prices shall be based upon and assume Contract Value of a not to exceed amount of \$[AMOUNT].
- .4 SCHEDULE OF BID PRICING SCHEDULE
  - .A All Bid Adjusted Factors listed below must be filled in completely. Bid Adjustment Factors are described or referenced in Document 00 52 00 (Agreement – Job Order Contract (JOC)) and attachments and documents incorporated therein by reference. In submitting this Bid Form (Document 00 41 00), Bidder verifies it has properly studied and understood the scope of all Adjustment Factors and Services.

Item No.		Adjusted Factor
1	<b>General Facilities Normal Working Hours:</b> Work performed during Normal Working Hours, in General Facilities, in the quantities specified in individual Job Orders for the Unit Price sum specified in the Construction Task Catalog multiplied by the Adjustment Factor. <b>[Note to Specifier: Use the following if contract includes OSHPD work.]</b>	

	<p><b>General OSHPD 1 Normal Working Hours:</b> Work performed under OSHPD 1 conditions during Normal Working Hours in the quantities specified in individual Job Orders for the Unit Price sum specified in the Construction Task Catalog® multiplied by the Adjustment Factor.</p>	
2	<p><b>General Facilities Other than Normal Working Hours*:</b> Work performed during Other Than Normal Working Hours, in General Facilities, in the quantities specified in individual Job Orders for the Unit Price sum specified in the Construction Task Catalog multiplied by the Adjustment Factor.</p> <p><b>[Note to Specifier: Use the following if contract includes OSHPD work.]</b></p> <p><b>General OSHPD 1 Other than Normal Working Hours:</b> Work performed under OSHPD 1 conditions during Other Than Normal Working Hours in the quantities specified in individual Job Orders for the Unit Price sum specified in the Construction Task Catalog® multiplied by the Adjustment Factor</p>	
3	<p><b>Detention Facilities** Normal Working Hours:</b> Work performed during Normal Working Hours, in Detention Facilities, in the quantities specified in individual Job Orders for the Unit Price sum specified in the Construction Task Catalog multiplied by the Adjustment Factor.</p> <p><b>[Note to Specifier: Use the following if contract includes OSHPD work.]</b></p> <p><b>Normal Working Hours:</b> OSHPD 3 and Non-OSHPD Work performed during Normal Working Hours in the quantities specified in individual Job Orders for the Unit Price sum specified in the Construction Task Catalog® multiplied by the Adjustment Factor.</p>	
4	<p><b>Detention Facilities Other than Normal Working Hours:</b> Work performed during Other Than Normal Working Hours, in Detention Facilities, in the quantities specified in individual Job Orders for the Unit Price sum specified in the Construction Task Catalog multiplied by the Adjustment Factor.</p> <p><b>[Note to Specifier: Use the following if contract includes OSHPD work.]</b></p> <p><b>Other than Normal Working Hours:</b> OSHPD 3 and Non-OSHPD Work performed during Other Than Normal Working Hours in the quantities specified in individual Job Orders for the Unit Price sum specified in the Construction Task Catalog® multiplied by the Adjustment Factor.</p>	
5	<p><b>Non Pre-Priced:</b> Work required by the Detailed Scope of Work but not included in the Construction Task Catalog® multiplied by the Adjustment Factor. <b>Maximum of 4% added to the Adjustment Factor for 'General Facilities Other than Normal Working Hours'.</b></p> <p><b>[Note to Specifier: Use the following if contract includes HCAI work.]</b></p>	

	<b>Non Pre-priced:</b> Work required by the Detailed Scope of Work but not included in the Construction Task Catalog® multiplied by the Adjustment Factor. <b>Maximum of 4% added to the Adjustment Factor for 'General OSHPD 1 Other than Normal Working Hours'.</b>	
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**.B** Price Criteria Figure Formula percentages are for Bid purposes only. The County is not obligated to issue Job Orders in the stated percentages. Carry out all Lines to the 4th decimal place.

Line 1.	General Facilities Normal Working Hours Adjustment Factor  <div style="background-color: yellow; padding: 2px;">[Note to Specifier: Use the following if contract includes OSHPD work.]</div> OSHPD 1 Normal Working Hours Adjustment Factor	1.
Line 2.	Multiply Line 1 by 65%	2.
Line 3.	General Facilities Other than Normal Working Hours Adjustment Factor  <div style="background-color: yellow; padding: 2px;">[Note to Specifier: Use the following if contract includes OSHPD work.]</div> OSHPD 1 Other than Normal Working Hours Adjustment Factor	3.
Line 4.	Multiply Line 3 by 15%	4.
Line 5.	Detention Facilities Normal Working Hours Adjustment Factor  <div style="background-color: yellow; padding: 2px;">Note to Specifier: Use the following if contract includes OSHPD work.]</div> OSHPD 3 and Non-OSHPD Normal Working Hours Adjustment Factor	5.
Line 6.	Multiply Line 5 by 10%	6.
Line 7.	Detention Facilities Other than Normal Working Hours Adjustment Factor  <div style="background-color: yellow; padding: 2px;">[Note to Specifier: Use the following if contract includes OSHPD work.]</div> OSHPD 3 and Non-OSHPD Other than Normal Working Hours Adjustment Factor	7.

Line 8.	Multiply Line 7 by 10%	8.
Line 9.	Non Pre-Priced Adjustment Factor	9.
Line 10.	Multiply Line 9 by 5%	10.
<b>Add Lines 2, 4, 6, 8, and 10 (This is the Price Criteria Figure)</b>		<b>PCF =</b>

- .5 The undersigned acknowledges the Owner's allowance amounts for time and cost of construction stated above are wholly discretionary amounts which Owner may exercise in its sole and unfettered discretion and are provided herein for Bidder's purposes in preparing its Bid.
- .6 Bidder is an individual, partnership, joint venture, corporation, or other recognized legal entity, that is appropriately licensed and authorized to do business in this State, including the necessary contractor's license(s) issued by the Contractors' State License Board.

**.A LICENSED IN ACCORDANCE WITH CHAPTER 9, DIVISION 3, OF BUSINESS AND PROFESSIONS CODE PROVIDING FOR THE REGISTRATION OF CONTRACTORS:**

Contractor's License: No.: \_\_\_\_\_ Class: \_\_\_\_\_ Expiration Date: \_\_\_\_\_

**.B PUBLIC WORKS CONTRACTOR ("PWC") REGISTRATIONS PURSUANT TO DIVISION 2, PART 7, CHAPTER 1 (COMMENCING WITH SECTION 1720) OF THE CALIFORNIA LABOR CODE.**

Public Works Contractor's Registration No.: \_\_\_\_\_ Expiration Date: \_\_\_\_\_

- .7 In submitting this Bid, Bidder represents that Bidder has examined all of the Contract Documents, performed all necessary pre-Bid investigations required in Document 00 22 13, received the pre-Bid conference minutes (if any), and received the following Addenda:

Addendum Number	Addendum Date	Signature of Bidder

- .8 Bidder acknowledges that it is Bidder's responsibility to ascertain whether any Addenda have been issued and if so, to obtain copies of such Addenda.
- .9 Contract Bonds and Insurance must be satisfactory to, and on forms acceptable to Owner.
- .10 Notice of acceptance of Bonds and Insurance or request for additional information may be addressed to the Bidder at the address shown on Page 1 of this Document 00 41 00 (Bid Form – JOC).

- .11 Wherever in this Bid an amount is stated in both words and figures, in case of discrepancy between words and figures, the words shall prevail.
- .12 If all or any portion of the Bid is required to be given in unit prices and totals, and a discrepancy exists between the sum of the unit prices and totals so given, the sum of the unit prices will prevail.
- .13 Bidder certifies that it has thoroughly read and understands the Bid Documents and Addenda. Bidder hereby incorporates by reference the Bid Documents and Addenda as though set out in full, and all provisions of the Notice Inviting Bids and Instructions to Bidders published by Owner pertaining to the Work described in this Bid.

.14 Prevailing Wage Statement.

- .A If awarded the contract, Contractor and its subcontractors shall pay all the workers assigned to the project not less than prevailing wages under Labor Code Section 1770 *et seq.* Contractor acknowledges and is aware that the Director of Industrial Relations has ascertained the general prevailing rate of per diem wages and the rates for overtime and holiday work in the locality in which the work is to be performed for each craft, classification, or type of worker needed to perform the Work under the contract which will be awarded to the successful Bidder. Copies of the prevailing wage rates are on file at:

Clerk of the Board of Supervisors  
County of Santa Clara Administration Building  
70 West Hedding Street, East Wing, 10th Floor  
San José, CA 95110  
(408) 299 - 5001

and

State of California Department of Industrial Relations  
Division of Labor Statistics and Research  
455 Golden Gate Avenue, Room #5184  
San Francisco, CA 94102  
Prevailing Wage Unit

(415) 703 – 4774

<http://www.dir.ca.gov/oprl/PWD/index.htm>

- .B No contractor or subcontractor may be awarded a contract for public work on a public works project unless registered with the Department of Industrial Relations (DIR) pursuant to Labor Code Section 1725.5. All subcontractors listed in the Bid or doing work must be registered with the DIR. No contractor or subcontractor may perform work on the project without being registered with the DIR. The successful Bidder shall be required to post the prevailing wage determinations at each job site.
- .C Each contractor and subcontractor shall keep accurate payroll records showing the name, address, social security number, work classification, straight time and overtime hours worked each day and week, and the actual per diem wages paid to each journeyman, apprentice, worker, or other employee employed by them in connection the public work.
- .D Certified copies of such payroll records must be furnished to the State or the County upon request.
- .E The Bidder certifies that it shall comply with the prevailing wage laws.

.15 Designation of Subcontractors.

- .A Document 00 43 36 (Subcontractors List) must be completed in compliance with the State of California Subletting and Subcontracting Fair Practices Act, Public Contract Code Section 4100 *et seq.*, and any amendment thereof. Bidder must complete the form for each Subcontract that exceeds one-half of one percent (½%) of the Bidder's total Bid price. A Subcontractor is one who: (1) performs Work or labor; or (2)

provides a service to the Bidder; or (3) specially Fabricates and Installs a portion of the Work according to the Contract Documents. Bidder's failure to list a Subcontractor for any portion of the Work in excess of ½% of Bidder's total Bid price signifies Bidder will self-perform that portion of the Work with its own forces. (Note: If more than one Subcontractor is designated for the same kind of Work, state the portion that each will perform.) The Project is subject to compliance monitoring and enforcement by the Department of Industrial Relations. No contractor or subcontractor may be listed on the Bid for a public works project unless registered with the Department of Industrial Relations, per Labor Code Section 1725.5. Because this Job Order Contract is of indefinite scope and quantity, Contractor shall be required to list subcontractors at the time it submits a Job Order Proposal.

**.16 NON-COLLUSION AFFIDAVIT**

In accordance with Public Contract Code section 7106 \_\_\_\_\_  
(Bidder's Full Name)

being first duly sworn, declares: I am \_\_\_\_\_  
(Bidder's Title)

of \_\_\_\_\_  
(Company Name)

the party making the foregoing Bid. The Bid is not made in the interest of, or on behalf of, any undisclosed person, partnership, company, association, organization, or corporation. The Bid is genuine and not collusive or sham. The Bidder has not directly or indirectly induced or solicited any other Bidder to put in a false or sham Bid. The Bidder has not directly or indirectly colluded, conspired, connived, or agreed with any Bidder or anyone else to put in a sham Bid, or to refrain from proposing. The Bidder has not in any manner, directly or indirectly, sought by agreement, communication, or conference with anyone to fix the bid price of the Bidder or any other Bidder, or to fix any overhead, profit, or cost element of the bid price, or of that of any other Bidder. All statements contained in the Bid are true. The Bidder has not, directly or indirectly, submitted his or her Bid price or any breakdown thereof, or the contents thereof, or divulged information or data relative thereto, to any corporation, partnership, company, association, organization, bid depository, or to any member or agent thereof, to effectuate a collusive or sham Bid, and has not paid, and will not pay, any person or entity for such purpose. Any person executing this declaration on behalf of a Bidder that is a corporation, partnership, joint venture, limited liability company, limited liability partnership, or any other entity, hereby represents that he or she has full power to execute, and does execute, this declaration on behalf of the Bidder.

**.17 CONTRACTING PRINCIPLES DECLARATION OF CONTRACTOR/BIDDER**

The Contract that may be Awarded will be a Type I Service Contract pursuant to the Board of Supervisor's Resolution on Contracting Principles adopted on October 28, 1997.

Type I Category: "II. Definitions C.2. Construction or other work required by law to be contracted out."

Explanation: The work required by these Contract Documents is construction work and pursuant to Public Contract Code section 20121 must be contracted out.

The Board resolution on Contracting Principals has two (2) specific requirements related to Type I Service contracts:

- 1) All Type 1 contracts must contain a contract provision specifying that the contractor shall comply with all applicable federal, state and local rules, regulations and laws. (See Document 00 72 00 (General Conditions), Part 3.08 (Permits, Fees and Compliance with Laws).)
- 2) All Type I contracts must contain a contract provision specifying that the contractor shall maintain financial records that would be adequate to show that County funds were used for purposes consistent with the terms of the service contract. (See Document 00 72 00 (General Conditions), Part 13.09 (Audits and Access to Records)).

I warrant and represent that I am authorized to complete this form on behalf of:

---

(Company Name)

- .18 Based on the foregoing, Bidder proposes and agrees to fully perform the Work within the time stated and in accord with the Contract Documents for the following sums of money listed in the following schedule of Bid Prices.
- .19 The undersigned encloses Document 00 43 83 (Bidder's Proposed Contract and Job Order Plan), Document 00 43 85 (Bidder's Proposed Safety Plan), and Document 00 43 86 (Bidder's Proposed Staffing/Resource Plan). Owner may, its sole discretion, include these submittals in the Contract Documents, subject to the limitations stated expressly in Document 00 52 00.
- .20 The undersigned acknowledges that the apparent low Bidder will be determined as provided in Document 00 21 13 (Instructions to Bidders).
- .21 The undersigned understands that Owner reserves the right to reject any and all Bids, institute a new procurement, or take other steps authorized by law, should Owner deem it in its best interest to do so.
- .22 If written notice of the acceptance of this Bid, hereinafter referred to as Notice of Award, is mailed or delivered to the undersigned Bidder within the time described in this Document 00 41 00 as the time this Bid is required to remain open for acceptance, or at any other time thereafter before it is withdrawn, the undersigned Bidder will execute and deliver the documents required by Document 00 21 13, including without limitation, Document 00 52 00, confirmation of Surety, evidence of required insurance under Document 00 73 16 (Insurance and Indemnification), certifications, and any other requirements stated in Document 00 21 13 or requested reasonably by Owner for administrative or compliance purposes, within the time specified therein.
- .23 The Notice of Award or request for additional information may be addressed to the undersigned Bidder at the address set forth below.
- .24 The undersigned encloses Bid security with Document 00 43 13, either cash, a cashier's check, or certified check of or on a responsible bank in the United States, or a corporate surety bond furnished by a surety authorized to do a surety business in the State of California, in form and amount specified in Document 00 21 13 (Instructions to Bidders), and as may be clarified in Document 00 43 13, made payable to the COUNTY OF SANTA CLARA.
- .25 The undersigned agrees to commence Work under the Contract Documents on the date(s) established in Document 00 52 00 and Document 00 72 00 and to complete all Work within the time(s) specified in each Job Order.
- .26 The undersigned agrees that, in accordance with Document 00 72 00 (General Conditions), liquidated damages for failure to complete Work of the Contract (or portions thereof) within the time(s) specified in Document 00 52 00 shall be as set forth in Document 00 52 00 and/or each Job Order.
- .27 Declaration of Compliance with Levine Act. Proposer certifies that it will comply with California Government Code section 84308 ("Levine Act"), which (1) requires a party to a proceeding involving a contract, including a competitive solicitation process, to disclose on the record of the proceeding any contribution, as defined by Government Code section 84308(a)(6), of more than \$250 that the party or their agent has made to any member



of the County Board of Supervisors, or any Other Elected County Officer (if they may participate in the proceeding), within the prior 12 months, and (2) prohibits a party to a proceeding involving a contract, including a competitive solicitation process, from making a contribution, as defined by Government Code section 84308(a)(6), of more than \$250 to any Elected County Officer participating in the proceeding during the proceeding and for 12 months following the final decision in the proceeding. Levine Act disclosures must be submitted at <https://www.sccgov.org/levineact>.

I declare under penalty of perjury under the laws of the State of California that the information supplied above are true and correct:

**Bidder's Signature:** \_\_\_\_\_ **Date:** \_\_\_\_\_

**Bidder's Name & Title (Print):** \_\_\_\_\_

**DOCUMENT 00 43 13 – BIDDER SECURITY (“BID BOND”) CERTIFICATION**

1. Accompanying this Bid is \_\_\_\_\_ (insert words “cash,” “cashier’s check,” “certified check,” or “Bond Accompanying Bid”) in the amount specified in Document 00 22 16 (Instructions to Bidders), Article 4, “Bid Security”.
2. Cashier’s checks, or certified checks, are drawn on a responsible bank in the United States. If a corporate surety bond, then furnished by a surety authorized to do a surety business in the State of California, using the County’s standard form of Bid Bond.
3. Contractor acknowledges receipt of the following Addenda to the Bid Documents:

☐ No Addenda received

☐ Addenda received as follows:

<u>Addendum Number</u>	<u>Date</u>
_____	_____
_____	_____
_____	_____

Failure to acknowledge receipt of an Addendum is not in itself cause for withdrawal or rejection of Bid, if it can be established Contractor did, in fact, receive such Addendum prior to submittal of Contractor’s Bid.

**SIGNATURE BLOCK MUST BE COMPLETED IN INK AND CHANGES MUST BE INITIALED**

Contractor’s Signature \_\_\_\_\_

Date \_\_\_\_\_

Contractor’s Name and Title (Print): \_\_\_\_\_

**DOCUMENT 00 43 13 - BIDDER'S BOND**

WHEREAS, we, \_\_\_\_\_ as Principal,

and \_\_\_\_\_ as Surety,

are held and firmly bound unto the County of Santa Clara, a political subdivision of the State of California (hereinafter called "County") in the penal sum of ten percent (10%) of the total aggregate amount of the Bid of the Principal above named, submitted by said Principal to County for the Work described below, for the payment of which sum in lawful money of the United States, well and truly to be made, we bind ourselves, our heirs, executors, administrators, and successors, jointly and severally, firmly by this agreement.

WHEREAS, the said Principal is submitting a Bid to the County of Santa Clara [PM to enter Project Name, brief description of the Work, including location, from the Notice to Bidders]

THE CONDITION OF THIS OBLIGATION IS that if the Bid submitted by the said Principal is accepted and the Contract awarded to said Principal within the time periods required in Bid, and if the Principal duly executes the required Agreement, provides the required Construction Performance Bond, Construction Labor and Material Payment Bond, insurance certificates, Guarantee, and all other endorsements, forms, and documents, in the form and time periods required by the Bid, then this obligation shall be void, otherwise to remain in full force and effect.

Surety for value received, hereby stipulates and agrees that no change, extension of time, alterations, or addition to the terms of the Contract or the call for Bids, or to the Work to be performed thereunder, or the specifications accompanying the same, shall in any way affect its obligation under Bidders bond, and Surety does hereby waive notice of any such change, extension of time, alteration, or addition to the terms or specifications.

In the event suit or claim for payment is brought upon Bidders Bond by the County of Santa Clara and County prevails before an adjudicatory body, Surety shall pay all costs incurred by the County of Santa Clara in such suit or claim, including a reasonable attorney's fee to be fixed by the adjudicating body.

**IN WITNESS WHEREOF**, we have hereunto set our hands and seals on this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_\_.

**PRINCIPAL:**

**SURETY:**

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Name

\_\_\_\_\_  
Name

\_\_\_\_\_  
Title

\_\_\_\_\_  
Title

\_\_\_\_\_  
Address

\_\_\_\_\_  
Address

\_\_\_\_\_  
City Where this Form was Signed

\_\_\_\_\_  
City Where this Form was Signed

Address for Service

Address for Service

**NOTE TO SURETY COMPANY:**

The following form of acknowledgement should be used. If any other form of acknowledgement is used, there must be submitted an original or an original certified copy of unrevoked resolution of authority for the attorney-in-fact.

**SURETY COMPANY ATTORNEY-IN-FACT**

STATE OF CALIFORNIA )  
COUNTY OF SANTA CLARA ) ss.  
 )

On \_\_\_\_\_, before me, the undersigned, a Notary Public in and for the State, personally appeared \_\_\_\_\_, known to me to be the duly authorized Attorney-in-Fact of the corporate Surety named in the within instrument, known to me to be authorized to execute that instrument on behalf of said corporation, known to me to be the person whose name is subscribed to such instrument as the Attorney-in-Fact of said corporation, and acknowledged to me that he (she) subscribed the name of said corporation thereto as Surety, and his (her) own name as Attorney-in-Fact and that said corporation executed the same.

WITNESS MY HAND AND OFFICIAL SEAL:

(SEAL)

Notary Public for the State of California.

Original Acknowledgement by Attorney-in-Fact must be attached.  
Original Corporate seals of Principal and Surety must be attached.

END OF DOCUMENT 00 43 13

DOCUMENT 00 43 36

**SUBCONTRACTORS LIST****TO BE UPDATED WITH ACCEPTANCE AND AWARD OF SUBCONTRACTS FOR EACH JOB ORDER.**

Provide in the spaces below (a) the name, the location of the place of business, and the California contractor license number of each Subcontractor who will perform work or labor or render service to the prime contractor in or about the construction of the work or improvement, and any Subcontractor licensed by the state of California who, under subcontract to the Contractor, specially fabricates and installs a portion of the work or improvement according to detailed drawings contained in the plans and specifications, (b) in an amount in excess of one-half of one percent of the Contractor's total Bid. Identify the portion of the work which will be done by each Subcontractor. The Contractor shall list only one Subcontractor for each such portion as is defined by the Contractor in its bid.

**Use this sheet for Subcontractors on Base Bid Work as required to be listed by law.**

BUSINESS NAME	DIR PWRC REGISTRATION NO.	LICENSE NO.	LOCATION OF BUSINESS	SCOPE OF WORK

(Attach additional sheets if necessary)

**To list additional Subcontractors, submit completed copies of this form as needed.**

---

SIGNATURE BLOCK (*Signature Block **must be completed in ink & changes must be initialed.***)

Contractor: \_\_\_\_\_

Bidder's Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Bidder's Name & Title (Print): \_\_\_\_\_

END OF DOCUMENT 00 43 36

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DOCUMENT 00 43 83

**Bidder's Contract and Job Orders Management Plan**

1. Submitted with this Document 00 43 83 is Bidder's Safety Plan responsive to Document 00 21 13 (Instructions to Bidders) (if applicable).

SIGNATURE BLOCK MUST BE COMPLETED IN INK AND CHANGES MUST BE INITIALED

Contractor's Signature \_\_\_\_\_

Date \_\_\_\_\_

Contractor's Name and Title (print): \_\_\_\_\_

**END OF DOCUMENT 00 43 83**

**DOCUMENT 00 43 85**

**Bidder's Proposed Safety Plan**

1. Submitted with this Document 00 43 85 is Bidder's Safety Plan responsive to Document 00 21 13 (Instructions to Bidders) (if applicable).

SIGNATURE BLOCK MUST BE COMPLETED IN INK AND CHANGES MUST BE INITIALED

Contractor's Signature \_\_\_\_\_

Date \_\_\_\_\_

Contractor's Name and Title (print): \_\_\_\_\_

**END OF DOCUMENT 00 43 85**



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**DOCUMENT 00 43 86**

**Bidder's Proposed Staffing/Resource Plan**

1. Submitted with this Document 00 43 86 is Bidder's Initial Staffing Plan responsive to Document 00 21 13 (Instruction to Bidders) (if applicable).

SIGNATURE BLOCK MUST BE COMPLETED IN INK AND CHANGES MUST BE INITIALED

Contractor's Signature \_\_\_\_\_

Date \_\_\_\_\_

Contractor's Name and Title (print): \_\_\_\_\_

**END OF DOCUMENT 00 43 86**

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00 43 86-1

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DOCUMENT 00 45 19

## NON-COLLUSION AFFIDAVIT

A. In accordance with Public Contract Code section 7106

\_\_\_\_\_  
(Bidder's full name)

being first duly sworn, deposes and says that he or she is

\_\_\_\_\_  
(Bidder's title)

of \_\_\_\_\_

(Company's name)

the party making the foregoing Bid. The Bid is not made in the interest of, or on behalf of, any undisclosed person, partnership, company, association, organization, or corporation. The Bid is genuine and not collusive or sham. The Bidder has not directly or indirectly induced or solicited any other bidder to put in a false or sham Bid, and has not directly or indirectly colluded, conspired, connived, or agreed with any Bidder or anyone else to put in a sham Bid, or to refrain from proposing. The Bidder has not in any manner, directly or indirectly, sought by agreement, communication, or conference with anyone to fix the Bid price of the Bidder or any other Bidder, or to fix any overhead, profit, or cost element of the Bid price, or of that of any other Bidder, or to secure any advantage against the public body awarding the contract of anyone interested in the proposed Contract. All statements contained in the Bid are true. The Bidder has not, directly or indirectly, submitted his or her Bid price or any breakdown thereof, or the contents thereof, or divulged information or data relative thereto, to any corporation, partnership, company association, organization, bid depository, or to any member or agent thereof to effectuate a collusive or sham Bid, and has not paid, and will not pay, any person or entity for such purpose. Any person executing this declaration on behalf of a Bidder that is a corporation, partnership, joint venture, limited liability company, limited liability partnership, or any other entity, hereby represents that he or she has full power to execute, and does execute, this declaration on behalf of the Bidder.

B. STATEMENT OF BIDDER

Has the Bidder, or any officer of the Bidder or any employee of the Bidder who may have a proprietary interest in the Bid, ever been disqualified, removed, or otherwise prevented from bidding on or completing any federal, state, or local governmental project because of a violation of law or safety regulations:

YES \_\_\_\_ NO \_\_\_\_

If your answer is yes, explain the circumstances:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

END OF DOCUMENT 00 45 19

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DOCUMENT 00 45 20

CONTRACTOR CERTIFICATIONS  
TO BE EXECUTED BY CONTRACTOR AND SUBMITTED WITH BIDS

**BIDDER'S CERTIFICATIONS**

1. THE NAMES OF ALL PERSONS INTERESTED IN THE FOREGOING BID AS PRINCIPALS ARE AS FOLLOWS: \_\_\_\_\_

**NOTE:** If Bidder or other interested person is a corporation, give legal name of corporation, the State where incorporated, and names of the president and secretary thereof; if a partnership, provide name of the firm, also names of all individual partners composing firm; if Bidder or other interested person is an individual, provide first and last names in full below:

\_\_\_\_\_  
\_\_\_\_\_

2. LICENSED IN ACCORDANCE WITH CHAPTER 9, DIVISION 3, OF BUSINESS AND PROFESSIONS CODE PROVIDING FOR THE REGISTRATION OF CONTRACTORS:

Contractor's License No.: \_\_\_\_\_ Class: \_\_\_\_\_ Expiration Date: \_\_\_\_\_

NOTE: Bidder(s) bidding jointly or as a combination of several business organizations are cautioned that such Bidder must be jointly licensed in the same form and style in which the Bid is executed. If making a Bid as a joint venture, each person submitting the Bid must provide the information required above with respect to their license.

3. PUBLIC WORKS CONTRACTOR (PWC) REGISTRATIONS PURSUANT TO DIVISION 2, PART 7, CHAPTER 1 (COMMENCING WITH SECTION 1720 OF THE CALIFORNIA LABOR CODE.)

Public Works Contractor's Registration No.: \_\_\_\_\_ Expiration Date: \_\_\_\_\_

NOTE: If Bidder is a corporation, the legal name of the corporation must be set forth below together with the signature of the officer or officers authorized to sign contracts on behalf of the corporation; if Bidder is a partnership, the name of the firm must be set forth below together with the signature of the partner or partners authorized to sign contracts on behalf of the partnership; and if Bidder is an individual, the Bidder must sign below.

Business Address: \_\_\_\_\_  
Street

\_\_\_\_\_  
City State Zip Code

Business Telephone: ( ) \_\_\_\_\_

\_\_\_\_\_  
Signature Date

**3. DESIGNATION OF INSURANCE COMPANY(IES) & AGENT OR BROKER**

The following insurance company(ies) and agent or broker will provide policies of insurance or insurance certificates as required by the Contract Documents:

Insurance Company(ies) \_\_\_\_\_

Admitted in California: YES \_\_\_\_\_ NO \_\_\_\_\_

Agent or Broker:

\_\_\_\_\_  
Street City Zip

Phone:( ) \_\_\_\_\_ Email: \_\_\_\_\_

**4. DESIGNATION OF BONDING COMPANY & AGENT OR BROKER**

The following Surety company and agent or broker will provide Payment and Performance Bonds as required by the Contract Documents:

Surety Company Providing Bonds:

Admitted in California: YES \_\_\_\_\_ NO \_\_\_\_\_

Agent or Broker:

\_\_\_\_\_  
Street City Zip

Phone:( ) \_\_\_\_\_ Email: \_\_\_\_\_

I declare under penalty of perjury under the laws of the State of California that the information supplied above are true and correct:

**Bidder's Signature:** \_\_\_\_\_ **Date:** \_\_\_\_\_

**Bidder's Name & Title (Print):** \_\_\_\_\_

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### Contractor's Certification Regarding Worker's Compensation

Contract with the County of Santa Clara for the construction of:

PROJECT TITLE: \_\_\_\_\_

PROJECT NO.: \_\_\_\_\_

Labor Code section 3700 states:

Every employer except the state shall secure the payment of compensation in one or more of the following ways:

- (a) By being insured against liability to pay compensation by one or more insurers duly authorized to write compensation insurance in this state.
- (b) By securing from the Director of Industrial Relations a certificate on consent to self-insure either as an individual employer, or as one employer in a group of employers, which may be given upon furnishing proof satisfactory to the Director of Industrial Relations of ability to self-insure and to pay any compensation that may become due to his or her employees.
- (c) For any county, city, city and county, municipal corporation, public district, public agency, or any political subdivision of the state, including each member of a pooling arrangement under a joint exercise of powers agreement (but not the state itself), by securing from the Director of Industrial Relations a certificate of consent to self-insure against workers' compensation claims, which certificate may be given upon furnishing proof satisfactory to the director of ability to administer workers' compensation claims properly, and to pay workers' compensation claims that may become due to its employees. On or before March 31, 1979, a political subdivision of the state which, on December 31, 1978, was uninsured for its liability to pay compensation, shall file a properly completed and executed application for a certificate of consent to self-insure against workers' compensation claims. The certificate shall be issued and be subject to the provisions of Section 3702.

For purposes of this section, "state" shall include the superior courts of California.

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I am aware of the provisions of Labor Code section 3700 that require every employer to be insured against liability for workers' compensation or to undertake self-insurance. In accordance with the provisions of that code, I will comply with such provisions before commencing the performance of the Work of this Contract.

Dated: \_\_\_\_\_, 20\_\_\_\_

(Contractor)

By \_\_\_\_\_

\_\_\_\_\_  
(Official Title)

(Labor Code section 1861 requires that this Contractor certification be signed and filed by the Contractor with the public agency prior to performing any Work.)

**END OF DOCUMENT 00 45 26**

DOCUMENT 00 50 50

**NOTICE OF RECOMMENDATION TO THE BOARD OF SUPERVISORS**

DATE POSTED: [DATE]

PROJECT NUMBER: [BIDSYNC #]

PROJECT TITLE: JOC

Owner intends to recommend to its Board of Supervisors the Award of the above-referenced Project to [CONTRACTOR NAME].

COUNTY OF SANTA CLARA

---

Gerry Zimmerman  
Chief of Construction Services  
Facilities and Fleet Department

**END OF DOCUMENT 00 50 50**

DOCUMENT 00 52 00

AGREEMENT

This is an agreement ("Agreement") between the **County of Santa Clara** ("Owner") and **[CONTRACTOR]**. ("Contractor"). Owner and Contractor agree as follows:

**ARTICLE 1 – SCOPE OF WORK**

Contractor must provide all of the materials and perform all of the Work authorized in Job Orders in accordance with the Contract Documents for Project **[BIDSYNC NO.]**.

**ARTICLE 2 - CONTRACT SUM**

As full compensation for furnishing all materials and performing all the Work that may be authorized in Job Orders pursuant to this Agreement until its Acceptance by Owner; for all risks of every description connected with the Work; and for all expenses incurred by or in consequence of the suspension or discontinuance of Work thereof, in the manner and according to the Contract Documents, Owner will compensate the Contractor for the Detailed Scope of Work called for in each Job Order issued pursuant to this Contract for the Unit Prices set forth in the Construction Task Catalog® in accordance with the Contractor's Adjustment Factors stated on the Proposal Schedule, which are as follows:

Item No.		Adjusted Factor
1	<p><b>General Facilities Normal Working Hours:</b> Work performed during Normal Working Hours, in General Facilities, in the quantities specified in individual Job Orders for the Unit Price sum specified in the Construction Task Catalog multiplied by the Adjustment Factor.</p> <p>6:00 a.m. to 6:00 p.m. Monday to Friday, except Owner holidays.</p> <p><b>[Note to Specifier: Use the following if contract includes OSHPD work.]</b></p> <p><b>General OSHPD 1 Normal Working Hours:</b> <b>6:00 a.m. to 6:00 p.m. Monday to Friday, except Owner holidays.</b></p>	
2	<p><b>General Facilities Other than Normal Working Hours:</b> Work performed during Other Than Normal Working Hours, in General Facilities, in the quantities specified in individual Job Orders for the Unit Price sum specified in the Construction Task Catalog multiplied by the Adjustment Factor.</p> <p>Hours outside Normal Working Hours including all day Saturday, Sunday and Owner holidays.</p> <p><b>[Note to Specifier: Use the following if contract includes OSHPD work.]</b></p> <p><b>General OSHPD 1 Other than Normal Working Hours:</b> Work performed under OSHPD 1 conditions during Other Than Normal Working Hours in the quantities specified in individual Job Orders for the Unit Price sum specified in the Construction Task Catalog® multiplied by the Adjustment Factor.</p>	



	Hours outside Normal Working Hours including all day Saturday, Sunday and County Holidays.	
3	<p><b>Detention Facilities Normal Working Hours:</b> Work performed during Normal Working Hours, in Detention Facilities, in the quantities specified in individual Job Orders for the Unit Price sum specified in the Construction Task Catalog multiplied by the Adjustment Factor.</p> <p>6:00 am to 6:00 pm Monday to Friday, except Owner Holidays</p> <p><b>[Note to Specifier: Use the following if contract includes OSHPD work.]</b></p> <p><b>Normal Working Hours:</b> OSHPD 3 and Non-OSHPD Work performed during Normal Working Hours in the quantities specified in individual Job Orders for the Unit Price sum specified in the Construction Task Catalog® multiplied by the Adjustment Factor.</p> <p>6:00 am to 6:00 pm Monday to Friday, except Owner Holidays</p>	
4	<p><b>Detention Facilities Other than Normal Working Hours:</b> Work performed during Other Than Normal Working Hours, in Detention Facilities, in the quantities specified in individual Job Orders for the Unit Price sum specified in the Construction Task Catalog multiplied by the Adjustment Factor.</p> <p>Hours outside Normal Working Hours including all day Saturday, Sunday and County Holidays.</p> <p><b>[Note to Specifier: Use the following if contract includes OSHPD work.]</b></p> <p><b>Other than Normal Working Hours:</b> OSHPD 3 and Non-OSHPD Work performed during Other Than Normal Working Hours in the quantities specified in individual Job Orders for the Unit Price sum specified in the Construction Task Catalog® multiplied by the Adjustment Factor.</p> <p>Hours outside Normal Working Hours including all day Saturday, Sunday and County Holidays.</p>	
5	<p><b>Non Pre-priced:</b> Work required by the Detailed Scope of Work but not included in the Construction Task Catalog® multiplied by the Adjustment Factor.: Work required by the Detailed Scope of Work but not included in <b>Maximum of 4% added to the Adjustment Factor for 'General Facilities Other than Normal Working Hours'.</b></p> <p><b>[Note to Specifier: Use the following if contract includes OSHPD work.]</b></p> <p><b>Non Pre-priced</b> the Construction Task Catalog® multiplied by the Adjustment Factor. <b>Maximum of 4% added to the Adjustment Factor for 'General OSHPD 1 Other than Normal Working Hours'.</b></p>	

The Minimum Contract Value is \$50,000. The Contractor has the opportunity to receive Job Orders totaling at least \$50,000 during the Contract term. The Maximum Contract Value is \$5,797,725 [Note to specifier: The maximum value increases yearly with the consumer price index.]. At no time may the sum of the outstanding Job Orders exceed the amount of the Payment Bond and Performance Bond. A Job Order is outstanding until the County has accepted the Project described in the Job Order by execution of a Notice of Completion. The Contractor will not be issued Job Orders which in total exceed the Maximum Contract Value. Owner does not guarantee a minimum amount of work will be ordered under this Contract. Owner is not legally authorized to pay for any work that results in an amount in excess of the Maximum Contract Value, and any work performed by Contractor that is in excess of the Maximum Contract Value is done at Contractor's own expense and Contractor shall not be compensated for the amount in excess of the Maximum Contract Value. At the discretion of the Owner/County and if deemed to be in public interest, the Maximum Contract Value may be increased by up to the sum authorized by Public Contract Code Section 20128.5.

Contractor shall maintain current and accurate accounting records, using Generally Accepted Accounting Principles, of all Job Orders pending and completed under this Contract. Contractor shall notify Owner in writing and in accordance with the notice provisions of this Contract when Job Orders cumulatively total seventy-five percent (75%) of the Maximum Contract Value. Failure to provide such notice will constitute a material breach of this Contract, and Owner may terminate this Contract immediately. If Contractor fails to provide notice as required under this provision, Owner shall withhold, as a penalty for failure to comply with this provision, \$25,000 from funds otherwise payable to the Contractor for every thirty (30) days or portion thereof on a pro rata basis that elapses after the seventy-five percent (75%) of the Maximum Contract Value threshold is reached without notice from the Contractor, until such notice is provided and effective. Contractor shall be liable to Owner for such amounts, and Owner may pursue any remedies it deems necessary, including legal action, to collect such amounts.

Contractor shall ensure that at no time may the sum of the outstanding Job Orders exceed the amount of the Payment Bond and Performance Bond. A Job Order is outstanding until the County has accepted the Project described in the Job Order by execution of a Notice of Completion. Failure to ensure that the sum of outstanding Job Orders do not exceed the amount of the Payment Bond and Performance Bond is a material breach of this Contract and Owner may terminate this Contract immediately and with no liability for work done in violation of this provision.

### **ARTICLE 3 - CONTRACT DOCUMENTS**

All rights and obligations of Owner and Contractor are fully set forth and described in the Contract Documents. The Contract Documents are incorporated herein by reference as though set forth in full.

Formation of a Contract between the parties requires accomplishment of the following: (1) execution of this Agreement by Contractor; (2) submission by Contractor and acceptance by Owner of the required Contract Bonds, Contractor's certification regarding Worker's Compensation, and insurance coverages and documents; (3) execution of this Agreement by Owner. No Contract is formed until these three elements have been accomplished to the satisfaction of the Owner.

The Contract Documents incorporate and supersede all the agreements, covenants, and understandings between the parties concerning the subject matter hereof, and all such agreements, covenants, and understandings have been merged into the Contract Documents. No prior or contemporaneous agreement or understanding, verbal or otherwise, of the parties or their agents shall be valid or enforceable unless embodied in these Contract Documents. After execution of this Agreement, the Contract Documents may only be amended, modified, or supplemented as provided in the Contract Documents.

### **ARTICLE 4 – WORKER'S COMPENSATION**

By my signature hereunder, as Contractor, I certify that I am aware of the provisions of Labor Code section 3700 which require every employer to be insured against liability for worker's compensation or to undertake self-insurance

in accordance with the provisions of that Code, and I will comply with such provisions before commencing the performance of the Work of this Contract.

## **ARTICLE 5 – CONTRACT TIME**

Following acceptance of Contract Bonds, Contractor's certifications (Document 00 45 20), insurance coverages and documents, and execution of this Agreement by both parties, Owner's Authorized Representative will provide an executed copy of this Job Order Contract.

The term of this Job Order Contract commences on the effective date of the executed contract issued by the County of Santa Clara.

The term of this Job Order Contract is either for one year or when issued Job Orders totaling the Maximum Contract Value have been completed, whichever occurs first. All Job Orders must be issued, but not necessarily completed within one calendar year of the commencement date of the Contract.

A separate Job Order Notice to Proceed will be issued for each Job Order. Each Job Order will specify a time limit for completion as stated on the Job Order Notice to Proceed. The Work must be fully completed within the Contract Time(s) set forth in the Job Order.

## **ARTICLE 6 - CONTRACTOR'S LICENSE**

Contractors are required by law to be licensed and regulated by the Contractor's State License Board. Any questions concerning contractor licensing must be referred to the Registrar of the Contractor's State License Board. Contractor shall comply with and cause its Subcontractors to comply with all applicable licensure and registration requirements, including but not limited to licensure by the Contractor's State License Board and registration with the Department of Industrial Relations, at all times during the term of this Agreement.

## **ARTICLE 7 – COUNTY STANDARD TERMS**

**7.01 Budgetary Contingency.** Performance and/or payment by County pursuant to this Agreement is contingent upon the appropriation by County of sufficient funds for deliverables covered by this Agreement. If funding is reduced or deleted by County for services covered by this Agreement, County may, at its option and without penalty or liability, terminate this Agreement or offer an amendment to this Agreement indicating the reduced amount.

**7.02 Merger and Acquisition.** The terms of this Agreement will survive an acquisition, merger, divestiture, or other transfer of rights involving Contractor. In the event of an acquisition, merger, divestiture, or other transfer of rights Contractor must ensure that the acquiring entity or the new entity is legally required to:

- .A** Honor all the terms in this Agreement and any pre-acquisition or pre-merger Agreement between Contractor and County, including but not limited to 1) established pricing and fees; and, 2) no price escalation.
- .B** 30 Days written notice to County following the closing of an acquisition, merger, divestiture, or other transfer of right involving Contractor.

**7.03 Assignment of Clayton Act, Cartwright Act Claims.** Contractor hereby assigns to County all rights, title, and interest in and to all causes of action it may have under Section 4 of the Clayton Act (15 U.S.C. Sec. 15) or under the Cartwright Act (Chapter 2 (commencing with Section 16700) of Part 2 of Division 7 of the

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Business and Professions Code), arising from purchases of goods, materials, or services by Contractor for sale to County pursuant to this Agreement.

- 7.04 Food and Beverage Standards.** Except in the event of an emergency or medical necessity, the following nutritional standards shall apply to any foods and/or beverages purchased by Contractor with County funds for County-sponsored meetings or events. If food is to be provided, healthier food options shall be offered. "Healthier food options" include (1) fruits, vegetables, whole grains, and low fat and low calorie foods; (2) minimally processed foods without added sugar and with low sodium; (3) foods prepared using healthy cooking techniques; and (4) foods with less than 0.5 grams of trans fat per serving. Whenever possible, Contractor shall (1) offer seasonal and local produce; (2) serve fruit instead of sugary, high calorie desserts; (3) attempt to accommodate special, dietary and cultural needs; and (4) post nutritional information and/or a list of ingredients for items served. If meals are to be provided, a vegetarian option shall be provided, and Contractor should consider providing a vegan option. If pre-packaged snack foods are provided, the items shall contain: (1) no more than 35% of calories from fat, unless the snack food items consist solely of nuts or seeds; (2) no more than 10% of calories from saturated fat; (3) zero trans-fat; (4) no more than 35% of total weight from sugar and caloric sweeteners, except for fruits and vegetables with no added sweeteners or fats; and (5) no more than 360 mg of sodium per serving. If beverages are to be provided, beverages that meet County's nutritional criteria are (1) water with no caloric sweeteners; (2) unsweetened coffee or tea, provided that sugar and sugar substitutes may be provided as condiments; (3) unsweetened, unflavored, reduced fat (either nonfat or 1% low fat) dairy milk; (4) plant-derived milk (e.g., soy milk, rice milk, and almond milk) with no more than 130 calories per 8 ounce serving; (5) 100% fruit or vegetable juice (limited to a maximum of 8 ounces per container); and (6) other low-calorie beverages (including tea and/or diet soda) that do not exceed 40 calories per 8 ounce serving. Sugar-sweetened beverages shall not be provided.
- 7.05 Third Party Beneficiaries.** This Agreement does not, and is not intended to, confer any rights or remedies upon any person or entity other than the parties.
- 7.06 Contractor Travel Expenses.** Contractor shall be solely responsible for any travel fees or out of pocket expenses.
- 7.07 County Data.**
- .A** "County Confidential Information" shall include all material, non-public information (including material, non-public County Data) appearing in any form (including, without limitation, written, oral or displayed), that is disclosed, directly or indirectly, through any means of communication by County, its agents or employees, to Contractor, its agents or employees, or any of its affiliates or representatives.
  - .B** "County Data" shall mean data and information received by Contractor from County. County Data includes any information or data that is transported across a County network, or that resides in a County-owned information system, or on a network or system under the control and management of a contractor for use by County. As between Contractor and County, all County Data shall remain the property of County.
  - .C** Contractor shall not acquire any ownership interest in County Data (including County Confidential Information). As between Contractor and County, all County Confidential Information and/or County Data shall remain the property of County. Contractor shall not, without County's written permission, use or disclose County Data (including County Confidential Information) other than in the performance of its obligations under this Agreement.
  - .D** Contractor shall be responsible for establishing and maintaining an information security program that is designed to ensure the security and confidentiality of County Data, protect against any anticipated threats or hazards to the security or integrity of County Data, and protect against unauthorized access to or use of County Data that could result in substantial harm or inconvenience to County or any end

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users. Upon termination or expiration of this Agreement, Contractor shall seek and follow County's direction regarding the proper disposition of County Data.

- .E Contractor shall take appropriate action to address any incident of unauthorized access to County Data, including addressing and/or remedying the issue that resulted in such unauthorized access, and notifying County by phone or in writing within 24 hours of any incident of unauthorized access to County Data, or any other breach in Contractor's security that materially affects County or end users. If the initial notification is by phone, Contractor shall provide a written notice within 5 Days of the incident. Contractor shall be responsible for ensuring compliance by its officers, employees, agents, and subcontractors with the confidentiality, privacy, and information security requirements of this Agreement. Should County Confidential Information and/or legally protected County Data be divulged to unauthorized third parties, Contractor shall comply with all applicable federal and state laws and regulations, including but not limited to California Civil Code sections 1798.29 and 1798.82 at Contractor's sole expense. Contractor shall not charge County for any expenses associated with Contractor's compliance with these obligations.
- .F Contractor shall defend, indemnify, and hold County harmless against any claim, liability, loss, injury or damage arising out of, or in connection with, the unauthorized use, access, and/or disclosure of information by Contractor and/or its agents, employees or subcontractors, excepting only loss, injury or damage caused by the sole negligence or willful misconduct of personnel employed by County.

**7.08 Compliance with All Laws, and Regulations Including Non-Discrimination, Equal Opportunity, and Wage Theft Prevention.** Contractor's violation of this provision shall be deemed a material default by Contractor, giving County a right to terminate the Agreement. Examples of such Regulations include but are not limited to California Occupational Safety and Health Act of 1973, Labor Code section 6300 *et seq.*, the Fair Packaging and Labeling Act, and the standards and regulations issued there under. Contractor agrees to indemnify and hold harmless County for any loss, damage, fine, penalty, or any expense whatsoever as a result of Contractor's failure to comply with the acts and any standards or regulations issued thereunder.

- .A **Compliance with All Laws.** Contractor shall comply with all applicable Federal, State, and local laws, regulations, rules, and policies (collectively, "Laws"), including but not limited to the non-discrimination, equal opportunity, and wage and hour Laws referenced in the paragraphs below.
- .B **Compliance with Non-Discrimination and Equal Opportunity Laws.** Contractor shall comply with all applicable Laws concerning nondiscrimination and equal opportunity in employment and contracting, including but not limited to the following: Santa Clara County's policies for contractors on nondiscrimination and equal opportunity; Title VII of the Civil Rights Act of 1964 as amended; Americans with Disabilities Act of 1990; the Age Discrimination in Employment Act of 1967; the Rehabilitation Act of 1973 (Sections 503 and 504); the Equal Pay Act of 1963; California Fair Employment and Housing Act (Government Code sections 12900 *et seq.*); California Labor Code sections 1101, 1102, and 1197.5; and the Genetic Information Nondiscrimination Act of 2008. In addition to the foregoing, Contractor shall not discriminate against any subcontractor, employee, or applicant for employment because of age, race, color, national origin, ancestry, religion, sex, gender identity, gender expression, sexual orientation, mental disability, physical disability, medical condition, political belief, organizational affiliation, or marital status in the recruitment, selection for training (including but not limited to apprenticeship), hiring, employment, assignment, promotion, layoff, rates of pay or other forms of compensation. Nor shall Contractor discriminate in the provision of services provided under this contract because of age, race, color, national origin, ancestry, religion, sex, gender identity, gender expression, sexual orientation, mental disability, physical disability, medical condition, political beliefs, organizational affiliations, or marital status.
- .C **Compliance with Wage and Hour Laws.** Contractor shall comply with all applicable wage and hour Laws, which may include but are not limited to, the Federal Fair Labor Standards Act, the California Labor Code, and, if applicable, any local Minimum Wage, Prevailing Wage, or Living Wage laws.

- .D Definitions.** For purposes of this Section, the following definitions shall apply. A “Final Judgment, Decision, Determination, or Order” shall mean a judgment, decision, determination, or order (a) which is issued by a court of law, an investigatory government agency authorized by law to enforce an applicable Law, an arbiter, or arbitration panel and (b) for which all appeals have been exhausted or the time period to appeal has expired. For pay equity Laws, relevant investigatory government agencies include the federal Equal Employment Opportunity Commission, the California Division of Labor Standards Enforcement, and the California Department of Fair Employment and Housing. Violation of a pay equity Law shall mean unlawful discrimination in compensation on the basis of an individual’s sex, gender, gender identity, gender expression, sexual orientation, race, color, ethnicity, or national origin under Title VII of the Civil Rights Act of 1964 as amended, the Equal Pay Act of 1963, California Fair Employment and Housing Act, or California Labor Code section 1197.5, as applicable. For wage and hour Laws, relevant investigatory government agencies include the federal Department of Labor, the California Division of Labor Standards Enforcement, and the City of San Jose’s Office of Equality Assurance.
- .E Prior Judgments, Decisions, or Orders Against Contractor.** By signing this Agreement, Contractor affirms that it has disclosed any final judgments, decisions, determinations, or orders that (a) were issued in the five years prior to executing this Agreement by a court or investigatory government agency and (b) found that Contractor violated an applicable wage and hour or pay equity law. Contractor further affirms that it has satisfied and complied with – or has reached agreement with County regarding the manner in which it will satisfy – any such final judgments, decisions, determinations, or orders.
- .F Violations of Wage and Hour Laws or Pay Equity Laws During Term of Agreement.** If at any time during the term of this Agreement, Contractor receives a Final Judgment, Decision, Determination, or Order rendered against it for violation of an applicable wage and hour Law or pay equity Law, then Contractor shall promptly satisfy and comply with any such Final Judgment, Decision, Determination or Order. Contractor shall inform the Office of County Executive-Office of Countywide Contracting Management (OCCM) of any relevant Final Judgment, Decision, Determination, or Order against it within 30 days of the Final Judgment, Decision, Determination, or Order becoming final or of learning of the Final Judgment, Decision, Determination, or Order, whichever is later. Contractor shall also provide any documentary evidence of compliance with the Final Judgment, Decision, Determination, or Order within 5 days of satisfying the Final Judgment, Decision, Determination, or Order. Any notice required by this paragraph shall be addressed to the Office of County Executive-OCCM at 70 W. Hedding Street, East Wing, 11th Floor, San José, CA 95110. Notice provisions in this paragraph are separate from any other notice provisions in this Agreement and, accordingly, only notice provided to the Office of County Executive-OCCM satisfies the notice requirements in this paragraph.
- .G Access to Records Concerning Compliance with Pay Equity Laws.** In addition to and notwithstanding any other provision of this Agreement concerning access to Contractor’s records, Contractor shall permit County and/or its authorized representatives to audit and review records related to compliance with applicable pay equity Laws. Upon County’s request, Contractor shall provide County with access to any and all facilities and records, including but not limited to financial and employee records, that are related to the purpose of this Section, except where prohibited by federal or state laws, regulations or rules. County’s access to such records and facilities shall be permitted at any time during Contractor’s normal business hours upon no less than 10 business days’ advance notice.
- .H Pay Equity Notification.** Contractor shall (1) directly provide each employee working in California and each person applying for a job in California with a written copy of any applicable pay equity Laws, or (2) electronically disseminate the text of applicable pay equity Laws to each California employee and job applicant, either directly or by posting a copy in conspicuous places available to employees and applicants. Such notification shall occur at least once during the term of this Agreement and, if this Agreement is a multi-year Agreement, at least annually thereafter.

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**.I Material Breach.** Failure to comply with any part of this Section shall constitute a material breach of this Agreement. In the event of such a breach, County may, in its discretion, exercise any or all remedies available under this Agreement and/or at law. County may, among other things, take any or all of the following actions:

- i. Suspend or terminate any or all parts of this Agreement.
- ii. Withhold payment to Contractor until full satisfaction of a Final Judgment, Decision, Determination, or Order.
- iii. Offer Contractor an opportunity to cure the breach.

**.J Subcontractors.** Contractor shall impose all of the requirements set forth in this Section on any subcontractors permitted to perform work under this Agreement. This includes ensuring that any subcontractor receiving a Final Judgment, Decision, Determination, or Order for violation of an applicable wage and hour Law promptly satisfies and complies with such Final Judgment, Decision, Determination, or Order.

**7.09 No Smoking.** Contractor and its employees, agents, and subcontractors, shall comply with the County's No-Smoking Policy, as set forth in the Board of Supervisors Policy Manual section 3.47 (as amended from time to time), which prohibits smoking: (1) at the Santa Clara Valley Medical Center Campus and all County-owned and operated health facilities, (2) within 30 feet surrounding County-owned buildings and leased buildings where the County is the sole occupant, and (3) in all County vehicles.

**7.10 Living Wage.** Unless otherwise exempted or prohibited by law or County policy, contractors that contract with County to provide Direct Services, as defined in County of Santa Clara Ordinance Code Division B36 ("Division B36") and Board Policy section 5.5.5.5 ("Living Wage Policy"), and their subcontractors, where the contract value is \$100,000 or more, must comply with Division B36 and the Living Wage Policy and compensate their employees in accordance with Division B36 and the Living Wage Policy. Compliance and compensation for purposes of this provision includes, but is not limited to, components relating to fair compensation, earned sick leave, paid jury duty, fair workweek, worker retention, fair chance hiring, targeted hiring, local hiring, protection from retaliation, and labor peace. If Contractor and/or a subcontractor violate this provision, the Board of Supervisors or its designee may, at its sole discretion, take responsive actions including, but not limited to, the following:

- .A** Suspend, modify, or terminate the Direct Services Contract.
- .B** Require Contractor and/or Subcontractor to comply with an appropriate remediation plan developed by County.
- .C** Waive all or part of Division B36 or the Living Wage Policy.

This provision shall not be construed to limit an employee's rights to bring any legal action for violation of the employee's rights under Division B36 or any other applicable law. Further, this provision does not confer any rights upon any person or entity other than the Board of Supervisors or its designee to bring any action seeking the cancellation or suspension of a County contract. By entering into this contract, Contractor certifies that it is currently complying with County Code Division B36 and County's Living Wage Policy with respect to applicable contracts, and warrants that it will continue to comply with County Code Division B36 and County's Living Wage Policy with respect to applicable contracts.

**7.11 Conflicts of Interest; Political Reform Act**

Contractor shall comply, and require its employees, agents, and subcontractors to comply, with all (1) applicable requirements governing avoidance of impermissible client conflicts; and (2) federal, state and local conflict of interest and disclosure laws and regulations including, without limitation, California Government Code section 1090 et seq., the California Political Reform Act (California Government Code section 87100 et seq.) and the regulations of the Fair Political Practices Commission concerning disclosure

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and disqualification (2 California Code of Regulations section 18700 et seq.). Failure to do so constitutes a material breach of this Agreement and is grounds for immediate termination of this Agreement by County.

In accepting this Agreement, Contractor covenants that it presently has no interest, and will not acquire any interest, direct or indirect, financial or otherwise, which would conflict in any manner or degree with the performance of this Agreement. Contractor further covenants that, in the performance of this Agreement, it will not use any contractor or employ any person having such an interest. Contractor, including but not limited to Contractor's employees, agents, and subcontractors, may be subject to the disclosure and disqualification provisions of the California Political Reform Act of 1974 (the "Act"), that (1) requires such persons to disclose economic interests that may foreseeably be materially affected by the work performed under this Agreement, and (2) prohibits such persons from making or participating in making decisions that will foreseeably financially affect such interests.

If the disclosure provisions of the Act are applicable to any individual providing service under the Agreement, Contractor shall, upon execution of this Agreement, provide County with the names, description of individual duties to be performed, and email addresses of all individuals, including but not limited to Contractor's employees, agents and subcontractors, that could be substantively involved in "mak[ing] a governmental decision" or "serv[ing] in a staff capacity" and in that capacity participating in making governmental decisions or performing duties that would be performed by an individual in a designated position, (2 CCR 18700.3), as part of Contractor's service to County under this Agreement. Contractor shall immediately notify County of the names and email addresses of any additional individuals later assigned to provide such service to County under this Agreement in such a capacity. Contractor shall immediately notify County of the names of individuals working in such a capacity who, during the course of the Agreement, end their service to County. Contractor shall ensure that all such individuals identified pursuant to this paragraph understand that they are subject to the Act and shall conform to all requirements of the Act and other applicable conflict of interest and disclosure laws and regulations, and shall file Statements of Economic Interests within 30 days of commencing service pursuant to this Agreement, annually by April 1, and within 30 days of their termination of service pursuant to this Agreement.

If applicable, Contractor and its agents shall comply with California Government Code section 84308 ("Levine Act") and the applicable regulations of the Fair Political Practices Commission concerning campaign disclosure (2 California Code of Regulations sections 18438.1 – 18438.8), which (1) require a party to a proceeding involving a contract to disclose on the record of the proceeding any contribution, as defined by Government Code section 84308(a)(6), of more than \$250 that the party or their agent has made within the prior 12 months, and (2) prohibit a party to a proceeding involving a contract from making a contribution, as defined by Government Code section 84308(a)(6), of more than \$250 to any County officer during the proceeding and for 12 months following the final decision in the proceeding. Disclosures pursuant to the Levine Act must be submitted online at the Office of the Clerk of the Board of Supervisors website at <http://www.sccgov.org/levineact>.

- 7.12 COVID-19 Requirements.** Contractor shall comply with all County requirements in effect relating to COVID-19 for persons who routinely perform services for County onsite and share airspace with or proximity to other people at a County facility as part of their services for County as set forth in a County Health Order (or similar directives) available at <https://covid19.sccgov.org/home>, and incorporated herein by this reference. Contractor shall comply with all reasonable requests by County for documentation demonstrating Contractor's compliance with this Section.

## **ARTICLE 8 – CONTRACTOR'S/OWNER'S REPRESENTATIVES**

The Owner's Authorized Representative during construction is the Project Manager listed on the Job Order, or designee, who has authority to approve change orders, payment requests, and other documents.

**Notice to the Owner's Authorized Representative under the Contract Documents shall be sent to:**



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County of Santa Clara – Facilities and Fleet  
Attn.: Kim Huynh, Contract Administrator  
2310 N. First Street, Suite 200  
San Jose, CA 95131

Tel.: 408-993-4632 / Fax: 408-993-4777  
Email: [Kim.Huynh@faf.sccgov.org](mailto:Kim.Huynh@faf.sccgov.org)

**[Note to Specifier: Use the following for HHS.]**

County of Santa Clara - Health and Hospital System  
Attn.: [JOC CONTRACT ADMIN.]  
766 Turner Drive  
San Jose, CA 95128

Tel.: [PHONE NUMBER]  
Email: [EMAIL ADDRESS]

**Notice to Contractor shall be send to Contractor's Authorized Representative to:**

[CONTACTOR]  
Attn.: [FULL NAME]  
[ADDRESS]

Tel.: [PHONE NUMBER]  
Email: [EMAIL]

**ARTICLE 9 – MISCELLANEOUS**

- 9.01** Terms and abbreviations used in this Agreement are defined in Document 00 71 00 (Contracting Definitions) and Document 00 72 00 (General Conditions) and will have the meaning indicated therein.
- 9.02** Unless expressly stated otherwise in the Contract Documents, all notices or demands to Owner or Contractor under the Contract Documents shall be in writing and directed to the other at the respective addresses identified under each party's signatures below, or by hand delivery or to such other person(s) and address(es) as a party shall provide to another. Except as otherwise expressly provided herein, notices shall be dispatched by facsimile transmission, overnight delivery by reputable courier service and/or U.S. mail. Except as otherwise expressly provided herein, notices dispatched by facsimile or overnight delivery shall be deemed received on the business day following dispatch. Notices dispatched by U.S. mail shall be deemed received on the third business day following dispatch. Email transmission of PDF images shall be effective upon express acknowledgement of receipt by the Authorized Representative of the receiving party.
- 9.03** In order to induce Owner to enter into this Agreement, Contractor represents and warrants that at all time applicable to the performance of the Work of the Contract Documents, including submission of its Bid and execution of this Agreement, that the following is true and will remain true: Contractor is duly organized, existing and in good standing under applicable state law; is licensed to perform all aspects of the Work; will employ only persons and subcontractors having all required licenses and certifications to perform the Work; that Contractor is duly qualified to conduct business in the State of California; that Contractor has duly authorized the execution, delivery and performance of this Agreement, the other Contract Documents and the Work to be performed herein; and that the Contract Documents do not violate or create a default under any instrument, agreement, order or decree binding on Contractor.
- 9.04** Contractor shall not assign any portion of Contractor's responsibilities under the Contract Documents without Owner's express written consent.

- 9.05** Should any part, term or provision of this Agreement or any of the Contract Documents, or any document required herein or therein to be executed or delivered, be declared invalid, void or unenforceable, all remaining parts, terms and provisions shall remain in full force and effect and shall in no way be invalidated, impaired or affected thereby. If the provisions of any law causing such invalidity, illegality or unenforceability may be waived, they are hereby waived to the end that this Agreement and the Contract Documents may be deemed valid and binding agreements, enforceable in accordance with their terms to the greatest extent permitted by applicable law. In the event any provision not otherwise included in the Contract Documents is required to be included by any applicable law, that provision is deemed included herein by this reference (or, if such provision is required to be included in any particular portion of the Contract Documents, that provision is deemed included in that portion).
- 9.06** It is understood and agreed that in no instance are the persons signing this Agreement for or on behalf of Owner or acting as an employee, agent, or representative of Owner, liable on this Agreement or any of the Contract Documents, or upon any warranty of authority, or otherwise, and it is further understood and agreed that liability of Owner is limited and confined to such liability as authorized or imposed by the Contract Documents or applicable law.
- 9.07** Copies of the general prevailing rates of per diem wages for each craft, classification, or type of worker needed to execute the Contract, as determined by Director of the State of California Department of Industrial Relations, are deemed included in the Contract Documents and on file at Owner's Office, and shall be made available to any interested party on request. Pursuant to California Labor Code Sections 1860 and 1861, in accordance with the provisions of Section 3700 of the Labor Code, every Contractor will be required to secure the payment of compensation to his employees. Contractor represents that it is aware of the provisions of Section 3700 of the Labor Code which require every employer to be insured against liability for workers' compensation or to undertake self-insurance in accordance with the provisions of that Code, and Contractor shall comply with such provisions before commencing the performance of the Work of the Contract Documents.
- 9.08** This Agreement and the Contract Documents shall be deemed to have been entered into in the County of Santa Clara, State of California, and governed in all respects by California law (excluding choice of law rules). The exclusive venue for all disputes or litigation hereunder shall be in the Superior Court for the County of Santa Clara.
- 9.09** In entering into this Agreement, Contractor warrants and represents that it and all Subcontractors were registered all with the Department of Industrial Relations when the Project was bid, and shall remain so registered through Completion. Failure to comply with this provision is material breach of this Agreement.

#### **ARTICLE 10 – COUNTERPARTS; ELECTRONIC/DIGITAL SIGNATURES**

This Agreement may be executed in one or more counterparts, each of which will be considered an original, but all of which together will constitute one and the same instrument. The parties agree that this Agreement, its amendments, and ancillary agreements to be entered into in connection with this Agreement will be considered signed when the signature of a party is delivered a method described herein. Unless otherwise prohibited by law or County policy, the parties agree that an electronic copy of a signed contract, or an electronically signed contract, has the same force and legal effect as a contract executed with an original ink signature. The term "electronic copy of a signed contract" refers to a transmission by facsimile, electronic mail, or other electronic means of a copy of an original signed contract in a portable document format. The term "electronically signed contract" means a contract that is executed by applying an electronic signature using technology approved by the County.

**IN WITNESS WHEREOF**, the parties hereto have executed this Agreement on the date signed by the Board of Supervisors.

COUNTY OF SANTA CLARA:

**[CONTRACTOR]:**

\_\_\_\_\_  
**[NAME]**

President, Board of Supervisors

Date: \_\_\_\_\_

\_\_\_\_\_  
**[FULL NAME]**

President

Date: \_\_\_\_\_

**ATTEST:**

**Signed and certified that a copy of this document  
has been delivered by electronic or other means to  
the President, Board of Supervisors.**

Contractor's License No.: \_\_\_\_\_

License Expiration Date: \_\_\_\_\_

License Class: \_\_\_\_\_

PWCR No.: \_\_\_\_\_

If this Agreement is signed outside of the State of  
California, a notarized acknowledgement is  
required.

\_\_\_\_\_  
Tiffany Lennear

Clerk of the Board of Supervisors

Date: \_\_\_\_\_

**APPROVED AS TO FORM AND LEGALITY:**

\_\_\_\_\_  
John A. Castro

Deputy County Counsel

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**DOCUMENT 00 61 13.13**  
**PERFORMANCE BOND FORM**

**WHEREAS**, the Board of Supervisors of the County of Santa Clara, State of California, and \_\_\_\_\_ hereinafter designated as "Principal" have entered into an Agreement for the furnishing of all materials, labor, services and equipment necessary, convenient and proper to:

\_\_\_\_\_

\_\_\_\_\_

pursuant to the said Agreement dated \_\_\_\_\_, 20\_\_\_\_, and all of the documents attached thereto and incorporated by reference, including Plans and Specifications for construction, becoming a part of said Agreement, are hereby referred to and made a part hereof, forming the contract for construction of the Project described therein ("Contract"); and,

**WHEREAS**, said Principal is required according to the terms of said Contract, to furnish a Bond for the faithful Performance of said Contract.

**NOW, THEREFORE**, we, the Principal and \_\_\_\_\_ as Surety, are held and firmly bound unto the County of Santa Clara in the penal sum of: \_\_\_\_\_ Dollars (\$\_\_\_\_\_), lawful money of the United States of America, for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents, referred to hereinafter as the Penal Sum.

1. NOW, THEREFORE, we, the undersigned Principal and **(Name of Surety)** \_\_\_\_\_ as Surety are held and firmly bound unto Owner in the sum of 100% OF THE CONTRACT PRICE to be paid to Owner or its successors and assigns; for which payment, well and truly to be made, we bind ourselves, our heirs, executors, administrators, successors, and assigns, jointly and severally, firmly by these presents.
2. THE CONDITION OF THIS OBLIGATION IS SUCH, that if Principal, or its heirs, executors, administrators, successors, or assigns approved by Owner, shall promptly and faithfully perform the covenants, conditions, and agreements of the Contract during the original term and any extensions thereof as may be granted by Owner, with or without notice to Surety, and during the period of any guarantees or warranties required under the Contract, and shall also promptly and faithfully perform all the covenants, conditions, and agreements of any alteration of the Contract made as therein provided, notice of which alterations to Surety being hereby waived, on Principal's part to be kept and performed at the time and in the manner therein specified, and in all respects according to their true intent and meaning, and shall indemnify, defend, protect, and hold harmless Owner as stipulated in the Contract, then this obligation shall become and be null and void; otherwise it shall be and remain in full force and effect.
3. No extension of time, change, alteration, modification, deletion or addition to the Contract, or of the work required thereunder, or work or actions by Owner to mitigate the damages resulting from any breach in performance by Contractor, or work or actions to protect the work or property, shall release or exonerate Surety on this bond or in any way affect the obligation of this bond; and Surety does hereby waive notice of any such extension of time, change, alteration, modification, or addition, work or actions.
4. Whenever Principal shall be and declared by Owner in default under the Contract, Surety shall promptly remedy the default, or shall promptly, and in no event later than forty-five (45) days from receipt of such

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notice or thirty days (30) days following the effective date of a termination of Contractor's right to proceed for default, elect and commence performance of one of the following options:

- A.** Undertake performance and completion of the Contract, through its agents or independent Contractors (but having qualifications and experience meeting contract requirements in the reasonable judgment of the Owner), to perform and complete the Contract in accordance with its terms and conditions and to pay and perform all obligations of Principal under the Contract, including without limitation, all obligations with respect to warranties, guarantees, indemnities, and the payment of liquidated damages; or
- B.** Obtain a bid or bids for completing the Contract in accordance with its terms and conditions, and, upon determination by Owner of the lowest responsible bidder, arrange for a contract between such bidder and Owner and make available as work progresses (even though there should be a default or a succession of defaults under the contract or contracts of completion arranged under this paragraph) sufficient funds to pay the cost of completion less the balance of the Contract Sum remaining on the date of effectiveness of such termination, and to pay and perform all obligations of Principal under the Contract, including, without limitation, all obligations with respect to warranties, guarantees, and the payment of liquidated damages;
- 5.** Surety's total obligations hereunder shall not exceed the amount set forth above as the Penal Sum. The term "balance of the Contract Sum" shall mean the total amount payable by Owner to the Principal under the Contract and any amendments thereto, less the amount paid by Owner to Principal.
- 6.** Surety's obligations hereunder are independent of the obligations of any other surety for the performance of the Contract, and suit may be brought against Surety and such other sureties, jointly and severally, or against any one or more of them, or against less than all of them without impairing Owner's rights against the others.
- 7.** Surety may not use Contractor to complete the Contract absent Owner's Consent. Owner shall have the right in its sole discretion to continue the work of the Contract, following a default and/or termination, as necessary to prevent risks of personal injury, property damage or delay to the Project pending Surety's election described above.
- 8.** No right of action shall accrue on this bond to or for the use of any person or corporation other than Owner or its successors or assigns.
- 9.** Surety shall join in any proceedings brought under the Contract upon Owner's demand, and shall be bound by any judgment. Correspondence or claims relating to this bond shall be sent to Surety at the address set forth below. Notices and elections may be sent by overnight mail, confirmed by email, in addition to methods required by Contract.
- 10.** In the event suit is brought upon this bond by Owner, Surety shall pay reasonable attorney's fees and costs incurred by Owner in such suit.

The Surety, by the execution of this Bond, represents and warrants that this Bond has also been duly executed by the Principal with proper authority, and the Surety hereby waives any defense which it might have by reason of any failure by the Principal to execute or properly execute this Bond.

**PERFORMANCE BOND (CONT'D)**

**IN WITNESS WHEREOF** two identical counterparts of this instrument, each of which shall for all purposes be deemed an original thereof, have been duly executed by the Principal and Surety above named on the \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_.

**PRINCIPAL:**\_\_\_\_\_  
Signature\_\_\_\_\_  
Name\_\_\_\_\_  
Title\_\_\_\_\_  
Address\_\_\_\_\_  
City Where this Form was Signed\_\_\_\_\_  
Address for Service**SURETY:**\_\_\_\_\_  
Signature\_\_\_\_\_  
Name\_\_\_\_\_  
Title\_\_\_\_\_  
Address\_\_\_\_\_  
City Where this Form was Signed\_\_\_\_\_  
Address for Service**NOTE TO SURETY COMPANY:**

The following form of original acknowledgement should be used. If any other form of acknowledgement is used, there must be submitted a certified copy of unrevoked resolution of authority for the attorney-in-fact.

**SURETY COMPANY ATTORNEY-IN-FACT**

STATE OF CALIFORNIA        )  
COUNTY OF SANTA CLARA    )        ss.  
                                      )

On \_\_\_\_\_, before me, the undersigned, a Notary Public in and for the State, personally appeared \_\_\_\_\_, known to me to be the duly authorized Attorney-in-Fact of the corporate Surety named in the within instrument, known to me to be authorized to execute that instrument on behalf of said corporation, known to me to be the person whose name is subscribed to such instrument as the Attorney-in-Fact of said corporation, and acknowledged to me that he (she) subscribed the name of said corporation thereto as Surety, and his (her) own name as Attorney-in-Fact and that said corporation executed the same.

**WITNESS MY HAND AND OFFICIAL SEAL:**

(SEAL)

\_\_\_\_\_  
Notary Public for the State of California

Original Acknowledgement by Attorney-in-Fact must be attached.  
Corporate seals of Principal and Surety must be attached.

**END OF DOCUMENT 00 61 13.13**

00 61 13.13-3

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DOCUMENT 00 61 13.16

## PAYMENT BOND FOR PUBLIC WORKS

**WHEREAS**, the Board of Supervisors of the County of Santa Clara, State of California, and hereinafter designated as "Principal" have entered into an Agreement for the furnishing of all materials, labor, services and equipment necessary, convenient and proper to:

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pursuant to the said Agreement dated \_\_\_\_\_, 20\_\_\_\_, and all of the documents attached thereto and incorporated by reference, including Plans and Specifications for construction, becoming a part of said Agreement, are hereby referred to and made a part hereof; and,

**WHEREAS**, said Principal is required by Title 1 (Works of Improvement Generally), Chapter 4 (commencing at Section 8152) and Title 3 (Public Works of Improvement), Chapter 5 (commencing at Section 9550), Division 4, Part 6, of the California Civil Code to furnish a Bond in connection with said Agreement.

**NOW THEREFORE**, we, the Principal and \_\_\_\_\_ as Surety, are held and firmly bound unto the County of Santa Clara in the penal sum of:

\_\_\_\_\_ Dollars (\$ \_\_\_\_\_), lawful money of the United States of America, for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators and successors, and assigns, jointly and severally, firmly by these presents.

**THE CONDITION OF THIS OBLIGATION IS SUCH THAT** if said Principal, its subcontractors, heirs, executors, administrators, successors or assigns shall fail to pay any of the persons named in Section 9100 of the California Civil Code, any amounts due under the Unemployment Insurance Code with respect to work or labor performed by any such claimant, any prevailing wages due and penalties incurred pursuant to Sections 1771, 1774, 1775, 1813 and 1815 of the California Labor Code, any amounts required to be deducted or withheld from the wages of employees of the Principal and its subcontractors for payment to the United States Government and/or to the State Franchise Tax Board with respect to such work and labor, the Surety will pay for the same, in an amount not exceeding the total sum herein above specified, and also, in case suit is brought upon this Bond, a reasonable attorney's fee to be fixed by the court. This Bond shall inure to the benefit of any of the persons named in Section 9100 of the California Civil Code, so as to give the right of action to such persons or their assigns in any suit brought upon this Bond.

It is further stipulated and agreed that the Surety on this Bond shall not be exonerated or released from the obligation of this Bond by any change, extension of time for performance, addition, deletion, alteration, or modification in, to, or any contract, plans, specifications, or agreement pertaining or relating to any scheme or work of improvement herein above described or pertaining to or relating to the furnishing of labor, materials, or equipment therefore, nor by any change or modification of any terms of payment or extension of the time for any payment pertaining or relating to any scheme or work of improvement herein above described, nor by any rescission or attempted rescission of the contract, agreement, or Bond, nor by any conditions precedent or subsequent in the Bond attempting to limit the right of recovery of claimants otherwise entitled to recover under any such contract or agreement or under the Bond, nor by any fraud practiced by any person other than the claimant seeking to recover on the Bond, and that this Bond be construed most strongly against the Surety and in favor of all persons for whose benefit such Bond is given, and in conformance with the Mechanic's Lien Law and stop payment notice provisions of the State of California, and under no

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00 61 13.16-1

## PAYMENT BOND FORM

Document 00 61 13.16

Page 2 of 3

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circumstances shall the Surety be released from its obligations hereunder by reason of any breach of contract between the County of Santa Clara and said Principal or on the part of any obligee named in such Bond, but the sole conditions of recovery shall be that claimant is a person described in Section 9100 of the California Civil Code and has not been paid the full amount of its claim, and that Surety does hereby waive notice of any such change, extension of time, addition, deletion, alteration, or modification herein mentioned.

The Surety, by the execution of this Bond, represents and warrants that this Bond has also been duly executed by the Principal with proper authority, and the Surety hereby waives any defense which it might have by reason of any failure by the Principal to execute or properly execute this Bond.

**IN WITNESS WHEREOF** two identical counterparts of this instrument each of which shall for all purposes be deemed an original thereof, have been duly executed by the Principal and Surety above named on the \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_.

**PRINCIPAL:**

Signature

Name \_\_\_\_\_

Title

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Address

City Where this Form was Signed

**Address for Service**

**SURETY:**

Signature

Name \_\_\_\_\_

Title

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Address

City Where this Form was Signed

**Address for Service**

**NOTE TO SURETY COMPANY:**

The following form of acknowledgement should be used. If any other form of acknowledgement is used, there must be submitted a certified copy of unrevoked resolution of authority for the attorney-in-fact.

**SURETY COMPANY ATTORNEY-IN-FACT**

STATE OF CALIFORNIA           )  
COUNTY OF SANTA CLARA       )             ss.  
  )

On \_\_\_\_\_, before me, the undersigned, a Notary Public in and for the

00 61 13.16-2



State, personally appeared \_\_\_\_\_, known to me to be the duly authorized Attorney-in-Fact of the corporate Surety named in the within instrument, known to me to be authorized to execute that instrument on behalf of said corporation, known to me to be the person whose name is subscribed to such instrument as the Attorney-in-Fact of said corporation, and acknowledged to me that he (she) subscribed the name of said corporation thereto as Surety, and his (her) own name as Attorney-in-Fact and that said corporation executed the same.

**WITNESS MY HAND AND OFFICIAL SEAL:**

(SEAL)

\_\_\_\_\_  
Notary Public for the State of California

Acknowledgement by Attorney-in-Fact must be attached.  
Corporate seals of Principal and Surety must be attached.

**END OF DOCUMENT 00 61 13.16**

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**DOCUMENT 00 62 20**  
**COUNTY OF SANTA CLARA SPECIAL ENDORSEMENT**

*REFER TO DOCUMENT 00 73 16 (INDEMNIFICATION AND INSURANCE REQUIREMENTS).*

<b>Mail completed certification to:</b> County of Santa Clara Clerk of the Board  <b>Attn:</b>   <b>Department:</b> County of Santa Clara  <b>Address:</b> 70 West Hedding St., 10 <sup>th</sup> Floor E. Wing San Jose, CA 95110  <b>Contract No.:</b> <b>Description:</b>				<b>Department:</b> 1. Complete address block to the left.  2. When completed certificate is returned, review and send the following to Finance / Controller. a. Signed and completed certificate. b. Copy of insurance requirements and hold harmless clause from the contract.  3. If agreement is a Board approved contract, send a copy of the above (2a and b) to the Clerk of the Board.			
This certification is issued as a matter of information only and confers no right upon the policy holder, and does not amend, extend or alter the coverage afforded by the policies. This to certify that the policies of insurance listed below have been issued to the insured named below for the policy period indicated, notwithstanding any requirement, term or condition of any contract or other document with respect to which this certificate may be insured or may pertain the insurance afforded by the policies described herein is subject to all terms, exclusions and conditions of such policies.							
<b>PRODUCER:</b>     				<b>COMPANIES AFFORDING COVERAGE</b> Company A  Company B  Company C  Company D			
<b>INSURED:</b>     							
Co. Ltr.	TYPE OF INSURANCE	POLICY NUMBER	POLICY EFFECTIVE DATE (MM/DD/YY)	POLICY EXPIRATION DATE (MM/DD/YY)	LIMITS		
	<b>GENERAL LIABILITY</b> <input type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS MADE <input type="checkbox"/> OCCUR <input type="checkbox"/> OWNER'S & CONT PROT  				GENERAL AGGREGATE \$ PROD-COMP/OP AGG \$ PERS & ADV INJURY \$ EACH OCCURRENCE \$ FIRE DAMAGE \$ (Any one fire) MED EXPENSE \$ (Any one person)		
	<b>AUTOMOBILE LIABILITY</b> <input type="checkbox"/> ANY AUTO <input type="checkbox"/> ALL OWNED AUTOS <input type="checkbox"/> SCHEDULED AUTOS <input type="checkbox"/> HIRED AUTOS <input type="checkbox"/> NON-OWNED AUTOS  				COMBINED SINGLE LIMIT \$  BODILY INJURY \$ (Per person) BODILY INJURY \$ (Per accident) PROPERTY DAMAGE \$		
	<b>GARAGE LIABILITY</b> <input type="checkbox"/> ANY AUTO  				AUTO ONLY. EACH ACC \$ OTHER THAN AUTO ONLY: EACH ACCIDENT \$ AGGREGATE \$		
	<b>EXCESS LIABILITY</b> <input type="checkbox"/> UMBRELLA FORM <input type="checkbox"/> OTHER THAN UMBRELLA FORM				EACH OCCURRENCE \$  AGGREGATE \$		
<b>WORKERS' COMPENSATION AND EMPLOYERS' LIABILITY</b>  THE PROPRIETOR / PARTNERS/ INCL. EXECUTIVE OFFICERS ARE: EXCL.					<u>STATUTORY LIMITS</u>  EACH ACCIDENT \$ DISEASE-POLICY LIMIT \$ DISEASE-EMPLOYEE \$		
<b>OTHER</b>  <b>CERTIFICATE HOLDER</b> COUNTY OF SANTA CLARA FAF Capital Programs 2310 North First Street, Suite 200 San Jose, CA 95131-1011		<b>DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES / SPECIAL ITEMS</b>   					
		<b>AUTHORIZED REPRESENTATIVE</b>					

00 11 00-2

Unless specifically excluded, the following endorsements are issued to, and form a part of, the policy number(s) shown below, and are effective on the date indicated at 12:01a.m. Standard Time as stated in the policy.

a. Additional Insured Endorsement:

Insurance afforded by this policy shall also apply to the County of Santa Clara, and members of the Board of Supervisors of the County of Santa Clara, and the officers, agents, and employees of the County of Santa Clara, individually and collectively, as additional insureds. Such insurance shall also apply to any municipality in which the Work occurs and they shall be named on the policy as additional insured (if applicable).

b. Primary Insurance Endorsement:

Insurance afforded by the additional insured endorsement shall apply as primary insurance, and other insurance maintained by the County of Santa Clara, its officers, agents, and employees shall be excess only and not contributing with insurance provided under this policy.

c. Notice of Cancellation or Change of Coverage Endorsement:

Insurance afforded by this policy shall not be canceled or changed so as to no longer meet the specified County insurance requirements without 30 days' prior written notice of such cancellation or change being delivered to the County of Santa.

d. Contractual Liability Endorsement:

Insurance afforded by this policy shall apply to liability assumed by the insured under written contract with the County of Santa Clara.

e. X C & U (Explosion, Collapse and Underground) Endorsement:

Insurance afforded by this policy provides X, C and U Hazards coverage.

Name of  
Insured \_\_\_\_\_

Effective Date  
of Endorsement \_\_\_\_\_

Insuring  
Company \_\_\_\_\_

Policy  
Number \_\_\_\_\_

Insuring  
Company \_\_\_\_\_

Policy  
Number \_\_\_\_\_

Signature of Authorized Representative: \_\_\_\_\_ Date: \_\_\_\_\_

**Send completed certificate to County of Santa Clara, Insurance Compliance, P.O. Box 100085-ZB, Duluth, GA 30096.**

**END OF DOCUMENT 00 62 20**

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DOCUMENT 00 62 90

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**ESCROW AGREEMENT FOR SECURITY DEPOSITS IN LIEU OF RETENTION**

California Public Contract Code Section 22300

THIS ESCROW AGREEMENT ("Escrow Agreement") is made and entered into this \_\_\_\_ day of \_\_\_\_\_, 201\_\_, by and between the County of Santa Clara ("Owner"), whose address is (Owner's Address), (Name of Contractor) ("Contractor"), whose place of business is located at (Contractor's Address), and (Name of Bank), a state or federally chartered bank in the State of California, whose place of business is located at (Escrow Agent's Address) ("Escrow Agent").

For the consideration hereinafter set forth, Owner, Contractor and Escrow Agent agree as follows:

- 1.01** Pursuant to California Public Contract Code section 22300, Contractor has the option to deposit securities with Escrow Agent as a substitute for retention earnings required to be withheld by Owner pursuant to Contract Number \_\_\_\_\_ entered into between Owner and Contractor for THE \_\_\_\_\_ PROJECT located at \_\_\_\_\_ in the amount of \$\_\_\_\_\_ dated \_\_\_\_\_, 201\_\_ (the "Contract"). Alternatively, on written request of Contractor, Owner shall make payments of the retention earnings directly to Escrow Agent. This Escrow Agreement shall be interpreted to conform to Public Contract Code section 22300 and amendments thereto current at the time of bidding. When Contractor deposits the securities as a substitute for Contract earnings, Escrow Agent shall notify Owner within ten (10) Days of the deposit. The market value of the securities at the time of substitution shall be at least equal to the cash amount then required to be withheld as retention under the terms of the Contract between Owner and Contractor. Securities shall be held in name of \_\_\_\_\_, and shall designate Contractor as the beneficial owner.
- 1.02** Owner shall make progress payments to Contractor for those funds which otherwise would be withheld from progress payments pursuant to the Contract provisions, provided that Escrow Agent holds securities in form and amount specified in Paragraph 1.01 of this Escrow Agreement.
- 1.03** When Owner makes payment(s) of retention earned directly to Escrow Agent, Escrow Agent shall hold said payment(s) for the benefit of Contractor until the time that the escrow created under this Escrow Agreement is terminated. Contractor may direct the investment of the payments into securities. All terms and conditions of this Escrow Agreement and the rights and responsibilities of the parties shall be equally applicable and binding when Owner pays Escrow Agent directly.
- 1.04** Contractor shall be responsible for paying all fees for the expenses incurred by Escrow Agent in administering the Escrow Account, and all expenses of Owner. Such expenses and payment terms shall be determined by Owner, Contractor, and Escrow Agent.
- 1.05** Interest earned on securities or money market accounts held in escrow and all interest earned on that interest shall be for sole account of Contractor and shall be subject to withdrawal by Contractor at any time and from time to time without notice to Owner.
- 1.06** Contractor shall have the right to withdraw all or any part of the principal in the Escrow Account only by written notice to Escrow Agent accompanied by written authorization from Owner to Escrow Agent that Owner consents to the withdrawal of the amount sought to be withdrawn by Contractor.

- 1.07** Owner shall have the right to draw upon the securities in event of default by Contractor. Upon seven (7) Days' written notice to Escrow Agent from Owner of the default, Escrow Agent shall immediately convert the securities to cash and shall distribute the cash as instructed by Owner.
- 1.08** Upon receipt of written notification from Owner certifying that the Contract is final and complete, and that Contractor has complied with all requirements and procedures applicable to the Contract, Escrow Agent shall release to Contractor all securities and interest on deposit less escrow fees and charges of the Escrow Account. The escrow shall be closed immediately upon disbursement of all moneys and securities on deposit and payments of fees and charges.
- 1.09** Escrow Agent shall rely on written notifications from Owner and Contractor pursuant to Paragraphs 1.05 through 1.08, inclusive, of this Escrow Agreement and Owner and Contractor shall hold Escrow Agent harmless from Escrow Agent's release and disbursement of securities and interest as set forth above.
- 1.10** The names of persons who are authorized to give written notice or to receive written notice on behalf of Owner and on behalf of Contractor in connection with the foregoing, and exemplars of their respective signatures are as follows:

**ON BEHALF OF OWNER: COUNTY OF SANTA CLARA****ON BEHALF OF CONTRACTOR:**\_\_\_\_\_  
Title\_\_\_\_\_  
Title\_\_\_\_\_  
Name\_\_\_\_\_  
Name\_\_\_\_\_  
Signature\_\_\_\_\_  
Signature\_\_\_\_\_  
Address\_\_\_\_\_  
Address\_\_\_\_\_  
City/State/Zip Code\_\_\_\_\_  
City/State/Zip Code

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**ON BEHALF OF ESCROW AGENT:**

\_\_\_\_\_  
Title

\_\_\_\_\_  
Name

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Address

\_\_\_\_\_  
City/State/Zip Code

At the time the Escrow Account is opened, Owner and Contractor shall deliver to Escrow Agent a fully executed counterpart of this Document 00 62 90.

IN WITNESS WHEREOF, the parties have executed this Escrow Agreement by their proper officers on the date first set forth above.

**OWNER:  
COUNTY OF SANTA CLARA**

**CONTRACTOR:**

\_\_\_\_\_  
Title

\_\_\_\_\_  
Title

\_\_\_\_\_  
Name

\_\_\_\_\_  
Name

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Signature

**END OF DOCUMENT 00 62 90**

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DOCUMENT 00 71 00

## CONTRACTING DEFINITIONS

## ARTICLE 1 – GENERAL PROVISIONS

## 1.01 ABBREVIATIONS

**A. ABBREVIATIONS:** References in the Contract Documents are sometimes referred to only by corresponding abbreviation. Not all abbreviations are listed and not all listed abbreviations are used. Unless otherwise specifically defined, when the following abbreviations are used, the intent and meaning will be interpreted as follows:

1. **A/E** – Design Professional (e.g., Architect, Engineer)
2. **PM** – Owner's Construction Project Manager
3. **DFOW** - Definable Feature of Work
4. **FAF** – The Facilities and Fleet Department of the County of Santa Clara
5. **LDs** – Liquidated Damages
6. **NTP** – Notice To Proceed
7. **OAR** – Owner's Authorized Representative
8. **PE** – Design Professional
9. **QC** – Quality Control
10. **RFI** – Request For Information
11. **SOV** – Schedule Of Values

## 1.02 DEFINITIONS IN REFERENCE TO MASTERFORMAT®

**A.** This Project Manual uses *MasterFormat®* for titling and arranging the parts of the Project Manual.

1. Project Manual identifies Documents and Sections by a six-digit number. The first two digits are termed a "Division," as in "Division 00" or "Division 01." The next two digits are termed "Level 2"; and the third set of two digits "Level 3."
2. Where Project Manual refers to Documents or Sections by "Division" followed by only one or two digits, it refers to all Documents and Sections within the identified Division. Examples: "Division 00," "Division 0," "Division 01," and "Division 1."
3. Where Project Manual refers to a "Division" in any other manner, without further qualification, it refers to all documents or sections within the Division.
4. Where Project Manual refers to Documents or Sections by "Division" followed by six digits, but Level 2 and Level 3 are "00," it refers to all Documents and Sections within the identified Division. Example: "Division 02 00 00."
5. Where Project Manual refers to Documents or Sections by "Series," it refers to all Documents and Sections within the identified Level 2 of the identified Division, and encompasses Documents numbered sequentially through 00 79 99. Example: "Division 00 50 00 Contracting Forms" encompasses Documents numbered 00 50 00 sequentially through 00 59 99; or "Division 00 70 00 General Conditions."

**B.** Groupings of Documents. Reference Document 00 01 10 Table of Contents for groupings and subgroups of Documents and Specifications.

1. Where Project Manual refers to Procurement Requirements, it refers to all Documents within the



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Project Manual, reflected on Document 00 01 10 Table of Contents, Subgroup “Procurement Requirements,” inclusive of all documents within the following Document Series: 00 10 00 Solicitation, inclusive of Advertisements and Invitations for Bid, Requests for Proposal and Requests for Qualifications; 00 20 00 Instructions for Procurement, inclusive of Instructions and Supplementary Instructions for Bidders and Proposers; 00 30 00 Available Information, inclusive of Available Project Information, Site Information, Materials, Environmental Information, Geotechnical Data; and 00 40 00 Procurement Forms and Supplements, inclusive of Bid Forms, Proposal Forms, Supplements, Representations and certifications.

2. Where Project Manual refers to Contracting Requirements, it refers to all documents within the Project Manual, reflected on Document 00 01 10 Table of Contents, Subgroup “Contracting Requirements,” inclusive of all documents within the following Document Series: 00 50 00 Contracting Forms and Supplements, Including Notice of Award, Agreement Forms, Agreement Form Supplements; 00 60 00 Project Forms, inclusive of Bonds, Certificates and Forms, as reflected on Document 00 01 10 Table of Contents.
3. Where Project Manual refers to General Conditions, it refers to all documents within the Project Manual, reflected on Document 00 01 10 Table of Contents, within the following Document Series: 00 70 00 Conditions of the Contract, inclusive of Definitions, General Conditions and Supplementary Conditions.
4. Where Project Manual refers to General Requirements, it refers to all specifications within Division 01 00 00 General Requirements, inclusive of Summary Specifications, Price and Payment Procedures, Administrative Requirements, Quality Requirements, Temporary Facilities and Controls, Product Requirements, Execution and Close Out Requirements, Performance Requirements and Lifecycle Activities, as reflected on Document 00 01 10 Table of Contents.
5. In the event of conflict between Document 00 01 10 Table of Contents and the names and six-digit numbers of Documents and Specifications contained in the Project Manual, where the omission appears inadvertent, the actual names and six-digit number shall prevail and the Table of Contents interpreted as including the Document or Specification.

### 1.03 DEFINITIONS

- A. Wherever in the Bidding Requirements, Contracting Requirements (except Document 00 73 16, “Indemnification and Insurance Requirements”), or General Requirements the following terms, or pronouns in place of them are used, the intent and meaning will be interpreted as defined herein. While Owner has made an effort to identify all defined terms with initial capitalization, the following definitions shall apply regardless of case unless the context otherwise requires. Owner’s omission to use a defined term in any instance shall not affect the interpretation of the language used.
  1. **Acceptance:** The formal acceptance by the Board of Supervisors of the Completion of the entire Work of the Contract, which to Owner’s knowledge has been performed in accordance with the requirements of the Contract Documents and all Approved modifications thereof. May interchange with “Accept,” “Accepts,” or “Accepted.”
  2. **Addendum:** A written change to the Bid Documents issued before the time fixed for the opening of Bids.
  3. **Addenda:** Written or graphic instruments issued prior to the opening of Bids, which clarify, correct, or change the bidding requirements or the Contract Documents. Addenda shall not include the minutes of the Pre-Bid Conference and/or Site Visit.
  4. **Additional Detailed Instructions:** Detailed written and/or graphic instructions issued by Owner to Contractor to explain the Work more fully. Such instructions become part of the requirements of the Contract Documents without changing the requirements of the Contract Documents.

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5. **Agreement:** The written and mutually signed document titled "Agreement" or "Agreement Form", as identified on Document 00 01 10 (Table of Contents) within this Project Manual. Agreement shall be numbered within Document Series 00 52 00 (its exact number will depend on the type of contract delivery method employed). The Agreement is sometimes also referred to as the Contract. Agreement incorporates by reference the Contract Documents for the performance of the Work and the furnishing of labor, materials, tools, and equipment in the construction of the Work.
  6. **Alternative:** Refer to Approved Equal and Substitution.
  7. **Approved, Directed, Ordered, "Sufficient," "Necessary," "Proper":** Whenever these words or their derivatives are used, it is the intent, unless otherwise clearly stated, that written approval, acceptance, or direction by Owner's Authorized Representative or Owner's Project Manager is required. Words "sufficient," "necessary," "proper," and the like shall mean sufficient, necessary, or proper in judgment of Owner.
  8. **Approved Equal:** Material, equipment, or method accepted by Owner's Authorized Representative as a Substitution, for use in the Work, as being acceptable as an equivalent in essential attributes to the material, equipment, or method specified in the Contract Documents.
  9. **Architect of Record:** See Design Professional of Record.
  10. **Architect's Supplemental Instruction:** A document prepared by the Architect to provide supplemental instructions or interpretations or to order minor changes in the work not involving adjustment to the Contract Amount or Contract Time.
  11. **As-Built Documents:** A set of the Contract Documents including Drawings and Project Manual updated on a continuous basis to indicate conditions encountered and the final configuration of the Project as it was constructed. As-Built Documents must include all Addenda, Changes, Additional Detailed Instructions or other clarifications to the Contract Documents and dimensional information showing the actual locations of Installed components of the Work.
  12. **Authority with Jurisdiction:** Any public body having jurisdiction over any Work (or part thereof) pursuant to applicable Codes and Laws. May be referred to as "Authority Having Jurisdiction."
  13. **Award Date:** Date of action taken by the Board of Supervisors accepting Contractor's Bid and authorizing its Chairperson to execute the Agreement (sometimes also referred to as Award).
  14. **Baseline Schedule:** As defined in Section 01 32 00 (Construction Progress Documentation).
  15. **Beneficial Occupancy:** Owner's occupancy or use of any part of the Work in accordance with Article 9 of Document 00 72 00 (General Conditions).
  16. **Bid Alternate:** Additive and/or deductive Bid items identified as such on the Bid Form.
  17. **Bid:** The offer of a Bidder to perform the Work pursuant to a completed prescribed Bid Form, properly executed and guaranteed, and timely submitted.
  18. **Bidder:** Any individual, firm, partnership, corporation, or combination thereof, submitting a Bid for the Work contemplated, acting directly or through a duly authorized representative.
  19. **Bid Documents:** The documents approved by the Board of Supervisors to advertise for construction of the Project, as contained and indicated in the Project Manual, inclusive of Document Series 00 20 00 (Solicitation) providing procedures for bidding and 00 30 00 (Available Project Information) providing information on existing conditions, including without limitation the "information only" materials provided pursuant to these Documents, and

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Document Series 00 40 00 (Procurement Forms), inclusive of the various bid/proposal requirement, and all Contract Documents as defined herein, including the Drawings and Specifications (all Divisions), and materials they reference. The Bid Documents are distinguished from the Contract Documents in that Series 00 20 00 (Solicitation) and Series 00 30 00 (Available Project Information) are classified solely as “Bid Documents” describing conditions of Bidding and not “Contract Documents” describing labor, materials, and services comprising the Work.

- 20. **Bid Form:** The approved form upon which Owner requires a formal Bid be prepared and submitted for the Work as identified on Document 00 01 10, “Table of Contents,” and within Document Series 00 40 00.
- 21. **Bidder’s Security:** The cash, cashier’s check, certified check, or Bidder’s bond accompanying the Bid submitted by the Bidder as a guaranty that the Bidder will enter into a Contract with Owner for the performance of the Work if the Contract is Awarded to the Bidder.
- 22. **Bidding Requirements:** See Bid Documents.
- 23. **Building Information Modeling (BIM):** The development of a computer-based parametric model of a project, and from this model then extracting information to convey a project or portion thereof. This differs from a CAD-based approach wherein individual drawings are created to collectively convey a project. Colloquially, BIM is taken to mean Autodesk’s Revit or similar software by others.
- 24. **Board of Supervisors:** The Board of Supervisors of the County of Santa Clara.
- 25. **Buyer:** Person designated by the Procurement Director to administer requisitions and contracts awarded by the Procurement Department.
- 26. **Chairperson:** The Chairperson or President of the Board of Supervisors.
- 27. **Change Order:** A written amendment to the Contract, changing the Work, and/or the Contract Documents, and/or the Contract Sum or GMP, and/or the Contract Time, and does not include Work that could be or should be paid out of Project Contingency. All Change Orders shall be either executed by the Board of Supervisors, or executed by Owner’s Authorized Representative under a delegation and within the limits authorized by the Board of Supervisors, and within the limits of Public Contract Code section 20142. Non-capitalized use of the words “change order” may refer to written changes in the Contract Documents, whether by Change Order, Construction Change Directive, or other available means. Depending on context, “Change Order” may also refer to another form of Contract Modification.
- 28. **Claim:** As defined in Document 00 73 83 (Dispute Resolution). Document 00 73 83 (Dispute Resolution) provides mandatory administrative settlement procedures for claims and disputes of all types.
- 29. **Codes and Laws:** All laws, statutes, the most recent building codes (or, following award, building codes applicable to the Work), ordinances, rules, regulations, and lawful orders of all public authorities having jurisdiction over Owner, Contractor, any Subcontractor, the Project, the Project site, the Work, or the prosecution of the Work; the Federal Occupational Safety and Health Act and all other Applicable Code Requirements relating to safety; applicable titles in the State of California Code of Regulations; applicable sections in California statutes, including without limitation, the California Labor Code, Business and Professions Code, Public Contract Code; all applicable Code requirements relating to nondiscrimination, payment of prevailing wages, payroll records, apprentices, work days and safety.
- 30. **Complete Submittal:** A group of individual Submittals, each meeting the requirements of the Contract Documents, encompassing all the Work included in a Definable Feature of Work (DFOW), and submitted to Owner as a single Submittal package.

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31. **Completion:** When referred to as completion of the Contract or completion of the Work, the term Completion means Acceptance of the Work.
32. **Construction Project Manager (CPM):** A consultant, firm, or such other individual or entity as Owner may designate to Contractor in writing, retained by Owner to perform project management services. If no Construction Project Manager is used on the Project that is the subject of this Contract, then all references to Construction Manager herein shall be read to refer to County.
33. **Construction Change Directive:** A change in the Contract Documents directed by Owner either on a lump sum; time and materials, not to exceed; unit price; or no-cost and/or no-time basis.
34. **Consultants:** Unless the context refers to consultants employed by Contractor or other third party, the terms Consultants refers to, Architects, Engineers, Construction Project Managers and other professionals engaged to provide Owner with professional services for the Project.
35. **Contract:** The written Agreement on Owner's form within the Series 00 52 00 Documents, incorporating by reference the Contract Documents, for the performance of the Work and the furnishing of labor, materials, tools, and equipment in the construction of the Work. The term Contract is synonymous with "Agreement" and "Contract Agreement."
36. **Contract Bonds:** The Performance Bond and the Payment Bond for Public Works.
37. **Contract Documents:** The Contract Documents include the following Documents, Specifications and Drawings, generally described and referenced on Document 00 01 10 (Table of Contents): (1) Division 00 of this Project Manual (excluding only Document Series 00 20 00 (Solicitation) and Document Series 00 30 00 (Available Information)); (2) All Specifications (Divisions 01 through 48 or above if applicable) (no exclusions); (3) All Drawings and any other documents specifically incorporated that show the Work performed for the Contract Sum, Bid Documents, and all Additional Detailed Instructions, Field Modifications, Approved Contract Modifications [*Note to Specifier: Provide title or drawings list of references, if any materials are information only, please so identify or indicate that the drawings will so identify*]; (4) All Addenda issued to the above documents issued prior to the deadline to submit a Bid; and, (5) Any other document(s) specifically incorporated by reference into any of the foregoing Contract Documents that show the Work performed by Contractor for the Contract Sum. The Contract Documents do not include: Document Series 00 20 00 (Solicitation) and Document Series 00 30 33 (Available Project Information), including without limitation the "information only materials provide pursuant to Document Series 00 20 00 and 00 30 00. Contract consists exclusively of the documents evidencing the agreement of the County and Contractor, identified as the Contract Documents in the Agreement. All Documents within Division 00, all Specifications (01 through 48 or above if applicable), Drawings, and any other documents specifically incorporated therein that show the Work performed for the Contract Sum, Bid Documents and all Additional Detailed Instructions, Field Modifications, and Approved Contract Modifications; subject to the exception, however, that Document Series 00 20 00 (Solicitation) providing procedures for bidding and Document Series 00 30 00 (Available Project Information) providing information on existing conditions, including without limitation the "information only" materials provided pursuant to these Documents, are not included within the definition of Contract Documents.
38. **Contract Modification:** A document Ordering changes in the Work. Such changes may only be Ordered in the following ways: Field Modification, Change Order, Construction Change Directive. May also be referred to as "Modification." "Approved" Contract Modification means Contract Modifications that Owner has agreed to, and which become part of the Contract Documents.

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39. **Contract Sum:** The Contract Sum is stated in the Agreement and its scope and composition stated in the Contract Documents including Section 01 29 00 (Payment Procedures). The Contract Sum, including authorized adjustments by Change Order, is the total amount payable by Owner to Contractor for performance of the Work pursuant to the Contract Documents.
40. **Contract Time(s):** Unless otherwise provided, the Contract Time is the period of time, including authorized adjustments, identified in the Contract Documents for Completion of the Work or a designated portion of the Work.
41. **Contractor:** The person or persons, firm, partnership, corporation, or combination thereof, private or municipal, or the legal representatives thereof, that entered into the Contract with Owner (sometimes also referred to as "Prime Contractor" or "Original Contractor").
42. **Contractor's Authorized Representative:** Contractor's authorized representative(s) who has the authority to represent and act for Contractor.
43. **Coordination Drawings:** Contractor-prepared drawings submitted by Contractor to Owner to demonstrate the coordination of methods, materials, equipment, plans, or sequence Contractor proposes to use when limited space is available for installation of different components. Coordination is required for installation of products and materials Fabricated by separate entities, or the relationship of components is shown on separate Shop Drawings or Submittals. Coordination Drawings are not considered Contract Documents.
44. **County:** The County of Santa Clara, a political subdivision of the State of California, acting through its Board of Supervisors or any of its authorized agents or designees.
45. **Critical Path:** The sequence or network of predecessor/successor Project activities on the Baseline Schedule or most recently Approved Official Progress Schedule which will take the longest time to reach Substantial Completion. The duration of the Critical Path is the sum of the activities' durations along the path. The duration of the Critical Path represents the minimum time required to reach Substantial Completion of the Project. Any delays along the Critical Path would indicate an impact to the Contract Time and/or Contract Sum.
46. **Date of Acceptance:** The date of Acceptance by the Board of Supervisors of Contract Completion.
47. **Day(s):** Calendar days unless otherwise designated.
48. **Defective:** An adjective that refers to Work that is unsatisfactory or unsuited for the use intended, faulty, or deficient, that does not conform to the Contract Documents, or does not meet the requirements of any inspection, reference standard, test or approval referred to in the Contract Documents (including but not limited to approval of Samples and "or equal" items), or has been damaged prior to final payment (unless responsibility for the protection thereof has been assumed by Owner). Unapproved substitutions are defective. Owner is the judge of whether Work is Defective.
49. **Deficiency List:** A written list of deficiencies in the completed Work; also sometimes referred to or included within the "Punch List."
50. **Deficient Work:** Installed Work that does not meet the requirements of the Contract Documents.
51. **Definable Feature of Work (DFOW):** A portion of the Work that is (1) separate and distinct; (2) has common control requirements and work crews; and, (3) is continuous by location on the site. For example, typical Section 03 00 00 Concrete work, would have a separate DFOW for footings; first floor slab (unless, for example, the slab were continuously poured with the footings); second floor slab, etc. All critical path activities are DFOWs. Non-critical path activities may also be DFOWs.
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52. **Demobilization:** For use on projects providing for Mobilization costs, when employing Alternate B for Mobilization costs. Demobilization includes movement off the Project site upon completion of the Work, of personnel, equipment, temporary offices, buildings and other facilities, supplies and incidentals; and submission of Project Acceptance submittals, as defined in Section 01 33 00 (Submittal Procedure).
53. **Design Professional:** A person licensed in California as (1) an architect pursuant to Chapter 3 (commencing with Section 5500) of Division 3 of the Business and Professions Code; (2) registered as a professional engineer pursuant to Chapter 7 (commencing with Section 6700) of Division 3 of the Business and Professions Code; or (3) licensed as a land surveyor pursuant to Chapter 15 (commencing with Section 8700) of Division 3 of the Business and Professions Code. Design Professionals are also sometimes referred to as "Architect/Engineer," "A/E," "Professional Engineer," "PE," "Design Consultant," and/or "Consultant," and unless the context indicates otherwise, employed by Owner.
54. **Design Professional of Record:** The Design Professional in responsible charge of the design services or portions of the design services in connection with the Project.
55. **Document:** The official written record of the Project and the parties' obligations related to prequalification, bidding, and Project performance and completion.
56. **Director:** The Director of the County's Facilities and Fleet Department.
57. **Dispute:** As defined in Document 00 73 83 (Dispute Resolution, Article 1).
58. **Drawings:** The graphic and pictorial portions of the Contract Documents illustrating the design, character, location, and dimensions of the Work to be performed, generally including but not limited to, elevations, sections, details, schedules, General Notes, specific notes, and diagrams. The term Drawings is synonymous with "Contract Drawings" and "Plans."
59. **Duplication:** Owner shall only pay for scope of Work one time. Nothing in the contract is intended to allow Contractor to be paid more than once for the same work being performed in the same location by the same party. However, nothing in the contract prohibits Contractor from allowing subcontractors or parties to perform the same types of work in different locations or to be paid for the portions of the scope that each subcontractor will perform. By way of example, multiple trade subcontractors will be allowed to have cleaning or caulking as a billable cost for the portion of the cleaning or caulking that relates solely to that subcontractor's scope of work.
60. **Excusable Delay:** As defined in Document 00 72 00 (General Conditions, Article 8).
61. **Excusable Compensable Delay:** As defined in Document 00 72 00 (General Conditions, Article 8).
62. **Excusable Non-Compensable Delay:** As defined in Document 00 72 00 (General Conditions, Article 8).
63. **Emergency:** A sudden, unexpected occurrence that poses a clear and imminent danger, requiring immediate action to prevent or mitigate the loss or impairment of life, health, property, or essential public services.
64. **Fabricated (or Fabrication):** Specifically assembled or made out of selected materials to meet Project specific design requirements.
65. **Facilities and Fleet Department (FAF):** The Facilities and Fleet Department of the County of Santa Clara.
66. **Field Modification:** A written instruction, clarification or additional information issued by Owner's Project Manager to Contractor that does not change the Contract Time or Contract Sum but becomes part of the requirements of the Contract Documents.
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67. **Final Completion:** Completion of the entire Work of the Contract, which to Owner's knowledge has been performed in accordance with the requirements of the Contract Documents and all Approved modifications thereof. Procedure for Final Completion is in Document 00 72 00 (General Conditions), Article 9; Section 00 45 00 (Quality Control); Section 00 77 00 (Procedures for Substantial Completion and Final Completion).
68. **Final Inspection:** The inspection performed by Owner and its Consultants after Contractor has certified that the entire Work of the Project is complete.
69. **Force Account:** The method of performing Work by or on behalf of Contractor on a time and materials and equipment, not to exceed basis.
70. **General Notes:** The written instructions, provisions, conditions, or other requirements appearing on the Drawings, and so identified thereon, which pertain to the performance of the Work.
71. **General Requirements:** Division 01 of the Project Manual, encompassing Sections 01 00 00 through 01 91 00.
72. **Governing Body:** The Board of Supervisors of the County of Santa Clara.
73. **Governmental Agencies:** Whenever, in the Contract Documents, reference is made to any governmental agency or officer, such reference will be deemed made to any agency or officer acting in accordance with law to the power, duties, jurisdiction, and authority of the agency or officer mentioned.
74. **Inspector:** The person assigned by Owner to perform Quality Assurance inspection of the Work (also referred to as Project Inspector or Owner's Inspector or Owner's Project Inspector).
75. **Install:** Synonymous with "Provide" for the purposes of this Contract.
76. **Invitation to Bid:** Includes any and all documents issued to Bidders that contain descriptions of the Work to be Bid or the content, form, or manner of submission of Bids. May be used synonymously with Request for Proposals.
77. **Laboratory:** Any laboratory authorized or accepted by Owner to test materials and Work involved in the Contract.
78. **Liquidated Damages:** The amount prescribed in the Contract Documents to be paid to Owner or to be deducted from any payments due or to become due Contractor for each Day's delay in completing the whole or any specified portion of the Work, beyond the time(s) allowed in the Contract Documents plus Approved time extensions.
79. **Manufactured:** Standard units usually mass-produced.
80. **Milestone:** A specific stage of completion of the Work, or specific portion of the Work, identified in the Contract Documents as a Milestone. Substantial Completion and Final Completion are stages of completion.
81. **Milestone Completion:** The date determined by Owner when the Work of a Milestone is complete. Milestone Completion does not constitute Acceptance but does establish the completion date of the Milestone for the purpose of assessment of Liquidated Damages, if any, associated with the Milestone.
82. **Milestone Duration:** The time allowed in the Contract Documents, plus Approved time extensions, for completion of the Work of a Milestone.
83. **Mobilization:** For contracts that provide a bid item or otherwise provide for payment for amounts for Mobilization, for purposes of Progress Payments pursuant to Section 01 29 00, Contractor must select one of the following two alternate definitions to apply to this Project:
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1. Alternate A: Includes preparatory work and operations, including, but not limited to:
    - i. Preparation of Pre-Construction Submittals and Project Management submittals (see Section 01 33 00, art. 1.03 for definition);
    - ii. Movement of personnel, equipment, supplies and incidentals to the Project Site, for establishment of all temporary offices, buildings, and other facilities necessary for Work on the Project; and,
    - iii. For all other work and operations which must be performed, or costs incurred including obtaining Contract Bonds and insurance, before beginning Work on the public improvement at the Project Site.
  2. Alternate B – includes i. and ii. above, plus Demobilization, but not iii.
90. **Named Products**: Products identified in the Contract Documents by manufacturer's product name. Named Products may include manufacturer's make or model number or other designation.
  91. **Non-Excusable Delay**: As defined in Document 00 72 00 (General Conditions, Article 8).
  92. **Notice of Award**: The letter from the Clerk of the Board of Supervisors notifying Contractor that the Board of Supervisors accepted Contractor's Bid and authorized the Chairperson to execute the Agreement.
  93. **Notice of Completion**: A document executed by the Clerk of the Board of Supervisors, as authorized by the Board of Supervisors, and filed with the County Recorder, signifying that the Contract has been Completed and Accepted.
  94. **Notice of Use**: Refer to Document 00 72 00 (General Conditions, Article 9).
  95. **Notice to Bidders**: The Document inviting sealed Bids for the Work (Document 00 11 00, "Notice to Bidders").
  96. **Notice to Proceed**: The written notice issued by Owner's Authorized Representative to Contractor whereby Contractor is notified of the official construction Contract start date and is authorized to proceed with the Work. Unless otherwise specified in the Contract Documents or Directed by written Order of Owner's Authorized Representative, Contractor must begin Work within ten (10) Days following the start date for the Work as stated in the Notice to Proceed.
  97. **Official Progress Schedule**: Contractor's Progress Schedule and all revisions and updates thereto, accepted by Owner, in accordance with the requirements of Section 01 32 00, "Construction Progress Documentation."
  98. **Or Equal**: See "Approved Equal," above.
  99. **Order**: A written directive, direction, or instruction. Also used variously throughout as Approved, Directed, Ordered, or Required.
  100. **Owner**: The County of Santa Clara.
  101. **Owner's Authorized Representative** - The person named in the Notice to Bidders or Agreement whose authority includes but is not limited to the authority to approve Addenda, Change Orders, Payment Requests, Milestone and Project Completion dates(s). May also be referred to as Owner's Representative.
  102. **Owner's Representative**: See Owner's Authorized Representative.
  103. **Plans**: See Drawings.
  104. **Preconstruction Submittals**: Submittals requiring Owner's acceptance before Contractor may proceed with the performance of on-site Work. These submittals include, but are not limited to, the Contractor's Quality Control Plan (CQC Plan), Fire Protection Plan,



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Qualifications of Key Personnel, Qualifications of Scheduler (if applicable to this Contract), Storm Water Pollution Protection Plan (SWPPP) (if applicable to this Contract), etc.

- 105. Procurement Documents:** Referring to the Project Manual, and documents and information referred to or incorporated by reference, inclusive of Contract Documents as defined, Bidding Documents as defined, Available Site Information as defined, and other “for information only” documents and materials whether descriptive of scope of work performed by Contractor, existing conditions information or instructions for bidding, proposing, or other procedures of procurement. The term “Procurement Documents” is not a term of limitation or exclusion, and as the context requires, may be synonymous with the term Project Manual, or Bid Documents.
- 106. Project:** The entire public improvement proposed by Owner to be constructed in whole or in part pursuant to the requirements of the Contract Documents, including any phasing or Milestone requirements.
- 107. Project Number:** The planned undertaking as provided for in the Contract Documents and Owner defined identification number for a Project.
- 108. Product(s):** New material, machinery, components, equipment, fixtures, and systems forming the Work, including existing materials or components required and approved by the County for reuse.
- 109. Product Data:** Illustrations, manufacturer’s literature, standard schedules, performance charts, instructions, brochures, diagrams, and other information submitted by Contractor to illustrate materials or equipment for some portion of the Work. Product Data are not considered Contract Documents.
- 110. Project Manager:** The person identified in the Notice to Bidders or Agreement as the Project Manager or subsequently designated by Owner’s Authorized Representative to manage the Contract and/or the Project. The Project Manager also is sometimes referred to as Owner’s Project Manager or County Project Manager.
- 111. Project Manual:** The written volume(s) assembled for the Work, including the Introductory Information, Bidding Requirements, Contracting Requirements, General Requirements, Technical Specifications, and other written or graphic material as may be listed in the Project Manual Document 00 01 00, Table of Contents, including any Addenda and Approved revisions by Owner.
- 112. Project Representatives:** A person authorized by either Owner or Contractor to receive Notices under the Contract Documents. Depending on context and circumstance, may be the Owner’s Authorized Representative, Project Manual, Clerk of the Board, or other person specifically delegated under the applicable Contract provision or as otherwise designated by law.
- 113. Project Site(s):** Space available to Contractor for performance of the Work, either exclusively or in conjunction with others performing other work as part of the Project.
- 114. Proposed Change Order (PCO):** A written request prepared by the Contractor requesting that the County and the Architect issue a Change Order based upon a proposed change to the Work.
- 115. Provide:** Synonymous with “Install” for the purposes of this Contract: All labor, materials, equipment, supervision, and whatever else is necessary to supply and incorporate a specified item into the Work in compliance with the requirements of the Contract Documents.
- 116. Punch List:** “Minor” Work that remains to be completed. Punch List work includes minor architectural cosmetic work to correct minor flaws or deficiencies related to painting, trim, ceiling tile, joinery work, or other architectural features; minor adjustments to door hardware;

minor cleaning to include scuff marks and small stains; correction of minor mechanical or electrical deficiencies such as tightening of plumbing fixtures and connections, affixing electrical cover plates, minor adjustments to HVAC controls and settings; minor corrections to landscaping; etc. Punch List does not include "major" Work that would prevent Owner from occupying and using the facility for its intended use.

- 117. Request for Information (RFI):** A written request by Contractor requesting that the Architect provide additional information necessary to clarify or amplify an item in the Contract Documents that the Contractor believes is not clearly shown or called for in the Drawings or Specifications or other portions of the Contract Documents, or to address problems that have arisen under field conditions.
- a.** RFIs are not to be used in place of a Substitution.
  - b.** RFIs are not to be used in lieu of a Corrective Action Plan. (Corrective Action Plan is described in Section 01 45 00 (Quality Control).)
  - c.** RFIs must be numbered sequentially and presented in a format furnished by or acceptable to, Owner's Project Manager. Owner's response to an RFI does not change the requirements of the Contract Documents, Contract Time, or Contract Sum.
- 118. Retention:** A defined percentage of the Contract Sum held by Owner pending Completion of the Work, or any portion of the Work.
- 119. Samples:** Physical examples that illustrate materials, equipment or workmanship and establish standards by which the Work will be evaluated.
- 120. Schedule of Values:** A document submitted by Contractor to Owner reflecting the portions of the Contract Sum allotted for the various parts of the Work. The Schedule of Values is sometimes also referred to as "Cost Breakdown."
- 121. Series:** A subgroup within a Division or Subgroup as specified by the *MasterFormat*®.
- 122. Shop Drawings:** Drawings, diagrams, schedules, and other data specially issued for the Work by Contractor or a Subcontractor, Sub-Subcontractor, or Supplier to demonstrate and/or illustrate the way by which Contractor proposes to conform to the information given and the design concept expressed in the Contract Documents for some specific portion of the Work. Shop Drawings are not considered Contract Documents.
- 123. Site:** Space available to Contractor for performance of the Work, either exclusively or in conjunction with other performing other work as part of the Project, as shown on the Drawings.
- 124. Specifications:** The written portion of the Contract Documents consisting of requirements for materials, equipment, construction systems, standards, and workmanship for the Work; performance of related services; commencing with Division 01 General requirements in *MasterFormat*. The term Specifications is also sometimes referred to as "Technical Specifications" or "Specs."
- 125. State:** The State of California.
- 126. Subcontractor:** A contractor, within the meaning of the provisions of Chapter 9 (commencing with Section 7000) of Division 3 of the Business and Professions Code, regardless of tier, who contracts directly with Contractor or with any other subcontractor, to perform any Work of the Project. The term Subcontractor is referred to throughout the Contract Documents as if singular in number and means a Subcontractor or its authorized representative. The Contract Documents do not address the Work of Subcontractors separately, rather, it is assumed Contractor has incorporated the Contract Documents into its subcontracts to the extent of the Subcontractor's scope of work. Where the Contract Documents do refer to

Subcontractors, it shall not be interpreted as de-emphasizing the presumption of incorporation.

- 127. Sub-subcontractor:** A contractor, within the meaning of the provisions of Chapter 9 (commencing with Section 7000) of Division 3 of the Business and Professions Code, that has a direct or indirect contract with a Subcontractor to perform any Work of the Project. The term Sub-subcontractor is referred to throughout the Contract Documents as if singular in number and means a Sub-subcontractor or an authorized representative thereof. The Contract Documents do not address the Work of Sub-Subcontractors separately, rather, it is assumed Contractor and Subcontractors have incorporated the Contract Documents into their subcontracts to the extent of the Sub-Subcontractor's scope of work. Where the Contract Documents do refer to Sub-Subcontractors, it shall not be interpreted as de-emphasizing the presumption of incorporation. Sub-subcontractors may be referred to as Subcontractor or "subcontractor" in the Contract Documents where contextually appropriate.
- 128. Submittal:** Data or items required by the Contract Documents to be submitted by Contractor to Owner. Submittals demonstrate the method, materials, plan, or sequence Contractor proposes to use to conform to the design concept expressed in the requirements of the Contract Documents. Submittals include but are not limited to Shop Drawings, Coordination Drawings, layouts, Progress Schedules, Substitution requests, Samples, mockups, catalogs, Product Data and literature, equipment data sheets, maintenance and operating data. Unless otherwise stated in the Contract Documents, Submittals are not considered Contract Documents.
- 129. Substantial Completion:** Completion of the physical Work of the Contract and deliverables defined in Document 00 72 00 (General Conditions), Article 9; Section 01 45 00 (Quality Control); Section 01 77 00 (Procedures for Substantial Completion and Final Completion), which to Owner's knowledge has been performed in accordance with the requirements of the Contract Documents, and Owner may use the Project for all of its intended uses.
- 130. Substitution:** A material and/or process offered by Contractor in lieu of the specified material and/or process, and accepted by Owner's Authorized Representative in writing as being equivalent (equal) to the specified material and/or process. (The term Substitution is also sometimes referred to as Product Substitution.)
- 131. Summary of Work:** A document setting forth the particular construction sequence, clearly defining and specifying each stage of construction.
- 132. Superintendent:** The person who runs the day-to-day operations on the Site and controls the short-term Project schedule.
- 133. Supplementary Conditions:** The document that modifies and takes precedence over the General Conditions for a particular Project.
- 134. Supplier:** A person or organization contracting with Contractor, a Subcontractor or a Sub-subcontractor to supply materials and/or equipment for the Work.
- 135. Surety:** A company that provides Contractor's bonds for bidding, performance, and payment, and is admitted as a surety insurer as defined in Section 995.120(a) of the California Code of Civil Procedure.
- 136. Technical Data:** "Technical Data" is contained in geotechnical reports and drawings of underground conditions provided by Owner for Contractor for the purpose of depicting underground conditions and shall include actual reported depths, reported quantities, reported soil types, reported soil conditions, and reported material, equipment, or structures that were encountered during subsurface exploration. The term "Technical Data" does not include any other data, interpretations, opinions, or information shown or indicated in such

drawings or reports that otherwise relate to subsurface conditions or described structures. The term "Technical Data" shall not include the location of Underground Facilities.

- 137. Total Float Time:** The time difference between the earliest start date and the latest start date, or between the earliest finish date and the latest finish date, of Project activities. Total Float Time is also sometimes referred to as "slack time" or "Total Float" or "Float."
- 138. Underground Facilities:** All pipelines, conduits, ducts, cables, wires, manholes, vaults, tanks, tunnels or other such facilities or attachments, and any encasements containing such facilities that have been installed underground to furnish any of the following services or materials: electricity, gases, chemicals, steam, liquid petroleum products, telephone or other communications, cable television, sewage and drainage removal, traffic or other control systems, or water.
- 139. Unsuccessful Proposer:** A proposer that, depending on the requirements of the solicitation at issue, has submitted a proposal that meets the requirements of the solicitation but is not selected for Award.
- 140. Warranty:** Contractor's, Subcontractor's, manufacturer's or material Supplier's promise or assurance, written or otherwise, that its products and services provided meet industry (implied) or contractual (the requirements of the Contract Documents) standards of performance. The term warranty is also sometimes referred to as Warranty/Guarantee.
- 141. Work:** The entire completed construction, or the various separately identifiable parts thereof, required to be furnished under the Contract Documents within the Contract Time, whether completed or partially completed, including all Change Orders and field modifications. Work includes and is the result of performing or furnishing labor and furnishing and incorporating materials and equipment into the construction, and performing or furnishing services and furnishing documents, all as required by standards and requirements of the Contract Documents including everything shown in the Drawings and set forth in the Specifications. Work includes all labor, materials, equipment, and services required by Contract Documents to demonstrate and guarantee the required quality, stages of completion and conformance of the completed Work to the requirements of the Contract Documents, including without limitation, Contractor's required quality control services, completion and commissioning services, reports, certifications, operations and maintenance data, as-builts and close out deliverables including warranties and guarantees provided for the completed Work. Wherever the word "work" is used, rather than the word "Work," unless the context indicates the word "Work" was intended, it shall be understood to have its ordinary and customary meaning.

**1.04 Reference To Standards And Specifications Of Technical Societies; Reporting And Resolving Discrepancies**

**A. References.**

1. Reference to standards, specifications, manuals, or codes of any technical society, organization, or association, or to the laws or regulations of any governmental authority, whether such reference be specific or by implication, shall mean the latest standard, specification, manual, code, or laws or regulations in effect at the time Contractor submits its Bid, except as may be otherwise specifically stated in the Contract Documents.
2. If during the performance of the Work, Contractor discovers any conflict, error, ambiguity, or discrepancy within the Contract Documents, or between the Contract Documents and any provision of any such law or regulation applicable to the performance of the Work or of any such standard, specification, manual, or code or of any instruction of any supplier, Contractor shall report it in writing at once to Owner's Representative.

**B. Precedence.**

1. Except as otherwise specifically stated in the Contract Documents or as may be provided by Change Order, Construction Change Directive, or Supplemental Instruction, the provisions of the Contract Documents shall take precedence in resolving any conflict, error, ambiguity, or discrepancy between the provisions of the Contract Documents; and,
  2. The provisions of any such standard, specification, manual, code, or instruction (whether or not specifically incorporated by reference in the Contract Documents); or,
  3. The provisions of any such laws or regulations applicable to the performance of the Work (unless such an interpretation of the provisions of the Contract Documents would result in violation of such law or regulation).
- C.** No provision of any such standard, specification, manual, code, or instruction shall be effective to change the duties and responsibilities of Owner, Owner's Representative, or Contractor, or any Subcontractor, consultants, agents, or employees, from those set forth in the Contract Documents, nor shall it be effective to assign to Owner, its consultants, agents, representatives or employees any duty or authority to supervise or direct the furnishing or performance of the Work or any duty or authority to undertake responsibility inconsistent with the provisions of the Contract Documents.
- D.** Referenced Grades, Classes, and Types. Where an alternative or optional grade, class, or type of product or execution is included in a reference but is not identified in Drawings or in Specifications, provide the highest, best, and greatest of the alternatives or options for the intended use and prevailing conditions.
- E.** Edition Date of References.
1. When an edition or effective date of a reference is not given, it shall be understood to be the current edition or latest revision published as of the date Contractor executes Document 00 52 00 (Agreement).
  2. All amendments, changes, errata, and supplements as of the effective date shall be included.
- F.** ASTM and ANSI References. Specifications and Standards of the American Society for Testing and Materials (ASTM) and the American National Standards Institute (ANSI) are identified in the Drawings and Specifications by abbreviation and number only and may not be further identified by title, date, revision, or amendment. It is presumed that Contractor is familiar with and has access to these nationally- and industry-recognized specifications and standards.

**END OF DOCUMENT 00 71 00**

DOCUMENT 00 72 00  
GENERAL CONDITIONS  
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## **ARTICLE 1 — ARTICLE ONE**

### **1.01 CORRELATION AND INTENT OF THE CONTRACT DOCUMENTS**

- .A The Contract Documents are complementary, and what is required by any one is as binding as though required by all. Any Work called for by the Drawings and not mentioned in the Specifications or other component of the Project Manual, or vice versa, is to be Provided as though fully set forth by both. Words and abbreviations having well known technical, trade or industry meanings are used in the Contract Documents in accordance with such recognized meanings.
- .B The Contract represents the entire and integrated agreement between the parties hereto and supersedes prior negotiations, representations or agreements, either written or oral. The Contract Documents shall not be construed to create a contractual relationship of any kind (1) between Contractor and Owner's consultants; (2) between Owner and a Subcontractor or a Sub-subcontractor; (3) between Owner and its Consultants; or (4) between any persons or entities other than Owner and Contractor. Owner shall, however, be deemed to be an intended third-party beneficiary of all Subcontracts and Sub-Subcontracts (of any tier) for the provision of labor, services, supplies or material to the Project, and each such agreement shall so provide.
- .C The intent of the Contract Documents and the Drawings and Specifications therein, is to describe completed Work that is functionally complete, complies with all applicable Codes and Laws; meets and complies with all applicable standards, is legally operable, and is constructed in accord with the Contract Documents.
- .D Words or phrases contained in the Drawings and Specifications that have well-known technical or construction industry or trade meaning, shall be interpreted in accordance with that meaning.
- .E A typical or representative detail on Drawings shall constitute the standard for workmanship and material throughout corresponding parts of Work. Where necessary, and where reasonably inferable from Drawings, Contractor shall adapt such representative detail for application to such corresponding parts of Work. The details of such adaptation shall be subject to prior approval by Owner. Repetitive features shown in outline on Drawings shall be in exact accordance with corresponding features completely shown.
- .F When standards of the federal government, trade societies, trade associations, or similar commercial standards are referred to in the Contract Documents by specific date of issue, these standards, including amendments or supplements, will be considered to be part of the Contract Documents and incorporated therein. When such references do not bear date of issue, the current published edition, including amendments or supplements shall be considered as part of the Contract Documents.

### **1.02 OWNER AS INITIAL INTERPRETER**

- .A In the event of any difference, discrepancy, inconsistency, error, omission, or other apparent conflict within the Contract Documents and/or with actual field conditions, Contractor must immediately notify Owner in writing, requesting clarification, as provided in Section 01 26 00 (Contract Modification Procedures) relating to Requests for Information.
- .B Owner will issue with reasonable promptness written responses, clarifications or interpretations as Owner may determine necessary, which shall be consistent with the intent of and be reasonably inferable from Contract Documents. Such written clarifications or interpretations shall be binding upon Contractor, and Contractor shall perform the Work in conformance there with.

- .C If Contractor believes that a written response, clarification or interpretation justifies an adjustment in the Contract Sum or Contract Time, then Contractor shall provide Owner prompt written notice and follow the applicable contract procedures including without limitation Section 01 26 00 (Contract Modification Procedures) and Document 00 73 83 (Dispute Resolution).

### **1.03 ORGANIZATION OF THE PROJECT MANUAL**

- .A The Project Manual is organized in general compliance with the Construction Specifications Institute (CSI) MasterFormat. The names of the various levels of the MasterFormat hierarchy as used in this Project Manual are specifically defined as follows:
  - .1 Bidding Requirements
    - .a document;
    - .b article;
    - .c part; and
    - .d sub-part(s).
  - .2 Contracting Requirements
    - .a document;
    - .b article;
    - .c part; and
    - .d sub-part(s).
  - .3 Division (1-48)
    - .a section;
    - .b part; and
    - .c paragraph(s).
- .B Hierarchal levels below sub-part or paragraph are referenced as up-part or paragraph.
  - .1 Example 1: "Document 00 72 00 - sub-Part 3.15E.1a" or "Document 00 72 00.3.15E.1.a" or "00 72 00.15E.1.a" refer to:
    - .a Document 00 72 00 (General Conditions);
    - .b Article 3 (Contractor);
    - .c Part 15 (Contractor's Use of the Project Site);
    - .d Sub-Part E (Sound); and
    - .e Sub-Part .1.a (Cal OSHA compliance).
  - .2 Example 2: "Division 1 - Section 01 45 00.1.08.B.1" or "Section 01 45 00.1.08.B.1" or "01 45 00.1.08.B1" refer to:
    - .a Division 1 (General Requirements);
    - .b Section 01 45 00 (Quality Control (QC));
    - .c Part 1 (General);
    - .d Paragraph 08 (QC Organization); and
    - .e Paragraph B.1 (Alternate QC Manager Duties and Qualifications).
- .C The organization of the Project Manual into articles, parts, sub-parts, divisions, sections and paragraphs and the arrangement of Drawings do not control Contractor in dividing the Work among Subcontractors or Suppliers or in establishing the extent of Work to be performed by any Subcontractor or trade.
- .D Paragraphs titled "Section Includes" are not intended to "scope" the section nor imply a trade responsibility, but serve merely as a listing of significant items in the section to allow the reader to quickly asses the section content. Similarly, paragraphs titled "Related Sections" or "Related

Requirements” or “Related Documents” are not intended to coordinate Contractor’s work, but merely indicate where certain other significant items that may be related to the Work of the section are specified.

- .E In cases of references to Division 0 “Documents” as “Sections”, example, “Section 00 72 00 (General Conditions),” the numerical reference shall have precedence over the terminology “Document” or “Section.”
- .F Unless otherwise indicated, **highlighted**, **emboldened**, *italicized*, or underlined text is not indented to imply special significance but serves merely as an aid to the reader to distinguish or quickly reference selected text.

#### **1.04 INTERPRETATION OF THE CONTRACT DOCUMENTS**

- .A In the case of discrepancy or ambiguity in the Contract Documents, the following order of precedence of Documents, Specifications and Drawings, as indicated on Document 00 01 10 (Table of Contents), shall prevail:
  - .1 Modifications in inverse chronological order (i.e., most recent first), including Modifications made by Addenda, and in the same order as specific portions they are modifying, followed by;
  - .2 the executed Agreement followed by all other documents within the Contracting Bidding Requirements (Division 00 50 00 series) and the Project Forms (Division 00 60 00 series), followed by;
  - .3 Document 00 73 16 (Indemnification and Insurance Requirements), followed by;
  - .4 all Supplementary Conditions within the Division 00 73 00 series followed by all other documents within the Division 00 73 00 series and Division 00 80 00 Series (if any), followed by;
  - .5 Document 00 71 00 (Contracting Definitions) and Document 00 72 00 (General Conditions), followed by all other documents within the Division 00 71 00 series and Division 00 72 00 series;
  - .6 Specifications denominated in Summary of Work within the Division 01 00 00 series, followed by all other specifications within the Division 01 00 00 Series (up to Section 01 99 99), collectively referred to as General Requirements;
  - .7 Drawings and technical Specifications (Division 2 through 48 Specifications);
  - .8 written numbers over figures, unless obviously incorrect;
  - .9 figured dimensions over scaled dimensions; and
  - .10 large-scale drawings over small-scale drawings.
- .B Any conflict between Drawings and Division 2 through 48 Specifications will be resolved in favor of the document of the latest date (i.e., the most recent document), and if the dates are the same or not determinable, then in favor of Specifications. In the event the Specifications include divisions above Division 48, then such divisions shall be included within the Contract Documents unless identified otherwise.

.C Resolution of conflicts in the Contract Documents.

- .1 In case of conflict of quantity, in which specific numbers for quantity have been stated in the Drawings and the Project Manual, the greater quantity number, expressed in either the Drawings or the Project Manual, shall govern and must be provided. In case of conflict within the Drawings involving quantity, or within the Project Manual involving quantity, the greater quantity must be provided.
- .2 In case of conflict involving quality between the Drawings and the Project Manual, or within the Project Manual involving quality; the higher quality must be provided.
- .3 In case of conflict of quantity, in which specific numbers for quantity have been stated in the Drawings and the Project Manual, the greater quantity number, expressed in either the Drawings or the Project Manual, shall govern. In case of conflict within the Drawings involving quantity, or within the Project Manual involving quantity, the greater quantity must be provided.
- .4 In case of conflict within the Drawings involving quality; between the Drawings and the Project Manual involving quality; or within the Project Manual involving quality; the higher quality must be provided.
- .5 In the case of conflict within the Drawings, the following will govern:
  - .a schedules, when identified as such, will govern over all other portions of the Drawings;
  - .b specific notes will govern over general notes, all other notes, and all other portions of the Drawings, except schedules described in the preceding clause;
  - .c figured dimensions will have precedence over undimensioned items;
  - .d larger scale Drawings will govern over smaller scale Drawings (for example,  $\frac{1}{4}" = 1'-0"$  governs over  $\frac{1}{8}" = 1'-0"$ ); and
  - .e detail Drawings govern over standard plates included in the Project Manual.

.D Omissions.

- .1 If the Contract Documents are not complete as to any minor detail or required construction system or with regard to the manner of combining or installing of parts, materials, or equipment, but there exists accepted trade standard for good and workmanlike construction, such detail will be deemed to have been included by the requirements of the Contract Documents in accordance with such standard.

.E Cross-references to related Documents, Specifications, Articles, Sections, parts, sub-parts, or paragraphs, are for convenience. Omission of cross-references or correct cross-references shall not change requirements of Contract Documents.

.F Capitalization and Captions.

- .1 Terms capitalized in the introductory information, bidding requirements, contracting requirements, General Conditions, and Division 1 (General Requirements) include those that are:
  - .a specifically defined; or
  - .b titles and captions of documents, Specification sections, or numbered articles, parts, sub-parts, sections, or paragraphs; or
  - .c titles of other Documents.
- .2 The titles and captions of the documents, articles, parts, sub-parts, sections, or paragraphs are for convenience only and will not be deemed relevant in resolving any question of

interpretation or construction of any such documents, articles, arts, sub-parts, sections, or paragraphs.

**1.05 OWNERSHIP AND USE**

- .A The Drawings, Project Manual and other Contract Documents issued by Owner and copies furnished to Contractor are for use solely with respect to the Work of this Project. They are not to be used by Contractor or any Subcontractor, Sub-Subcontractor or Supplier on other projects, nor for additions to this Project outside the scope of the Work without the specific written consent of Owner. Contractor, Subcontractors, Sub-Subcontractors and Suppliers are granted permission to use and reproduce applicable portions of the Drawings, Project Manual and other Contract Documents issued by Owner appropriate to, and for use in, the execution of their Work pursuant to the requirements of the Contract Documents.

**1.06 TRANSMISSION OF DATA IN DIGITAL FORM**

- .A Requirements and protocols for transmission of documents in digital form are set forth in Document 00 54 33 (Digital/Electronic Data Protocol). All required records that Contractor must generate and maintain pursuant to the Contract Documents, and all communications and documents exchanged between County and Contractor, shall, at Owner's option, be maintained electronically and exchanged electronically, pursuant to the terms of Document 00 54 33.

**1.07 SUPPLEMENTAL CONDITIONS**

- .A Supplementary Conditions in Division 00 73 00 provide terms and conditions specific to the Contract and supersede contrary information in this Document 00 72 00 General Conditions.

**END ARTICLE 1 OF DOCUMENT 00 72 00**

## **ARTICLE 2 — OWNER**

### **2.01 GENERAL**

- .A The Owner is the County of Santa Clara and is referred to in the Contract Documents as Owner. In some instances the County of Santa Clara is referred to by its full name or as County. Owner shall designate in writing a representative who shall have authority to represent it with respect to all matters requiring Owner's representation, referred to throughout the Contract Documents as Owner's Representative or Owner's Authorized Representative.
- .B Owner's Representative will provide administration of the Contract as provided in the Contract Documents, including without limitation, Article 4, Part 4.1 of this Document. Owner may employ consultants including architects, engineers, testing agencies, and/or a Construction Manager (CM), to assist Owner's Representative. Such consultants shall have only such delegated authority as Owner may specify in the Contract Documents or subsequently in writing by Owner's Representative.
- .C Owner may at any time and from time to time, without prior notice to or approval of Contractor, replace Owner's Representative with a new Owner's Representative. Upon receipt of notice from Owner informing Contractor of such replacement and identifying the new Owner's representative, Contractor shall recognize such person or firm as Owner's Representative for all purposes under the Contract Documents.

### **2.02 INFORMATION AND/OR SERVICES FURNISHED BY OWNER**

- .A Information and/or services required of Owner will be furnished by Owner in accordance with the Contract Documents.
- .B Owner will furnish Contractor with copies of the Drawings and Project Manuals as specified in the Bid Documents.

### **2.03 OWNER'S OBSERVATION OF THE WORK**

- .A Work shall be performed under Owner's general observation and administration.
- .B Unless otherwise specified in the Contract Documents, Owner will not direct or control the construction means, methods, techniques, sequences, procedures, safety precautions and programs in connection with the Work, since these are solely Contractor's responsibility.
- .C Owner is not responsible for Contractor's failure to carry out the Work in accordance with the requirements of the Contract Documents.
- .D Owner is not responsible for acts, errors, or omissions of Contractor, a Subcontractor, Sub-subcontractor or anyone directly or indirectly employed by any of them, or of any other persons performing portions of the Work.
- .E Contractor shall comply with Owner's directions and instructions in accordance with the terms of Contract Documents; but nothing contained in these General Conditions shall be taken to relieve Contractor of any obligations or liabilities under the Contract Documents.
- .F Owner's failure to review or, upon review, failure to object to any aspect of Work reviewed, shall not be deemed a waiver or approval by Owner of any non-conforming aspect of Work.

### **2.04 OWNER'S RIGHT TO STOP THE WORK**

- .A If Contractor fails or refuses to promptly comply with any notice of non-compliance, or repeatedly fails to carry out Work in accordance with the Contract Documents, Owner may, in addition to other remedies provided by law and/or the Contract Documents, issue an Order to

Contractor to suspend part or all of the Work until Contractor has taken satisfactory corrective action. No part of the cost or time expended by Contractor or its Subcontractors due to such Order to suspend Work shall be made the subject of a Dispute or Claim against Owner for extension of the Contract Time, Contract Sum, or for excess costs or damages of any kind.

- .B The right of Owner to stop the Work is wholly discretionary on the part of Owner and shall not give rise to a duty or responsibility on the part of Owner or Owner's Representative to exercise this right for the benefit of Contractor or any other person or entity.

## **2.05 OWNER'S RIGHT TO CARRY OUT THE WORK**

- .A If Contractor fails to carry out the Work in accordance with the Contract Documents, or fails to remedy any failure, defect, or damage (collectively "deficiencies"), within ten (10) Days of Owner's notice of such failure or commence to remedy and proceed with due diligence when the deficiency cannot be completed within ten (10) Days, Owner may in its discretion exclude Contractor from the affected area, correct or remedy such deficiency(ies) at Contractor's expense. In such case an appropriate Change Order or Construction Change Directive shall be issued deducting from payments then or thereafter due Contractor the reasonable cost of correcting such deficiencies, including Owner's costs and expenses for additional design and construction management, made necessary by such deficiency. If payments then or thereafter due Contractor are not sufficient to cover such amounts, Contractor shall pay the difference to Owner.
- .B The right of Owner to carry out the Work is wholly discretionary on the part of Owner and shall not give rise to a duty on the part of Owner to exercise this right for the benefit of Contractor or any other person or entity.

**END ARTICLE 2 OF DOCUMENT 00 72 00**

## **ARTICLE 3 — CONTRACTOR**

### **3.01 GENERAL**

- .A Contractor, having assured itself of the adequacy of the Bid Documents and the accuracy of its Bid, agrees to perform the Work within the Contract Times(s) and Contract Sum established in the Contract Documents. Contractor further agrees that construction will likely involve clarifications and changes to the Bid Documents and modifications in Contractor's planned work procedures. Contractor acknowledges that these are expected conditions of construction.
- .B Contractor shall perform the Work in accordance with the Contract Documents. As part of the "Work," Contractor shall Provide and furnish, except as otherwise expressly provided in the Specifications, all labor materials, equipment, machinery, processes, construction materials and equipment, tools, plants, supplies, facilities, services, employee training and testing, hoisting facilities, transportation, shop drawings, storage, testing, security, transportation, disposal, the securing of all necessary or required field dimensions, the cutting or patching of existing materials, notices, permits, documents, reports, agreements and all other things necessary to complete timely and fully the Work described and the results intended by Contract Documents and, in particular, Drawings and Specifications, in a skillful, workmanlike and orderly manner, in accordance with the Drawings, Specifications and all other parts of this Contract, and to the satisfaction of Owner.
- .C Contractor shall perform reasonably implied parts of Work as "incidental work" although absent from Drawings and Specifications, where such work is necessary and customarily required as a part of the Work shown on Drawings or described in Specifications because it is necessary or required to make each installation satisfactory, legally operable, functional, and consistent with the intent of Drawings and Specifications or the requirements of Contract Documents including required tasks to be performed under Division 1 of Specifications. Contractor shall perform incidental work without extra cost to Owner.
- .D Contractor will not be relieved from its obligations to perform the Work in accordance with the requirements of the Contract Documents, either by the activities or duties of Owner or Owner's Consultants in their administration of the Contract, or by inspections, tests, acceptance, or approvals required or performed by persons other than Contractor. Deviations from Drawings and from the dimensions therein given, or from the Specifications, whether or not error is believed to exist, shall be made only when approved in writing by Owner. Contractor may deviate from Drawings or the dimensions given in the Drawings, and may deviate from the Specifications only upon Owner's advance written approval of the proposed deviation, either by Change Order, Construction Change Directive, or by Field Modification.
- .E Contractor is solely responsible for ensuring that all Subcontractors, Suppliers, manufacturers, etc., working with any portion of the Contract Documents are fully aware that all of the Contract Documents apply to their work, although the other portions of the Contract Documents may not be fully reproduced or repeated therein.
- .F Contractor must follow any sequence of operations required by the Contract Documents.

### **3.02 CONTRACTOR'S AUTHORIZED REPRESENTATIVE**

- .A Prior to Contractor mobilization to the Project Site, Contractor must submit to Owner in writing two (2) copies of a letter naming Contractor's Authorized Representative who will have the authority to represent and act for Contractor at the Project Site. Communications provided to Contractor's Authorized Representative will be as binding as if provided directly to Contractor. When Contractor is comprised of two (2) or more persons, firms, partnerships, or corporations functioning as a joint venture, Contractor must submit a letter to Owner, before starting Work, stating the name of one (1) authorized representative who has the authority to represent and act for Contractor.



- .B Contractor's Authorized Representative must be present at the Work site at all times while any Work is in progress. When Work is not in progress and during periods when Work is suspended, Contractor's Authorized Representative must nevertheless keep Owner's Representative advised of his/her whereabouts and the whereabouts of Contractor's site superintendents so that they may readily be reached and available for consultation at the Project Site at any time.
- .C Prior to Contractor mobilization to the Project Site, Contractor must submit to Owner the telephone, cell phone, and/or pager numbers at which Contractor's Authorized Representative can be reached at all times. In the event it is necessary for Contractor's Authorized Representative to be absent from the Project Site, Contractor's Authorized Representative will, except in the case of personal emergency, give written notice to Owner's Representative designating an acting representative. The absence must not exceed forty-eight (48) hours without prior written approval of Owner's Representative.

### **3.03 REVIEW OF CONTRACT DOCUMENTS AND FIELD CONDITIONS**

- .A By submitting a Bid and entering into the Agreement, Contractor represents and warrants that it has carefully reviewed the Contract Documents for this Project and carefully examined the Project Site of the Work, is familiar with the Project Site conditions including the nature and locations of the Work, the character, quality and quantities of materials and labor required, and the difficulties likely to be encountered, the availability of labor and materials in the local geographic area where the Work is to be performed, and has correlated personal observations with requirements of the Contract Documents.
- .B By submitting a Bid and entering into the Agreement, Contractor represents and warrants that Contractor has verified the availability of Named Products, and the Named Products, including sole or single source products are currently available. Contractor also represents and warrants that Named Products, including sole or single source products can be obtained, delivered, and installed within the Contract Time(s) stated in the Bid Documents.
- .C Contractor and its Subcontractors and Sub-Subcontractors must take field measurements and verify field conditions and must compare such field measurements, conditions and other related information known to Contractor with the requirements of the Contract Documents before beginning the Work and shall promptly report to Owner, in writing, any conflict, error, ambiguity or discrepancy that Contractor may discover.
- .D Before undertaking each part of Work, Contractor and its Subcontractors and Sub-Subcontractors shall carefully study and compare Contract Documents and check and verify pertinent figures shown in the Contract Documents and all applicable field measurements; and shall promptly report to Owner, in writing, any conflict, error, ambiguity or discrepancy that Contractor may discover. Contractor shall be responsible for any errors that might have been avoided by such comparison.
- .E Contractor and its Subcontractors and Sub-subcontractors shall, at all times, report promptly to Owner, any errors, inconsistencies, or omissions in the Contract Documents, or inconsistencies with Codes and Laws observed by Contractor or its Subcontractors or Sub-subcontractors. Such prompt reporting may occur informally but shall be confirmed the same day using methods provided in the Contract Documents.
- .F If Contractor and its Subcontractors or Sub-subcontractors perform any construction activity involving an error, inconsistency, or omission referred to in this Part 3.03, without giving the notice required in the written format and with the distribution required by the Contract Documents, and obtaining thereafter the written consent of Owner's Representative, also in the form required in the Contract Documents, then Contractor shall be responsible for any resultant losses, including, without limitation, the costs of correcting Defective Work.

### **3.04 SUPERVISION AND CONSTRUCTION PROCEDURES**

- .A Contractor shall supervise, coordinate, and direct the Work using Contractor's best skill and attention. Contractor shall be solely responsible for and have control over construction means, methods, techniques, sequences, procedures, safety precautions and programs, and the coordination of all portions of the Work
- .B Contractor shall be responsible to Owner for acts and omissions of Contractor's agents, employees, and Subcontractors and Sub-Subcontractors, and their respective agents and employees, and any other persons performing portions of the Work pursuant to a direct or indirect contract with Contractor or at its direction.
- .C Contractor shall be responsible for ensuring that the completed Work complies accurately with Contract Documents. Contractor shall not be relieved of its obligation to perform the Work in accordance with the Contract Documents either by acts or omissions of Owner or Owner's Representative in the administration of the Contract, or by tests, inspections, or approvals required or performed by Owner, its consultants, inspectors, testing firms, authorities acting pursuant to Codes and Laws, or other persons or firms not in the control of Contractor.
- .D Contractor shall be responsible for Quality Control for all portions of the Work, including Contractor's testing and inspections as may be required by Contractor under its Contractor's Quality Control (CQC) Plan, for ongoing Work and portions of Work already performed under this Contract, to determine that Work and conforms to the requirements of the Contract and is ready to receive subsequent Work.
- .E Contractor shall anticipate the inter-relationship(s) of all Subcontractors and their relationship with the total Work. Contractor may not delegate its responsibility for coordination to a Subcontractor of any nature or tier. Contractor shall coordinate the work of Subcontractors and material or equipment Suppliers, so that their work is performed in a manner to minimize interference with and to facilitate the progress of the Work.
- .F Contractor shall Provide competent, fully qualified personnel to perform the Work.
- .G Contractor must at all times enforce good order and discipline among its employees and must not employ on the Work anyone not skilled in the task assigned. If any person or Subcontractor working at the direction or subject to the control of Contractor refuses or fails to carry out a properly given Order by Owner's Representative or is, in Owner Representative's opinion, incompetent, disorderly, or acting in an improper manner, Contractor must immediately remove that person or Subcontractor from the Project upon Owner's written request, and such person or Subcontractor must not be permitted to perform further Work on the Project.

### **3.05 STANDARDS FOR WORK AND MATERIALS**

- .A The Work must comply with all applicable Codes and Laws, including standards referred to by such Codes and Laws and the Contract Documents; and said requirements are considered as minimum. When the Contract Documents call for materials of higher quality or performance, or larger sizes or capacity than required by said codes or standards, the requirements of the Contract Documents take precedence. Under no circumstances may Contract Documents be interpreted as permitting deviations from minimum Code and Law requirements.
- .B Standards referred to, except as modified in the Contract Documents, have full force and effect as though printed in the Contract Documents. Standards are not repeated because Contractor and its Subcontractor(s) and Supplier(s) are expected to be familiar with requirements governing or applicable to their work.
- .C Contractor must furnish all materials required to complete the Work, except materials that are designated in the Contract Documents to be furnished by Owner, or furnished by Owner in the performance of extra Work.

- .D Material specified by reference to the number, symbol or title or a specific standard, such as a commercial standard, a Federal specification, a trade association standard, or other similar standard, must comply with the requirements thereof.
- .E Contractor must incorporate in the Work only materials conforming to the requirements of the Contract Documents.
- .F All materials Provided must be new, except as may be specifically provided in the Contract Documents.
- .G Inspections and tests may be made by Owner or its designated representatives, but such inspections and tests shall not be considered as a guaranty of acceptance of such material nor of continued acceptance of material offered as similar to that which may have been inspected or tested.
- .H All Owner performed inspections and tests are for Owner's benefit and are not a substitute for Contractor's own Quality Control Program.

### **3.06 CONTRACTOR'S WARRANTIES**

- .A Contractor warrants and represents that it is and will be at all times fully qualified and capable of performing every phase of the Work. Contractor warrants that all construction services shall be performed in accordance with generally accepted professional standards of good and sound construction practices and all requirements of Contract Documents.
- .B Contractor warrants and represents that the Work, including but not limited to all materials and equipment used in or incorporated into the Work will be of good quality, new, and free from defects, including without limitation, meeting required quality standards for equipment, components, systems, materials, construction and workmanship, and will conform with the requirements of the Drawings and Specifications, including without limitation, the lines, grades, cross sections, dimensions and material requirements, and tolerances, shown on the Drawings or indicated in the Project Manual, and shall meet all other requirements of Contract Documents.
- .C Contractor warrants and represents that Work shall conform in all respects with all applicable requirements of Codes and Laws, including without limitation, federal, state and local laws, applicable construction codes and standards, licenses, and permits. Contractor shall not be responsible, however, for the negligence of others in the specification of specific equipment, materials, design parameters and means or methods of construction where that is specifically shown and expressly required by Contract Documents.
- .D Contractor warrants and represents that the Work, including but not limited to all materials and equipment used in or incorporated into the Work will be free of liens, claims, and security interests of third parties .
- .E All Work not conforming to Contractor's warranties and representations, including substitutions not properly accepted and authorized by Owner's Representative, may be considered defective. Upon request at any time, Contractor must furnish evidence, satisfactory to Owner, demonstrating the quality of installed materials and equipment. Although measurement, sampling, and testing may be considered evidence as to such conformity, Owner's Representative is the sole judge as to whether the Work or materials deviate from the requirements of the Contract Documents, and the decision of Owner's Representative as to any allowable deviation therefrom is final.

### **3.07 TAXES**

- .A Contractor must pay any or all taxes imposed by Federal, State, or local governments, that were legally enacted as of the Bid date or subsequently enacted during the Contract Time, including but not limited to Federal excise tax and all State and local sales and use taxes. Owner will not furnish any tax exemption certificate or any document designed to exempt Contractor from payment of any tax on labor, services, materials, transportation, or any other items Provided by Contractor pursuant to the Contract Documents.

### **3.08 PERMITS, FEES AND COMPLIANCE WITH LAWS**

- .A Unless otherwise stated in the Contract Documents, Owner will arrange and pay for utility companies to provide and install main metering devices and permanent utility services from the Utility company's main service line to the metering devices. Once "permanent" utilities are connected, Owner will pay for all utility usage charges. For scheduling purposes, "permanent" power will be available to Contractor prior to the start of the Commissioning phase Functional Testing, pursuant to Section 01 91 00 (General Commissioning Requirements). Owner will plan and schedule such permanent service connections in conjunction with Contractor's Official Progress Schedule and accepted updates thereto, Contractor shall comply with Owner's directions with respect to alternative power or continued use of temporary power.
- .B Permits and Fees. Contractor must obtain and pay for all building permits, encroachment permits, and all other permits and governmental fees, licenses and inspections necessary for the proper execution and completion of the Work, unless otherwise provided in the Contract Documents.
- .C Contractor must give all necessary notices and comply with all Codes and Laws, including but not limited to ordinances, rules, regulations and lawful Orders relating to the Work, and to the preservation of the public health and safety. If Contractor performs any work contrary to such Codes and Laws, including but not limited to ordinances, Orders, rules and regulations, Contractor shall bear all costs attributable thereto.
- .D Contractor will not be charged for any building permit required by County ordinances and issued by the County of Santa Clara.
- .E Upon receipt, Contractor must Submit four (4) copies of all Contractor-obtained permits to Owner.
- .F Contractor must arrange, coordinate, and pay for all permit related inspections unless otherwise provided in the Contract Documents.
- .G Royalties and License Fees. Contractor must pay all royalties and license fees, and must protect, indemnify and defend Owner from and against all suits or claims for infringement of any intellectual property rights and hold Owner and its Consultants on this Project harmless from loss of any nature on account thereof.
- .H Utilities:
  - .1 Unless otherwise stated in Section 01 50 00 (Temporary Facilities and Controls), Contractor will pay for the installation, metering and consumption of all "temporary" utilities. "Temporary" utilities include electrical, water and sewer for the following through project completion:
    - a. to operate Contractor's field office;
    - b. to power and operate construction tools, temporary lighting, concrete, mortar and grout mixing and placement operations; and
    - c. to power any construction elevators.

### **3.09 ALLOWANCES**

If Contract includes Allowances, the following terms shall apply. Materials and equipment under an Allowance shall be selected by the Owner with reasonable promptness. Contractor shall include in the Contract Sum all allowances stated in the Contract Documents. Items covered by Allowances shall be supplied in such amounts and by such persons or entities as the Owner may direct, but the Contractor shall not be required to employ persons or entities to whom the Contractor has reasonable objection. Unless the Contract Documents expressly provide otherwise, Allowance compensation shall use Contract Modification procedures in Section 01 26 00 (Contract Modification Procedures) to measure the cost of labor, equipment, materials and/or subcontractors, to perform Allowance Work, to which contract-designated percentage mark-up for time and materials change order work shall be applied, which shall constitute full compensation for Allowance Work. Unused Allowance amounts, if any, shall reduce the Contract Sum.

### **3.10 SUPERINTENDENT**

- .A Contractor shall designate and keep on the Project Site at all times during Work progress a competent resident Superintendent, who once designated, shall not be replaced without Owner's express written consent. All disclosures and requirements applicable to Contractor's Superintendent set forth in contractor prequalification shall apply to any proposed replacement Superintendent. If Contractor proposes to replace any Superintendent, the existing Superintendent shall remain on the Project until a new Superintendent is approved by Owner.
- .B Failure to maintain a Superintendent on the Project site at all times Work is in progress shall be considered a material breach of this Contract, entitling Owner to terminate the Contract therefore or alternatively, issue a stop Work order until the Superintendent is on the Project site. If, by virtue of issuance of said stop Work order, Contractor fails to complete the Contract on time, Contractor will be assessed Liquidated Damages in accordance with the Agreement. If the Contract requires a Safety Manager on Site full time, then these same requirements apply regarding the Safety Manager.
- .C The Superintendent may not perform the Work of any trade, pick-up materials, or perform any Work not directly related to the supervision and coordination of the Work at the Project site when Work is in progress

### **3.11 CONTRACTOR'S CONSTRUCTION SCHEDULES**

- .A Contractor must submit Progress Schedules prepared in accordance with the requirements of the Contract Documents, including the requirements of Section 01 32 00 (Construction Progress Documentation).
- .B Owner will review the form and general content of Contractor's Progress Schedules (inclusive of the Official Project Schedule and Updates thereto) for the purpose of assessing Official Progress and updates thereto, under Section 01 32 00 (Schedules). All Contractor's Progress Schedules shall contain information necessary for Owner's monitoring and administration of the Contract, including whether:
  - .1 schedules are suitable for Owner's monitoring progress of the Work;
  - .2 schedules provide Owner with necessary data about the timing for Owner decisions and Owner furnished items;
  - .3 schedules include sufficient detail to demonstrate adequate planning for the Work; and
  - .4 schedules indicate a practical plan to perform and complete the Work within the Contract Time.
- .C Owner's review and acceptance of Contractor's schedules is not a quality check of Contractor's Schedules or of Contractor's proper or accurate use of scheduling software. Under no

circumstances shall Owner's review and acceptance be construed as expressly or implicitly warranting, acknowledging or admitting the reasonableness of the use of software, the incorporated logic, durations, cost, manpower or equipment loading indicated in the Schedules. Rather, and at all times, Contractor shall have full responsibility to plan, develop, supervise, control, and coordinate the performance of the Work so that its progress and the sequence and timing of Work will permit its completion within the Contract Time(s).

- .D Owner may provide review comments about Contractor's Schedules to which Contractor must apply its independent judgment. Owner's review comments shall not relieve Contractor from its sole responsibility to plan for, perform, and complete the Work within the Contract Time. Contractor's acceptance or agreement with Owner's review comments shall not transfer responsibility to Owner nor imply agreement with (1) any assumption upon which such Contractor's Schedule is based or (2) any matter underlying or contained in such Contractor's Schedule.
- .E Failure of Owner to discover errors or omissions in schedules that it has reviewed, or to inform Contractor that Contractor, Subcontractors, or others are behind schedule, or to direct or enforce procedures for complying with the Contract, shall not relieve Contractor from its sole responsibility to perform and complete the Work within the Contract Time and shall not be a cause for an adjustment of the Contract Time or the Contract Sum.
- .F Acceptance of any schedule showing completion beyond the Contract Time by Owner's Representative shall not change the Contract Time and is without prejudice to any right of the Owner. The Contract Time, not the Official Progress Schedule as defined in section 01 32 00, shall control in the determination of liquidated damages payable by Contractor and in the determination of any delay.
- .G If a schedule showing the Work completed in less than the Contract Time is accepted, Contractor shall not be entitled to extensions of the Contract Time for Excusable Delays or Compensable Delays as defined in the Contract Documents (Construction Progress Documentation) or to adjustments of the Contract Sum for Compensable Delays until such delays extend the Completion of the Work beyond the expiration of the Contract Time.

### **3.12 DOCUMENTS AND SAMPLES AT THE PROJECT SITE**

- .A Contractor must maintain at the Project Site one (1) copy of the As-Built Documents, including but not limited to, Drawings, Project Manual, Addenda, Contract Modifications, Requests for Information Field Modifications, and Additional Detailed Instructions.
- .B Contractor must maintain the As-Built Documents in good and current condition and post all changes and clarifications to the Contract Documents on a daily basis as they occur.
- .C Contractor must mark the As-Built Drawings and Project Manual to record Addenda, Change Orders, Requests for Information, Field Modifications, Additional Detailed Instructions, and actual field dimensions of installed Work.
- .D Contractor must maintain an As-Built Project Manual in good order and indicate by marking in the appropriate section of the Project Manual, the selected product or material that was approved for incorporation in the Work.
- .E At least one (1) copy of all Owner accepted Shop Drawings, Product Data, Samples and similar Submittals must be maintained at the Project Site in good and current condition and made available to Owner upon request.
- .F Contractor and each Subcontractor (if required by Section 01 32 00 Construction Progress Documentation) must prepare and maintain Daily Reports to document the progress of the Work. Daily Reports must be in a format prescribed in the Contract Documents or approved by Owner's Representative, and completely filled out on a daily basis. Contractor must submit the

Daily Report to Owner by 10:00 AM of the following workday in the manner required by the Contract Documents. The Daily Report must segregate all Force Account Work.

- .G Contractor and each Subcontractor must prepare and maintain incident reports to document unusual occurrences including but not limited to breaches of on-site security, altercations, vehicle or construction equipment accidents, and complaints from neighbors, etc. Incident reports must be in a format prescribed or approved by Owner's Representative, completely filled out at or about the time of the occurrence of the incident. Incident reports must be submitted to Owner's Representative within twenty-four (24) hours of the incident in the manner required by the Contract Documents. Information related to follow-up investigation(s) of the incident must be submitted to Owner's Representative upon request.
- .H Contractor and each Subcontractor must prepare accident reports to document all reportable accidents at the Project Site. Accident reports must be in a format prescribed or approved by Owner's Representative, completely filled out at or about the time of the occurrence of the accident. Accident reports must be submitted to Owner's Representative within twenty-four (24) hours of the accident in the manner required by the Contract Documents. Information related to follow-up investigation(s) of the accident must be submitted to Owner's Representative upon request.
- .I Contractor must arrange for the review or selection of any heavy or large material (or color) samples to be made at vendor shops or facilities and, after being suitably tested and accepted, must arrange for samples of the selected material (or colors) to be maintained at the Project Site in a secure location for use during construction to verify the acceptability of materials and/or work.

### **3.13 SHOP DRAWINGS, PRODUCT DATA, AND SAMPLES**

- .A Shop Drawings, Product Data, Samples and similar Submittals are not Contract Documents. Their purpose is to demonstrate those portions of the Work for which Submittals are required and the way Contractor proposes to conform to the information provided and the design concept expressed in the Contract Documents.
- .B All Submittals are instruments of Contractor. By submitting Shop Drawings, Product Data, Samples and similar Submittals, Contractor represents that Contractor has determined and verified materials, construction methods, field measurements and related field construction criteria, coordinated the Work of the Subcontractors, and has checked and coordinated the information contained within the Submittal with the requirements of the Contract Documents and other Submittals. If Contractor discovers any conflicts, omissions, or errors in Shop Drawings or other submittals, Contractor shall notify Owner and receive instruction before proceeding with the affected Work.
- .C Owner's review of Submittals is for general compliance with the requirements of the Contract Documents. Contractor is solely responsible for all quantities, dimensions, weights, gauges, materials, Fabrication processes, construction methods, coordination with the Work of other trades, and construction safety precautions. Owner's review does not relieve Contractor of responsibility for errors and omissions in the Submittals or from responsibility for proper fitting and construction of the Work, nor from furnishing materials and Work required by Contract Documents that may not be indicated or shown on the Submittal(s).
- .D Owner's review of Contractor's Submittal(s) does not relieve Contractor of any responsibilities for the successful completion of the Work in conformity with the requirements of the Contract Documents. Owner may reject any defective Work notwithstanding any review or previous acceptance of a Submittal associated with the Work.
- .E Contractor is not relieved of the responsibility for any deviation from the requirements of the Contract Documents by Owner's review of Submittals unless Contractor has explicitly informed

Owner, in writing, of such deviation at the time of Submittal, and Owner has provided specific written consent to each specific deviation. Making notations on the Submittal of proposed deviation is not sufficient to satisfy this requirement. Each proposed deviation must be clearly noted on the Submittal and separately itemized and explained in writing in the transmittal accompanying the Submittal. For each Submittal, Contractor must indicate that the Submittal contains "No Deviations" or itemize the proposed deviations on the transmittal accompanying the Submittal. This written list of deviations is in addition to any indications or marks on the Shop Drawings, Product Data, Coordination Drawings, Samples, or other Submittals indicating the proposed deviations.

- .F When certification of materials, systems or equipment is required by the Contract Documents, Design Professional and Owner are entitled to rely upon the accuracy and completeness of such certifications and the calculations and other professional analysis supporting the certifications.
- .G When descriptive catalog designations, including Manufacturer's name, product brand name, or model number(s) are referred to in the Contract Documents, such designations shall be considered as being those found in industry publications of current issue at date of first Notice to Bidders unless a different industry publication is cited in an Addendum issued during the Bid Period.
- .H Contractor shall perform no portion of the Work requiring submittal and review of Shop Drawings, Product Data, Samples, or similar submittals until the respective submittal has been reviewed by Owner and no exceptions have been taken by Owner. Where a Submittal is required, any indirectly-related Work performed before Owner's review and acceptance of the Submittal will be at Contractor's sole risk, expense and responsibility.

Except as otherwise specifically stated in the Contract Documents or specifically Approved or Directed by Owner's Representative, all required Preconstruction Submittals must be submitted within forty-five (45) Days after the start date for the Work as stated in the Notice to Proceed.
- .I General acceptance of Contractor's Progress Schedule, Submittal Log, or other related Project Management submittals (see definition in Section 01 33 00 (Submittal Process Procedure)) by Owner does not constitute specific Approval by Owner's Representative for deviation from the forty-five (45) Day cut-off date for Preconstruction Submittals. Contractor must make a specific request in writing for each proposed deviation to the cut-off date and Owner's Representative must grant specific written Approval for each proposed deviation to the cut-off date.
- .J Contractor must allow sufficient time for reviews, revisions and resubmittals to avoid delays in the Work. No extension of the Contract Time will be authorized because of failure to transmit Complete Submittals sufficiently in advance of the Work to permit processing within the timeframes allowed by Contract. Contractor is responsible for all costs of delays caused by Submittals that are tardy or are not Complete Submittals.
- .K Submittals not required by the Contract Documents will not be reviewed and will be "Returned Without Action" or may be discarded.
- .L If a returned Submittal is required to be resubmitted more than once due to Contractor's failure to comply with the Submittal requirements, Contractor may be charged all costs associated with re-review of the Submittal. The charges may be deducted from progress payments due or to become due to Contractor.
- .M Owner's Design Professional of Record may review Contractor's submitted Shop Drawings, Product Data, and Samples, but only for the limited purpose of checking for conformance with information provided and the design concept expressed in the Contract Documents.



- .N Review of Submittals is not conducted for determining the accuracy and completeness of other details, such as dimensions and quantities, nor for substantiating instructions for installation or performance of equipment or systems, all of which are and remain the responsibility of Contractor. Unless stated expressly otherwise in clear and conspicuous terms on the face of the submittal and its transmittal, all submittals are deemed to contain Contractor's representation and warranty the submitted and shown item meets the intent of the Contract Documents as submitted and will meet the intent of the Contract Documents as installed in the Work.

### **3.14 COORDINATION DRAWINGS AND BIM**

- .A The Drawings indicate the desired arrangement and approximate location for conduit, piping, and duct work, and other items of equipment. Contractor shall prepare and issue Coordination Drawings to insure that the Work is constructed in a manner to avoid obstructions, preserve head room, keep openings and other passageways clear, overcome interference with structural conditions, and coordinate with other trades. Contractor shall provide Coordination Drawings for all mechanical, electrical, telecommunications, data, fire protection, and any other building systems. Contractor shall be responsible for proper installation and coordination of equipment in the space available.

### **3.15 CONTRACTOR'S USE OF THE PROJECT SITE**

#### **.A Contractor's Operations**

- .1 Contractor must confine operations at the Project Site to areas permitted by law, ordinances, permits and the Contract Documents, and must not unreasonably encumber the Project Site with any materials, equipment, temporary structures, or temporary measures. Contractor's employees, or others subject to Contractor's control, are not permitted to reside on the Project Site in temporary living facilities.
- .2 Contractor must give timely advance notice to Owner of Work that is likely to be disruptive to Owner's normal operations at or near the Project Site. If Contractor does not so advise Owner, Owner has the right to temporarily suspend Contractor's Work or to require Contractor to modify its Work operations to eliminate any disruption, and Contractor is not entitled to any adjustment in the Contract Sum or Contract Time for any delay or additional costs associated therewith.

#### **.B Workplace Environment**

- .1 The use or possession of alcohol, weapons, or illegal controlled substances by Contractor, or others subject to Contractor's control, on County property is prohibited.
- .2 Contractor must ensure and maintain a workplace environment free of personal harassment and intimidation.
- .3 Conduct that creates an intimidating, hostile, or offensive workplace environment is prohibited. Such conduct includes, but is not limited to, the following:
  - .a verbal harassment, e.g., epithets, derogatory comments or slurs;
  - .b physical harassment, e.g., assault, impeding or blocking movement, gestures, staring, or any physical interference with normal work or movement; and
  - .c visual forms of harassment, e.g., derogatory posters, letters, poems, graffiti, cartoons, or drawings.

- .4 Unwelcome and/or unwanted sexual advances constitute sexual harassment that is prohibited. By way of example only, and not by limitation, requests for sexual favors and verbal or physical conduct of a sexual nature are prohibited.
- .5 It is the responsibility of Contractor to:
  - .a inform its employees and Subcontractors that behavior that creates an intimidating, hostile, or offensive workplace environment is prohibited;
  - .b create a workplace environment that is free from harassment; and,
  - .c take sufficient immediate corrective action to stop prohibited behavior/conduct.
- .6 If, in the opinion of Owner's Representative, any employee of Contractor or Contractor's Subcontractors violate the prohibitions of this Article 3.15.B (Workplace Environment), Contractor must immediately remove that person or Subcontractor from the Project upon Owner's request, and such person or Subcontractor must not be permitted to perform further Work on the Project Site.

**.C Normal Hours Of Work**

- .1 Normal Hours Of Work for Contractor's operations, which are located within city limits, must comply with city ordinances or requirements of the city. Contractor's operations in County's unincorporated areas or areas which border a city, town or other county must comply with requirements of Santa Clara County or requirements adopted by other jurisdictions, whichever are more stringent. In case of conflict between the requirements of a city, County, and the requirements of the Contract Documents, the most restrictive requirements will govern.

**.D Saturday, Sunday, Holiday, and Overtime Work**

- .1 Unless otherwise required in the Contract Documents, no construction Work shall be done on Saturdays, Sundays or holidays recognized by County government and no Work shall be performed outside of Normal Hours Of Work without the prior consent of the Owner's Representative.
- .2 Whenever Contractor intends to perform overtime work or work on Saturday, Sunday, or a legal holiday recognized by County, Contractor must request permission by giving written notice to the Owner's Representative at least (two) 2 workdays prior to performing the Work.
- .3 Unless specifically provided or required by the Contract Documents, Contractor shall receive no additional compensation for any overtime work (i.e., work in excess of eight (8) hours in any one Day, forty (40) hours in any one calendar week, or evening, night, legal holidays observed by Owner, or weekend work).
- .4 Prior to the start of such Work, when necessary, Contractor must arrange with Owner for the continuous or periodic inspection of the Work.
- .5 Should Contractor find it necessary in order to complete the Work according to the Official Progress Schedule to perform certain of Contractor's operations on Saturdays, Sundays, holidays or during other overtime hours, these operations will be performed as part of the Work included in the Contract Sum and do not constitute a basis for additional compensation. At Owner's option Contractor may be required to compensate Owner for inspection, testing, security, or management costs during Work performed outside of Normal Hours Of Work. Owner has the right and authority to deduct the cost of all such inspections, testing, security, or management costs from any payments due or that become due Contractor.

- .6 Owner has the right to Order Contractor to perform Work outside Normal Hours Of Work. Owner will issue such Order in writing. If Owner Orders Contractor to perform Work outside Normal Hours Of Work, Contractor must make all arrangements to supply an adequate Work force for the task to be accomplished and will be compensated for the premium portion of the wages paid, plus labor burdens applicable to the premium portion only of the wages paid. Contractor must submit copies of Contractor's payrolls indicating the premium wages actually paid, and Owner will issue a Contract Modification to reimburse Contractor for Contractor's actual costs only. Allowable equipment costs are only the cost of added equipment mobilized to the site to accomplish the Work performed outside Normal Hours Of Work.

**.E Sound Control**

- .1 Contractor must comply with all CAL OSHA requirements.
- .2 Contractor must comply with all local sound control and noise level rules, regulations, and ordinances that apply to any Work performed pursuant to the requirements of the Contract Documents.
- .3 Each internal combustion engine used for any purpose on the Project Site or related to the Project must be equipped with a muffler of a type recommended by the manufacturer. No internal combustion engine shall be operated on the Project Site without said muffler.
- .4 Noise level from and hours of Contractor's operations that are located within city limits must comply with city ordinances or requirements. Contractor's operations in County's unincorporated areas or areas which border a city, town or other county must comply with the noise level requirements per the Santa Clara County Ordinance Code or requirements adopted by other jurisdictions, whichever are more stringent. Contractor's attention is directed to the current Santa Clara County Ordinance Code, section B11-194 2.6 "Construction/Demolition" for the maximum acceptable noise levels.
- .5 Noise level requirements apply to all equipment used in the Project or at the Project Site including, but not limited to, trucks, transit mixers, generators, air-tools, or equipment that may or may not be owned by Contractor. The use of loud sound signals must be avoided in favor of warning lights except those required by safety laws for the protection of personnel.

**3.16 CUTTING AND PATCHING**

- .A Unless otherwise stated in Section 01 73 29 (Cutting and Patching), Contractor is responsible for all cutting, fitting, or patching required to complete the Work or to make its parts fit together properly.
- .B Contractor must not damage or endanger any portion of the Work, or the work of Owner or any separate contractors, by cutting, patching or otherwise altering any work.
- .C Contractor must not cut or otherwise alter the work of Owner or any separate contractor except with the written consent of Owner and such separate contractor. Contractor must not unreasonably withhold from Owner or any separate contractor its consent to cutting or otherwise altering the Work.
- .D Cutting and Patching by Others. Contractor is responsible for any and all cutting, fitting and patching required to complete the Work or join Work with the work of others, except as otherwise specifically provided for in the Contract Documents.

**3.17 ACCESS TO WORK**

- .A Contractor must provide Owner continuous access to the Work.

- .B During performance of Work, Owner and its agents, officers, consultants, and employees may at any time enter upon Work, shops or studios where any part of the Work may be in preparation, or factories where any materials for use in Work are being or are to be manufactured, and Contractor shall provide proper and safe facilities for this purpose, and shall make arrangements with manufacturers to facilitate inspection of their processes and products to such extent as Owner's interests may require. Other contractors performing work for Owner may also enter upon Work for all purposes required by their respective contracts. Subject to the rights reserved in the Contract Documents, Contractor shall have sole care, custody, and control of the Project Site and its Work areas.
- .C Owner may, at any time, and from time to time, during the performance of the Work, enter the Project Site for the for the purpose of installing any necessary work by Owner labor or other contracts, and for any other purpose in connection with the installation of facilities. In doing so, Owner shall endeavor not to interfere with Contractor and Contractor shall not interfere with other work being done by or on behalf of Owner.

### **3.18 CLEANUP**

- .A Contractor must continuously keep the Project Site and surrounding areas free from the accumulation of excess dirt, waste materials and/or rubbish caused by its operations or rubbish from any source that accumulates within the Project Site and any other area designated by Owner's Representative for use by Contractor. Contractor shall remove all excess dirt, waste material, and rubbish caused by the Contractor; tools; equipment; machinery; and surplus materials from the Project site and surrounding area at the completion of the Work.
- .B When cleanup is paid for as a separate Bid item, full compensation for such work must be included in the Bid price for cleanup.
- .C When the Bid price is a lump sum, or there is no unit price item for cleanup, full compensation for cleanup will be considered to have been included in the various items of Work.
- .D Contractor must, before certifying that the entire Work of the Project is complete and/or requesting Milestone completion inspection (intermediate, Substantial Completion or Final Completion), clean material storage sites and all ground occupied or affected in connection with the Work or designated portion of the Work, and must leave all parts of the Project in a neat and presentable condition satisfactory to Owner's Representative.
- .E Upon completion of the Work or any designated part thereof, Contractor must promptly remove all its waste materials, rubbish and debris, and all its tools, construction equipment, machinery and surplus materials from the Project area or the completed part.
- .F If Contractor fails to clean up as required by the Contract Documents, Owner may do so and the cost thereof will be charged to the Contractor and deducted from progress payments due or to become due to Contractor.

### **3.19 ROYALTIES, PATENTS, AND COPYRIGHTS**

- .A Contractor must assume all costs arising from the use of patented materials, equipment, devices or processes used on or incorporated in the Work, and must indemnify, hold harmless, and defend Owner and Owner's Representatives and Consultants, from all suits at law, or actions of every nature for or on account of the use of any patented materials, equipment, devices or processes.

**END ARTICLE 3 OF DOCUMENT 00 72 00**

## **ARTICLE 4 — ADMINISTRATION OF THE CONTRACT**

### **4.01 ADMINISTRATION OF THE CONTRACT**

- .A Owner's Representative will provide administration of the Contract as provided in the Contract Documents and will be the representative of Owner. Owner's Representative will have authority to act on behalf of Owner only to the extent provided in the Contract Documents.
- .B Owner's Representative will have the right to visit the Project Site at such intervals as deemed appropriate by the Owner's Representative. However, no actions taken during such Project Site visit by Owner's Representative shall relieve Contractor of its obligations as described in the Contract Documents. Based on Owner's Representative's Project site visits and evaluations of Contractor's Applications For Payment, Owner's Representative will recommend amounts, if any, due Contractor.
- .C Owner's Representative will decide all questions regarding the interpretation and fulfillment of the Contract, the prosecution, progress, quality and acceptability of Work and materials; will implement and enforce decisions by issuing Orders, Directives, instructions and notices; and, subject to limitations expressed within the Contract Documents and by law, will have sole authority to approve changes in Contract Sum and Contract Time.
- .D Owner's Representative will have the authority to reject the Work, or any portion thereof, which does not conform to the Contract Documents. Owner's Representative will have the authority to stop the Work or any portion thereof. Whenever Owner's Representative considers it necessary or advisable for implementation of the intent of the Contract Documents, Owner's Representative will have the authority to require additional inspection or testing of the Work in accordance with the Contract Documents, whether or not such Work is fabricated, installed, or completed. However, no authority of Owner's Representative conferred by the Contract Documents nor any decision made in good faith either to exercise or not exercise such authority, will give rise to a duty or responsibility of Owner or Owner's Representative to Contractor, or any person or entity claiming under or through Contractor.
- .E Owner's Representative will have the authority to conduct inspections as provided in the Contract Documents, to determine and exercise rights of Partial Occupancy or use under Article 9 of this Document, and to determine the dates of Substantial Completion and Final Completion; will receive for review and approval any records, written warranties, and related documents required by the Contract Documents and assembled by Contractor; and will recommend Acceptance by the Board of Supervisors upon Contractor's compliance with all applicable requirements of the Contract Documents.

### **4.02 COMMUNICATIONS FACILITATING CONTRACT ADMINISTRATION**

- .A Unless otherwise specified in the Contract Documents or when Owner's Representative has specifically authorized direct communications with its Consultants, Contractor communications by and with Owner's Consultants must be through Owner's Representative.
- .B Subcontractors, Sub-Subcontractors and Supplier communications with Owner or its Consultants must be through Contractor.
- .C Unless otherwise specified in the Contract Documents or when Owner's Representative has specifically authorized direct communications with other contractors working at the Project Site, Communications by and with separate contractors must be through Owner's Representative.
- .D Unless otherwise stated in the Contract Documents, Contractor must sequentially number all Contractor correspondence to Owner in a format acceptable to the Owner's Representative.

**END ARTICLE 4 OF DOCUMENT 00 72 00**

## **ARTICLE 5 — SUBCONTRACTORS**

### **5.01 SUBLETTING AND SUBCONTRACTING**

- .A Contractor must adhere to the rules governing subcontracting as set forth in the Subletting and Subcontracting Fair Practices Act, commencing with Public Contract Code Section 4100. Subcontractor substitutions must be in accordance with provisions of the Subletting and Subcontracting Fair Practices Act, beginning with Public Contract Code Section 4100.
- .B Contractor is responsible for all Work performed pursuant to the requirements of the Contract Documents, including Work Subcontracted to others, and shall ensure that all Subcontractors and Sub-subcontractors comply with the Contract Documents. All persons engaged in the Work of the Project are the responsibility of and subject to the control of Contractor.
- .C When any Subcontractor fails to execute a portion of the Work in a manner satisfactory to Owner, Contractor must remove such Subcontractor immediately upon written notice from Owner, and the Subcontractor must not again be employed on the Project.
- .D Although the Project Manual is divided into documents, articles, parts, sub-parts and divisions, sections, and paragraphs, it is not intended to provide a basis for the Bid, assignment, or performance of the Work. Contractor is fully responsible for assigning the Work to the various Subcontractors, Suppliers and vendors that will be bidding or performing the Work. Owner will not entertain requests to arbitrate disputes among Subcontractors or between Contractor and Subcontractor(s) concerning responsibility for performing any part of the Work.
- .E Contractor shall maintain a current list of all Subcontractors performing Work on the Project, and shall provide this list to Owner weekly until Owner files a Certificate of Completion or Project Acceptance, whichever is earlier.

### **5.02 SUBCONTRACTOR'S CONTRACTUAL OBLIGATIONS**

- .A By an appropriate agreement, Contractor shall require each Subcontractor and Supplier, to the extent of that Subcontractor's or Supplier's Work, to be bound to Contractor by the terms of the Contract, and to assume toward Contractor all the obligations and responsibilities which Contractor, by these Contract Documents, assumes toward Owner.
- .B Said subcontracts and agreements must preserve and protect Owner's rights pursuant to the Contract with respect to the Subcontractor's or Suppliers Work so the subcontracting thereof will not prejudice such rights. Contractor must require each Subcontractor to enter into similar agreements with its Sub-subcontractors.
- .C Contractor must make available to each proposed Subcontractor and Supplier, prior to execution of the subcontract or agreement, copies of the Contract Documents to which the Subcontractor or Supplier will be bound and, upon written request of the Subcontractor or Supplier, identify to the Subcontractor or Supplier any terms and conditions of the proposed subcontract or agreement that may be at variance with the Contract. Each Subcontractor must similarly make copies of all such Documents available to its proposed Sub-subcontractors.
- .D Contractor shall cause each such subcontract to expressly include the following requirements:
  - .1 Subcontractor waives all rights that Subcontractor may have against Owner for damages caused by fire or other perils covered by builder's risk property insurance carried by Contractor or Owner, except for such rights Subcontractor may have to the proceeds of such insurance under the Contract Documents.



- .2 Owner, State of California, and entities and agencies designated by Owner will have access to and the right to audit and the right to copy at Owner's cost all of Subcontractor's books, records, contracts, correspondence, instructions, drawings, receipts, vouchers, purchase orders, and memoranda relating to the Work. Subcontractor shall preserve all such records and other items for a period of at least three (3) years after Final Completion.
- .3 Subcontractor recognizes the rights of Owner under Article 14.04, Contingent Assignment of Subcontracts, of this Document 00 72 00, and agrees, upon notice from Owner that Owner has elected to accept said assignment and to retain Subcontractor pursuant to the terms of the subcontract, to complete the unperformed obligations under the subcontract and, if requested by Owner, to execute a written agreement confirming that Subcontractor is bound to Owner under the terms of the subcontract.
- .E Upon the request of Owner, Contractor shall promptly furnish to Owner a true, complete, and executed copy of any subcontract.

### **5.03 CONTROL OF SUBCONTRACTORS**

- .A Contractor must:
  - .1 schedule and coordinate the Work of all Subcontractors;
  - .2 instruct all Subcontractors to consult with other Subcontractors to ascertain the locations of their various materials including stored materials and to familiarize themselves with their own material locations, making such changes as required to obtain the best results;
  - .3 instruct all Subcontractors to schedule their Work and cooperate with the other Subcontractors to avoid delays, interferences, and unnecessary work, to conform to the schedule of operations as indicated in the Official Progress Schedule, and make Installations when and where directed;
  - .4 make all necessary changes, including removing and reinstalling of materials, at their sole expense if they fail to check with other Subcontractors, and their Installed Work is later found to interfere with Work of other Subcontractors; and
  - .5 follow-up to ensure that all Subcontractors Install their Work when and where directed.

**END ARTICLE 5 OF DOCUMENT 00 72 00**

**ARTICLE 6 — CONSTRUCTION BY OWNER OR BY SEPARATE CONTRACTORS**

**6.01 OWNER'S RIGHT TO PERFORM CONSTRUCTION AND AWARD SEPARATE CONTRACTS**

- .A Owner has the right to perform work at any time related to the Project with its own forces and/or to award separate contracts in connection with other portions of the Project or other work on the Project Site pursuant to these or similar conditions of this Contract.
- .B When separate contracts are awarded for different portions of the Project or other work on the Project Site, the term contractor in the Contract Documents in each case means the contractor who executes each separate Owner/Contractor Agreement.

**6.02 COOPERATION WITH OWNER'S FORCES AND OTHER CONTRACTORS EMPLOYED BY OWNER**

- .A Unless otherwise indicated in the Contract Documents, Owner will provide for the coordination of the work of Owner's own forces and of each separate contractor with the Work of Contractor, who must cooperate therewith as provided herein.
- .B When Contractor and one or more other contractors are employed by Owner on related or adjacent work, Contractor must not cause any unnecessary delay or hindrance to the other contractors.
- .C If the performance of the Work of this Contract is likely to be interfered with by the simultaneous performance of the work of some other separate contract or contracts, Owner will decide which contractors or Contractor may proceed.
- .D Contractor must accommodate Owner move-in activities including installation of Furniture, Fixtures and Equipment (FF&E) by Owner or others.

**6.03 MUTUAL RESPONSIBILITY**

- .A Contractor must cooperate fully with Owner and all separate contractors including utility companies with regard to the execution of their Work as follows.
  - .1 Contractor must cooperate fully with Owner and all separate contractors with regard to introduction and storage of their materials and equipment.
  - .2 Contractor must coordinate with Owner, all separate contractors, and all utility companies with regard to construction scheduling, sequence of operations and site access, all subject to approval of Owner. Contractor must include activities in Contractor's Progress Schedule for all on-site activities performed by utility companies.
  - .3 Contractor must coordinate and accommodate the concurrent installation of inserts, hangers, blocking, and all other items or embeds to be installed by others within or upon Contractor's Work. Contractor must coordinate and schedule the concurrent installation of these items in such a manner to cause no Critical Path delay to its Work or the work of others.
  - .4 Contractor must properly connect the Work to the work of Owner or the separate Contractors.
  - .5 Contractor must inspect the work of Owner or other contractors affecting the Work and promptly report to Owner in writing irregularities or defects in the separate work that render it unsuitable for reception or connection of the Work.
  - .6 Failure of Contractor to inspect and report constitutes acceptance of the other work as fit and proper to receive the Work, except as to defects that may develop in the other work after execution of Contractor's Work.

**6.04 DISPUTES BETWEEN SEPARATE CONTRACTORS**

- .A Contractor is responsible to the other contractors for all damage to the other contractors' work, persons, or property caused by Contractor's operations, and for any loss suffered by such other contractors caused by Contractor's own unnecessary delays or failure to finish Work within the Contract Time(s) specified. Contractor must indemnify and hold harmless Owner for any damages and losses caused by Contractor in connection with Article 6, Construction by Owner or by Separate Contractors, of this Document 00 72 00.
- .B Should Contractor cause damage to the work or property of any separate contractor on the Project, Contractor must, upon due notice, resolve the claim directly with such other contractor. If such separate contractor initiates legal action or alternative dispute resolution (ADR) process, Owner will notify Contractor who must defend Owner in such proceedings at Contractor's sole expense.
- .C If a monetary obligation results from any lawsuit or ADR proceeding against Owner, Contractor is solely responsible for satisfying such obligation. In addition, Contractor must pay Owner for all attorneys' fees, and court costs as well as administrative, professional, consultant, inspection, testing and other consulting as service costs that Owner has incurred.
- .D Contractor must promptly remedy damage wrongfully caused by Contractor to any completed or partially completed construction or to any property of Owner or separate contractors.

**6.05 OWNER'S RIGHT TO CLEAN UP**

- .A If a disagreement or Dispute arises among Contractor, separate contractors and/or Owner as to the responsibility pursuant to their respective contracts for maintaining the Project Site and surrounding areas free from waste materials and rubbish, Owner may clean up or cause to be cleaned up the waste, materials, and rubbish and allocate the costs among those responsible, and deduct each contractor's share from progress payments due or to become due to each contractor.

**END ARTICLE 6 OF DOCUMENT 00 72 00**

## **ARTICLE 7 — CHANGES IN THE WORK**

### **7.01 GENERAL**

- .A Owner may at any time, without notice to the Sureties, by written Order, make changes in the Work, including but not limited to additions, deletions or other revisions, changes in the Contract Documents and in the method and manner of performing the Work. Such changes will be Ordered in any of the below ways:
  - .1 Field Modification as defined in Contracting Definitions (00 71 00);
  - .2 Change Order as defined in Contracting Definitions (00 71 00);
  - .3 Construction Change Directive as defined in Contracting Definitions (00 71 00); or by
  - .4 No-cost Change Order documenting the use of Contingency.
- .B Owner has the right to increase or decrease the quantity of any Unit price item for which an Estimated Quantity is stated in the Bid Form.
- .C The Contractor agrees and understands that no oral approval, either express or implied, of any adjustment of the Contract Sum by Owner or its agents shall be binding upon Owner unless and until such approval is ratified by execution of a written Change Order.

### **7.02 CONTRACT MODIFICATION**

- .A Refer to Section 01 26 00 (Contract Modification Procedures).

### **7.03 CONTRACTOR'S ACCEPTANCE OF CHANGE ORDERS**

- .A Refer to Section 01 26 00 (Contract Modification Procedures).

### **7.04 DISPUTE PROCEDURES**

- .A Refer to Document 00 73 83 (Disputes Resolution).

**END OF ARTICLE 7 OF DOCUMENT 00 72 00**

## **ARTICLE 8 — TIME**

### **8.01 CONTRACT TIME**

- .A Time is of the essence in this Contract.
- .B Contractor must complete the entire Work of the Project and designated portions thereof within the Contract Time(s) stated in the Bid Documents, or any authorized extension(s) thereof.
- .C Failure of Contractor to include an element of the Work required for performance of this Contract in the Official Progress Schedule, or inaccuracy in the Official Progress Schedule, does not relieve Contractor from responsibility for accomplishing the Work within the Contract Time(s) designated in the Contract Documents and will not constitute grounds for delay in completion of the Work or designated portion on the Work.
- .D Contractor must provide an adequate workforce, materials of proper quality, and equipment to properly execute the Work and to ensure completion of each part of the Work in accordance with the Official Progress Schedule.

### **8.02 NOTICE TO PROCEED**

- .A Owner's Notice to Proceed will state the first Day of the Contract Time, also referred to as the Commencement Date.
- .B Notwithstanding other provisions of the Contract Documents, Owner is not obligated to accept or to pay for Work Provided by Contractor prior to the first Day of the Contract Time designated in the Notice to Proceed, whether or not Owner has knowledge of the furnishing of such Work.
- .C Unless otherwise stated in the Contract Documents or Directed by Owner, Contractor must begin Work within ten (10) Days following the start date for the Work as stated in the Notice to Proceed.
- .D Contractor will not be allowed on the Project Site of the Work until the Contractor's Contract Bonds and insurance comply with requirements of the Contract Documents. Owner reserves the right, in its sole discretion, to subsequently modify or alter the Commencement Date of the Work or permit the Contractor early site access upon determination of conditions, coordination and insurance coverages which Owner in its sole discretion may deem necessary.

### **8.03 LIQUIDATED DAMAGES**

- .A All Work and designated Milestones must be completed and ready for full use by Owner on, or prior to, the Milestone date(s), Substantial Completion date(s) and Final Completion date(s), as specified in the Bid Documents or any change order extending such dates. Such dates are referred to as the Contract Time(s) for the Work.
- .B If Contractor fails to complete the Work or Milestone(s) within the Contract Time(s) designated in the Bid Documents, or any authorized extension thereof, it is understood and agreed that Owner will suffer damage; and, it being impractical and extremely difficult to determine the amount of actual damage, it is agreed that Contractor will pay as fixed and liquidated damages, and not as a penalty, the sums set forth in the Contract Documents for each and every calendar Day of delay until the Work achieves Substantial Completion, Final Completion and/or Intermediate Milestone Completion, and Contractor and its Sureties shall be liable for the amount thereof.
- .C Contractor acknowledges that the Liquidated Damages amounts set forth in the Contract Documents constitute a reasonable estimate of the damages Owner will actually suffer every Day during which completion of the Work or designated portion of the Work is avoidably delayed beyond the expiration of the Contract Time(s) designated in the Contract Documents

- .D Owner may withhold Liquidated Damages from payments due to Contractor as such damages accrue, or, at Owner's discretion, withhold Liquidated Damages from any payments that may become due, including retention and Final Payment (pursuant to California Government Code Section 53069.85).
- .E Liquidated damages for delay shall only cover administrative, overhead, interest on bonds, and general loss of public use damages suffered by Owner as a result of delay. Liquidated damages shall not cover the cost of completion of the Work, damages resulting from defective Work, costs of substitute facilities if any, or damages suffered by others who then seek to recover their damages from Owner (for example, delay claims of other contractors, subcontractors, tenants, or other third-parties).

#### **8.04 ACCELERATION**

- .A Owner reserves the right to Direct Contractor to accelerate performance of the Work or any portion of the Work. No action or direction of Owner other than an express written Order by Owner's Representative to accelerate performance of the Work shall be construed by Contractor to be direction to accelerate the Work.
- .B If Contractor believes that some action or inaction on the part of Owner constitutes an acceleration directive, Contractor must immediately notify Owner in writing that Contractor considers the actions or inaction an acceleration directive. This written notification must detail the circumstances of the acceleration directive. Contractor attention is also directed to Document 00 73 83, Dispute Resolution.
- .C Contractor must keep Daily cost and other Project records related to Owner's acceleration Directive separate from other Project costs and records, and must submit a written Daily record of acceleration cost to Owner at the end of each Day.
- .D Allowable labor costs are limited to overtime or shift premium costs. Allowable equipment costs are only the cost of added equipment mobilized to the Project Site to accomplish the accelerated Work effort.

#### **8.05 DELAY AND TIME EXTENSIONS**

- .A Owner will consider extensions to the Contract Time(s) for the following reasons only if they affect the Critical Path of the Official Progress Schedule.
  - .1 Acts of God (as defined in Public Contract Code Section 7105 (b) (2)) or of the public enemy, acts of Government, acts of Owner, fires, floods, epidemics, quarantine restrictions, sanctioned strikes, freight embargoes, unusually severe weather, or delays of Subcontractors or Suppliers arising from unforeseeable causes beyond the control and without the fault or negligence of both Contractor and such Subcontractors or Suppliers.
  - .2 Delays in progress due to an act of neglect by Owner only for the amount of delay time that occurs after Contractor has notified Owner in writing and Owner has had a reasonable time to respond to the notification.
  - .3 An Approved Contract Modification that extends the Contract Time.
  - .4 Adjustments to the Contract Time(s) due to weather will be allowed only for unusually severe weather or resulting site conditions that affect the progress of activities on the Critical Path of the Official Progress Schedule.
  - .5 No Contract Time extension for rain will be allowed for any month until the number of Days of rain for that month as indicated below has been exceeded. Rainfall will be considered unusually severe only when the Days of rain (defined as more than one-tenth (1/10<sup>th</sup>) of an inch of rain per Day) in any month exceed the following number of Days of rain per month:

<u>Month</u>	<u>No. of Days</u>
January	10
February	9
March	7
April	3
May	1
June	0
July	0
August	0
September	3
October	7
November	9
December	10

- .6 Contractor must exercise due diligence in protecting the Work and the Work site from the adverse impacts of weather by:
  - .a taking appropriate preventative actions before anticipated inclement weather to protect the Work and Work site from the potential adverse effects of the weather;
  - .b taking corrective action during the inclement weather to protect the Work and Work site from the actual and potential adverse effects of the inclement weather; and
  - .c taking corrective action after the inclement weather to remedy, prevent, and/or mitigate the negative impacts of the adverse weather on the Work and the Work site.
- .B Within twenty-four (24) hours from the beginning of any Critical Path delay to the Official Progress Schedule, Contractor must notify Owner in writing of the causes of delay.
- .C Within fourteen (14) Days from the end of any Critical Path delay to the Official Progress Schedule, Contractor must submit two (2) hard copies and electronic data files on Compact Disks, of all supporting information to validate the impact of the delay on the Contract Time.
- .D Owner will ascertain the facts and the extent of the delay and adjust the Contract Time(s) for completing the Work when, in Owner's judgment, the facts justify an adjustment. Owner's determination is final and conclusive.
- .E Delay and Contractor's entitlement for delay will be determined as follows:
  - .1 The following definitions apply to Article 8.05, Delay and Time Extensions, of this Document 00 72 00.
    - .a "Excusable Delay" means any delay in the Work caused by conditions beyond the control and without the fault or negligence of the Contractor.
    - .b "Excusable Non-Compensable Delay" means any Excusable Delay not solely the responsibility of Contractor, such as, earthquake, fire, flood, cyclone, and inclement weather conditions that caused a delay of Work on the Critical Path. The financial inability of Contractor or any Subcontractor, Sub-subcontractor or Supplier, or the default of any Subcontractor, Sub-subcontractor or Supplier is not a condition beyond Contractor's control. An Excusable Non-Compensable Delay may entitle Contractor to an extension of the Contract Time, but will not entitle Contractor to any adjustment of the Contract Sum.
    - .c "Excusable Compensable Delay" means any Excusable Delay caused by a delay of the Work on the Critical Path for which Owner is solely responsible and which delay is unreasonable given the circumstances and not within the contemplation of the parties.

An Excusable Compensable Delay may entitle Contractor to an extension of the Contract Time and an adjustment of the Contract Sum.

- .d "Non-Excusable Delay" means any delay in the Work resulting from causes within the control of Contractor or due to the fault or negligence of Contractor or its Subcontractors or Suppliers. A Non-Excusable Delay shall not entitle Contractor to an extension of the Contract Time or an adjustment of the Contract Sum.
- .2 Whenever Contractor foresees any delay in the prosecution of the Work, Contractor must notify Owner in writing of the potential delay. Such notification must specify with detail the cause asserted by Contractor for the potential delay and provide a description of the anticipated effect of the potential delay on the most recent Updated Official Progress Schedule including identification of the activity numbers of the affected activities. Failure of Contractor to submit such a notice within seven (7) Days after recognition of any incident or event giving rise to the potential delay will constitute a waiver by Contractor of any request for extension of the Contract Time, and no extension of the Contract Time will be granted as a consequence of such delay.
- .3 Within twenty-four (24) hours from the beginning of any Critical Path delay to the Official Progress Schedule, Contractor must submit written notice to Owner of the delay. The notice must include identification of the affected activities, evidence of the cause of the delay, and within fourteen (14) Days of the end of the Critical Path delay, Contractor must submit a Time Impact Analysis per Article 8.05.F, Time Impact Analysis, of this Document 00 72 00.
- .4 Owner has no obligation to consider any request for extension to the Contract Time(s) unless Contractor satisfies the requirements set forth in the Contract Documents for providing notice of potential delay and submission of a Time Impact Analysis establishing the impact of the delay on the Critical Path of the Official Progress Schedule.
- .5 Owner is not responsible to Contractor for any constructive acceleration due to Contractor's failure to comply with the submission and justification requirements of the Contract Documents for Contract Time extension requests. Contractor's failure to perform in accordance with the Official Progress Schedule shall not be excused because Contractor has submitted Contract Time extension requests, unless and until Owner Approves such requests.
- .6 Extension to the Contract Time(s) will not be allowed for delays on paths of activities containing Total Float Time per the latest Updated Official Progress Schedule, providing such delay does not exceed the Total Float Time(s) on paths of activities on the latest Updated Official Progress Schedule.
- .7 Any extension of Contract Time(s) granted Contractor pursuant to Article 8.05, Delay and Time Extensions of this Document 00 72 00 does not constitute a waiver by Owner of, nor a release of Contractor from, Contractor's obligation to perform the Work within the Contract Time(s) specified by the Contract Documents, as modified by the particular extension in question. Owner's decision to grant an extension of the Contract Time(s) due to one circumstance set forth in one request, shall not be construed as a grant of an extension for any other circumstance or the same circumstance occurring at some other time, and shall not be viewed by Contractor as a precedent for any other request for extension of the Contract Time(s).
- .8 If Owner Orders the Contractor to suspend Work pursuant to Article 14.1, Suspension of the Work, of this Document 00 72 00. Contractor will not be entitled to any extension of the Contract Time(s) and/or damages resulting from the suspension, unless Contractor can establish that the suspension was Ordered without reasonable justification.



**.F Time Impact Analysis**

- .1 The time impact analysis must provide information justifying the request for extension of the Contract Time(s) and stating the extent of the adjustment requested for the alleged delay. Time impact analysis must be in form and content acceptable to Owner and include, but not be limited to, the following:
  - .a time impact analyses must be based on analyzing the Official Progress Schedule in effect at the time the alleged delay or impact first occurred;
  - .b Contractor must present fragmentary Critical Path Method (CPM) type network windows (fragments) in time scaled precedent format, illustrating how Contractor proposes to incorporate the alleged delay into the Updated Official Progress Schedule in effect at the time the alleged delay or impact first occurred;
  - .c Contractor must identify the activities that are proposed to be amended due to the alleged delay; and
  - .d Contractor must identify the preceding and succeeding activities in the Official Progress Schedule to which the fragment(s) is to be connected.

**.G Weather Delays**

- .1 Except for rain, if weather conditions are the basis for delays in the continuance or completion of the Work or any designated portion of the Work, Contractor must substantiate that the weather conditions were abnormal, based on the climatologically data for the immediately preceding ten (10) year period. For all weather related delay, Contractor must establish that the adverse weather conditions could not have been reasonably anticipated.
- .2 Rain will not be considered abnormal unless it results in precipitation that exceeds the maximum daily precipitation for the cumulative number of Days per month indicated in Article 5.05A.5, Delay and Time Extensions, of this Document 00 72 00.
- .3 When the amount of rain is considered to be abnormal, extensions to the Contract Time(s) will be granted where the condition of the site, as determined by Owner, is such that Contractor can perform no Work identified as Critical Path Work on the current version of the Official Progress Schedule in effect at the time the delay occurred.

**.H Concurrent Delays**

- .1 If an Excusable Non-Compensable Delay and an Excusable Compensable Delay operate to concurrently delay completion of the Work, the maximum extension of the Contract Time will be the number of Days from the commencement of the first delay to the cessation of the delay which ends last. Any adjustment of the Contract Sum will be in accordance with Section 01 26 00 (Contract Modification) and will be based only on the number of Days of Excusable Compensable Delay, less the duration of the concurrence.
- .2 If a Non-excusable Delay operates to concurrently delay completion of the Work with an Excusable Non-Compensable Delay, the maximum extension of the Contract Time will be the number of Days of concurrent delay plus the non-concurrent portion of the Excusable Non-Compensable Delay. The entire delay is non-compensable.
- .3 If a Non-excusable Delay operates to concurrently delay completion of the Work with an Excusable Compensable Delay the maximum extension of the Contract Time will be the number of Days of concurrent delay plus the non-concurrent portion of the Excusable Compensable Delay. Any adjustment of the Contract Sum will be in accordance with

Section 01 26 00 (Contract Modification) and will be based only on the non-concurrent portion of the Excusable Compensable Delay.

- .4 Where the period of concurrent delay is sixty (60) days or longer, Owner will pay fifty percent (50%) of labor and material cost escalations experienced as a result of the concurrent delay following Contractor's demonstration of the cost escalations to the reasonable satisfaction of Owner.

#### **8.06 SCHEDULE COMPLIANCE**

Owner's rights to full and compliant construction progress documentation, schedules and recovery schedules expressed in the Division 1 Specifications may be deferred or exercised in Owner's discretion.

**END ARTICLE 8 OF DOCUMENT 00 72 00**

## **ARTICLE 9 — PAYMENTS AND COMPLETION**

### **9.01 GENERAL**

- .A Unless otherwise expressly provided for, Contractor shall accept the Contract Sum provided in the Contract as full payment for all Work. Section 01 29 00 (Payment Procedures) defines scope and composition of Contract Sum, and is incorporated here.
- .B For unit price Bid items, the quantities listed by Owner in the Bid schedule do not govern payment. Payment to Contractor will be made only for the actual quantities of Contract items constructed in accordance with the requirements of the Contract Documents. Upon completion of construction, if the actual quantities show either an increase or a decrease from the quantities stated in the Bid schedule, the Contract unit prices will prevail and are not subject to adjustment.
- .C Payment will not be made for: materials wasted or disposed of in a manner not called for pursuant to the Contract; rejected material of any kind; material damaged or rejected after it has been placed; and material placed outside of the Work limits shown on the Drawings. No compensation will be made for disposing of rejected or excess material.
- .D Whenever Owner performs any portion of the Work at Contractor's request, the cost thereof will be charged against Contractor, and may be deducted from any amount due or to become due from Owner.
- .E Whenever immediate action is required to prevent impending injury, death, or property damage, and precautions which are Contractor's responsibility have not been taken, Owner may, after reasonable attempt to notify Contractor, cause such precautions to be taken and charge the cost thereof to Contractor, or may deduct such cost from any amount due or become due from Owner. Owner's action or inaction given such circumstances shall not be construed as relieving Contractor or its Surety from any liability for such circumstances.
- .F Payment does not relieve Contractor from its Contract obligations pursuant to the Contract; nor is such payment to be construed to be acceptance of any of the Work. Payment shall not be construed as the transfer of ownership of any equipment or materials to Owner. Responsibility of ownership shall remain with Contractor who is obligated to store, protect, repair, replace, rebuild or otherwise restore any fully or partially completed Work for which payment has been made; or replace any materials or equipment required to be Provided pursuant to the Contract which may be damaged, lost, stolen or otherwise degraded in any way before Acceptance of the Work, except as provided in Article 9.05, Use Before Acceptance of this Document 00 72 00.

### **9.02 PROGRESS PAYMENTS**

- .A General. Contractor will be paid for the actual field accepted quantities for the various items of work in accordance with the following provisions and the requirements of Section 01 29 00 (Payment Procedures); however, in no event will the total payment exceed the total Contract Sum.
- .B Schedule of Values (Cost Breakdown). As required by Section 01 29 00 (Payment Procedures), Contractor must prepare and submit for Owner's acceptance a Schedule of Values (Cost Breakdown) of the Work totaling the Contract Sum (Bid amount) including Owner accepted Additive and Deductive Bid items if any. The Schedule of Values must be supported by such data to substantiate its accuracy as Owner may require. There shall be a separate line item consisting solely of Contractor's overhead (including general conditions costs) and for Contractor's profit for the entire project. The dollar values in the Schedule of Values will be

used for determining the amount of each progress payment. A Schedule of Values may be rejected if, in Owner's opinion, any item is unbalanced.

- .C Mobilization Costs. Where Contract Documents provide for payment of mobilization costs, payment for Mobilization will be made by one of two means. Contractor shall select the means applicable to this project when preparing and submitting the Cost Breakdown, pursuant to Section 01 29 00:

Alternate A – Coincides with Mobilization, Alternate A, as defined in Section 01 29 00.1.08.B. Partial payment for "Mobilization" will be made in percentages as follows (less retainage):

Contract Amount Completed	Payment for Mobilization
5 %	50% of amount Bid for Mobilization, or 5% of original Contract amount, whichever is less.
10%	75% of amount Bid for Mobilization, or 7.5% of original Contract amount, whichever is less.
20%	95% of amount Bid for Mobilization, or 9.5% of original Contract amount, whichever is less.
50%	100% of amount Bid for Mobilization, or 10% of original Contract amount, whichever is less.

- .1 If Mobilization payments are based on a percentage of the original Contract amount, no payment for Mobilization will be made after the base Contract amount completed exceeds sixty-five percent (65%).
- .2 If Mobilization payments are based on an amount Bid for Mobilization, upon Completion of all Work on the Project, payment of any amount Bid for Mobilization in excess of ten percent (10%) of the original Contract amount will be paid.

Alternate B – Coincides with Mobilization, Alternate B, as defined in Section 01 29 00.1.08.B. Contractor will include separate line items in the Cost Breakdown or Cost-Loaded construction schedule, as applicable, for Mobilization and Demobilization. Demobilization includes: movement of personnel, equipment, temporary offices, buildings and other facilities, supplies and incidentals off the Project Site, and submission of Project Acceptance submittals, as defined in Section 01 33 00 (Submittal Procedures).

If using Alternate B, separate from Mobilization, the Cost Breakdown or Cost-Loaded construction schedule may have a separate line item for bonds and insurance, which are payable after Contractor demonstrates proof of payment.

- .D Owner may refuse to process Contractor's Payment Request or may withhold all or a portion of payments due Contractor until Contractor has met the requirements of Section 01 32 00.3.05 Official Progress Schedule.
- .E Owner's Project Inspector will review the Record Documents prior to and as a condition of approving each progress payment.
- .F Owner's Representative will establish the monthly pay period end dates. Contractor must base its monthly progress payment period end dates on the dates established by Owner.

- .G Establishing the Work completed for each monthly request for payment is an estimate only, and no inaccuracy or error in said estimates operate to release Contractor or its Sureties from damages arising from such Work or from complying with each and every provision of the requirements of the Contract Documents. Owner has the right to correct any error made in any estimate for payment.
- .H No such estimate or payment is required to be made when, in Owner's judgment, the Work is not proceeding in accordance with the requirements of the Contract Documents, or when in Owner's judgment the total value of the Work done since the last pay estimate amounts to less than five hundred dollars (\$500).
- .I Contractor is not entitled to have any payment made for Work performed so long as any lawful or proper Order concerning the Work or any portion thereof given by Owner to Contractor shall not have been followed.

### **9.03 RETENTIONS**

- .A Owner will retain five percent (5%) of the estimated value of the Work done, which includes the value of materials procured and delivered but not yet used, or procured and stored in accordance with Section 01 29 00 (Payment Procedures), as part security for the fulfillment of the Contract requirements by Contractor, and will pay to Contractor, while carrying on the Work, the balance not retained, as aforesaid, after deducting therefrom all previous payments and all sums to be withheld or retained pursuant to the provisions of the Contract Documents or allowed or required by law. No such estimate or payment shall be construed to be an acceptance of any defective Work or improper materials.
- .B In addition to any remedy authorized by law, all or a portion of the Contract Sum due Contractor and considered necessary by Owner to satisfy pending or reasonably anticipated suits or claims for damages, may be withheld by Owner until disposition has been made of such suits or claims.
- .C Document 00 73 73 (Statutory Requirements), defines Contractor's rights under Public Contract Code Section 22300.

### **9.04 PAYMENTS WITHHELD**

- .A Owner may withhold payment(s) in whole or in part to such extent as may be necessary to protect Owner from loss from but not limited to:
  - .1 Defective work not remedied;
  - .2 third party claims filed or reasonable evidence indicating probable filing of such claims;
  - .3 failure of Contractor to make payments properly to Subcontractors for labor, materials or equipment;
  - .4 reasonable evidence that the Work cannot be completed for the unpaid balance of the Contract Sum, including any Liquidated Damages thereby due;
  - .5 damage to Owner or another contractor, or damage to the Work, or damage to other work or property;
  - .6 reasonable evidence that the Work or designated portions of the Work will not be or had not been completed within the Contract Time.
  - .7 Failure to carry out the Work in accordance with the requirements of the Contract Documents, including failure to make required Submittals;
  - .8 failure to submit certified weekly payrolls;

- .9 Stop Notices filed, as more specifically provided in Document 00 73 73 (Statutory Requirements);
  - .10 failure or refusal of Contractor to fully comply with the Contract requirements; and
  - .11 amounts deemed necessary by Owner to satisfy pending or reasonable anticipated suits or claims for damages.
- .B Whenever Owner withholds any monies otherwise due Contractor, Owner will furnish written notice of the amount withheld and the reasons therefore to Contractor.

**9.05 USE BEFORE ACCEPTANCE (PARTIAL OCCUPANCY OR USE)**

- .A Owner has the right upon reasonable notice to utilize or place into service any item of equipment or other usable portion of the Work before Acceptance of the entire Project. Whenever Owner plans to exercise said right, Owner's Representative will notify Contractor in writing, identifying the specific portion or portions of the Work to be so utilized or otherwise placed into service, hereinafter referred to as "Use Before Acceptance."
- .B Following Owner's written notice of intent but prior to commencing such use, Owner's Representative will make an inspection of the subject equipment or other usable portion of the Work and prepare a list of items to be completed or corrected prior to Substantial Completion.
- .C Owner's will provide a Notice of Use before Acceptance upon taking possession, utilizing or placing into service the subject equipment or other usable portion of the Work. Until Owner's Representative issues such written notification, Contractor is responsible for all care and maintenance of all items or portions of the Work.
- .D Upon Owner's issuance of written notice of Use Before Acceptance, Owner will accept responsibility for the protection and maintenance of all such items or portions of the Work described in the written notice, excepting any injury or damage resulting from Contractor's actions or negligence. Owner may, however, require Contractor to provide continued utility services, heating, and cooling for systems, site security and support, as Owner may direct.
- .E If, by reason of Owner's Use Before Acceptance, the premium for Contractor's bodily injury and property damage insurance is increased, Owner will reimburse Contractor for the additional amount necessarily incurred, allocable to the area and the period of Owner's occupancy, up to the Date of Acceptance of the Work.
- .F Owner's Use Before Acceptance does not constitute Acceptance of the Work, or any portion of the Work, by Owner, nor will it relieve Contractor of responsibility for correcting defective and/or Deficient Work or materials found at any time before Acceptance of the Work or during the Guarantee period after Owner's Acceptance. However, when the Project includes separate buildings, and one or more of the buildings is entirely occupied by Owner, then upon written request by Contractor and by written consent from Owner, the Guarantee period on the building entirely occupied by Owner will commence to run from the date of Owner occupancy of such building or buildings.
- .G Notwithstanding any Use Before Acceptance, Contractor retains full responsibility for fulfillment of all the requirements of the Contract Documents.
- .H Should Owner elect to partially occupy or use portions of the Work prior to Acceptance, Contractor must perform final cleaning for those portions of the Work prior to their being so occupied or used.

**9.06 CONTRACT MILESTONES, SUBSTANTIAL COMPLETION AND FINAL COMPLETION**

- .A Contract Milestones are stages in the progress of the Work. Contract Milestones include Intermediate Milestones, Substantial Completion and Final Completion.

- .1 Contract Documents may use the term “Final Construction Milestone” to refer to Substantial Completion. The terms are synonymous and have the same meaning as stated herein
- .2 Contract Documents may use the term Acceptance, or Final Completion and Acceptance, to refer to Final Completion. The terms are synonymous.
- .B Intermediate Milestones: Intermediate Milestones are a stage(s) in the progress of the Work defined specifically in the Contract Documents as an Intermediate Milestone.
  - .1 The Contract Documents will describe criteria to determine completion of Intermediate Milestones.
  - .2 Unless stated otherwise, however, Intermediate Milestones are subject to all requirements of Section 01 45 00 (Quality Control).
- .C Substantial Completion. Substantial Completion is the stage in the completion of the Work where, except for certain submittals required for Final Acceptance, the Contractor has completed all Work of the Contract Documents and Owner can use the Project, fully and completely, for all intended purposes.
  - .1 Section 01 77 00 (Procedures For Substantial Completion And Final Completion) provides specific detail regarding the required stage of completion of the Work, procedures, certifications, submitted documents and inspections necessary for Substantial Completion.
  - .2 Section 01 77 00 is incorporated here by this reference.
- .D Final Completion.
  - .1 Final Completion and Acceptance is the stage in the completion of the Work where the Contractor has completed all Work and made all required certifications permitting the Owner's Representative to recommend to the County Board of Supervisors that it formally accept the Project.
  - .2 Section 01 77 00 (Procedures For Substantial Completion And Final Completion) provides specific detail regarding the required completion of the Work, procedures, certifications, submitted documents and inspections necessary for Final Completion.
  - .3 Section 01 77 00 is incorporated here by this reference.
  - .4 When this Milestone is achieved, Owner's Representative will recommend to the County's Board of Supervisors that it formally Accept the Work.

#### **9.07 REQUIRED CERTIFICATIONS AND INSPECTIONS TO ACHIEVE CONTRACT MILESTONES, SUBSTANTIAL COMPLETION AND FINAL COMPLETION**

- .A General
  - .1 Contractor's attention is directed to the requirements, form, contents, and copies of Contractor's required certifications, for establishing completion Milestones (Intermediate, Substantial Completion and Final Completion), contained in the Division 1 Specifications, including Section 01 45 00 (Quality Control) and the individual specification sections within Series 01 70 00 (Execution and Closeout) and 01 80 00 (Performance Requirements).
  - .2 Procedures to establish Contract Milestones (Intermediate, Substantial Completion and Final Completion), are considered part of the Work and necessary elements of performance of the Work. These procedures may not be waived and are not subject to substantial compliance. Failure to follow procedures, meet requirements, or to complete this required Work and provide the required services and submittals, will be deemed as a failure to complete the Work of the Milestone.

- .3 Owner may, in its sole discretion, elect to recognize Milestone completion (Intermediate or Substantial Completion) pending completion of minor items of the Work, however, Owner shall have no duty to do so. A condition subsequent to any such election is Contractor's prompt and timely completion of any such remaining minor items and any further conditions Owner may provide in writing. Neither the existence nor the exercise of this right by Owner shall be interpreted as creating any obligation by Owner to consider or grant exceptions to the requirements of the Contract Documents, or as acceptance of incomplete or defective Work, or as waiver of any requirements of the Contract Documents.
  - .4 Delays resulting from Contractor's failure to follow Contract procedures for required certifications and to meet requirements for Milestones (Intermediate, Substantial Completion or Final Completion), shall be treated as inexcusable delay.
  - .5 Owner's "inspections" performed for Intermediate Milestones and/or for Substantial Completion do not relieve the Contractor from complying with the requirements of Section 01 45 00 (Quality Control).
- .B Certification of Milestone Completion By Contractor's Quality Control Manager.
- .1 Contractor's attention is directed to the requirements of Section 01 45 00 (Quality Control).
  - .2 When Contractor has completed the Work of the Contract Documents, necessary to achieve Substantial Completion of the Work or of any Intermediate Milestone identified in the Contract Documents, Contractor shall provide Owner written notice of completion thereof.
  - .3 Contractor's written notice shall be in the form of a certification made by Contractor's Quality Control Manager in conformance with the requirements of Section 01 45 00 (Quality Control) of this Contract, certifying that the Work of the Milestone is complete and requesting a Preliminary Final Inspection.
  - .4 Contractor's attention is directed to the fact that required certification of Milestones, is Milestone-specific.
- .C Preliminary Final Inspection
- .1 Within seven (7) Days of receipt of QC Manager's certification that all Work necessary to achieve Substantial Completion of the Work or of any Intermediate Milestone is complete, Owner's Authorized Representative, and/or Project Manager, Project Inspector, Architect of Record, and other staff, will conduct a Preliminary Final Inspection with the QC Manager and the Project Superintendent.
  - .2 If Owner's Project Manager determines that, based on the results of the Preliminary Inspection, the Incomplete/Deficient work identified is greater in substance and/or volume, than can be appropriately declared as Punch-list, then the Work is not complete enough to complete the Preliminary Final Inspection. The Contractor will be so notified in writing. Contractor must complete the Work and re-initiate procedures for another Preliminary Final Inspection. Any costs to Owner for more than two (2) Preliminary Inspections may be charged to Contractor.
  - .3 If the results of the Preliminary Final Inspection are satisfactory to Owner's Representative, a Punch-list will be prepared and issued to Contractor. Pursuant to Section 01 45 00 (Quality Control), neither Owner's preparation of the Punch List, nor any omission from the Punch-list of items of Incomplete and/or Deficient Work, relieves Contractor from completing all the Work required by the Contract Documents.
- .D Final Inspection



- .1 When the Punch-list generated from the Preliminary Final Inspection is complete the QC Manager must certify that the entire Work of the Milestone, including Punch-list, is complete. Upon delivery of such certification to Owner's Representative, and if Owner's Representative agrees with Contractor's certification, a Final Inspection will occur within ten (10) calendar days of Contractor's delivery of certification of final completion .
- .2 If Owner's Representative determines the Work is deficient, Contractor will again be furnished with a Punch-list identifying the observed deficiencies in the Work. After all deficiencies have been corrected, Contractor must initiate procedures for another Final Inspection. If more than two (2) Final Inspections are required any costs to Owner for additional Final Inspections may be changed to Contractor.
- .3 If the results of the Final Inspection are satisfactory, Owner's Representative will issue Contractor a Milestone Completion letter or Substantial Completion letter as appropriate.
- .4 Contractor's Progress Schedule must include activities for Final Inspection of Milestones and for Substantial Completion.
- .E For each completion Milestone, and for Substantial Completion, Contractor must include activities for conducting the Preliminary Final Inspection, completion of Punch List, and Final Inspection, in Contractor's Progress Schedule.

#### **9.08 ACCEPTANCE OF THE WORK**

- .A Acceptance of the Work will be made by the Board of Supervisors only after Owner's Representative has recommended Acceptance.
- .B After the formal Acceptance of the Work, the Clerk of the Board of Supervisors will record a Notice of Completion.
- .C Determinations by Owner's Representative that the Work is complete or Acceptance of the Work by the Board of Supervisors, or the Director of the Facilities and Fleet Department, shall not change any terms of Contract Documents or prejudice or limit Owner's rights thereunder, including, without limitation, Owner's rights under Article 12.07, Warranty and Guarantees of this Document 00 72 00.
- .D Determinations by Contractor and certifications by Contractor required by the Contract Documents, including without limitation certifications made for inspections, any Intermediate Milestone, Substantial Completion and/or Final Completion, may not and shall not prejudice any rights of Contractor or Owner to enforce terms, warranties, guarantees, service agreements or any other terms within Contractor's subcontracts or purchase orders, or otherwise prejudice Contractor's rights thereunder nor Owner's rights under any assignment thereof.

**END ARTICLE 9 OF DOCUMENT 00 72 00**

## **ARTICLE 10 — PROTECTION OF PERSONS AND PROPERTY**

### **10.01 CARE, CUSTODY AND CONTROL**

- .A Contractor has charge and care of all Work and all materials to be used therein (including materials for which Contractor has received partial payment or materials which have been furnished by Owner) until Acceptance of the Work. Contractor bears the risk of injury, loss, or damage to any part thereof by the action of the elements or from any other cause, whether arising from the performance or nonperformance of the Work, except as otherwise expressly provided.
- .B Contractor must Complete, rebuild, repair, restore, and make good all injuries, losses, or damages to any portion of the Work or the materials by any cause before Completion and Acceptance.
- .C Contractor must Provide suitable drainage and erect such temporary structures as are necessary to protect the Work or materials from damage. Suspension of the Work from any cause whatever will not relieve Contractor of responsibility for the Work and materials as herein specified.
- .D Contractor must properly store materials which have been partially paid for by Owner or which have been furnished by Owner. Such storage by Contractor is on behalf of Owner who shall at all times be entitled to the possession of such materials. Contractor must promptly return such materials to the Project site when requested. Contractor must not dispose of any of the materials so stored except upon Owner's written authorization.

### **10.02 SAFETY PROVISIONS**

- .A Contractor is solely and completely responsible for conditions of the job site, including safety of all persons and property during performance of work. This requirement applies continuously and is not limited to Normal Hours Of Work. No act, service, drawing or construction review, acceptance or other act by Owner, Owner's Project Inspector, Consultant or any other representative of Owner is intended to include review of the adequacy of Contractor's safety measures at or near the Project site, at any place of Fabrication, or anywhere else.
- .B Contractor must take all necessary precautions on the Work for the safety of its workers, of Owner's employees and the public, and must comply with all applicable Federal, State, and local safety laws and codes to prevent accidents or injury to persons on, about, or adjacent to where the Work is being performed.
- .C Contractor must erect and properly maintain at all times, as required by the conditions and progress of the Work, all appropriate safeguards for the protection of workers and the public, and post danger signs warning against construction hazards, such as fire, toxics, pesticides, chemicals, odors, noise, vibration, equipment operations, obstructions, falling objects, falls and all other construction related hazards.
- .D Contractor must designate a responsible member of its organization who will be present on the Project site and who has the duty for prevention of accidents. Prior to starting Work, Contractor must submit a letter to the Owner providing the name and position of the person so designated.

### **10.03 CONFINED SPACE ENTRY PROGRAM**

- .A Contractor must comply with all State and Federal OSHA requirements, and all of Owner's requirements regarding entry into confined spaces including but not limited to the following:
  - .1 Before starting any Work, submit for Owners review and acceptance three (3) copies of a Confined Space Entry Program applying to all existing permit-required confined spaces

identified by Owner in the Contract Documents, or defined by regulations, and any confined spaces identified or created by Contractor or Owner during the Contract Time. Owner has the right to identify additional spaces to be treated as confined spaces by Contractor at any time during the Contract Time, without changing the Contract Sum or Contract Time if such additional spaces were created by Contractor.

- .2 Maintain written records of all entries into confined spaces and all activities conducted in confined spaces.
- .3 Coordinate all entry operations with Owner when both Contractor's personnel and Owner's personnel will be working in or near a confined space in the Project area. Owner will endeavor to give Contractor at least twenty-four (24) hours advance notice of such entry except in unforeseen situations and emergencies.
- .4 Inform Owner in writing at the conclusion of entry operations regarding the permit space program followed and any hazards confronted or created in permit spaces during entry operations.

#### **10.04 PUBLIC SAFETY AND CONVENIENCE**

- .A Contractor must provide for the safety of the public during construction and conduct its operations to minimize the amount of work posing potential hazards to the public.
- .B Contractor must pave pedestrian openings through falsework or Provide full width continuous wood walks and keep all walkways clear. Contractor must protect pedestrians from falling objects and water runoff. Overhead protection for pedestrians must extend not less than four (4) feet beyond the edge of a structure.
- .C Contractor's equipment must enter and leave the Project area via access routes designated or accepted in writing by Owner, and move in the direction of public traffic at all times. All movements on or across public traveled ways must not endanger public traffic.
- .D Contractor must immediately remove any spillage, debris, dirt, or mud resulting from hauling operations along or across any public traveled way.
- .E Contractor must minimize inconvenience or obstruction to the public. When Contractor's operations create a condition hazardous to the public, Contractor must furnish, erect, and maintain such Temporary Fencing, barricades, lights, signs, and other devices as are necessary for direction of the public or to avoid accidents, damage, or injury to the public. Contractor must furnish such flagmen and guards as are necessary to direct the public or to give adequate warning of any hazardous conditions.

#### **10.05 PROTECTION AND RESTORATION OF PROPERTY**

- .A California Civil Code Section 832 provides requirements relating to notification of adjacent property owners (30 Day notification required) and protection of adjacent property when performing excavation that may adversely impact the lateral and subjacent support to adjoining land or structures. In addition to these requirements and any other requirements imposed by law, Contractor must shore up, brace, underpin, and protect as may be necessary, all foundations and other parts of all existing structures adjacent to and adjoining the site of the Work which are in any way affected by the excavations or other operations connected with the Work pursuant to this Contract. Whenever any notice is required to be furnished by Owner or Contractor to any adjoining or adjacent landowner or other party before commencement of any Work pursuant to this Contract, Contractor must provide such notice. Contractor must indemnify and hold Owner harmless from any damages for which Owner may become liable in consequence of such injury or damage to adjoining or adjacent structures and premises.

- .B Contractor must immediately repair any damage, arising from or in consequence of the performance of the Contract, to improvements or property, whether above or below the ground, private or public, within or adjacent to the Project. If, in Owner's opinion, Owner's best interests require such repair to be made before execution of any part of the Work included in this Contract, Owner will so notify Contractor who will delay or discontinue the performance of that part of the Work until the necessary repair has been made. Such delay shall not be considered unavoidable, and no extension of the Contract Time shall be allowed.
- .C When Ordered by Owner to make any repair, Contractor must start work thereon within four (4) hours and must prosecute the same with diligence to completion. Upon Contractor's failure to comply with such Order, or upon Contractor's failure to make immediate Emergency repairs which are necessary in the best interests of Owner or the public, Owner may cause such repairs to be made and deduct the costs thereof from any money due, or that may become due Contractor.
- .D In an Emergency affecting the safety of life or property, including adjoining property, Contractor is authorized to act at its discretion, without special instructions or authorization from Owner, to prevent such threatened loss or injury, and Contractor must act whether or not instructed by Owner. Contractor must maintain adequate protection against damage to life and property involved in Project and on property adjacent thereto until Acceptance and must Provide all necessary guards, barricades, night lights, facilities, tools, equipment, materials and other needed or required protective devices.
- .E Contractor will until Acceptance maintain adequate protection of all its Work and work performed by others pursuant to the Contract Documents from damage, loss, or defacement. Contractor must repair or replace any such damage and remove any damaged or defaced material or equipment from the premises at no extra cost to Owner except as may be due directly to errors in the Contract Documents or caused by Owner.
- .F Contractor must ensure the limits of Work to be free of graffiti or other similar defacements during the entire Contract Time; if such defacement occurs, Contractor must promptly remove, repair, or correct the affected area(s). Contractor must protect all exposed finished surfaces within the limits of Work (both temporary and final), with anti-graffiti coatings, and maintain such protection continuously during the entire Contract Time.

#### **10.06 CONTRACTOR'S DUTIES AND RESPONSIBILITIES AFTER ACCEPTANCE**

- .A After Acceptance of the Work Contractor is relieved of the duty of maintaining and protecting the entire Work, and Contractor is not required to perform any further Work thereon, except as otherwise required by law or the Contract Documents.
- .B Contractor is relieved of responsibility for injury to persons or property or damage to the Work that occurs after Owner's Acceptance, provided that such injury/damage is not in any way caused by Contractor.

**END ARTICLE 10 OF DOCUMENT 00 72 00**

## **ARTICLE 11 — INDEMNIFICATION AND INSURANCE**

### **11.01 INDEMNIFICATION AND INSURANCE REQUIREMENTS**

.A Indemnification and Insurance requirements for projects less than \$2,000,000 are set forth in Exhibit B-1, "Construction Contracts between \$45,000 and \$2,000,000."

- .1 Exhibit B-1 is incorporated herein as though set forth in full.
- .2 Exhibit B-1 is located in Document 00 73 16.1 (Indemnification and Insurance Requirements for Projects between \$45,000 and \$2,000,000)

.B Indemnification and Insurance requirements for projects over \$2,000,000 and under \$5,000,000 are set forth in the County's Insurance Exhibit B-1A.

- .1 Exhibit B-1A is incorporated herein as though set forth in full.
- .2 Exhibit B-1A is located in Document 00 73 16.2 (Indemnification and Insurance Requirements for Construction Contracts between \$2,000,000 and \$5,000,000.).

.C Indemnification and Insurance requirements for projects over \$5,000,000 shall be specifically developed and set forth in Document 00 73 16.3, indemnification and insurance requirements that are specific to the Project.

### **11.02 REQUIREMENTS FOR CHANGES**

- A. Changes to terms and conditions within Document 00 73 16 and changes of any type that change, limit, or may impair Contractor-provided insurance coverage required by Document 00 73 16, or recoverability by the County of loss, cost, damage, expense or liability for which such insurance would otherwise provide insurance coverage, require a written Contract Modification bearing the additional signature of the County Risk Manager or authorized designee approving such Contract Modification as to form. Otherwise, any such change order is void.
- B. No term of this Contract nor of any change orders to this Contract, may be construed as expressly or impliedly impairing any Contractor-provided insurance coverage required by Document 00 73 16, or the recoverability by County of any loss, cost, damage, expense or liability for which such insurance would otherwise provide insurance coverage. A written Contract Modification bearing the additional signature of the County Risk Manager or authorized designee approving such change order as to form, shall be deemed the exclusive means for the making of any such changes.

**END ARTICLE 11 OF DOCUMENT 00 72 00**

## **ARTICLE 12 — UNCOVERING AND CORRECTION OF WORK**

### **12.01 OWNER'S QUALITY ASSURANCE**

- .A Owner, Owner's Consultants, and Owner's Project Inspector as appropriate, will conduct periodic quality assurance inspections to determine Contractor's compliance with its QC Program and with the requirements of the Contract Documents. If Owner observes Work that appears non-compliant with the requirements of the Contract Documents, Owner has the authority to reject the Work.
- .B Whenever Owner considers it necessary or advisable for implementation of the intent of the Contract Documents, Owner may require additional inspection and testing of the Work, whether or not such Work is Fabricated, Installed, or completed. If Owner notifies Contractor of any observed noncompliance with the requirements of the Contract Documents, Contractor must take immediate corrective action upon receipt of such notice. Such notice, when delivered to Contractor at the Project Site, is sufficient for the purpose of notification.

### **12.02 CONTRACTOR'S QUALITY CONTROL**

- .A Section 01 45 00 (Quality Control) of this Contract provides required elements of Contractor's Quality Control Program. Contractor is responsible for identifying and managing Incomplete and Deficient work. Incomplete and Deficient work includes, but is not limited to: non-compliance items, re-work items, and non-conforming tests, pursuant to Section 01 45 00 (Quality Control); deficiencies relating to inspections by the Building Official, pursuant to Section 01 81 00 (if included in this Contract); and items of work not complete per the Contract Documents.

### **12.03 TESTS AND INSPECTIONS**

- .A Contractor must at all times permit Owner, its agents, officers, employees, Consultants and representatives to visit the Project Site and inspect the Work, including shops where Work is in preparation. This obligation includes maintaining proper facilities and safe access for such inspection. When the Contract Documents require a portion of the Work be tested, such portion of Work must not be covered up until inspected and accepted by Owner. Contractor is solely responsible for notifying Owner's Project Inspector where and when the Work will be ready for inspection and testing. Should any Work be covered without the required testing and acceptance, such Work must be uncovered and recovered at Contractor's expense.
- .B Contractor shall give Owner and all inspection personnel timely notice of readiness of Work for all required inspections, tests or approvals, shall schedule and coordinate the same, and shall cooperate with inspection and testing personnel to facilitate required inspections or tests. Contractor shall also coordinate, schedule and give adequate notice to the appropriate inspection personnel of any Work that can only be inspected as it is placed or assembled (for example, concrete or masonry work), to enable the constant presence of such inspection personnel during such Work.
- .C If applicable laws or regulations of any public body having jurisdiction (Authority with Jurisdiction) require any Work (or part thereof) specifically to be inspected, tested or approved by an employee or other representative of such public body, Contractor shall assume full responsibility for arranging and obtaining such inspections, tests or approvals, and furnish Owner with the required certificates of inspection, or approval. Owner will pay the cost of initial testing and Contractor shall pay all costs in connection with any follow-up or additional testing. Contractor shall also be responsible for arranging and obtaining and shall pay all costs in connection with any inspections, tests or approvals required for the acceptance of materials or

equipment to be incorporated in the Work, or of materials, mix designs, or equipment submitted for approval prior to Contractor's purchase thereof for incorporation in the Work.

- .D If Owner determines that portions of the Work require additional testing, inspection or acceptance not included in the requirements of the Contract Documents, Owner will Direct Contractor, in writing, to make arrangements for additional testing, inspection or acceptance by an entity acceptable to Owner, and Contractor must give forty-eight (48) hours written notice to Owner of where and when tests and inspections will be conducted so that Owner may observe the procedures. Owner will bear the costs except as otherwise provided in Article 12.03 of this Document 00 72 00.
- .E If procedures for additional testing, inspection or acceptance required by Article 12.03 of this Document 00 72 00 reveal failure of a portion(s) of the Work to comply with the requirements of the Contract Documents, Contractor will bear all costs made necessary by such failure(s) including those of repeated procedures and compensation for Owner's services and expenses.
- .F Certificates of testing, inspection, acceptance, or approval will, unless otherwise required by the Contract Documents, be secured by Contractor and submitted to Owner's Project Inspector within two (2) Days after completion of each test, inspection, acceptance or approval.
- .G In order that Owner may determine whether Contractor has complied or is complying with requirements of Contract Documents not readily enforceable through inspection and tests of Work and materials, Contractor shall at any time, when requested, submit to Owner properly authenticated documents or other satisfactory proofs of compliance with all applicable requirements.
- .H Contractor is responsible for inspections of portions of its Work and the work of others already completed to determine that such portions are in proper condition to receive subsequent Work.
  - .1 If Contractor determines that Work performed on the Project does not comply with the requirements of the Contract Documents, Contractor must repair or replace such defective Work at Contractor's sole expense.
  - .2 If Contractor determines that completed work of others is not in proper condition to receive its Work, Contractor must immediately notify Owner in writing and must not proceed with the affected portion of its Work without Direction from Owner.
- .I Defective Materials
  - .1 All materials that Owner has determined do not conform to the requirements of the Contract Documents will be rejected whether in place or not. Contractor must remove all rejected materials immediately from the Project site, unless otherwise permitted by Owner's Representative. No rejected material, or repaired defective material, shall be used in the Work, without Owner's written acceptance.
  - .2 Upon Contractor's failure to comply promptly with any Order of Owner made pursuant to the provisions in Article 12.03.I, Defective Materials, of this Document 00 72 00, Owner has the right and authority to cause the removal and replacement of rejected material and to deduct the cost thereof from any monies due or to become due to Contractor.
- .J Inspection at Source of Supply
  - .1 Owner may inspect the production of any material, or the Manufacture of any product at the source of supply. Such inspection, however, will not be undertaken until Owner is assured of the cooperation and assistance of both Contractor and producer. Owner or its authorized representatives shall have free entry at all times to the parts of the plant Manufacturing or producing such materials. Adequate facilities must be provided free of charge to make the

necessary inspections. Owner assumes no obligation to inspect materials at source of supply.

**.K Certificate of Compliance**

- .1 Owner may permit the use of certain materials or assemblies before sampling and testing if accompanied by a Certificate of Compliance stating that the materials comply in all respects with the requirements of the Contract Documents. The Manufacturer of the material or assembly must sign the Certificate of Compliance. A Certificate of Compliance must be submitted with each lot of material delivered to the Project and the lot so certified must be clearly identified in the Certificate of Compliance.
- .2 Owner may sample and test all materials used pursuant to a Certificate of Compliance at any time. The fact that material is used pursuant to a Certificate of Compliance does not relieve Contractor of responsibility for incorporating material in the Work which conforms to the requirements of the Contract Documents; and any such material not conforming to such requirements will be subject to rejection whether in place or not.
- .3 Owner reserves the unrestricted right to refuse to permit the use of material pursuant to a Certificate of Compliance.
- .4 Owner will set the form of the Certificate of Compliance and its disposition.

**.L Testing**

- .1 Contractor must furnish without cost to Owner, adequate samples of all materials necessary for testing.
- .2 Tests must be by a Laboratory accepted by Owner and paid for by Contractor.
- .3 Contractor must pay all costs of all tests.
- .4 If a test fails, Contractor must pay for subsequent tests until passage.
- .5 The Laboratory must submit certified copies of all test reports directly to Owner and Contractor by 10 a.m. of the second workday after performing each test.

**12.04 GENERAL**

- .A Contractor must notify Owner two (2) Days prior to covering any Work.
- .B If a portion of the Work is covered prior to Owner's review, it must, if requested in writing by Owner, be uncovered for Owner observation and replaced at Contractor's expense without change in the Contract Time.

**12.05 CORRECTION OF WORK AND CORRECTIVE ACTION PLANS**

- .A Contractor must promptly correct Work rejected by Owner or Work failing to conform to the requirements of the Contract Documents, whether or not Fabricated, Installed or completed. Contractor bears the costs of correcting such rejected Work, including additional testing and inspections required, and compensation for Owner services and expenses made necessary thereby.
- .B Contractor may take one of two actions to remediate Work that does not conform to the Contract Documents:
  - .1 Contractor may, at its own expense, remove defective Work and install Work that complies with the Contract Documents; or
  - .2 Contractor may develop and submit, as a Submittal (not an RFI), a Corrective Action Plan (CAP). The CAP describes possible solution(s) to address the defective Work including "work-arounds" that would leave the defective Work in place. To facilitate Owner's review



and possible acceptance of the CAP Contractor may employ the services of a licensed Engineer or Architect to develop, sign and stamp the CAP for submission to Owner.

- .a Alternatively Contractor may submit a CAP that is more general in description and substance and leave it to the Architect of Record (AOR) to evaluate and develop a formal solution. Contractor shall compensate the AOR for costs incurred via Owner issuance of a deductive change order to the Contract.
- .3 In the event Owner determines that a practical solution is not available that would enable the defective Work to be left in place, then Contractor must remove the defective Work and build per the Contract Documents.
- .C Notwithstanding Article 12.05.B.2 of this Document 00 72 00, in the event of an Emergency constituting an immediate hazard to the health or safety of Owner's employees, agents, representatives, property, or licensees, Owner may undertake, at Contractor's expense and without prior notice, all work necessary to correct such hazardous condition(s) when it was caused by work of Contractor not being in accordance with requirements of the Contract Documents.
- .D Contractor must remove from the Project site portions of the Work that are not in accordance with the requirements of the Contract Documents, and are neither corrected by the Contractor nor accepted by the Owner.
- .E If Contractor fails to correct nonconforming Work, as per Article 12.05.B.2 of this Document 00 72 00, or fails to remove nonconforming work, as per Article 12.05.B.1 of this Document 00 72 00, Owner may correct or remove the nonconforming Work per Article 2.05 (Owner's Right to Carry Out the Work) and/or Article 12.06 (Acceptance or Correction of Nonconforming Work by Owner) of this Document 00 72 00. Owner may direct Contractor to correct any Defective Work or remove it from the Project site and replace it with Work that is not defective and satisfactorily correct or remove and replace any damage to other Work or the work of others resulting from the correction or removal. Contractor shall be responsible for any and all claims, costs, losses and damages caused by or resulting from such correction or removal.
- .F If Contractor does not submit a Corrective Action Plan or proceed with correction or removal of nonconforming Work, within such time fixed by the Contract Documents or written notice from Owner, Owner may remove and store the salvable materials, articles and/or equipment at Contractor's expense. If Contractor does not pay all costs of such removal and storage within fourteen (14) Days after written notice, Owner may, upon fourteen (14) additional Days written notice, sell such materials articles and/or equipment at an auction or private sale, and shall account for the proceeds thereof, after deducting costs and damages that would have been borne by Contractor, including compensation for Owner services and expenses made necessary thereby. If the proceeds of a sale do not cover all costs that Contractor would have borne, the Contract Sum will be reduced by the deficiency. If payments then or thereafter due Contractor are not sufficient to cover such amount, Contractor must pay the difference to Owner.
- .G Contractor bears the cost of correcting destroyed or damaged Work, which is caused by Contractor's correction, or removal of Work that is not in accordance with requirements of the Contract Documents, including work performed by Owner or separate contractors that is damaged or destroyed by Contractor during the Contract Time or Guarantee period.
- .H Nothing contained in this Article 12.05, Correction of Work and Corrective Action Plans, of this Document 00 72 00, establishes a period of limitation with respect to other obligations that the Contractor might have in the Contract Documents. Establishment of the Warranty/Guarantee period(s), as described in Article 12.07, Warranty and Guarantees of this Document 00 72 00, relates only to the specific obligation of Contractor to correct the Work, and has no relationship

to the time within which the obligation to comply with requirements of the Contract Documents may be sought to be enforced, nor to the time within which proceedings may be commenced to establish Contractor's liability with respect to Contractor's obligations other than specifically to correct the Work.

#### **12.06 ACCEPTANCE OR CORRECTION OF NONCONFORMING WORK BY OWNER**

- .A If Owner prefers to accept any or all of the Work that is not in accordance with requirements of the Contract Documents, Owner may do so instead of requiring its correction and/or removal, in which case the Contract Sum will be reduced as appropriate and equitable. Such adjustment shall be effected whether or not Final Payment to Contractor has been made.
- .B Owner may accept Defective Work. Contractor shall pay all claims, costs, losses and damages attributable to Owner's evaluation of and determination to accept such Defective Work. If Owner accepts any Defective Work prior to final payment, a Change Order will be issued incorporating the necessary revisions in the Contract Documents with respect to the Work and the Contract Sum. If the parties are unable to agree to the amount of an appropriate decrease in the Contract Sum, Owner may deduct from moneys due Contractor, all claims, costs, losses, damages, expenses and liabilities attributable to the Defective Work. If Contractor disagrees with Owner's calculations, Contractor may pursue a dispute under Document 00 73 83 (Dispute Resolution). If Owner accepts any Defective Work after final payment, Contractor shall pay to Owner, an appropriate amount as determined by Owner.
- .C Owner may correct and remedy deficiency if, after five (5) Days' written notice to Contractor, Contractor fails to correct Defective Work or to remove and replace rejected Work in accordance with this Article 12; or provide a plan for correction of Defective Work acceptable to Owner; or perform Work in accordance with Contract Documents. In connection with such corrective and remedial action, Owner may exclude Contractor from all or part of the Project Site; take possession of all or part of Work and suspend Contractor's Work related thereto; take possession of all or part of Contractor's tools, appliances, construction equipment and machinery at the Project Site; and incorporate in Work any materials and equipment stored at the Project Site or for which Owner has paid Contractor but which are stored elsewhere. Contractor shall allow Owner, its representatives, agents, employees, and other contractors and Owner's consultants access to the Project Site to enable Owner to exercise the rights and remedies under this Article 12. Contractor shall be responsible for all claims, costs, losses, damages, expenses and liabilities incurred or sustained by Owner in exercising such rights and remedies. A Change Order will be issued incorporating the necessary revisions in the Contract Documents with respect to Work and the Contract Sum. If the parties are unable to agree to the amount of an appropriate decrease in the Contract Sum, Owner may deduct from moneys due Contractor, all claims, costs, losses and damages caused by or resulting from the correction or removal. If Contractor disagrees with Owner's calculations, Contractor may pursue a dispute under Document 00 73 83 (Dispute Resolution).

#### **12.07 WARRANTY AND GUARANTEES**

- .A Owner's Acceptance does not relieve Contractor of responsibility for faulty materials or workmanship or of complying with the requirements of Warranties and Guarantees.
- .B Neither the final Acceptance, nor payment, nor any provision in the Contract Documents relieves Contractor of responsibility for faulty materials or workmanship.
- .C Contractor must Guarantee all workmanship and materials for a period of one year, or as specified in the technical sections of the Contract Documents (specifications), from and after the Date of Acceptance of the Work by the Board of Supervisors.

- .D Contractor may also be required to furnish a written Guarantee covering all or certain items of Work for longer periods of time from the Date of Acceptance of the Contract. The Work to be Guaranteed, the form, and the time limit of the Guarantee will be specified in the Contract Documents. Said Guarantee must be signed and submitted to Owner before Acceptance of the Work.
- .E The Warranty/Guarantee period begins at the Date of Acceptance of the Work by the Board of Supervisors.
- .F In addition to any other warranties in this contract, Contractor warrants, except as provided in paragraph J of this clause, that work performed under this Contract conforms to the Contract requirements and is free of any defect in equipment, material, or design furnished, or workmanship performed by Contractor or any subcontractor or supplier at any tier.
- .G This warranty shall continue for a period of one (1) year from the date of final acceptance of the work by the County Board of Supervisors. If, pursuant to Article 9.05 (Use Before Acceptance) of this Document 00 72 00, Owner takes possession of any part of the work before final acceptance, this warranty shall continue for a period of one (1) year from the date Owner takes possession the specific Work identified pursuant to Article 9.05 of this Document 00 72 00.
- .H Contractor shall remedy at Contractor's expense any failure to conform, or any defect. In addition, Contractor shall remedy at Contractor's expense any damage to Owner-owned or controlled real or personal property, when that damage is the result of:
  - .1 Contractor's failure to conform to contract requirements; or
  - .2 any defect of equipment, material, workmanship, or design furnished.
- .I Contractor shall restore any work damaged in fulfilling the terms and conditions of this clause. Contractor's warranty with respect to work repaired or replaced will run for one (1) year from the date of repair or replacement.
- .J With respect to all warranties, express or implied, from subcontractors, manufacturers, or suppliers for work performed and materials furnished under this contract, Contractor shall:
  - .1 obtain all warranties that would be given in normal commercial practice;
  - .2 require all warranties to be executed, in writing, for the benefit of Owner, if directed by Owner's Representative (OAR); and
  - .3 enforce all warranties for the benefit of Owner, if directed by the OAR.
- .K For guaranties exceeding one (1) year, Contractor's co-guarantor obligation shall apply only to the extent the guaranty involves water-tightness (above grade or below grade) or any type of moisture intrusion. Otherwise, any guaranty exceeding one (1) year provided by the Supplier or manufacturer of any equipment or materials used in the Project shall be extended for such term. Contractor expressly agrees to supply Owner with all warranty and guaranty documents relative to equipment and materials incorporated in the Project and guaranteed by their Suppliers or manufacturers, and reasonably assist Owner in enforcing such warranties and guaranties throughout their respective terms.
- .L Unless a defect is caused by the negligence of Contractor or subcontractor or supplier at any tier, Contractor shall not be liable for the repair of any defects of material or design furnished by Owner nor for the repair of any damage that results from any defect in Owner-furnished material or design.
- .M This warranty shall not limit Owner's rights or remedies otherwise available at law, including without limitation, remedies with respect to latent defects, gross mistakes, or fraud, as may be

discovered at a later date and for which any period of limitation will only start to run upon discovery of the defect and its cause.

- .N Contractor must repair or replace all defective Work, together with any other Work affected by the repair or replacement during said Guarantee period without expense whatsoever to Owner.
- .O The aforesaid one-year Warranty/Guarantee period does not in any way limit or waive Owner's rights to legal recourse for latent construction defects. Nor does said one-year Warranty/Guarantee period have any effect on the operation of California Civil Code Section 337.15 for latent defects or California Civil Code Section 337.1 for patent defects. Subject to Civil Code Sections 337.1 and 337.15, the period of limitations otherwise applicable at law, shall commence upon actual discovery of a latent defect and its cause.
- .P Approximately ninety (90) Days before completion of the entire Work of the Project, Contractor must meet with Owner regarding Warranty/Guarantee requirements. Owner will establish communication procedures for notifying Contractor of Warranty defects, priorities regarding the type of defect, time required for Contractor response, and other details deemed necessary by Owner for execution of the Warranty/Guarantee.
- .Q If, following installation of any equipment or facilities furnished by Contractor, defects requiring correction by Contractor are found, Owner shall have the right to operate such unsatisfactory equipment or facilities and make reasonable use thereof until the equipment or facilities can be shut down for correction of defects without injury to Owner.

**END ARTICLE 12 OF DOCUMENT 00 72 00**

## **ARTICLE 13 — LEGAL AND MISCELLANEOUS PROVISIONS**

### **13.01 NOTICE**

- .A Any notice from one party to the other, as distinguished from ordinary project administration, must be dated and signed by the party giving such notice or by a duly authorized representative of such party. No notice is effective for any purpose unless served in the following manner:
  - .1 If the notice is provided to Owner, it must be given in the manner required by the Contract Documents and also by personal delivery to Owner's Authorized Representative or by depositing the same in the United States mail, enclosed in a sealed envelope, addressed to the Clerk of the Board of Supervisors at the address stated in the Notice to Bidders, first class postage prepaid.
  - .2 If the notice is provided to Contractor, it must be given in the manner required by the Contract Documents and also by personal delivery thereof to Contractor, or to Contractor's Authorized Representative at the Project Site, or by depositing the same in the United States mail, enclosed in a sealed envelope, addressed to Contractor at its regular place of business or at such other address as may have been established for the conduct of the Work, first class postage prepaid.
  - .3 If the notice is provided to the Surety or any other person, by personal delivery to such Surety or by overnight mail or by depositing the same in the United States mail, enclosed in a sealed envelope, addressed to such Surety or person at the address of such Surety or person as stated in the Bond documents.
- .B Deposit of notice in the United States mail will be deemed effective on the date of receipt thereof.

### **13.02 GOVERNING LAW**

- .A This Contract will be interpreted and enforced in accordance with the laws of the State of California. Pursuant to California Code of Civil Procedure Section 394, proper venue for legal action arising out of this Agreement is in the County of Santa Clara. Both parties hereto agree that personal and subject matter jurisdiction is proper in Santa Clara County, California.

### **13.03 REMEDIES AND CONTRACT INTEGRATION**

- .A Subject to Contract Documents provisions regarding Dispute Resolution (Document 00 73 83), and subject to the limitations therein, the exclusive jurisdiction and venue for resolving all claims, counter-claims, disputes and other matters in question between Owner and Contractor arising out of or relating to Contract Documents, any breach thereof or the Project shall be the Superior Court of the State of California for County of Santa Clara. All Owner remedies provided in the Contract Documents shall be taken and construed as cumulative and not exclusive; that is, in addition to each and every other remedy herein provided; and in all instances Owner shall have any and all other equitable and legal rights and remedies which it would have according to law.
- .B The Contract Documents, any Contract Modifications and Change Orders shall represent the entire and integrated agreement between Owner and Contractor regarding the subject matters hereof and thereof and shall constitute the exclusive statement of the terms of the parties' agreement. The Contract Documents, and any Contract Modifications, shall supersede any and all prior negotiations, representations or agreements, written or oral, express or implied, that relate in any way to the subject matter of the Contract Documents or written Modifications.

- .C Owner and Contractor represent and agree that, except as otherwise expressly provided in the Contract Documents, they are entering into the Contract Documents and any subsequent written Contract Modification in sole reliance upon the information set forth or referenced in the Contract Documents or Contract Modifications and the parties are not and will not rely on any other information.
- .D Either party's waiver of any breach or failure to enforce any of the terms, covenants, conditions or other provisions of the Contract Documents at any time shall not in any way affect, limit, modify or waive that party's right thereafter to enforce or compel strict compliance with every term, covenant, condition or other provision hereof, any course of dealing or custom of the trade or oral representations notwithstanding.

#### **13.04 LIMIT OF LIABILITY**

- .A OWNER, AND EACH OF ITS OFFICERS, BOARD MEMBERS, EMPLOYEES, CONSULTANTS AND AGENTS INCLUDING, BUT NOT LIMITED TO, ARCHITECT/ENGINEER AND OWNER'S REPRESENTATIVE, SHALL HAVE NO LIABILITY TO CONTRACTOR FOR SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES, EXCEPT TO THE LIMITED EXTENT THAT THESE CONTRACT DOCUMENTS OR APPLICABLE PUBLIC CONTRACTING STATUTES MAY SPECIFY THEIR RECOVERY. CONTRACTOR EXPRESSLY RELEASES SUCH CLAIMS. THIS LIMIT AND RELEASE APPLIES TO CLAIMS HOWEVER DENOMINATED OR DERIVED, WHETHER IN CONTRACT, NEGLIGENCE, STATUTE OR OTHER TORT.

#### **13.05 SEVERABILITY**

- .A Should any part of this Agreement between Owner and Contractor be held to be invalid, illegal, or unenforceable in any respect, such invalidity, illegality, or unenforceability shall not affect the validity of the remainder of the Agreement which shall continue in full force and effect, provided that such remainder can, absent the excised portion, be reasonably interpreted to give the effect to the intentions of the parties.

#### **13.06 SURVIVAL**

- .A The provisions of the Contract which by their nature survive termination of the Contract or Final Completion, including all warranties, indemnities, payment obligations, and Owner's right to audit Contractor's books and records, shall remain in full force and effect after Final Completion or any termination of the Contract.

#### **13.07 CONTRACTOR'S USE OF COMPUTER SOFTWARE**

- .A All representations, warranties, and covenants contained in the Contract, or in any instrument, certificate, exhibit, or other writing intended by the parties to survive the Contract, shall survive the termination or expiration of the Contract, including but not limited to all terms (1) providing for indemnification of County; (2) relating to the California Public Records Act; (3) relating to County Data; and (4) relating to Contractor's obligations upon termination or expiration of this Contract.

#### **13.08 RIGHTS IN LAND AND IMPROVEMENTS**

- .A Nothing in the Contract shall be construed as allowing Contractor to make any arrangements with any person to permit occupancy or use of any land, structure, or building within the physical limits of the Project for any purpose whatsoever, either with or without compensation, nor act in conflict with any agreement between Owner and any owner, former owner, or tenant of such land, structure, or building.

- .B Contractor must not occupy Owner's property outside the Project limits as shown on the Plans or on maps available in Owner's offices, unless Contractor enters into a written agreement with Owner.

#### **13.09 AUDITS AND ACCESS TO RECORDS**

- .A Contractor must maintain all books, records, documents, electronic media, and other evidence directly pertinent to the performance of the Work in accordance with generally accepted accounting principles and practices consistently applied. Contractor must also maintain all financial information and data used by the Contractor in the preparation or support of any cost submission, including Contractor's Bid estimate, any Change Order, Dispute, Claim, Pay Application, or other request for equitable adjustment. Owner and its representatives will have access upon twenty-four (24) hours advanced written notice, at all times during normal business hours, to all Contractors books, summary reports, records, accounts, estimates, documents, detailed financial information, certified payroll records, and all other relevant information and documentation for the purposes of inspection, audit, and copying. Contractor will, at no cost to Owner, provide proper facilities for such access, inspection and copying purposes.
- .B Contractor agrees to include and make the requirements of Article 13.09.A of this Document 00 72 00 applicable to all Subcontracts of any tier or purchase orders of any tier in excess of ten thousand dollars (\$10,000), at any tier.
- .C Audits conducted pursuant to Article 13.09 of this Document 00 72 00 will be in accordance with general accepted auditing standards and established procedures and guidelines of the reviewing or audit agency.
- .D Contractor agrees to provide all information and reports resulting from access to records to Owner and other affected parties.
- .E Records must be maintained and made available during the performance of the Work and for five (5) years after Final Payment, and until final settlement of all Disputes, Claims, or litigation, whichever occurs later. In addition, those records which relate to any portion of this Contract, to any Change Order, to any Dispute, to any litigation, to the settlement of any Claim arising out of such performance, or to the cost or items to which an audit exception has been taken, must be maintained and made available until Final Payment or final resolution of such Dispute, litigation, Claim, or exception, whichever occurs later.
- .F The right of access provisions of Article 13.09 of this Document 00 72 00 applies to all financial records pertaining to this Contract:
  - .1 to the extent the records pertain directly to Contract performance;
  - .2 to the extent required for verification of the costs incurred where such costs are the basis for billings pursuant to this Contract including Contract Modifications;
  - .3 to the extent there is any indication of violation of the California False Claims statute or that fraud, gross abuse, or corrupt practices may be involved; and
  - .4 if the Contract is terminated for default or convenience.
- .G Access to records is not limited to the required retention periods. Owner's Representative or designee will have access to records at any reasonable time for as long as the records are maintained. This right of audit exists in favor of the State of California, and the Federal Government to the extent this Contract is funded by federal sources.

#### **13.10 ASSIGNMENT**

- .A Contractor binds Contractor, Contractor's partners, successors, assigns and legal representatives to Owner in respect to covenants, agreements and obligations contained in the

Contract Documents. Contractor must not assign the Contract as a whole or in part without written consent of Owner. If Contractor makes such an assignment without Owner's written consent, Contractor will remain legally responsible for all Contractor's obligations in the Contract Documents.

- .B No assignment by Contractor will be valid unless it contains a provision that the funds to be paid to the assignee pursuant to the assignments are subject to prior claims for payment for services rendered or material supplied for performance of the Work called for pursuant to the Contract Documents in favor of all persons, firms, or corporations rendering such services or supplying such materials.
- .C Owner will not consent to an assignment that would relieve Contractor or Contractor's Surety(s) of their responsibilities pursuant to the Contract.
- .D Subcontracts, purchase orders, and rental agreements entered into by Contractor must contain provisions permitting assignment to Owner, and providing for termination pursuant to the terms of this Agreement. To the extent that Owner elects to take legal assignment, Contractor must execute and deliver all documents and take all such steps, including the legal assignment of such contracts and exercise other contractual rights of Contractor, as Owner may require for the purpose of fully vesting in Owner the rights and benefits of Contractor pursuant to such contracts.
- .E Contractor may assign moneys due or to become due pursuant to the Contract, through an amendment to the Contract. Any assignment of moneys earned by Contractor is subject to all proper withholdings and Retention in favor of Owner provided for in the Contract Documents. All moneys withheld, whether assigned or not, are subject to being used by Owner to the extent permitted by law, for the Completion of the Work in the event that Contractor is in default of the Contract.

#### **13.11 NON-WAIVER**

- .A Neither Acceptance of, nor payment for the Work or any part thereof, nor any extension of the Contract Time, nor any possession or use by Owner, will operate as a waiver of any of the provisions of the Contract, nor will a waiver of any breach of the Contract be held to be a waiver of any other or subsequent breach.
- .B Conformance with any provisions in one part of the Contract Documents will not relieve Contractor from its responsibilities as set forth elsewhere in the Contract Documents.
- .C Inspection by Owner shall not relieve Contractor of its obligation to have furnished material and workmanship in accordance with Contract Documents. Payment for Work completed through periodic progress payments or otherwise shall not operate to waive Owner's right to require full compliance with Contract Documents and shall in no way be deemed as acceptance of the Work paid therefor. Contractor's obligation to complete the Work in accordance with Contract Documents shall be absolute, unless Owner agrees otherwise in writing.
- .D Inspection by Owner or its authorized agents or representatives, any order or certificate for the payment of money, any payment, acceptance of the whole or any part of Work by Owner, any extension of time, any verbal statements on behalf of Owner or its authorized agents or representatives shall not operate as a waiver or modification of any provision of the Contract Documents, or of any power reserved to Owner herein or therein or any right to damages provided in the Contract Documents. Any waiver of any breach of the Contract Documents shall not be held to be a waiver of any other subsequent breach.



- .E All estimates and payments made, including the final estimate and payment, are subject to correction and adjustment for clerical errors in the calculations involved in the determination of quantities and payments. Contractor and Owner agree to pay to the other any sum hereby due.
- .F Making of final payment by Owner to Contractor, and by Contractor to Subcontractors, shall not be construed and waiver or limitation of rights regarding any failure of Work or any component thereof to comply with the requirements of the Contract Documents or of special warranties required by the Contract Documents. Nor may final payment be construed and waiver or limitation of rights in the event of unknown or latent defects or unknown items of incomplete Work subsequently discovered. Nor may final payment be construed and waiver or limitation of rights under any insurance coverage required to remain in force after final payment.
- .G References throughout the Contract Documents of the non-waiver principles in this Part 13.11 do not dilute their application to all terms and conditions of the Contract Documents.

### **13.12 DUTY OF CARE**

- .A In exercising its responsibilities and authorities under the Contract Documents, Owner and Owner's Representative, do not assume any duties or responsibilities to any Subcontractor or supplier and does not assume any duty of care to Contractor, Contractor's Subcontractors or suppliers. Except as expressly set forth in the Contract Documents, in exercising their respective responsibilities and authorities under the Contract Documents, neither Architect/Engineer nor any Owner consultant assume any duties or responsibilities to any Subcontractor, sub-Subcontractor or supplier nor assume any duty of care to Contractor or any Subcontractor, sub-Subcontractor or suppliers.

### **13.13 AUTHORITY LIMITS**

- .A Authority Limits set forth herein establish levels of authority and levels of approval required for administration of this Contract. There shall be no express, implied or ostensible authority inconsistent with the levels of authority and approval established herein.
- .B The Board of Supervisors retains all authority vested in it by law. Among other things the Board has the authority, specifically or generally, to approve, reject or direct any matter and designate any person to take any action regarding this Contract.
- .C Officers of the County and the Directors of the Department or Agency administering this Contract, and Owner's Authorized Representative, acting as their authorized designee, shall have such authority as specifically delegated by the Board of Supervisors, by law, ordinance, resolution awarding this Contract, or other resolution or Board action, including authority to make changes in the Work and authorize payment and/or deducts for such changed work.
- .D When so authorized by the Board of Supervisors, changes or additions to the Work shall be subject to and executed in accordance with Contract procedures for changed Work and payment for changed Work.
- .E When so authorized by the Board of Supervisors, the Director of FAF may authorize changes or additions to the Work subject to the limits of Public Contract Code Section 20142 as follows:
  - .1 Not to exceed five thousand dollars (\$5,000) when the total amount of the original contract does not exceed fifty thousand dollars (\$50,000);

- .2 Not to exceed 10 percent (10%) of the amount of any original contract that exceeds fifty thousand dollars (\$50,000), but does not exceed two hundred fifty thousand dollars (\$250,000).
  - .3 For contracts whose original cost exceeds two hundred fifty thousand dollars (\$250,000), the extra cost for any change or addition to the work so ordered shall not exceed twenty-five thousand dollars (\$25,000), plus 5 percent (5%) of the amount of the original contract cost in excess of two hundred fifty thousand dollars (\$250,000). In no event, however, shall any such change or alteration exceed two hundred ten thousand dollars (\$210,000).
  - .4 Time extension may be granted up to but not exceeding thirty (30) days.
  - .5 Change Orders exceeding the amounts and/or days provided above require approval by the Board of Supervisors, except in cases of emergency (as defined by Public Contract Code Section 1102), in which case the Board of Supervisors or the County Executive or their designee may direct change orders to respond to the emergency as provided by in the County of Santa Clara Ordinance Code, Section A34-82.
- .F Changes in the Work and administration of the Work, regardless of dollar amounts or time extension, require a written change order approved as to form and legality by a member of the Office of County Counsel, for any of the following:
- .1 Changes, waivers or alterations of terms and conditions of Contract General Conditions, Supplementary Conditions, Contract Bonds, or requirements of Codes and Laws;
  - .2 Agreements regarding confidential data; payment or collection of sales or use taxes; releases and settlements; assignments; requiring Owner to maintain insurance; imposing indemnification obligations on Owner; and
  - .3 Determination and findings on Claims under Document 00 73 83 (Disputes), require approval as to form by the Office of the County Counsel, only if such determination and findings submitted as a Change Order would require approval by the Board of Supervisors or the Office of the County Counsel under the standards set forth herein.
- .G Changes affecting insurance coverages, under Article 11 of these General Conditions, require approval as to form by the County Risk Manager.

**END ARTICLE 13 OF DOCUMENT 00 72 00**

## **ARTICLE 14 — TERMINATION OR SUSPENSION OF THE CONTRACT**

### **14.01 SUSPENSION OF WORK**

- .A Owner may, with or without cause, order Contractor in writing to suspend, delay or interrupt Work in whole or in part for such period of time as Owner may determine. An adjustment shall be made for increases in cost of performance of Work of the Contract Documents caused by any such suspension, delay or interruption, calculated using the measures set forth in Document 01 26 00 (Contract Modification Procedures). No adjustment shall be made to extent that:
  - .1 Performance is, was or would have been so suspended, delayed or interrupted by another cause for which Contractor is responsible; or
  - .2 An equitable adjustment is made or denied under any other provision of Contract Documents; or
  - .3 The suspension of Work was the direct or indirect result of Contractor's failure to perform any of its obligations hereunder. Adjustments made in cost of performance may have a mutually agreed fixed or percentage fee; if the parties cannot agree, Contractor may pursue a dispute under Document 00 73 83 (Dispute Resolution).
- .B In the event of a cessation of labor on the Project for a continuous period of one hundred (100) Days or more, due to factors beyond the control of the Contractor, retention may be invoiced and paid within sixty (60) Days thereafter (Public Contract Code Section 7107(c)(3)).

### **14.02 TERMINATION OF CONTRACT FOR CAUSE**

- .A Owner may declare Contractor in default of Contract Documents and Owner may terminate Contractor's right to proceed under the Contract Documents for cause:
  - .1 Should Contractor make an assignment for the benefit of creditors; admit in writing its inability to pay its debts as they become due; file a voluntary petition in bankruptcy; be adjudged a bankrupt or insolvent; be the subject of an involuntary petition in bankruptcy which is not dismissed within sixty (60) Days; file a petition or answer seeking for itself any reorganization, arrangement, composition, readjustment, liquidation, dissolution, or similar relief under any present or future statute, law, or regulation; file any answer admitting or not contesting the material allegations of a petition filed against Contractor in any such proceeding; or seek, consent to, or acquiesce in, the appointment of any trustee, receiver, custodian or liquidator of Contractor or of all or any substantial part of its properties or if Contractor, its directors or shareholders, take action to dissolve or liquidate Contractor; or
  - .2 Should Contractor commit a material breach of the Contract Documents. If Owner declares Contractor in default due to material breach, however, Owner must allow Contractor an opportunity to cure such breach within ten (10) Days of the date of notice from Owner to Contractor providing notice of the default; or, if such breach is curable but not curable within such ten-(10) Day period, within such period of time as is reasonably necessary to accomplish such cure. (In order for Contractor to avail itself of a time period in excess of ten Days, Contractor must provide Owner within the ten (10) -Day period with a written plan ["Cure Plan"] acceptable to Owner to cure said breach which includes, for example, evidence of necessary resources, resumes of committed management staff, actual Subcontractor commitments, actual labor commitments, schedules and recovery schedules

meeting Contract Document requirements and showing a realistic and achievable plan to cure the breach. Contractor must then diligently commence and continue such cure according to the written cure plan); or

- .3 Should Contractor violate or allow (by a Subcontractor or other person or entity for which Contractor is responsible) a violation of any valid law, statute, regulation, rule, ordinance, permit, license or order of any governmental agency applicable to the Project or Work and does not cure (or cause to be cured) such violation within ten (10) Days of the date of the notice from Owner to Contractor demanding such cure; or, if such violation is curable but not curable within such ten-Day period, within such period of time as is reasonably necessary to accomplish such cure. (In order for Contractor to avail itself of a time period in excess of ten (10) Days, Contractor shall provide Owner within the ten (10) -Day period with a written plan to cure said violation acceptable to Owner, and then diligently commence and continue performance of such cure according to the written plan.)
- .B If Owner at any time reasonably believes that Contractor is or may be in default under the Contract Documents as provided above, then Owner may in its sole discretion notify Contractor of this fact and request written assurances from Contractor of performance of Contract Documents and a written plan from Contractor to remedy any default under the terms of Contract Documents which Owner may advise Contractor of in writing. Contractor shall, within ten (10) Days of Owner's request, deliver a written cure plan which meets the requirements of the written cure plan deliverable defined above. Failure of Contractor to provide such written assurances of performance and the required written cure plan, within ten (10) Days of request, will constitute a material breach of Contract Documents sufficient to justify termination for cause.
- .C In event of termination for cause, Owner will immediately serve written notice thereof upon Surety and Contractor. Surety shall have the rights and obligations set forth in Document 00 61 13.13 (Construction Performance Bond). Owner may take over the Work and prosecute it to completion by contract or by any other methods it may deem advisable, however, work that occurs within the time periods allowed the Surety to make its election in the Bond, shall not be of a nature that results in substantial prejudice to Surety's rights and liabilities under the Bond.
- .D In the event of termination for cause:
  - .1 Owner will compensate Contractor for the value of the Work delivered to Owner upon termination as determined in accordance with the Contract Documents, subject to all rights of offset and back charges, and provided that Contractor provides Owner with updated as-builts and Project Record Documents showing the Work performed up to the date of termination. Owner will not compensate Contractor for its costs in terminating the Work or any cancellation charges owed to third parties.
  - .2 Contractor shall deliver to Owner possession of the Work in its then condition including, but not limited to, all designs, architectural and engineering, Project records, Project Record Documents, cost data of all types, Drawings and Specifications and contracts with vendors and Subcontractors, all other documentation associated with the Project, and all construction supplies and aids dedicated solely to performing the Work which, in the normal course of construction, would be consumed or only have salvage value at the end of the construction period. Contractor shall remain fully liable for the failure of any Work completed and materials and equipment provided through the date of such termination to comply with the provisions of the Contract Documents. The provisions of this subparagraph shall not be interpreted to diminish any right which Owner may have to claim and recover damages for any breach of Contract Documents or otherwise, but rather, Contractor shall

compensate Owner for all loss, cost, damage, expense, and/or liability suffered by Owner as a result of such termination and failure to comply with Contract Documents.

- .3 Owner's rights under this subparagraph shall be specifically enforceable to the greatest extent permitted by law. Owner shall, at all times, have all other rights and remedies set forth in any Contract Document.
- .E Owner may terminate portions or parts of the Work for cause, provided these portions or parts (1) have separate geographic areas from parts or portions of the Work not terminated or (2) are limited to the work of one or more specific trades or Subcontractors. In such case, Contractor shall cooperate with a completing contractor as required under Article 6 (Construction by Owner or by Separate Contractors) of this Document 00 72 00.
- .F In the event a termination for cause is later determined to have been made wrongfully or without cause, then Contractor shall have no greater rights than if a termination for convenience had been effected (to include, as appropriate, the recovery rights specified therefore.) Any Contractor claim arising out of a termination for cause, however, shall follow Document 00 73 83 (Dispute Resolution). No other loss cost, damage, expense or liability may be claimed, requested or recovered by Contractor, including, by way of example, Contractor shall have no right to special, incidental or consequential damages, claims for lost bonding capacity however styled, or claims for lost profits on uncompleted work.

#### **14.03 TERMINATION OF CONTRACT FOR CONVENIENCE**

- .A Owner may terminate for convenience the performance of the Work under the Contract Documents in accordance with this clause in whole, or from time to time in part, whenever Owner shall determine that termination is in Owner's best interest. Termination for convenience may only be effected by Owner delivering to Contractor a written "Notice of Termination for Convenience," specifying the extent to which performance of the Work under the Contract Documents is terminated and the effective date of the termination.
- .B After receiving a notice of termination for convenience under this subparagraph, and except as otherwise directed by Owner, Contractor shall:
  - .1 Stop Work under the Contract Documents on date and to extent specified in notice of termination for convenience;
  - .2 Place no further orders or subcontracts for materials, services, or facilities except as necessary to complete portion of Work under the Contract Documents which is not terminated;
  - .3 Terminate all orders and subcontracts to extent that they relate to performance of Work terminated by the notice of termination;
  - .4 Assign to Owner in manner, at times, and to extent directed by Owner, all right, title, and interest of Contractor under orders and subcontracts so terminated. Owner shall have the right, in its sole discretion, to settle or pay any or all claims arising out of termination of orders and subcontracts;
  - .5 Settle all outstanding liabilities and all claims arising out of such termination of orders and subcontracts, with approval or ratification of Owner to extent Owner may require. Owner's approval or ratification shall be final for purposes of this subparagraph;

- .6 Transfer title to Owner, and deliver in the manner, at the times, and to the extent, if any, directed by Owner, all fabricated or unfabricated parts, Work in process, completed Work, supplies, and all other material produced as part of, or acquired in connection with performance of, Work terminated by the notice of termination, and completed or partially completed drawings, drawings, specifications, information, and other property which, if the Project had been completed, would have been required to be furnished to Owner;
  - .7 Use its best efforts to sell, in manner, at times, to extent, and at price or prices that Owner directs or authorizes, any property of types referred to in this subparagraph, but Contractor shall not be required to extend credit to any purchaser, and may acquire any such property under conditions prescribed and at price or prices approved by Owner. Proceeds of transfer or disposition shall be applied to reduce payments to be made by Owner to Contractor under the Contract Documents or shall otherwise be credited to the price or cost of Work covered by Contract Documents or paid in such other manner as Owner may direct;
  - .8 Complete performance of the part of the Work which was not terminated by the notice of termination; and
  - .9 Take such action as may be necessary, or as Owner may direct, to protect and preserve all property related to Contract Documents which is in Contractor's possession and in which Owner has or may acquire interest.
- .C After receipt of a notice of termination for convenience, Contractor shall submit to Owner its termination for convenience claim, in form and with all certifications required of a Claim under Document 00 73 83 (Dispute Resolution). Contractor's termination for convenience claim shall be submitted promptly, but in no event later than thirty (30) Days from effective date of the termination. Contractor and Owner may agree upon the whole or part of the amount or amounts to be paid to Contractor because of a total or partial termination of Work under this subparagraph. If Contractor and Owner fail to agree on the whole amount to be paid to Contractor because of the termination of the Work under this subparagraph, Owner's total liability to Contractor by reason of the termination shall be the total (without duplication of any items) of:
- .1 The pro rata Fee otherwise due Contractor under this Contract, for all Work performed prior to the effective date of the termination, including Work done to secure the Project for termination. The pro rata Fee may not exceed the applicable percentage completion values derived from the progress schedule and the schedule of values. Deductions shall be made for cost of materials to be retained by Contractor, cost of Work defectively performed, amounts realized by sale of materials, and for other appropriate credits against cost of Work. The pro rata Fee shall include costs to Contractor of handling material returned to vendors, delivered to Owner or otherwise disposed of as directed by Owner.
  - .2 Except as provided in this subparagraph, Owner shall not be liable for costs incurred or amounts claimed by Contractor or Subcontractors after receipt of a notice of termination. Such non-recoverable costs include, but are not limited to, anticipated profits on Work not performed as of the date of termination, anticipated profits on other work however styled or denominated, post-termination employee salaries, post-termination general administrative expenses, post-termination overhead or unabsorbed overhead, costs of preparing and submitting Contractor's Bid, attorney's fees of any type, and all costs relating to prosecution of claim or lawsuit.

- .3 Owner shall have no obligation to pay Contractor under this subparagraph unless and until Contractor provides Owner with updated and acceptable as-builts and Project Record Documents for Work completed prior to termination.
- .D In arriving at the amount due Contractor under this clause, there shall be deducted in whole (or in the appropriate part[s] if the termination is partial):
  - .1 All unliquidated advances or other payments on account previously made to Contractor, including without limitation all payments applicable to the terminated portion of Contract Documents;
  - .2 Any claim which Owner may have against Contractor in connection with Contract Documents; and
  - .3 The agreed price for, or proceeds of sale of, any materials, supplies, or other things kept by Contractor or sold under provisions of this subparagraph, and not otherwise recovered by or credited to Owner.
- .E If the parties cannot agree, Contractor may pursue a dispute under Document 00 73 83 (Dispute Resolution).

#### **14.04 CONTINGENT ASSIGNMENT OF SUBCONTRACTS**

- .A Contractor hereby assigns to Owner each Subcontract for a portion of the Work, provided that:
  - .1 The assignment is effective only after Owner's termination of Contractor's right to proceed under the Contract Documents (or portion thereof relating to that Subcontract) pursuant to the termination for cause subparagraphs herein.
  - .2 The Assignment is effective only for the Subcontracts which Owner expressly accepts by notifying the Subcontractor in writing;
  - .3 The assignment is subject to the prior rights, if any, of the Surety, obligated by Document 00 61 13.13 (Construction Performance Bond) provided under the Contract Documents, where the Surety exercises its rights to complete the Contract;
  - .4 After the effectiveness of an assignment, Contractor shall, at its sole cost and expense, sign all instruments and take all actions reasonably requested by Owner to evidence and confirm the effectiveness of the assignment in Owner; and
  - .5 Nothing in this subparagraph shall modify or limit any of Contractor's obligations to Owner arising from acts or omissions occurring before the effectiveness of any Subcontract assignment, including but not limited to all defense, indemnity and hold-harmless obligations arising from or related to the assigned Subcontract.
- .B Any assignment made under this section shall not relieve the Contractor of its duties and responsibilities under this Contract nor shall any assignment be deemed a waiver by Owner of any action or claims which it could assert against Contractor.

#### **14.05 OWNER PAYMENTS TO SUBCONTRACTORS**

- .A In case of any default hereunder by Contractor, that is not the fault of a Subcontractor, Owner may make direct payment to the Subcontractor, less appropriate retainage. In that event, the amount so paid the Subcontractor shall be deducted from the payments to Contractor.
- .B Nothing contained herein shall create any obligation by Owner to make any payments to any Subcontractor and no payment by Owner to any Subcontractor shall create any obligation to make any further payments to any Subcontractor.

**END ARTICLE 14 OF DOCUMENT 00 72 00**



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**DOCUMENT 00 73 00****SUPPLEMENTAL GENERAL CONDITIONS**

This Document 00 73 00 Supplemental General Conditions adds, deletes, amends, and/or replaces, terms and conditions, as specifically indicated, to conform to this Job Order Contract.

**I. The following language is added to Section 1.01(A), ABBREVIATIONS of ARTICLE 1 – GENERAL PROVISIONS of DOCUMENT 00 71 00 (CONTRACTING DEFINITIONS):**

- 12. **JOC** – Job Order Contract
- 13. **JO** – Job Order
- 14. **DSW** – Detailed Scope of Work
- 15. **RFJP** – Request for Job Order Proposal
- 16. **CTC** – Construction Task Catalog®
- 17. **NPP** – Non Pre-Priced
- 18. **ACO** – Area Compliance Officer of HCAI
- 19. **ILSM** – Interim Life Safety Measures
- 20. **IOR** – Inspector of Record
- 21. **FLSO** – Fire and Life Safety Officer
- 22. **HCAI** – California Department of Health Care Access and Information (formerly Office of Statewide Health Planning and Development (“OSHPD”))
- 23. **SCVMC** – Santa Clara Valley Medical Center
- 24. **SCVHHS** – Santa Clara Valley Health & Hospital System (former name of CSCHS)
- 25. **RCO** – Regional Compliance Officer of HCAI
- 26. **CSCHS** – County of Santa Clara Health System

**II. The Following language is added to Section 1.03, DEFINITIONS of ARTICLE 1 – GENERAL PROVISIONS of DOCUMENT 00 71 00 CONTRACTING DEFINITIONS:**

- 1.03.A.142. **[Note to Specifier: Use the following definition if contract includes HCAI facility work.]**  
**Adjustment Factor:** Contractor’s competitively bid price adjustment to the Unit Prices as published in the Construction Task Catalog®. Contractors must bid five Adjustment Factors, one pair for work to be accomplished during Normal Working and Other than Normal Working Hours for General/Non-HCAI 1 Facilities and one pair for Normal Working and Other than Normal Working Hours for HCAI 1 Facilities and another Factor for Non Pre-Priced work items. All Adjustment Factors are expressed as a multiplicative increase or decrease from the published prices in the Construction Task Catalog®. **[Note to Specifier: Use the following definition if contract includes detention facility work.]**  
**Adjustment Factor:** Contractor’s competitively bid price adjustment to the Unit Prices as published in the Construction Task Catalog®. Contractors must bid five Adjustment Factors, one pair for work to be accomplished

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during Normal Working and Other than Normal Working Hours for General Facilities and one pair for Normal Working and Other than Normal Working Hours for Detention Facilities and another Factor for Non Pre-Priced work items. All Adjustment Factors are expressed as a multiplicative increase or decrease from the published prices in the Construction Task Catalog®.

- 1.03.A.143. **Price Criteria Figure:** The composite Adjustment Factor, used to determine the bid price, as determined on the basis of the Price Criteria Figure Formula provided in the Bid Form.
- 1.03.A.144. **Construction Task Catalog®:** A comprehensive listing of construction related specific repair or refurbishment tasks together with a specific unit of measurement and a Unit Price. (Also referred to as the "CTC.")
- 1.03.A.145. **Detailed Scope of Work:** The complete description of services to be provided by the Contractor pursuant to an individual Job Order. The Detailed Scope of Work will include documentation for a given project. Documentation may include a narrative description of the Work, partial design documents, or full design documents, depending on the complexity of the specific project. (Also referred to as "DSW.")
- 1.03.A.146. **General Facilities Adjustment Factors:** Adjustment Factors that apply when Job Order Work is performed in all locations other than those defined by the HCAI 1 and NPP Adjustment Factors.
- 1.03.A.147. **Job Order:** A written order signed by the County that describes the Detailed Scope of Work to be accomplished by Contractor within the Job Order Completion Time for the Job Order Price. Owner has sole discretion to determine the number and scope of Job Orders issued. Each Job Order will include a Detailed Scope of Work, a firm fixed price, time duration for the completion of the Work, and any special conditions that applies to that specific Job Order, such as Liquidated Damages. Also referred to as "Project." The Job Order Price is determined by multiplying the preset unit prices by the appropriate quantities and by the appropriate Adjustment Factor. The Job Order Price shall be a lump sum, fixed price for the completion of the Detailed Scope of Work. A separate Job Order will be issued for each project. Extra work, credits, and deletions will be contained in additional or Supplemental Job Orders.
- 1.03.A.148. **Job Order Completion Time:** The time within which Contractor must complete the Detailed Scope of Work.
- 1.03.A.149. **Job Order Price:** The value of the approved Job Order Price Proposal and the amount Contractor will be paid for completing a Job Order.
- 1.03.A.150. **Job Order Price Proposal:** A price proposal prepared by Contractor that includes the Pre-Priced Tasks, Non Pre-Priced Tasks, quantities, and appropriate Adjustment Factors required to complete the Detailed Scope of Work.
- 1.03.A.151. **Job Order Proposal:** The documents prepared by Contractor stating a firm fixed price to perform a specific Detailed Scope of Work. The Proposal includes shop drawings and sketches, permits, and submittals as necessary, a detailed Job Order Price Proposal comprised of line items from the Construction Task Catalog®, supporting documentation for any Non Pre-Priced items, a construction schedule, a list of subcontractors, and other documentation as may be required by Owner prior to the issuance of a Job Order. Also referred to as "Proposal."
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- 1.03.A.152. **Job Order Plans:** The graphic and pictorial portions of the Job Order as defined in the Detailed Scope of Work, illustrating the design, character, location, and dimensions of the Work to be performed, generally including but not limited to, elevations, sections, details, schedules, General Notes, specific notes, and diagrams. Synonymous with "Drawings," "Contract Drawings," and "Plans."
- 1.03.A.153. **Job Order (Task) Specifications:** Description of the manner of performing the Work, the quantities, qualities, and types of materials to be furnished.
- 1.03.A.154. **Joint Scope Meeting:** Meeting at the project site attended by Owner and Contractor to jointly scope the Work before the Detailed Scope of Work is finalized.
- 1.03.A.155. **Maximum Contract Value:** The maximum value of Job Orders that Contractor may receive under this Contract.
- 1.03.A.156. **Minimum Contract Value:** The minimum value of Job Orders that Contractor is given the opportunity to perform under this Contract as stated in Document 00 21 13 (Instructions to Bidders).
- 1.03.A.157. **Non Pre-Priced Tasks:** Units of Work that are not included in the Construction Task Catalog® but which are within the general scope and intent of this Contract. (Also referred to as "NPP.")
- 1.03.A.158. **Normal Working Hours:** Standard Shift Work between the Hours of Work between 6:00 AM and 6:00 PM, Monday through Friday.
- 1.03.A.159. **Other than Normal Working Hours:** Hours outside Normal Working Hours, including all day Saturday, Sunday, and County Holidays.
- 1.03.A.160. **Pre-Priced Task:** A task described in, and for which a Unit Price is set forth in, the Construction Task Catalog®.
- 1.03.A.161. **Request for Job Order Proposal:** The County's formal written request for the Contractor to provide a Job Order Proposal for the Detailed Scope of Work referenced therein. (Also referred to as "RFJP.")
- 1.03.A.162. **Supplemental Job Order:** A written agreement between Owner and Contractor entered into after the award of the initial Job Order that alters or amends the Job Order. Changes in the Detailed Scope of Work requested are accomplished by the issuance of a Supplemental Job Order. Changes involving extensions of time, and additive or deductive changes are accomplished by issuance of a Supplemental Job Order to the original Job Order.
- 1.03.A.163. **Task Specifications:** Description of the manner of performing the Work, the quantities, qualities, and types of materials to be furnished.
- 1.03.A.164. **Technical Specifications:** The written requirements for materials, equipment, systems, standards, and workmanship for the Work, and performance of related services.
- 1.03.A.165. **Unit Price:** The price published in the Construction Task Catalog® for a specific construction related repair or refurbishment task. The Unit Prices are fixed for the duration of the Contract. Each Unit Price is comprised of the labor, equipment, and materials costs to accomplish that specific task. Unit Prices for new Pre-Priced Tasks can be established during the course of the Contract and added to the Construction Task Catalog®.
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**III. The following paragraph replaces Section 1.04(A), INTERPRETATION OF THE CONTRACT DOCUMENTS of ARTICLE 1 - GENERAL PROVISIONS of DOCUMENT 00 72 00 (GENERAL CONDITIONS):**

- A. The Contract Documents are intended to be complementary, and to describe and provide for a complete Work. In the case of discrepancy or ambiguity in the Contract Documents, the following order of precedence of Documents, Specifications and Drawings, as indicated on Document 00 01 10 (Table of Contents), shall prevail.
1. Modifications in inverse chronological order (i.e., most recent first), including Modifications made by Addenda, and in the same order as specific portions they are modifying;
  2. The executed Agreement followed by all other documents within the Contracting Bidding Requirements (Division 00 50 00 series) and the Project Forms (Division 00 60 00 series);
  3. Document 00 73 16 (Indemnification and Insurance Requirements);
  4. All Supplemental General Conditions within the Division 00 73 00 series followed by all other documents within the Division 00 73 00 series and Division 00 80 00 Series (if any);
  5. Document 00 71 00 (Contracting Definitions) and Document 00 72 00 (General Conditions), followed by all other documents within the Division 00 71 00 series and Division 00 72 00 series;
  6. Job Order(s) (including Detailed Scopes of Work and Requests for Proposals);
  7. Specifications denominated in Summary of Work within the Division 01 00 00 series, followed by all other specifications within the Division 01 00 00 Series (up to Section 01 99 99), collectively referred to as General Requirements;
  8. Job Order drawings
  9. Job Order Specifications
  10. Construction Task Catalog®
  11. General Conditions and Requirements
  12. Technical Specifications
  13. Task Specifications
  14. Written numbers over figures, unless obviously incorrect;
  15. Figured dimensions over scaled dimensions;
  16. Large-scale drawings over small-scale drawings.

**IV. The following language is added to ARTICLE 3 - CONTRACTOR of DOCUMENT 00 72 00 (GENERAL CONDITIONS):**

**3.20 FACILITIES SECURITY AND ACCESS POLICIES**

- A. Contractor shall adhere to all County hospital, secured facility, tool control, and escort
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policies.

- B. All Contractor's workers must wear badges issued by CSCHS for any Work within a CSCHS building.
- C. Specific site policies will be supplied on a Job Order basis.
- D. While performing the Work, Contractor may have direct or incidental access to "Protected Health Information" or "PHI" or contact with patients. For purposes of this section, "Protected Health Information" or "PHI" shall have the meaning provided by the Standards for Privacy of Individually Identifiable Health Information, 45 C.F.R. Part 160 and Subparts A and E of Part 164 (the "Privacy Standards") as promulgated by the Department of Health and Human Services ("HHS") pursuant to the Health Insurance Portability and Accountability Act of 1996 ("HIPAA") (42 U.S.C. Section 1320d, *et seq.*), California Civil Code section 56.20 *et seq.* and other applicable California laws (each and collectively, the "HIPAA Laws"). While on site, Contractor shall endeavor to implement reasonable safeguards to protect PHI from any intentional or unintentional disclosure to third parties in violation of the Privacy Standards by implementing appropriate administrative, technical, and physical safeguards to limit incidental disclosures of PHI to any person or entity. The parties agree that neither Contractor nor Contractor's representatives shall need access to, nor shall Contractor or its representatives use or disclose, any PHI. In the event, however, PHI is disclosed to Contractor or its representatives, or to others by Contractor or its representatives, either directly or indirectly and regardless of whether the disclosure is inadvertent or otherwise, Contractor agrees to take reasonable steps to maintain, and to require its representatives to maintain, the privacy and confidentiality of such PHI, including that no PHI will be knowingly removed from the Work site by anyone, and no PHI will be discussed with or otherwise knowingly disclosed to any other person or entity. Contractor agrees to immediately notify Owner upon learning of any disclosure of PHI. The parties agree that the foregoing does not create, and is not intended to create, a "business associate" relationship between the parties as that term is defined by the Privacy Standards.

**V. The following language is added to Section 4.01, ADMINISTRATION OF THE CONTRACT of ARTICLE 4 - ADMINISTRATION OF THE CONTRACT of DOCUMENT 00 72 00 (GENERAL CONDITIONS):**

- F. The scope of required Work will be determined by the Detailed Scopes of Work stated in each individual Job Order. All costs incurred with preparing Job Order Proposals are the sole responsibility of Contractor.
- G. Contractor will perform Work only as authorized by Job Orders issued by Owner in accordance with the administration of the Contract Documents. (See Document 00 72 00, art. 4.) Contractor must perform all Job Orders up to and including the Maximum Contract Value. Owner must order at least the Minimum Contract Value.
- H. Contractor must provide all pricing, management, shop drawings, documents, labor, materials, parts (to include system components), transportation, plant, supervision, and equipment needed to perform each Job Order. Contractor must provide quality assurance as specified in strict accordance with the Contract Documents.

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- I. In addition to the tasks and requirements stated in the Construction Task Catalog® and Task Specifications, Owner may require Non Pre-Priced Tasks incidental to work described in the Job Order. Owner and Contractor will price these Non Pre-Priced Tasks in accordance with the procedures set forth in the Contract Documents.
- J. As directed by Owner, Contractor shall provide incidental architectural or engineering design services in accordance with applicable State laws and the County's insurance and indemnification requirements. All documents are subject to review and approval of Owner. Owner may require that design documents be prepared and provided in Computer Aided Design (CAD) format. Any cost for this work is included in Contractor's Adjustment Factor.
- K. Each Job Order will be prepared under the direction of Owner.
- L. County staff will notify Contractor in writing or via email of a Joint Scope Meeting to discuss a potential Job Order.
- M. Prior to the Joint Scope Meeting, Owner will provide Contractor with all appropriate information and documentation, if any, pertaining to the potential Job Order. Contractor and their primary trade(s) will participate in the Joint Scope Meeting and visit the proposed site with County staff. At the Joint Scope Meeting the following items will be discussed:
- Job Order number and title
  - Existing site conditions
  - Presence of Hazardous Materials
  - Methods and alternatives for accomplishing work
  - Definition and refinement of requirements
  - General scope of Work
  - Requirements for stamped & unstamped design drawings, sketches, submittals, catalogue cuts, samples, shop drawings, etc.
  - Tentative construction schedule (bar chart or critical path method schedule)
  - Liquidated damages if appropriate
  - Preliminary quantity estimates
  - Staging areas and site access including protocol for admission
  - Special conditions regarding unique facility operations
  - Safety requirements
  - Special insurance requirements
  - Job Order Proposal due date
- N. Making information available to Contractor is not to be construed in any way as a waiver of any provision in the Contract Documents, and Contractor must satisfy themselves through their own investigations as to conditions to be encountered.
- O. Where investigation of subsurface conditions has been made by Owner in respect to foundation or other design, Contractor may inspect Owner's records of such investigation, including examination of samples and drill cores, if any. However, any such records shall fall within the purview of Document 00 73 10 (Site Conditions), Article 3 (Limited Reliance on Certain As Built Information and Technical Data Regarding Subsurface Conditions), and Contractor shall only be entitled to limited reliance on Owner's records pursuant to the terms of that article.
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- P. When logs of test borings indicating a record of the data obtained by Owner's investigation of subsurface conditions are made available, said logs represent only the investigator's opinion as to the character of material encountered in test borings and are made available only for the convenience of bidders. Any such records shall fall within the purview of Document 00 73 10 (Site Conditions), Article 3 (Limited Reliance on Certain As Built Information and Technical Data Regarding Subsurface Conditions), and Contractor shall only be entitled to limited reliance on Owner's records pursuant to the terms of that article.
- Q. Upon completion of the joint scoping process, Owner will issue a Request for Job Order Proposal and a draft Detailed Scope of Work referencing any sketches, drawings, photographs, and specifications required to document accurately the work to be accomplished. Contractor shall review the Detailed Scope of Work and request any required changes or modifications. When an acceptable Detailed Scope of Work has been prepared, Owner will issue a Request for Proposal that will require Contractor to prepare a Job Order Proposal. If Liquidated Damages will be applied to the Job Order, Owner's Authorized Representative will provide the appropriate information in the Request for Proposal or Detailed Scope of Work. The Detailed Scope of Work, unless modified by Owner and Contractor, will be the basis on which Contractor will develop its Job Order Proposal and upon which Owner will evaluate the Job Order Proposal. Contractor does not have the right to refuse to perform any task or any work in connection with a particular project.
- R. Contractor is required to post from eGordian® a scope of work and associated subcontractor trade list on the eGordian® website, <http://www.eGordian.com/> 'Tools for Contractors and Subcontractors' within three (3) working days of the issuance of the Request for Job Order Proposal and Detailed Scope of Work.
- S. Job Order Proposal Development. Contractor shall prepare Proposals in accordance with the following:
1. Pre-priced Tasks: Contractor shall identify the task and quantities required from the Construction Task Catalog® (CTC). The Unit Price set forth in the CTC serves as the base price.
  2. Non Pre-Priced Tasks (NPP): Non Pre-Priced Tasks, if any, must be separately identified in the Proposal. Information submitted in support of Non Pre-Priced Tasks includes, but is not be limited to, the following:
    - Complete specifications and technical data, including task content, support drawings, task cost data, quality control, and inspection requirements.
    - Work schedule.
    - Cost data will include a cost analysis report, establishing the basis for selecting the approach proposed for accomplishment of the task. Unless otherwise directed by Owner, cost data will be submitted demonstrating that Contractor sought and received three (3) price quotes. Contractor will provide an installed Unit Price (or demolition price if appropriate) which will include all costs required to accomplish the Non Pre-Priced Task.
    - If Contractor will perform the work with its own forces, it shall submit three (3) independent quotes for all material to be installed and shall, to the extent possible, use Pre-Priced labor and equipment from the Construction Task Catalog®. If the work is to be subcontracted, Contractor must submit three (3) independent bids from subcontractors. Contractor shall not submit a quote or bid from any supplier or subcontractor that Contractor is not prepared
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- to use. Owner may require additional quotes and bids if the suppliers or subcontractors are not acceptable or if the prices are not reasonable.
- The final price submitted for Non Pre-Priced Tasks which are performed by Contractor will be according to the following formula:
    - $A = \text{Direct labor cost and fringe benefits per prevailing wage rates}$
    - $B = \text{Direct material costs (supported by three (3) quotes)}$
    - $C = \text{Direct equipment costs (supported by official posted state rental rates)}$
    - $\text{Total Price for Self-Performed Work} = (A+B+C) \times \text{Non Pre-Priced Adjustment Factor}$
  - The final price submitted for Non Pre-Priced Tasks which are performed by a subcontractor is according to the following formula:
    - $D = \text{Subcontractor costs (supported by three (3) quotes)}$
    - $\text{Total Price for Subcontracted Work} = D \times \text{Non Pre-Priced Adjustment Factor}$
  - Following approval by Owner of a Non Pre-Priced Task, the Non Pre-Priced Task Unit Price will be entered into the computer database and fixed as a permanent Pre-Priced task which will no longer require price justification.
  - The total extended price for the Non Pre-Priced Task will be determined by multiplying the task Unit Price by the quantity required. The price offered in the Proposal will be determined by multiplying the total extended price by an Adjustment Factor of 1.00 (one).
  - Owner's determination as to whether an item is a Pre-Priced task or a Non Pre-Priced Task is final, binding, and conclusive as to Contractor.
  - If a Pre-Priced Task is present in the CTC, it must be used in the formulation of the Job Order Price Proposal. Immaterial differences in the description of a Task shall not be a cause for classifying a Task as a Non Pre-Priced Task. Owner's Project Manager's determination as to whether a task is a Pre-Priced Task or a Non Pre-Priced Task is final, binding, and conclusive upon Contractor.
3. Contractor's Proposal must include supporting documentation to indicate that adequate engineering and planning for the Job Order has been done, and that the tasks proposed are reasonable for the Work to be performed. Documentation to be submitted with the Proposal must include, but not be limited to:
- Stamped & unstamped design drawings, calculations, specifications
  - Catalog cuts
  - Subcontractor and material supplier list
  - Construction schedule
  - Special Insurance
  - For special equipment a copy of the warranty document may be required.
  - Notification of Foreign Material
4. Contractor's Proposal must be submitted by the date indicated on the RFJP. All incomplete Job Order Proposals shall be rejected. The time allowed for preparation of Contractor's Proposal will depend on the complexity and urgency of the Job Order. On complex Job Orders, such as Job Orders requiring engineering/architectural drawings and approvals and permits, adequate time will be provided for preparation and submittal of the necessary documents and the Proposal. In urgent situations and minor maintenance and repair Job Orders requiring immediate completion, the Proposal may be required quickly or Contractor may be directed to begin work immediately with the paperwork to follow. In the event that immediate emergency response is necessary, Contractor shall be required to follow alternative procedures as established by Owner. Contractor shall begin work as directed notwithstanding the absence of a fully developed Request for Proposal, Detailed Scope of
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Work, or Job Order. Contractor shall be compensated for such work as if the work had been ordered under the standard procedures.

5. By submitting a Job Order Proposal to Owner, Contractor agrees to accomplish the Detailed Scope of Work in accordance with the Request for Proposal at the price submitted. It is Contractor's responsibility to include the necessary tasks and quantities in the Job Order Price Proposal and apply the appropriate Adjustment Factor(s) prior to delivering it to Owner.
6. If Contractor requires clarifications or additional information regarding the Detailed Scope of work in order to prepare the Job Order Proposal, the request must be submitted so that the submittal of the Job Order Proposal is not delayed.

T. Review of the Job Order Proposal

1. Owner reserves the right to reject a Proposal or cancel a Project for any reason. Owner also reserves the right not to issue a Job Order if it is determined to be in the best interests of Owner to do so, or if the proposed cost exceeds Owner's estimate. In these instances, Contractor shall not be entitled to any reimbursement for Proposal preparation expenses, including but not limited to the costs to attend the Joint Scope Meeting, review the Detailed Scope of Work, any costs associated with Job Order Proposal development including architectural and/or engineering services, subcontractor costs, and the costs to review the Job Order Proposal with Owner. Owner may pursue the performance of any Work by other means.
2. By submitting a Proposal to Owner, Contractor agrees to accomplish the Detailed Scope of Work in accordance with the Request for Proposal for the lump sum price submitted. It is Contractor's responsibility to include all necessary Pre-Priced and Non Pre-Priced tasks and quantities in the Job Order Price Proposal prior to delivering it to Owner.
3. Owner will evaluate the entire Job Order Proposal and compare these with Owner's estimate of the Detailed Scope of Work, including the correct tasks and quantities, and determine if Contractor proposes to accomplish the Detailed Scope of Work in a manner acceptable to Owner.
4. Contractor may choose the means and methods of construction; subject however, to Owner's right to reject any means and methods proposed by Contractor that:
  - Will constitute or create a hazard to the work, or to persons or property;
  - Will not produce finished Work in accordance with the terms of the Contract; or,
  - Unnecessarily increases the price of the Job Order when alternative means and methods are available.

U. Issuance of the Job Order

1. A Job Order executed by Owner will be provided to Contractor. Each Job Order will include a Detailed Scope of Work, a firm fixed price, time duration for the completion of the Work, and any special conditions that might apply to that specific Job Order, such as Liquidated Damages. After Owner issues a Job Order, Contractor's Detailed cost proposal is of no significance and shall be disregarded. The Detailed Scope of Work becomes the Final Scope of Work. The Final Scope of Work defines the requirements of the Job Order. All provisions of this Contract

are applicable to each Job Order. Job Orders will be written on an appropriate form approved by Owner.


2. Owner may direct Contractor to undertake and possibly complete urgent work prior to the issuance of a Job Order. Contractor will be compensated in accordance with the provisions of this Contract.
- V. Contractor's Acceptance of Job Orders. Contractor's written acceptance of a Job Order or Supplemental Job Order constitutes final and binding agreement to the provisions thereof and a waiver of all claims in connection therewith, whether direct, indirect, or consequential. A general statement that Contractor reserves their right to claim additional time and/or money at a future date for Work associated with the Job Order is not permitted.
- W. Unilateral Job Order. If Contractor fails to submit a Proposal or the parties fail to reach an agreement, Owner may issue a Unilateral Job Order. Compensation for the Work shall be in accordance with the CTC and terms and conditions of the Contract Documents. Contractor must commence any work issued under a Unilateral Job Order in the time stated in the Job Order. Failure to commence Work may result in termination of this Contract for cause under Document 00 72 00 (General Conditions). The issuance of a Unilateral Job Order will not prejudice any of the Contractor's rights to make claims or appeal disputed matters.
- X. Computer and Communications Equipment Requirements. Contractor must maintain in an operational condition a computer system capable of operating the software supplied by Owner. Contractor will include the cost of the system in its Adjustment Factor.
- VI. **The following language is added to ARTICLE 10 PROTECTION OF PERSONS AND PROPERTY of DOCUMENT 00 72 00 (GENERAL CONDITIONS): [Note to Specifier: Remove if Not Required for Project]**

#### **10.07 INTERIM LIFE SAFETY MEASURES**

- A. Interim Life Safety Measures (ILSM) is a series of administrative actions that must be taken to compensate temporarily for the hazards posed by existing NFPA 101-1991 Life Safety Code (LSC) deficiencies or construction activities.
- B. ILSM must be implemented in, or adjacent to, all construction areas and throughout buildings with existing LSC deficiencies. ILSM apply to all personnel, including construction workers, and must be implemented during project development and continuously enforced through project completion.
- C. ILSM consist of the following actions:
  1. Ensuring that exits provide free and unobstructed egress. Personnel shall receive training if alternative exits must be designated. Building or areas under construction must maintain escape facilities for construction workers at all times. Means of egress in construction areas must be inspected daily.
  2. Ensuring free and unobstructed access to emergency department/services and emergency forces.

3. Ensuring that fire alarm, detection, and suppression systems are not impaired. A temporary, but equivalent, system shall be provided when any fire system is impaired. Temporary systems must be inspected and tested monthly.
4. Ensuring that temporary construction partitions are smoke tight and built of noncombustible or limited combustible materials that will not contribute to the development or spread of fire.
5. Providing additional fire-fighting equipment and use-training for personnel.
6. Prohibiting smoking in accordance with MA.1.3.15 (in the "Management and Administrative Service" Chapter M, Volume 1 of the manual) and in, or adjacent to, construction areas.
7. Developing and enforcing storage, housekeeping, and debris removal practices that reduce the flammable and combustible fire load of the building to the lowest level necessary for daily operations.
8. Conducting a minimum of two fire drills per shift per quarter.
9. Increasing hazard surveillance buildings, grounds, and equipment, with special attention to excavations, construction areas, construction storage, and field offices.
10. Training personnel when structural or compartment features of fire safety are compromised.
11. Conducting organization wide safety education programs to ensure awareness of any LSC deficiencies, construction hazards, and these ILSM.

#### 10.08 INFECTION CONTROL

- A. POLICY: To maintain a safe environment for patients, employees, and workers, planning for any new construction, demolition, and remodeling of hospital structures and structures adjacent to patient care areas must be reviewed by Owner with input from the Infection Control Department and/or the Hospital Epidemiologist. The role of infection control is multifaceted and will be required throughout the project and after the completion of the construction project.
- B. PURPOSE: Any construction or remodeling activity which disturbs dust or interrupts water supplies can be a risk factor for certain nosocomial infections especially in patients who are immunosuppressed. To prevent these infections, guidelines for construction projects has been developed by the Infection Control Department. Refer to Policy No. 515, Environment of Care in the SCVMC Infection Prevention Manual. A copy of this Policy is attached to this Document 00 73 00. **[Note to specifier: Be sure to add document.]**
- C. PROCESS: An Infection Prevention Construction Permit must be filled out, approved by the Infection Prevention Manager, and a copy posted at the entrances to the construction project area. A sample copy of a Infection Prevention Construction Permit is in the General Requirements section of the  Order Contract Technical Specifications.
  1. Contractor, the Project Manager and/or the Department Manager will notify the Infection Control Department when planning any construction project in a patient care area or an adjacent area.
  2. Types of projects that require barrier precautions:
    - a. Demolition of wallboard, plaster, ceramic tiles, or ceiling tiles.
    - b. Demolition of floor tiles.
    - c. Removal of windows or doors.
    - d. Removal of case work.

3. Review of the project shall include checking for adequate barriers to seal off construction sites from patient care areas.
4. The Infection Prevention Manager, Project Managers, and Department Supervisors will routinely monitor the construction/renovation areas for compliance with good infection control guidelines and the requirements of the Infection Prevention Construction Permit. Inspections will be conducted at least weekly by the Infection Prevention Manager. Contractor's Superintendent or Foreman must walk with the Infection Prevention Manager during these inspections. These joint weekly inspections take a maximum of one hour per week per job order. Violations will be documented and may be cause for termination of the job order for cause.
5. Dust proof barriers must be installed to seal-off construction areas from patient care units.
6. Dust proof barriers must be installed whenever a worker must crawl into or place equipment through any ceiling space in-patient care areas.
7. Dust proof barrier must be completely sealed from floor to ceiling to prevent dust from seeping into patient care areas. The seal must be maintained throughout the construction period.

#### **10.09 PROOF OF IMMUNIZATION**

- A. All Contractor personnel, including subcontractors, on site must provide proof of immunizations including rubella, mumps, and varicellar titers, live vaccine or disease; a documented TB test; and a Hepatitis B vaccination or declination form, prior to starting work on any Job Site for the County of Santa Clara Health System.
- B. Costs of documentation and additional immunizations, if needed, are the responsibility of the Contractor.

#### **10.10 APPLICABLE DOCUMENT / ATTACHMENT**

- A. Policy No. 515 – Environment of Care. This policy is part of the SCVMC Infection Prevention Manual.

### **VII. The following paragraphs are added to ARTICLE 13 – LEGAL AND MISCELLANEOUS PROVISIONS of DOCUMENT 00 72 00 (GENERAL CONDITIONS):**

#### **13.14 RIGHTS IN LAND AND IMPROVEMENTS**

- A. Nothing in the Contract shall be construed as allowing Contractor to make any arrangements with any person to permit occupancy or use of any land, structure, or building within the physical limits of the project for any purpose whatsoever, either with or without compensation, nor act in conflict with any agreement between Owner and any owner, former owner, or tenant of such land, structure, or building.
- B. Contractor must not occupy Owner's property outside the project limits as shown on the plans or on maps available in Owner's offices, unless Contractor enters into a written agreement with

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Owner.

**13.14 FEDERAL CONTRACT PROVISIONS [Note to Specifier: Remove this section if the project is not federally funded, or if FEMA disaster reimbursement is not anticipated.]**

The County of Santa Clara requires the following federal contract provisions in relation to the Work. The below contract provisions shall become part of the Contract Documents.

A. Procurement of Materials by Contractor

1. For any procurement related to the Work in excess of \$250,000, Contractor must perform a price/cost analysis pursuant to the enclosed Job Aid, attached hereto and incorporated by reference. **[Note to specifier: Be sure to include form/policy.]** In all procurement and purchase transactions, Contractor shall document its determination that the transaction price is fair and reasonable.
2. Contractor agrees to educate itself and abide by all rules and regulations relating to micro-purchase procurement. (See, e.g., 2 C.F.R. § 200.67; Section 41 U.S.C. § 1902(a)(1); OMB Memo (M-18-18), available at <https://www.whitehouse.gov/wpcontent/uploads/2018/06/M-18-18.pdf>.) To the extent practicable, Contractor shall distribute micro-purchases equitably among qualified suppliers.
3. Contractor agrees to educate itself and abide by all rules and regulations relating to small purchase procurement. (See, e.g., 2 C.F.R. § 200.88; Section 805 codified at 41 U.S.C. § 134; OMB Memo (M-18-18), available at <https://www.whitehouse.gov/wpcontent/uploads/2018/06/M-18-18.pdf>.) Contractor shall obtain price or rate quotations from an adequate number of sources, which in no case shall be less than three.
4. Contractor agrees to document the reasons for any procurement made in relation to the Work that was not competitively procured (e.g., competing bids/quotes, et al.).
5. Contractor acknowledges and agrees to avoid the acquisition of unnecessary or duplicative items, and to procure items using the most economical approach whenever possible. This includes, but is not limited to, consolidating or breaking out procurements to obtain a more economical purchase, and leasing instead of purchasing equipment (or vice versa). Contractor agrees to consult with Owner's Project Manager if Contractor is unsure whether any procurement transaction will result in a violation of this provision.
6. Contractor acknowledges and agrees to maintain a documented history of every procurement transaction in relation to the Work, including rationale for method of procurement, selection of contract type, subcontractor selection or rejection, and basis for contract price (including a price/cost analysis pursuant to Section A, above). Any modification or alteration to any subcontract or procurement transaction must include the signatures of all parties and be maintained in Contractor's project records. Additional documentation that should be documented in Contractor's history of procurement transactions includes, but is not limited to, acquisition planning information and other pre-solicitation documents, statement of work/scope of services, a list of sources solicited, and copies of the proposed contract action.
7. Contractor acknowledges and agrees that, pursuant to 2 C.F.R. § 200.318(f), Contractor is encouraged to use federal surplus property as an alternative to purchasing new equipment whenever it is feasible and reduces project costs. Contractor agrees to discuss acquiring federal surplus property with Owner's Project Manager if needed.

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8. Contractor acknowledges and agrees that, pursuant to 2 C.F.R. § 200.318(g), Contractor is encouraged to use value engineering and/or offer reasonable opportunities for cost reduction.
  9. Contractor acknowledges and agrees that, if it determines that only a brand name product is acceptable for prosecution of the Work under this Contract, it is subject to the express approval by Owner, and that if such approval is provided, the determination to use the brand name product shall be documented and justified by Contractor.
  10. Contractor acknowledges and agrees that it will only award subcontracts to responsible subcontractors possessing the ability to perform the Work successfully under the terms and conditions of the Contract Documents. Contractor agrees to document its determination that a prospective subcontractor qualifies as responsible, as well as its basis for such determination. In making its responsibility determination as to subcontractors, Contractor must consider such matters as contractor integrity, compliance with public policy, record of past performance (i.e., demonstrate that it has sufficient resources, with adequate experience, to perform the required work), and financial and technical resources. Contractor agrees to utilize the System for Award Management ([www.sam.gov/SAM](http://www.sam.gov/SAM)) in aiding its responsibility determinations as to subcontractors.
  11. Contractor acknowledges and warrants that it is not suspended or debarred from participating in federal transactions, and that no subcontractor employed, hired, or awarded by Contractor shall likewise be similarly suspended or disbarred.
  12. Contractor agrees that it will not award or enter into any contract, subcontract, or procurement transaction in relation to the Work that is performed on a time and materials basis, or cost-plus-percentage-cost basis.
  13. Contractor agrees that it will not award or enter into any contract, subcontract, or procurement transaction that allows for a local/geographic preference.
- B. Recovered Materials. Within forty-five (45) days of execution of the Contract, Contractor shall prepare and submit a submittal for Owner's review estimating the percentage of recovered materials used out of the total materials used under the Work and the Contract.
- C. Conflicts of Interest.
1. Contractor represents and warrants that (1) no official or employee of County has been employed or paid by it or any of its subcontractors to aid in the procuring of this Contract; and, (2) no official or employee of County will be employed or paid by Contract or any of the subcontractors or otherwise personally benefit from this Contract.
  2. Contractor shall comply, and require its subcontractors to comply, with all applicable (i) requirements governing avoidance of impermissible client conflicts; and (ii) federal, state and local conflict of interest laws and regulations including, without limitation, California Government Code section 1090 *et seq.*, the California Political Reform Act (California Government Code section 87100 *et seq.*) and the regulations of the Fair Political Practices Commission concerning disclosure and disqualification (2 California Code of Regulations section 18700 *et seq.*). Failure to do so constitutes a material breach of this Contract and is grounds for immediate termination of this Contractor by Owner.
  3. In accepting this Contract, Contractor covenants that it and its subcontractors presently has/have no interest, and will not acquire any interest, direct or indirect, financial or otherwise, which would conflict in any manner or degree with the performance of this Contract or any of the Work herein. Contractor, on its own behalf and on behalf of its subcontractors, further covenants that, in the performance of this Contract, Contractor and its subcontractors will not employ any contractor or person having such an interest.
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Contractor, including its subcontractors, may be subject to the disclosure and disqualification provisions of the California Political Reform Act of 1974 (the "Act"), that (1) requires such persons to disclose economic interests that may foreseeably be materially affected by the work performed under this Contract, and (2) prohibits such persons from making or participating in making decisions that will foreseeably financially affect such interests.

4. If the disclosure provisions of the Political Reform Act are applicable to any individual providing services, labor, materials, or Work under this Contract, Contractor shall provide the County with the names, description of individual duties to be performed, and email addresses of all individuals, including but not limited to Contractor's employees, agents, and subcontractors, that could be substantively involved in "making a governmental decision" or "serving in a staff capacity and in that capacity participating in making governmental decisions or performing duties that would be performed by an individual in a designated position," (2 CCR 18701(a)(2)), as part of Contractor's services, labor, materials, or Work to the County under this Contractor. Contractor shall immediately notify the County of the names and email addresses of any additional individuals later assigned to provide such services, labor, materials, or Work to the County under this Contract in such a capacity. Contractor shall immediately notify the County of the names of individuals working in such a capacity who, during the course of the Work under this Contract, end their services, labor, materials, or Work to the County.
  5. If the disclosure provisions of the Political Reform Act are applicable to any individual under this Contract, Contractor shall ensure that all such individuals identified pursuant to this section understand that they are subject to the Act and shall conform to all requirements of the Act and other laws and regulations listed in subsection including, as required, filing of Statements of Economic Interests within 30 days of execution of the Agreement, annually by April 1, and within 30 days of their termination of service, labor, materials, or Work pursuant to this Contract.
  6. Contractor agrees not to offer gifts, gratuities, favors, or anything of monetary value to any officer, employee, and/or agent of Owner. Examples include entertainment, hospitality, loans, forbearance, free training, transportation, local travel, lodgings, and meals, whether provided in-kind, by purchase of a ticket, payment in advance, or reimbursement after the expense has been incurred.
  7. Contractor agrees that the above provisions apply to real conflicts of interest, as well as apparent conflicts of interest.
  8. Contractor agrees that if Owner finds substantial evidence that Contractor has violated any of the above conflicts of interest provisions, said violation shall constitute a material breach of the Contract, and Contractor shall be subject to disciplinary action, including, but not limited to, dismissal, withholding of payment, and any and all other rights and/or remedies Owner may seek at law.
- D. Contractor agrees to have the provisions in this article incorporated into every subcontract and purchase order in relation to the Work.
- E. Contractor acknowledges and agrees that once the federal government no longer declares the a national emergency giving rise to these provisions, Contractor shall work and partner with Owner to transition any remaining Work under the Contract to a competitively bid contract structure, to the extent it has not already been procured or awarded on a competitive basis.

### 13.15 APPLICABLE DOCUMENTS / ATTACHMENTS

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1. County of Santa Clara Federally Required Contract Provisions, version 1.0.
2. FEMA Job Aid, Public Assistance: Reasonable Cost Evaluation, dated October 13, 2018.  
**[Note to Specifier: Remove this attachment if the project is not COVID-19-related, or if FEMA reimbursement is not anticipated.]**

END OF DOCUMENT 00 73 00



**SANTA CLARA VALLEY MEDICAL CENTER  
INFECTION PREVENTION MANUAL  
ENVIRONMENT OF CARE (EOC)  
B6855 #515**

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**II. Compliance**

**A.** For compliance, see Infection Prevention Manual Section:

1. #300 Employee Health (EH) Infection Prevention Program
2. #400 Standard Universal Precautions
3. #500 General Hospital Environment and Cleaning
4. #500-D Ice Machines
5. #502 Hand Hygiene Guidelines
6. #504 Hospital Medical Waste

**B.** Education, training, and record-keeping as set forth herein.

**III. Definitions**

1. **Acceptable level of moisture:** The level of moisture in a material, or in a contained area that is normally present, and that would not promote mold growth.

2. **Air Movers:** Mechanical enhancement of water evaporation in material drying process.
  3. **Air Sampling:** The collection of air with subsequent analysis to determine the presence or measure the concentration of a bioaerosol.
  4. **Bioaerosol:** Airborne particles, large molecules, or volatile compounds that are living or were released from a living organism.
  5. **Biocide:** A chemical that can kill living organisms.
  6. **Boroscope:** A long and thin rod-like optical device used to visually inspect normally inaccessible areas such as spaces within walls and inside duct.
  7. **Bulk Sampling:** Collection of a representative amount of a material with subsequent analysis to determine the presence or measure the concentration mold or bacteria.
  8. **Dehumidification:** The process of reducing the moisture (water) content of air.
  9. **Engineering Controls:** Methods of controlling exposures by modifying the source or reducing the quantity released into the work area.
  10. **Evaporation:** The process whereby liquid is changed to a vapor or gas.
  11. **HEPA:** High Efficiency Particulate Arrestor. Filter that is 99.97% efficient for the collection of DOP 0.3 micron particles.
  12. **Humidity:** Weight of water vapor per unit weight of dry air.
  13. **HVAC:** Heating, Ventilation, and Air Conditioning.
  14. **Intrusion:** Entry of a material or substance into an area in which the substance or material was not previously present.
  15. **Microbial growth:** Proliferation of mold that is visible.
  16. **Moisture Meter:** Instrument used to provide direct reading of moisture levels in building materials.
  17. **Mold:** A group of organisms that belong to the kingdom Fungi. For the purposes of this document, the terms fungi and mold can be used interchangeably. There are over 20,000 species of mold.
  18. **Negative air pressure differential:** Air pressure in an area that is less than that of an adjacent area, resulting in air being drawn from the high to low pressure area.
  19. **Organic matter:** Compounds or material that contain carbon and that can support growth of mold such as paper, dust, dirt, wood, cellulose, etc.
  20. **Patient Risk Group:** Process for categorizing patients with specific diagnosis or immune states that predispose them to potentially increased risks due to specific mold or water intrusion hazards.
  21. **Readily available:** Obtainable without much difficulty so that immediate response can be
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performed.

**22. Remediation:** Fix or repair so that a safe and healthy environment is present.

**23. Respirator:** A device to protect the wearer from inhalation of harmful contaminants.

**24. Response:** Evaluation and remediation activities implemented to protect people and property when water intrusion or mold growth incidents occur.

**25. Response Equipment:** Machinery, instruments, and supplies used to support engineering control measures.

**26. Restoration:** Return to original or usable and functioning condition.

**27. Salvageable:** Can be sufficiently cleaned and re-used.

**28. Sealed bag:** An airtight and waterproof bag typically sealed with duct tape.

**29. Wipe Sampling:** Use of adhesive, swab, or other appropriate means to collect a sample from the surface of a building material or object to determine the presence or measure the concentration of mold or fungus.

#### **IV. Policy**

- A.** This policy applies to all facilities of the County of Santa Clara Health System (CSCHS).
- B.** To establish operationalization for construction, water intrusion, and mold management.
- C.** To identify specific essential event participants.

#### **V. Purpose**

- A.** To ensure that hospital patients receive safe and adequate care and treatment and that the health and safety of patients, visitors, and hospital employees are protected.
- B.** Implement response actions that are effective in protecting the health of members and employees.
- C.** Minimize damage to buildings and the work environment.
- D.** To establish responses for efficient and consistent appropriate actions that are neither too minimal, nor too extensive, based on current industry standards.
- E.** Identify roles and responsibilities to enable proper and timely responses and actions during environmental emergencies that may occur.

#### **VI. Procedures**

- A.** An Infection Control Risk Assessment (ICRA) permit must be authorized by Infection Prevention
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(IP) before initiating any construction/renovation, water intrusion, or mold management activity (Appendix G). There are matrices specific to Construction & Renovation (Appendix C), Water Intrusion (Appendix D), and Mold Management (Appendix E).

- B.** Under the established Utility Management System Plan, the Facilities Manager and/or the department manager will notify IP when planning any construction, renovation, mold management, and/or water intrusion activity to discuss IP implications. IP will complete the Preconstruction/Renovation Inspection (Appendix F) to identify potential IP risks and specify the precautions to be taken in the pre-design, before, during, and after construction phases.
- C.** Project managers/supervisors will monitor all activity areas each day for compliance with IP guidelines. An ICRA Compliance Monitoring form shall be completed by IP on a weekly basis, or more frequently as determined by IP (Appendix H).
- D.** If ventilation communicates with other intakes, it will be “blocked off” in the activity areas. When negative airflow is required, machines in the activity area with filtration of exhausted air will be used inside the activity areas and vented to the outside of the building unless alternative approved by IP and the Safety Officer.
- E.** Facility engineers must be contacted for maintenance and cleaning of any ventilation system affected during the activity period.
- F.** All project workers, including contractors, must follow the procedures described in this policy. Education and training of project workers on the IP implications of construction is required and is the responsibility of the project manager/supervisor and, if requested, IP.
- G.** Some activities may require relocation of patients from the activity area. The decision to relocate patients will be made by the patient’s physician in consultation with Nursing, IP, and project manager.
- H.** Windows and doors are to remain closed in or near activity areas. Any exceptions should be discussed with and approved by IP.
- I.** Restrict traffic control in construction areas to construction workers only.
- J.** Daily cleanup of all sites will include mopping or vacuuming of traffic path and construction area; removal of all dust and debris; cleanup inspected and approved by site manager. If vacuuming is done, a HEPA vacuum should be used. Damp mopping of access area floor should be done at least daily and more often if dust generation is high.
- K.** IP has the authority and responsibility to stop work on a project if hazardous IP issues are discovered. The contractor/project manager/supervisor will take immediate action to correct deficiencies found before any scope of work can continue.
- L.** If patients have been vacated for activity, the room(s) and corridors must be thoroughly cleaned before admitting or readmitting patients.
- M.** Flush water lines in new and renovated areas before occupation of areas.
- N.** Evaluation with a moisture meter by Facilities must be completed on all areas with potential moisture or water leakage.

- O. IP involvement in construction/renovation, water intrusion, and mold management activities may not be limited to above stated actions and may include other activities which have direct impact on nosocomial infection risk factors for patients, employees, and/or visitors.

## **VII. References**

- A. American Institute of Architects/Facility Guidelines Institute (AIA/FGI, 2006), 2006 Guidelines for design and construction of hospital and health care facilities.
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- C. American Society of Heating, Refrigerating, and Air-Conditioning Engineers (ASHRAE, 2005), 2005 ASHRAE handbook fundamentals
- D. Association for Professionals in Infection Control and Epidemiology (APIC, 2007), Construction and Renovation, 3rd edition: Toolkit for Professionals in Infection Prevention and Control
- E. Kaiser Permanente National Water Intrusion and Mold Management Program (2004)
- F. Mueller Bartley, Judene (2000). APIC state-of-the-art report: The role of infection control during construction in health care facilities. *American Journal of Infection Control*, 28(2), 156- 169. doi: 10.1067/mic.2000.106055

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## **Appendix A: Guidelines for Selecting Outsource Consultants & Contractors**

Most facility-based operations have adequate capacity and staff to address typical repair, water intrusion, and mold management projects. However, the decision to utilize local resources is based on site specific factors such as staff capabilities and availability of equipment and other resources. In specific instances where facility management have made the determination to outsource construction/renovation, water intrusion, and mold management services these guidelines describe the types of providers that should be considered.

The list of providers has been categorized into areas of service and expertise. In such instances where outsource service providers are limited or not available geographically, this guideline has included qualifications and/or certifications that are recommended.

Preferred consultants and/or contractors that are retained should have enough experience to express proficient knowledge and provide the services of qualified staff that are licensed and/or certified with one or more of the following credentials:

### **I. Consultants**

There is no single designation, license, or certification that qualifies an individual to provide construction and renovation, water restoration, or mold/microbial assessment services. The term commonly used in the industry of someone able to serve in the capacity of providing these types of consulting services is an Indoor Environmental Professional (IEP). The IEP is an individual who is qualified by knowledge, skill, education, training and/or experience to perform assessment of microbial ecology of property systems, create a sampling strategy, sample indoor environment, interpret laboratory data and establishing a scope of work to restore areas to pre-event condition.

Many IEPs possess technical degrees or professional credentials in industrial hygiene (CIH), medical background, biology, microbiology, mycology, public health, environmental science, toxicology, building science, or engineering. It is highly recommended that individuals with advanced degrees and certifications also have additional education in industry-related subjects including but not limited to indoor environmental quality (IEQ), water damage restoration, occupational health and safety, environmental monitoring and assessment, construction basics, construction failure, building science, mechanical systems operation and maintenance, mechanical systems testing and remediation, and mold remediation.

### **II. Contractors**

**A. Water Intrusion Response/Damage Restoration.** Rapid response to water intrusion and restoration of structures and contents should be performed by a qualified (certified) restoration specialist. This type of certification is offered by the IICRC and includes completing educational competencies for the cleaning and restoration of water damaged structures and articles. It is recommended that the contractor be a member with the Association of Specialists in Cleaning and Restoration (ASCR), which is a non-profit affiliation of restoration and cleaning professional(s) who set and promote industry standards for water cleanup and restoration.

**B. Mold Growth Assessment and Remediation.** Several Organizations have begun offering

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certifications for supervisors and/or workers involved in mold remediation. These certifications are generally related specifically to mold or microbial remediation. They may or may not satisfy legal requirements for worker training under OSHA Hazard Communication Standard 29 CFR 1910.1200 or Cal/OSHA CCR Title 8 Section 5194.

The following organizations offer certifications pertaining directly with mold remediation: American Indoor Air Quality Council (AIAQ), Indoor Air Quality Association (IAQA), and Institute of Inspection, Cleaning and Restoration certification (IICRC). All contractors should work in conjunction with an Indoor Environmental Professional (i.e. CIH, QEP, etc.). The information provided below is a summary and does not represent a complete listing of requirements for the various certifications. The organizations should be contacted directly for a complete list of requirements to support their certifications.

### **III. Analytical Services**

Any laboratory providing mold or microbiological analytical services should be accredited by the American Industrial Hygiene Association (AIHA). A listing of laboratories participating in the AIHA Environmental Microbiological Laboratory Accreditation Program (EMLAP) can be found at [www.aiha.org/LaboratoryServices/html/lists/htm](http://www.aiha.org/LaboratoryServices/html/lists/htm).

## **END OF APPENDIX A**

## Appendix B: Assessment Guidelines & Checklists

A thorough assessment of construction/renovation, water intrusion, and potential mold growth is important in ensuring that a safe and healthy workplace and environment of care are maintained, and in determining appropriate response actions and remedial strategies. A visual inspection is the most important initial step in identifying a possible problem. For mold management, this should include determining the source of any moisture intrusion, identifying the presence of visible mold, and determining the extent of mold growth and the area of the facility that are impacted. Generally, identifying the moisture source is the key to solving a mold problem. Any water intrusion represents the potential for mold growth.

An assessment is typically performed:

- Prior to initiating any construction or renovation activity
- During and upon completion of any construction or renovation activity
- In response to employee indoor air quality concerns potentially related to the presence of mold
- In response to reports of moldy, musty odors
- In response to reports of visible mold
- In response to known or suspected water intrusion incidents
- As part of proactive inspections to identify mold contamination

### Site Assessment

When conducting a visual inspection and site assessment the following should be included when applicable:

- A visual inspection of the work site to verify that the permit is posted, personnel are wearing required identification and personal protective equipment, and that appropriate barriers are in place.
- A visual inspection for visible mold and/or moisture intrusion. The amount or area impacted or affected by mold or water intrusion occurrence. Ceiling tiles, gypsum wallboard (sheetrock), cardboard, paper, and other cellulosic surfaces should be thoroughly inspected.
- Determination of Facility's capacity to address/mitigate the problem area.
- An evaluation of potential sources of moisture intrusion (roof leaks, leaks around windows, pipe leaks, sewage leaks). Actions to stop water intrusion should be implemented as soon as feasible. Water intrusion from sewer leaks and backups require special cleanup procedures.
- A visual inspection for moisture associated with condensation.
- An evaluation of the potential for hidden mold.
- If mold is identified, determine the extent of mold present (i.e., less than 10 square feet, 10-100 square feet, more than 100 square feet). The extent of mold growth is a key factor in determining remediation engineering control and PPE requirements.
- If moisture intrusion is identified, determine how long materials have been wet (more or less than 48 hours). Materials wet longer than 48 hours should generally be treated as if mold growth is present.
- Determining the salvageability of water damaged items.
- Predetermination of steps and resources needed for restoration of sensitive or irreplaceable items (e.g., outsourced restoration/drying services).
- Ventilation systems should also be visually checked, particularly for damp filters but also for damp conditions elsewhere in the system and for overall cleanliness. The condensation drain



pans should also be inspected to ensure proper drainage is occurring. Inspect drain pans for stagnant water and visible slime/mold. Since mold growth in an air stream can be a potentially significant problem any mold growth in an HVAC system, particularly the supply ductwork, must be addressed promptly.

- Inspect heating and cooling coils for the presence of a buildup of dirt or debris or visible mold.
- A measurement of relative humidity levels to determine if it could be a contributing factor. (Relative humidity levels should be less than 60% in an indoor environment.)
- Determine if building occupants have reported musty or moldy odors. Odors can be a key indicator of mold growth, but it is important to remember that perceptions can differ from person to person.
- Determine if building occupants have reported health problems.
- Investigate if the building been recently remodeled or if building use has changed. Renovation may have disturbed previously hidden mold, or resulted in accidental water intrusion.
- Determine if consultation with medical or health professionals indicated.

### **Tools for Conducting Assessments**

The use of equipment such as a boroscope to view spaces in ductwork or behind walls, or a moisture meter to detect moisture in building materials, may be helpful in identifying hidden sources of fungal growth and the extent of water damage.

Moisture meters may be helpful for measuring the moisture content in a variety of building materials following water damage. They can also be used to monitor the process of drying damaged materials. Moisture meters can be used on materials such as carpet, wallboard, wood, brick, and concrete.

If a moisture meter is used, it should allow the user to determine percent moisture content. Instrument measurements of impacted materials should be evaluated by comparing moisture measurements from similar materials from non-impacted areas. This type of evaluation will take in account variations in climatic and building interior conditions. There are two types of instruments used in determining material moisture content: intrusive and non-intrusive. Intrusive meters require the user to penetrate the material with a 2-pronged probe which will yield the moisture content by percent but leaves markings that may require patching. Moisture gradients (differential moisture) with depth can be obtained based on probe length, which may be beneficial when inspecting wall systems. Non-intrusive instruments can provide moisture content on most materials but are usually limited to a penetration depth of a few inches. However, there are more expensive (high-end) non-intrusive meters emerging on the market that will obtain greater depths.

### **Assessment – Consider the Potential for Hidden Mold**

In some cases, indoor mold growth may not be obvious, and therefore it is important to consider the potential for hidden mold when conducting inspections. It is possible that mold may be growing on hidden surfaces, such as the back side of dry wall, wallpaper, or paneling, the top of ceiling tiles, the underside of carpets and pads, etc.

Possible locations of hidden mold can include pipe chases and utility tunnels (with leaking or condensing pipes), walls behind furniture (where condensation forms), condensate drain pans inside air handling units, porous thermal or acoustic liners inside ductwork, or roof materials above ceiling tiles (due to roof leaks or insufficient insulation). Some building materials, such as dry wall with vinyl

wallpaper over it or wood paneling, may act as vapor barriers, trapping moisture underneath their surfaces and thereby providing a moist environment where mold can grow.

You may suspect hidden mold if a building smells moldy, but you cannot see the source, or if you know there has been water damage and building occupants are reporting health problems. Investigating hidden mold problems may be difficult and will require caution when the investigation involves disturbing potential sites of mold growth— make sure to use PPE. For example, removal of wallpaper can lead to a release of spores from mold growing on the underside of the paper. If you discover hidden mold, you should revise your remediation plan to account for the total area affected by mold growth.

### **Assessment – Hazardous Materials**

If asbestos-containing materials (ACM) or lead based paint have been impacted by water intrusion or mold growth additional requirements for clean-up, removal, disposal, and/or repair may be necessary. If ACM is known or suspected to have been impacted, it is important that the Asbestos Program Manager for the facility be contacted to further evaluate conditions and determine appropriate response actions. The clean-up, repair, removal, and/or disposal of ACM must be performed by a qualified asbestos abatement contractor in accordance with the CSCHS Asbestos Abatement Program and federal, state, and local asbestos abatement regulations. Facilities or Service Areas with CSCHS employees that have been properly trained in the removal of ACM may also perform removal or repair of ACM, although it is important that the CSCHS Asbestos Program Manager ensure that such staff are properly trained and licensed.

If lead-based paint is known or suspected to have been impacted a CSCHS EH&S Professional or a qualified industrial hygiene consultant should be contacted to identify appropriate response actions. The removal, cleanup, repair and disposal of lead-based paint must be performed in accordance with federal, state, and local regulations and any CSCHS guidelines.

## **END APPENDIX B**

## Appendix C: Construction & Renovation Matrix

### **Construction & Renovation Procedures Overview**

The procedures in this section provide a step-by- step process for responding to construction and renovation. The process is broken down into 8 essential steps:

1. Assessment of specific reported or identified construction/renovation project(s)
2. Determination of Patient Risk Group from 4 potential risk categories
3. Determination of Class of Response and corresponding Work Practices
4. Determination of Surrounding areas
5. Determination of Specific Issues
6. Follow-up investigation
7. Close-out documentation
8. Process evaluation

### **Step One – Construction and Renovation Assessment**

Use the following table to identify the type of construction activity:

<b>TYPE A</b>	<b>Inspection and Non-Invasive Activities</b>  Includes, but is not limited to: <ul style="list-style-type: none"> <li>▪ Removal of ceiling tiles for visual inspection only, e.g., limited to 1 tile per 50 square feet</li> <li>▪ Painting (but not sanding)</li> <li>▪ Wallcovering, electrical trim work, minor plumbing, and activities which do not generate dust or require cutting of walls or access to ceilings other than for visual inspection</li> </ul>
<b>TYPE B</b>	<b>Small scale, short duration activities which create minimal dust</b>  Includes, but is not limited to: <ul style="list-style-type: none"> <li>▪ Installation of telephone and computer cabling</li> <li>▪ Access to chase spaces</li> <li>▪ Cutting of walls or ceiling where dust migration can be controlled</li> </ul>
<b>TYPE C</b>	<b>Work that generates a moderate to high level of dust or requires demolition or removal of any fixed building components or assemblies</b>  Includes, but is not limited to: <ul style="list-style-type: none"> <li>▪ Sanding of walls for painting or wall covering</li> <li>▪ Removal of floorcoverings, ceiling tiles, and casework</li> <li>▪ New wall construction</li> <li>▪ Minor duct work or electrical work above ceilings</li> <li>▪ Major cabling activities</li> <li>▪ Any activity which cannot be completed within a single work shift</li> </ul>
<b>TYPE D</b>	<b>Major demolition and construction projects</b>  Includes, but is not limited to:

	<ul style="list-style-type: none"> <li>▪ Activities which require consecutive work shifts</li> <li>▪ Requires heavy demolition or removal of a complete cabling system</li> <li>▪ New construction</li> </ul>
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### **Step Two: Patient Risk Assessment**

Use the table below as a general guideline to identify the patient population(s) potentially impacted by the construction. The intent of determining the patient risk groups is to protect immune deficient patients, visitors, and employees that are occupying the affected area and any adjacent area(s) where the response action is planned. Additional factors to consider when determining the patients' risk include: the immune status of the patient(s), the degree of invasive procedures being conducted with the patient, and/or the potential length of exposure time in or adjacent to the affected area (for example the comparatively greater exposure time in the hospital setting vs. outpatient care setting).

**If more than one risk group may be affected, select the higher risk group.**

<b>Low Risk</b>	<b>Medium Risk</b>	<b>High Risk</b>	<b>Highest Risk</b>
<ul style="list-style-type: none"> <li>• Office Areas</li> <li>• Admin or MD offices</li> <li>• Conference/ Education Rooms</li> </ul>	<ul style="list-style-type: none"> <li>• Cardiology</li> <li>• Echo-cardiography</li> <li>• Endoscopy</li> <li>• Nuclear Medicine</li> <li>• Physical Therapy</li> <li>• Radiology / MRI</li> <li>• Minor Outpatient Procedure Rooms</li> <li>• Ob-Gyn</li> <li>• Outpatient Pharmacy</li> <li>• Primary Care</li> <li>• Medical and Surgical specialties</li> </ul>	<ul style="list-style-type: none"> <li>• CCU</li> <li>• Emergency Room</li> <li>• Labor &amp; Delivery</li> <li>• Laboratories (specimen)</li> <li>• Newborn Nursery</li> <li>• Outpatient Surgery</li> <li>• Pediatrics (In and Out)</li> <li>• Pharmacies that do compounding/mixing</li> <li>• Post Anesthesia Care Unit</li> <li>• Surgical Units (inpatient)</li> <li>• Respiratory Therapy</li> </ul>	<ul style="list-style-type: none"> <li>• Areas providing care to immuno-compromised patients (inpatient)</li> <li>• Burn Unit</li> <li>• Cardiac Cath Lab</li> <li>• Central Sterile Supply</li> <li>• Intensive Care Units (newborn, pediatric and adult)</li> <li>• Medical Unit (inpatient)</li> <li>• Negative Pressure Isolation Rooms (inpatient)</li> <li>• Oncology (in and out patient)</li> <li>• Operating Rooms, including C-Section Rooms</li> <li>• Infusion/dialysis clinics</li> </ul>

### **Step Three: Determine the Class of Response**

Based upon the Construction and Renovation Assessment performed in Step One and the Patient Risk Assessment performed in Step Two, determine the class of response that will be utilized for the construction project. Use the matrix below to identify the class of precautions:

	<b>Response Procedures For Construction &amp; Renovation Matrix</b>			
<b>Patient Risk Group</b>	<b>Type A</b>	<b>Type B</b>	<b>Type C</b>	<b>Type D</b>
Low Risk	I	II	II	III / IV
Medium Risk	I	II	III	IV
High Risk	I	II	III / IV	IV
Highest Risk	II	III / IV	III / IV	IV

**Step Four: Identify Surrounding Areas**

Identify the areas surrounding the project area, assessing potential impact.

Unit Below	Unit Above	Lateral	Lateral	Behind	Front
Risk Group	Risk Group	Risk Group	Risk Group	Risk Group	Risk Group

**Step Five: Identify Specific Issues**

1. Identify the specific site of activity e.g., patient rooms, medication rooms, etc.
2. Identify issues related to: ventilation, plumbing, electrical in terms of the occurrence of probable outages.
3. Identify containment measures, using prior assessment. What types of barriers (e.g., solid wall barriers)? Will HEPA filtration be required? Note: Renovation and construction area shall be isolated from the occupied areas during construction and shall be negative with respect to surrounding areas.
4. Consider potential risk of water damage. Is there a risk due to compromising structural integrity (e.g., wall, ceiling, roof)?
5. Work hours: Can or will the work be done during non-patient care hours?
6. Do plans allow for adequate number of isolation/negative air flow rooms?
7. Do the plans allow for the required number and type of hand washing sinks?
8. Does the Infection Prevention department agree with the plans relative to clean and soiled utility rooms?
9. Plan to discuss the following containment issues with the project team (e.g., traffic flow, housekeeping, debris removal (how and when).

Note: Identify and communicate the responsibility for project monitoring that includes Infection Prevention concerns and risks. The ICRA may be modified throughout the project. Revisions must be communicated to the Project Manager.

**Step Six: Follow-Up Investigation**

After completion of activity, a follow-up investigation to assure effective restoration and identify any additional activities that may need to occur. It is important to fully document all corrective measures that were completed. The follow-up investigation should include:

- Visual inspection of the previously affected area(s);
- Interview of occupants;
- Perceptions of unusual (e.g. musty, moldy, etc.) odors; and,
- Provision of additional updates to staff as necessary.

**Steps Seven and Eight: Final Response Close-out and Process Evaluation**

To closeout each incident, the incident Response Team and the EOC Program Team should document:

- The risk assessment and response procedures on the Infection Control Risk Assessment (ICRA);
- Action items identified and current status, e.g. pending vs. completed;
- Any items or questions requiring further follow-up;
- Any impacts on patient or staff operations as a result of the incident;
- Any recommendations for additional staff education to be addressed by the EOC Program Team; and,
- Any construction related permit(s) that may be required.

All close-out documentation should be retained for no longer than 7 years, unless legal or regulatory requirements mandate a longer retention period.

### **Construction & Renovation Class I**

#### **During Construction Project:**

1. Execute work by methods to minimize raising dust from construction operations.
2. Immediately replace a ceiling tile displaced for visual inspection.

#### **Upon Completion of Project:**

1. Clean work area upon completion of task.

### **Construction & Renovation Class II**

#### **During Construction Project:**

1. Provide active means to prevent airborne dust from dispersing into atmosphere.
2. Water mist work surfaces to control dust while cutting.
3. Seal unused doors with duct tape.
4. Block off and seal air vents.
5. Place dust mat at entrance and exit of work area
6. Remove or isolate HVAC system in areas where work is being performed.

#### **Upon Completion of Project:**

1. Wipe work surfaces with cleaner/disinfectant.
2. Contain construction waste before transport in tightly covered containers.
3. Wet mop and/or vacuum with HEPA filtered vacuum before leaving work area.
4. Upon completion, restore HVAC system where work was performed.

### **Construction & Renovation Class III**

#### **During Construction Project:**

1. Remove or Isolate HVAC system in area where work is being done to prevent contamination of duct system.
2. Complete all critical barriers, i.e. sheetrock, plywood, plastic, to seal area from non-work area or implement control cube method (cart with plastic covering and sealed connection to work site

- with HEPA vacuum for vacuuming prior to exit) before construction begins.
- 3. Maintain negative air pressure within work site utilizing HEPA equipped air filtration units.
- 4. Contain construction waste before transport in tightly covered containers.
- 5. Cover transport receptacles or carts. Tape covering unless solid lid.

**Upon Completion of Project:**

- 1. Do not remove barriers from work area until completed project is inspected by the owner's Safety Department and Infection Prevention Department and thoroughly cleaned by the owner's Environmental Services Department.
- 2. Remove barrier materials carefully to minimize spreading of dirt and debris associated with construction.
- 3. Vacuum work area with HEPA filtered vacuums.
- 4. Wet mop area with cleaner/disinfectant.
- 5. Upon completion, restore HVAC system where work was performed.

**Construction & Renovation Class IV**

**During Construction Project:**

- 1. Isolate HVAC system in area where work is being done to prevent contamination of duct system.
- 2. Complete all critical barriers, i.e. sheetrock, plywood, plastic, to seal area from non-work area or implement control cube method (cart with plastic covering and sealed connection to work site with HEPA vacuum for vacuuming prior to exit) before construction begins.
- 3. Maintain negative air pressure within work site utilizing HEPA equipped air filtration units.
- 4. Seal holes, pipes, conduits, and punctures.
- 5. Construct anteroom and require all personnel to pass through this room so they can be vacuumed using a HEPA vacuum cleaner before leaving work site or they can wear cloth or paper coveralls that are removed each time they leave work site.
- 6. All personnel entering work site are required to wear shoe covers. Shoe covers must be changed each time the worker exits the work area.

**Upon Completion of Project:**

- 1. Do not remove barriers from work area until completed project is inspected by the owner's Safety Department and Infection Prevention Department and thoroughly cleaned by the owner's Environmental Services Department.
- 2. Remove barrier material carefully to minimize spreading of dirt and debris associated with construction.
- 3. Contain construction waste before transport in tightly covered containers.
- 4. Cover transport receptacles or carts. Tape covering unless solid lid.
- 5. Vacuum work area with HEPA filtered vacuums.
- 6. Wet mop area with cleaner/disinfectant.
- 7. Upon completion, restore HVAC system where work was performed.

**Strategies to Reduce Dust and Moisture Intrusion During External Demolition & Construction**

Item	Recommendation
Demolition Site	Shroud the site if possible to reduce environmental contamination.

Dust-Generating Equipment	Prior to placing dust-generating equipment, evaluate the location to ensure that dust produced by the equipment will not enter the building through open doorways or windows, or through ventilation air intakes.
Construction Materials Storage	Locate this storage away from the facility and ventilation air intakes.
Adjacent Air Intakes	Seal off affected intakes, if possible, or move if funds permit.
HVAC System	Consult with the facility engineer about pressure differentials and air recirculation options; keep facility air pressure positive to outside air.
Filters	Ensure that filters are properly installed; change roughing (preliminary) filters frequently to prevent dust build-up on high-efficiency filters.
Windows	Seal and caulk to prevent entry of airborne fungal spores.
Doors	Keep closed as much as possible; do not prop open; seal and caulk unused doors (i.e., those that are not designated as emergency exits); use mats with tacky surfaces at outside entrances.
Water Utilities	Note location relative to construction area to prevent intrusion of dust into water systems.*
Medical Gas Piping	Ensure that these lines/pipes are insulated during periods of vibration.
Rooftops	Temporarily close off during active demolition/construction those rooftop areas that are normally open to the public (e.g., rooftop atrium).
Dust Generation	Provide methods (e.g., misting the area with water) to minimize dust.
Immunocompromised Patients	Use walk-ways protected from demolition/construction sites; avoid outside areas close to these sites; avoid rooftops.
Pedestrian Traffic	Close off entry ways as needed to minimize dust intrusion.
Truck Traffic	Reroute if possible, or arrange for frequent street cleaning.
Education and Awareness+	Encourage reporting of hazardous or unsafe incidents associated with construction.

\* Contamination of water pipes during demolition activities has been associated with health-care-associated transmission of *Legionella* spp.

+ When healthcare facilities have immunosuppressed patients in their census, telephoning the city building department each month to find out if buildings are scheduled for demolition is prudent.

## END APPENDIX C



## Appendix D: Water Intrusion Matrix

### **Water Intrusion Specific Procedures Overview**

The procedures in this section provide a step-by-step process for responding to water intrusion incidents. The process is broken down into 8 essential steps:

1. Report of water intrusion incidents to a member of the EOC Program Management Team
2. Assessment of specific reported or identified water intrusion incident(s)
3. Determination of Patient Risk Group from 4 potential risk categories
4. Determination of Class of Response and corresponding Work Practices
5. Implementation and Completion of Response Actions
6. Post initial response assessment
7. Follow-up investigation
8. Close-out documentation

### **Step One – Water Intrusion Reporting**

Whenever visible water intrusion is identified, or other conditions (e.g., musty odors, warped flooring) indicate that a potential water intrusion exists, it should be reported to a member of the EOC Program Management Team.

Additionally, the following water intrusion incidents should be reported:

- Sewage release inside building;
- Any gray water or clean water release that cannot be easily managed or that complete clean up and drying cannot be completed within 1 hour of when the incident initially occurred; and,
- Any reoccurring water intrusion incident associated with damaged pipes, roofing material, or other exterior building barriers.

Prompt reporting is essential to assure a rapid response and response time is crucial. Each shift should have an immediate response team that is capable of selecting and providing the appropriate initial response methods. Proper reporting will enable the Program Lead to ensure appropriate steps can be taken to assess and respond to incidents. The Program Lead should ensure that staff who typically receive reports of identifiable water intrusion are aware of the reporting requirements. This should include regional/local EH&S professionals, Facility Managers, Facility Engineers, Infection Control Professionals, and Construction Managers. The EOC Program Response Team must be provided with enough information to prepare and have the ability to respond within one hour of the notification call. The initial response team must have the proper training, Personal Protective Equipment (PPE), and tools available to address all types of water intrusion occurrences.

### **Step Two: Water Intrusion Assessment**

There are three categories of potential water intrusion: Category I “Clean” water, Category II “Gray” water, and Category III “Black” water. Each water type requires different responses and levels of protection for response team members.

**Category I: “Clean” Water Intrusion.** Clean water intrusion sources result from drinking (potable)

water supply line leaks, or sink, shower, water closet and bath overflows, rainwater entering the building through roof, ceiling, window, or door sealant leaks, HVAC system condensate, fire sprinklers, or any other uncontaminated source of water.

**Category II: “Gray” Water Intrusion.** Gray water sources are derived from equipment process water, sink/bath/or shower drain leaks, dishwashers, steam sterilizers, and any source of water that does not contain or has been contaminated by excrement (fecal matter).

**Category III: “Black” Water Intrusion**

Black water sources contain or have been contaminated with fecal matter (sewage) and are derived from toilet or sewer drainpipes.

**Step Three: Patient Risk Assessment**

Use the table below as a general guideline to identify the patient population(s) potentially impacted by the water intrusion. The intent of determining the patient risk groups is to protect immune deficient patients, visitors, and employees that are occupying the affected area and any adjacent area(s) where the response action is planned. Additional factors to consider when determining the patients’ risk include: the immune status of the patient(s), the degree of invasive procedures being conducted with the patient and/or the potential length of exposure time in or adjacent to the affected area (for example the comparatively greater exposure time in the hospital setting vs. outpatient care setting).

**If more than one risk group may be affected, select the higher risk group.**

Low Risk	Medium Risk	High Risk	Highest Risk
<ul style="list-style-type: none"> <li>• Office Areas</li> <li>• Admin or MD offices</li> <li>• Conference/ Education Rooms</li> </ul>	<ul style="list-style-type: none"> <li>• Cardiology</li> <li>• Echo-cardiography</li> <li>• Endoscopy</li> <li>• Nuclear Medicine</li> <li>• Physical Therapy</li> <li>• Radiology / MRI</li> <li>• Minor Outpatient Procedure Rooms</li> <li>• Ob-Gyn</li> <li>• Outpatient Pharmacy</li> <li>• Primary Care</li> <li>• Medical and Surgical sub-specialties</li> </ul>	<ul style="list-style-type: none"> <li>• CCU</li> <li>• Emergency Room</li> <li>• Labor &amp; Delivery</li> <li>• Laboratories (specimen)</li> <li>• Newborn Nursery</li> <li>• Outpatient Surgery</li> <li>• Pediatrics (In and Out)</li> <li>• Pharmacies that do compounding/mixing</li> <li>• Post Anesthesia Care Unit</li> <li>• Surgical Units (inpatient)</li> <li>• Respiratory Therapy</li> </ul>	<ul style="list-style-type: none"> <li>• Areas providing care to immuno-compromised patients (inpatient)</li> <li>• Burn Unit</li> <li>• Cardiac Cath Lab</li> <li>• Central Sterile Supply</li> <li>• Intensive Care Units (newborn, pediatric and adult)</li> <li>• Medical Unit (inpatient)</li> <li>• Negative Pressure Isolation Rooms (inpatient)</li> <li>• Oncology (in and out patient)</li> <li>• Operating Rooms, including C-Section Rooms</li> <li>• Infusion/dialysis clinics</li> </ul>

**Step Four: Determine the Class of Response**

Based upon the Water Intrusion Assessment performed in Step Two and the Patient Risk Assessment performed in Step Three, determine the class of response that will be utilized to respond to the water intrusion incident. Use the matrix below to identify the responses for water intrusion.

NOTE: CSCHS employees and contractors performing water intrusion responses must receive training that includes:

- The health hazards of contaminant being remediated (i.e. mold, biological hazards, medical waste);
- Appropriate use of personnel protective equipment; and,
- Remediation methods, and methods and means to minimize exposure.

In addition, if respiratory protection is assigned, training that satisfies the requirement of the CalOSHA and Federal OSHA Respiratory Protection Standards must be provided as appropriate.

### **Step Five: Water Intrusion Response Procedures**

There are 3 classes of response procedures that can be used to manage water intrusion. The Classes are based on the type of water intrusion (Category I, Category II and Category III) and the patient risk group(s). The intent of the water intrusion response activities is to recover water and enhance drying of materials to maintain the health and safety of facility occupants and minimize the growth and amplification of mold.

To determine the appropriate response procedures, match the water intrusion type (Category I, Category II, and Category III) with the Patient Risk Group (Low, Medium, High, or Highest). Use the *Response Procedures for Water Type Matrix* below to determine the Class of Procedures to follow. The Classes of response are W-1, W-2, and W-3 based on the Category of Water Type and the length of time the water intrusion has existed, e.g. for less than 48 hours or more than 48 hours, but without any mold growth.

<b><i>Response Procedures For Water Type Matrix</i></b>			
<b>Patient Risk Group</b>	<b>Category I (Clean Water)</b>	<b>Category II (Gray Water)</b>	<b>Category III (Black Water)</b>
Low Risk	W-1	W-2	W-3
Medium Risk	W-1	W-2	W-3
High Risk	W-1	W-3	W-3
Highest Risk	W-2	W-3	W-3

### **Step Six: Follow-Up Investigation**

After completion of restoration activity, a follow-up investigation of any Water Intrusion should be conducted to assure effective restoration and identify any additional EOC activities that may need to occur. It is important to fully document all corrective measures that were completed. The follow-up investigation should include:

- Visual inspection of the previously affected area(s);
- Interview of occupants;
- Perceptions of unusual (e.g., musty, moldy, etc.) odors; and,
- Provision of additional updates to staff as necessary.

### **Steps Seven and Eight: Final Response Close-Out and Process Evaluation**

To closeout each incident, the incident Response Team and the EOC Program Team should document:

- The risk assessment and response procedures on the Infection Control Risk Assessment (ICRA);
- Action items identified and current status, e.g. pending vs. completed;
- Any items or questions requiring further follow-up;
- Any impacts on patient or staff operations as a result of the incident;
- Any recommendations for additional staff education to be addressed by the EOC Program Team;
- Any construction related permit(s) that may be required.

All close-out documentation should be retained for no longer than 7 years, unless legal or regulatory requirements mandate a longer retention period.

### **Water Intrusion Work Practice Level W-1**

**Initial Water Removal:** Contain the extent of water intrusion to the smallest area possible and strive to dry the area within 48 hours of the occurrence.

1. Identify and remove source of water intrusion.
2. Contain water to limited area.
3. Redirect and restrict access to the affected area(s) to prevent slip/falls and prevent tracking to unaffected areas.
4. Protect structural components (e.g., furnishings, other area contents, etc.) from direct contact with water. Take measures as quickly and as safely as possible to remove all removable items from the area.
5. Extract water from all locations that have been impacted by water intrusion including building systems or components including, but not necessarily limited to: HVAC and other air handling systems, wall cavities, flooring systems plumbing and electrical chases.
6. Extracted water can be disposed down the sanitary drain.
7. If asbestos-containing materials (ACM) or lead based paint have been impacted by water intrusion or mold growth additional requirements for clean-up, removal, disposal, and/or repair may be necessary. If ACM is known or suspected to have been impacted, it is important that the Asbestos Program Manager for the facility be contacted to further evaluate conditions and determine appropriate response actions. The clean-up, repair, removal, and/or disposal of ACM must be performed by a qualified asbestos abatement contractor in accordance with the SCVMC Asbestos Abatement Program and federal, state, and local asbestos abatement regulations. Facilities or Service Areas with SCVMC employees that have been properly trained in the removal of ACM may also perform removal or repair of ACM, although it is important that the SCVMC Asbestos Program Manager ensure that such staff are properly trained and licensed.

### **Post Initial Response Assessment Procedures:**

1. Determine actions to remediate and restore damaged materials
2. Discard all unsalvageable contents and furnishings promptly.
3. Communicate results of response actions back to the EOC Program Team.

**Restoration:** Throughout the restoration process, anticipate secondary damage and attend to structural components that may require drying, demolition, and/or replacement. These components include, but are not limited to:

- Ceiling (tiles);
- Flooring (carpet & tile);
- Walls (gypsum board);
- Built-in furnishings and fixtures;
- Insulation; and,
- Wood.

After demolition, debris removal, and assuring thorough drying, a qualified and properly licensed person(s) should perform authorized and necessary structural repairs, reconstruction, or cleaning. Any item not achieving the acceptable moisture content within 48-hours after water intrusion must be re-evaluated for potential development of mold growth.

**Restoration processes can be applied to the following:**

- 1. Non-Porous Surfaces and Hard Surfaces and Floors:** Remove water as indicated above and mop with floor cleaner.
- 2. Overhead fixtures and equipment with trapped water:** Open to air, wipe down and dehumidify.
- 3. Porous Surfaces:**

**Carpet / Textiles / Fibrous Coverings**

- Determine salvageable status;
- If possible, disengage carpet and remove pad if appropriate and unsalvageable;
- Secure carpet to original tack strips temporarily without pad and apply drying procedures (i.e., fans/dehumidification);
- Re-install carpet with pad when thoroughly dried; and,
- Complete final carpet cleaning to limit microbial growth and development of odors.

**Wallboard / Hard-line Ceilings: IMPORTANT**—Ensure all electrical and supply conveyance systems are de-energized, and then perform the following:

- If insulation is present remove affected area;
- Remove and replace insulation and wallboard after applying drying procedures;
- In the absence of insulation, open areas (ports) per stud spacing to ventilate;
- Apply drying procedures;
- Patch/paint over wall ports.

**Pipe Insulation (Overhead):**

- Open the area to ventilate space;
- Remove pipe insulation;
- Apply drying procedures to space;
- Replace pipe insulation with new material; and,
- Replace coverings.

**Drop Ceilings:**

- Replace wet ceiling tiles.

**Paper / Files:**

- To be determined based on scenario, i.e. amount of water, importance of files.

**Furniture and Accessories**

- To be determined based on scenario, i.e. amount of water, value of item, etc.

**Follow-Up Investigation:** Complete Follow-Up Investigation.

**Final Response Close-out and Process Evaluation:** Complete Close-Out documentation.

### **Water Intrusion Work Practices Level W-2**

**Perform all steps included in Water Intrusion Work Practice Level W-1 AND the following: Areas contaminated with gray and black water pose a potential threat to human health. The severity of health risk depends on the extent, content, and degree of water contamination penetration.** Technicians performing Category II/III response to water intrusions must be trained in the following areas:

- OSHA Hazard Communication (OSHA 29CFR 1910.1200) (CCR Title 8 Section 5194);
- Bloodborne Pathogens prevention and use of personal protective equipment (PPE) in accordance with 29 CFR 1910.132 and 134 if applicable;
- Use of disinfectants;
- Use of response equipment.

All persons working in and around Category II/III water during the initial stages of response and prior to completion of cleaning and restoration should have current immunizations for Hepatitis A&B and be equipped with PPE including but not limited to the following:

- Half-face respirator equipped with HEPA and organic filter cartridges;
- Industrial-grade rubber gloves;
- Full eye/splash protection (goggles);
- Protective suit;
- Rubber boots; and,
- Hard hat if overhead hazards exist

### **Initial Water Removal:**

1. Redirect and restrict access to affected areas to minimize cross contamination from affected areas.
2. Block off and seal supply and return air vents.
3. Evacuate high or highest risk patients from area.
4. Remove solid matter and extract water from all locations that have been impacted. Vacuums must be equipped with HEPA filters.
5. Decontaminate damaged hard surface materials with approved disinfectant to reduce microbial load.
6. Excess water and organic matter must be physically removed.
7. Discard all highly absorbent, saturated materials promptly without cross-contaminating unaffected areas.
8. Extracted wastewater can be discharged into a sanitary sewer.

All personnel involved with restoration must wear the appropriate PPE. After demolition, debris removal, and assuring thorough drying, qualified and properly licensed persons should perform authorized and necessary structural repairs, reconstruction, or cleaning.

When possible, use a city waste disposal company to remove, transport, and properly dispose of unsalvageable materials (i.e., carpet, cushion, drywall, and structural wood), otherwise special arrangements that comply with all applicable laws may be required. Hazardous materials, such as

asbestos and lead, require special handling and disposal procedures.

Any item not achieving the desired moisture content within 48 hours the water intrusion must be re-evaluated for potential development of microbial growth.

**Restoration processes can be applied to the following:**

**1. Non-Porous Surfaces, Hard Surfaces and Floors:**

- Remove water as indicated above;
- Remove and dispose if penetration is observed (buckling, warping, or bubbling);
- Clean and disinfect sub-floor with EPA-approved disinfectant; and,
- Flush clean cracks if floor is intact, pressure wash with EPA-approved disinfectant, and recover with HEPA filtered extraction unit (use caution and adequate controls to minimize the distribution of bioaerosol's and fluid contaminants).

**2. Overhead Fixtures (trapped water):**

- IMPORTANT - Ensure all electrical and supply conveyance systems are de-energized;
- Open to air and wipe down with EPA-approved disinfectant/ dehumidify.

**3. Porous Surfaces:**

- **Carpet / Textiles / Fibrous Coverings**

- Clear the area to expose wet surfaces (treat moved items and prevent cross contamination);
- If needed, replace with in kind flooring. Wallboard/Hard- Ceilings:
- Install new drywall as needed Suspended Ceilings;
- Remove and replace all wet ceiling tiles;
- Wipe supports with EPA-disinfectants.

- **Pipe Insulation:**

- Assess condition (integrity and ACM);
- Wipe with EPA-approved disinfectant.

- **Paper / Files:** Dispose of all highly absorbent saturated materials.

**Water Intrusion Work Practices Level W-3**

**Perform all steps included in Water Intrusion Work Practice Level W-1 and W-2 AND the following:**

**Initial Water Removal:** Decontaminate sewage-damaged materials before handling with spray or immerse in an EPA-approved disinfectant to reduce microorganisms as quickly as possible.

**The restoration process can be applied to the following materials:**

**1. Porous Surfaces:** IMPORTANT ensure all electrical and supply conveyance systems are de-energized

- **Carpet / Textiles / Fibrous Coverings**

- Clear the area to expose wet surfaces (treat moved items and prevent cross contamination);
- Disengage and remove carpet and pad and dispose;
- Replace with in kind floor covering. Wallboard / Hard Ceilings:
- Remove and dispose all material (including insulation) to nearest seam past affected area;
- Install new drywall.

## **Appendix E: Mold Management Matrix**

### **Mold Growth Procedures Overview**

The procedures in this section provide a step-by-step process for responding to mold growth concerns. The process is broken down into 8 essential steps:

1. Report of mold growth concern to a member of the EOC Program Team.
2. Assessment of specific reported or identified mold growth
3. Determination of Patient Risk Group from 4 potential risk groups
4. Determination of Class of Response and corresponding Work Practices
5. Implementation and Completion of Response Action
6. Post initial response assessment
7. Follow-up investigation
8. Close-out documentation

### **Step One: Mold Growth Reporting**

Whenever visible mold is identified, or other chronically wet conditions (e.g., musty odors, warped flooring) are noted that may indicate that potential mold growth exists, it should be reported to a member of the EOC Program Team.

Proper reporting will enable the EOC Program Lead to ensure appropriate steps can be taken to assess and respond to incidents. The EOC Program Lead should ensure that staff who typically receive reports or identify mold growth are aware of the reporting requirement. This should include regional/local EH&S professionals, Facility Engineers, Infection Control Professionals, Capital Projects/Construction Managers, and Facility Administrators.

### **Step Two: Mold Growth Assessment**

The EOC Program Team Lead or designee should assess the mold growth concern to determine the team members that need to be involved, and the appropriate response actions that need to be implemented. When the presence of mold growth is reported to the EOC Program Team, the EOC Program Lead should ensure that a proper assessment is performed.

#### **Assessment Guidelines and Checklist**

The EOC Program Lead is encouraged to involve; the Infection Control professional for all incidents, but should ensure that approval is obtained for all incidents requiring a Mold Class of response Level M-3, M-4, or M-5 Response Procedures.

The assessment should include determining the:

- Source of any water intrusion and when the intrusion occurred;
- Presence and extent of mold growth;
- Area of the facility and patient population(s) that are potentially impacted;
- Presence of mold growth in the HVAC system; and,
- Types of materials impacted by mold growth or water intrusion.



**NOTE:** It is important to determine if water intrusion incidents can be remediated within 48 hours of when the water intrusion first occurred. Water intrusion incidents that have occurred and can be remediated within 48 hours should be responded to in accordance with the water intrusion procedures. Water intrusion incidents that cannot be cleaned up within 48 hours of occurrence should be assessed to determine if mold growth is a concern. If mold growth is determined to be associated with the water intrusion, then it should be responded to in accordance with EOC Program mold remediation procedures.

### Sampling

Currently there are no universally accepted standard procedures for sampling or testing for mold in the indoor environment. Air, bulk, and wipe sampling for fungi are not recommended to be part of a routine assessment. Decisions about appropriate remediation and response strategies can usually be made on the basis of a visual inspections. In addition, air-sampling methods for some fungi are prone to false negative results and therefore cannot be used to definitively rule out contamination.

When considering what type of sampling could be conducted, sampling strategies should be determined by a qualified person such as the local EH&S professional or NEH&S personnel certified in Industrial Hygiene. Additionally, only trained, qualified persons should conduct sampling.

If samples are taken, regardless of the purpose, there should be a clear question that the sample results should help answer. Sampling without a specific purpose greatly increases the chances of generating useless data. For example, if sampling is planned to be conducted to verify effective remediation, it is important to collect samples to establish a baseline prior to beginning remediation.

Only a laboratory with American Industrial Hygiene Association EMLAP accreditation must be used for sample analysis.

### **Step Three: Patient Risk Assessment**

Use the table below as a general guideline to evaluate the risk to the patient population potentially impacted by mold growth. The intent of determining the patient risk groups is to protect immune deficient patients, visitors, and employees that are occupying the affected area and the adjacent area(s) where the response action is planned.

Identify the Patient Risk Group that will be affected. Factors to consider when determining the patients' risk include: the immune status of the patient(s), the degree of invasive procedures being conducted with the patient, and/or the potential length of exposure time in or adjacent to the affected area (for example the comparatively greater exposure time in the hospital setting vs. outpatient care setting). **If more than one risk category will be affected, select the higher risk group.**

Low Risk	Medium Risk	High Risk	Highest Risk
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<ul style="list-style-type: none"> <li>• Office Areas</li> <li>• Admin or MD offices</li> <li>• Conference / Education Rooms</li> </ul>	<ul style="list-style-type: none"> <li>• Cardiology</li> <li>• Echo-cardiography</li> <li>• Endoscopy</li> <li>• Nuclear Medicine</li> <li>• Physical Therapy</li> <li>• Radiology / MRI</li> <li>• Minor Outpatient Procedure Rooms</li> <li>• Ob-Gyn</li> <li>• Outpatient Pharmacy</li> <li>• Primary Care</li> <li>• Medical and Surgical sub-specialties</li> </ul>	<ul style="list-style-type: none"> <li>• CCU</li> <li>• Emergency Room</li> <li>• Labor &amp; Delivery</li> <li>• Laboratories (specimen)</li> <li>• Newborn Nursery</li> <li>• Outpatient Surgery</li> <li>• Pediatrics (In and Out)</li> <li>• Pharmacies that do compounding/mixing</li> <li>• Post Anesthesia Care Unit</li> <li>• Surgical Units (inpatient)</li> <li>• Respiratory Therapy</li> </ul>	<ul style="list-style-type: none"> <li>• Areas providing care to immuno-compromised patients (inpatient)</li> <li>• Burn Unit</li> <li>• Cardiac Cath Lab</li> <li>• Central Sterile Supply</li> <li>• Intensive Care Units (newborn, pediatric and adult)</li> <li>• Medical Unit (inpatient)</li> <li>• Negative Pressure Isolation Rooms (inpatient)</li> <li>• Oncology (in and out patient)</li> <li>• Operating Rooms, including C-Section Rooms</li> <li>• Infusion/dialysis clinics</li> </ul>
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Determine the risk category, and proper implementation of the corresponding work practices. Review work periodically, and adjust the risk category as is appropriate during the EOC Program related work. Use the Infection Control Risk Assessment Form (ICRA) for documentation purposed.

#### **Step Four: Determine Class of Response**

Based upon the assessment performed in Step Two and the Patient Risk Assessment performed in Step Three, the class of response can be determined. To identify the appropriate class of responses use the Mold Response Matrix below.

CSCHS employees and contractors performing mold responses must receive training that includes:

- The health hazards of contaminant being remediated (i.e., mold, biological hazards, medical waste);
- Appropriate use of personnel protective equipment; and,
- Remediation methods, and methods and means to minimize exposure.

In addition, if respiratory protection is assigned, training that satisfies the requirement of the CalOSHA and Federal OSHA Respiratory Protection Standards must be provided as appropriate.

#### **Step Five: Mold Response Work Practices**

There are 5 classes of response work practices that can be used to remediate identified mold growth. The classes are based on the amount of square footage with identified mold and/or the location of mold in an HVAC system. The square footage Classes of Work Practices are M-1to M-4, and M-5 which is exclusive to mold identified in the HVAC system.

To determine the appropriate response procedures to implement for identified mold growth, match the square footage amount of mold that has been identified with the Patient Risk Group Chart (Low, Medium, High, or Highest). Use the following Mold Response Matrix. **Note:** All molds in the HVAC system should be remediated using Class M-5. If asbestos-containing materials (ACM) or lead based

paint have been impacted by water intrusion or mold growth additional requirements for clean-up, removal, disposal, and/or repair may be necessary. If ACM is known or suspected to have been impacted, it is important that the Asbestos Program Manager for the facility be contacted to further evaluate conditions and determine appropriate response actions. The clean-up, repair, removal, and/or disposal of ACM must be performed by a qualified asbestos abatement contractor in accordance with the CSCHS Asbestos Abatement Program and federal, state, and local asbestos abatement regulations. Facilities or Service Areas with CSCHS employees that have been properly trained in the removal of ACM may also perform removal or repair of ACM, although it is important that the CSCHS Asbestos Program Manager ensure that such staff are properly trained and licensed.

	<b><i>Mold Response Matrix</i></b>				
<b>Patient Risk Group</b>	Less than 10 square feet	10 to 30 square feet	30 to 100 square feet	Greater than 100 square feet	HVAC System
Low Risk	M-1	M-2	M-3	M-4	M-5
Medium Risk	M-1	M-2	M-3	M-4	M-5
High Risk	M-3	M-3	M-4	M-4	M-5
Highest Risk	M-3	M-4	M-4	M-4	M-5

### **Cleaning Mold Affected Items**

Non-porous (e.g., metals, glass, and hard plastics) and semi-porous materials that are sound and visibly moldy may be cleaned and reused. Cleaning should be done using a detergent solution. Building structural items, such as wood, concrete, and steel must be evaluated by an architect or structural engineer before removal.

Porous materials such as ceiling tile, insulation, and wallboards with more than a small area of contamination should be removed and discarded. Porous materials (e.g., wallboard, and fabrics) that can be effectively cleaned may be reused, but should be discarded if possible. A professional restoration consultant should be contacted when restoring porous materials of significant value (e.g., art work) with more than a small area of fungal contamination. All materials to be reused should be dry and visibly free from mold. Routine inspections should be conducted to confirm the effectiveness of remediation work.

### **Step Six: Follow-up Investigation**

After completion of restoration activity, a follow-up investigation of any mold growth should be conducted to assure effective restoration and identify any additional EOC activities that may need to occur. It is important to fully document all corrective measures that were completed. The follow-up investigation should include:

- Visual inspection of the previously affected area(s);
- Interview of occupants;
- Perceptions of unusual (e.g., musty, moldy, etc.) odors; and,

- Provision of additional updates to staff as necessary.

### **Steps Seven and Eight: Final Response Close-out and Process Evaluation**

To closeout each incident, the incident Response Team and the EOC Program Team should document:

- The risk assessment and response procedures on the Infection Control Risk Assessment (ICRA);
- Action items identified and current status (e.g., pending vs. completed);
- Any items or questions requiring further follow-up;
- Any impacts on patient or staff operations as a result of the incident;
- Any recommendations for additional staff education to be addressed by the EOC Program Team;
- Any construction related permit(s) that may be required.

All close-out documentation should be retained for no longer than 7 years, unless legal or regulatory requirements mandate a longer retention period.

### **Mold Management Work Practice Level M-1**

Remediation can be conducted by regular building maintenance staff. Staff performing remediation should receive training on proper clean up methods, personal protection, and potential health hazards. This training can be performed as part of a program to comply with the requirements of the OSHA Hazard Communication Standard (29 CFR 1910.1200) and Cal OSHA CCR Title 8 Section 5194.

Respiratory protection (e.g., N95 disposable respirator), in accordance with the OSHA respiratory protection standard (29 CFR 1910.134) is recommended. Gloves and eye protection should be worn. Assignment of respiratory protection requires a written respiratory protection program, annual fit testing, medical evaluations, and annual training.

1. Identify and remove any source of water intrusion.
2. Restrict access (i.e., close doors) to immediate work area. The immediate work area should be unoccupied.
3. Containment of the work area is not necessary. Work practices should be used that minimize the disturbance of mold so that it does not migrate outside the immediate work area.
4. Work practices to minimize dust generation should be used. Dust suppression methods, such as using wet wiping methods can be effective if small amounts of dust could potentially be generated. However, it is important to minimize water use so that materials are not excessive moist. Also, using a HEPA vacuum when necessary to capture airborne dust at the generation source can be effective.
5. Contaminated materials that cannot be cleaned should be removed from the building in a sealed plastic bag.
6. Moldy materials should be sealed in a plastic bag using duct tape and disposed of in regular trash in exterior dumpster. Sharp objects should be bagged in a manner to prevent puncture, such as using double bags. Try whenever possible to transport debris during the hours of least activity in the building and along the most direct, but least congested route.
7. The work area and areas used by remedial workers for egress should be cleaned with a damp cloth and/or mop and a detergent solution.
8. Visually inspect work area to ensure that it has been left dry and visibly free from contamination and debris. Ensure source of water intrusion has been repaired or eliminated.
9. Complete Follow-up Investigation and Closeout documentation.

**Mold Management Work Practice Level M-2**

**Perform all steps included in Mold Management Work Practice Level M-1 AND the following:**

1. Seal unused doors with plastic and/or duct tape. Place tacky mats at the exit to prevent transporting mold and debris outside the immediate work area.
2. Cover the work area with a plastic sheet(s) and seal with duct tape before remediation, to contain dust/debris. Seal return air ducts with plastic and duct tape.
3. The work area and areas used by remedial workers for egress should be HEPA vacuumed (a vacuum equipped with a High-Efficiency Particulate Air filter) and hard flooring cleaned with a damp cloth and/or mop with a detergent solution.

**Mold Management Work Practice Level M-3**

**Perform all steps included in Mold Management Work Practice Level M-1 and M-2 AND the following:**

A qualified contractor or experienced qualified staff should perform the work.

1. Consult a health and safety professional with experience performing microbial investigations prior to remediation activities to provide oversight for the project.
2. If abatement procedures are expected to generate a lot of dust (e.g., abrasive cleaning of contaminated surfaces, demolition of plaster walls) or the visible concentration of the fungi is heavy (blanket coverage as opposed to patchy), then remediation procedures for Level IV must be followed.
3. Clean, wet wipe, HEPA vacuum, and remove all objects from the work area if visible mold is in the room. Remove all removable objects prior to beginning remediation of mold.
4. The work area and areas directly adjacent should be covered with a plastic sheet(s) and taped before remediation, to contain dust/debris.
5. Clean supply and return air grills with HEPA vacuum or other methods to remove visible dust.
6. Seal ventilation ducts/grills in the work area and areas directly adjacent with plastic sheeting.
7. The work area and areas directly adjacent should be unoccupied. Further vacating of people from spaces near the work area is recommended for high and highest risk areas.
8. Moldy items should be sealed in a plastic bag and disposed of in regular trash in exterior dumpster. Debris should be promptly bagged. The outside of bags should be cleaned using a HEPA vacuum and wet wiping before transport outside the work area. Try whenever possible to transport debris during the hours of least activity in the building and along the most direct, but least congested route.
9. Bags should not be allowed to accumulate, and carried outside the building for disposal at least daily.
10. The work area, including the temporary barriers, egress surfaces, and surrounding areas should be HEPA vacuumed and cleaned with a damp cloth and/or mop and a detergent solution. All areas should be left dry and visibly free from contamination and debris.
11. Following the removal of barriers, visually inspect work area to ensure that it has been left dry and visibly free from contamination and debris. Ensure source of water intrusion has been repaired or eliminated.

**Mold Management Work Practice Level M-4**

**Perform all steps included in Mold Management Work Practice Level M-1, M-2, and M-3 AND the following:**

1. For amounts greater than 100 square feet, personnel trained in the handling of hazardous materials equipped with:
  - a. Minimum N95 respirators for amounts less than 100 square feet with minimal dust generation;
  - b. Full-face respirators with high efficiency particulate air (HEPA) cartridges (for amounts greater than 100 square feet or when dust will be generated);
  - c. Disposable protective clothing covering both head and shoes;
  - d. Gloves.
2. Containment of the affected area:
  - a. Complete isolation of work area from occupied spaces using plastic sheeting sealed with duct tape (including ventilation ducts/grills, fixtures, and any other openings);
  - b. The use of an exhaust fan with a HEPA filter to generate negative differential inside the contained work area in relation to surrounding area;
  - c. Airlocks and decontamination room.
3. Vacate people from spaces immediately adjacent to the work area for highest risk categories.
4. The contained area and decontamination room should be HEPA vacuumed and cleaned with a damp cloth and/or mop and be visibly clean prior to the removal of isolation barriers.
5. The containment and negative pressure should be maintained until a visual inspection is conducted that determines an adequate level of cleanliness, with no visible dust has been achieved. The inspection should be performed by using “white glove” methods to wipe surfaces to determine if visible dust is present on surfaces.
6. However, if it is determined that air sampling is to be performed, samples should be collected both prior to the commencement of work and following an acceptable visual inspection. The criteria for acceptable airborne concentrations of fungi is a post visual inspection sample that measures airborne concentrations of fungi below concentrations measured prior to the commencement of work.
7. Following satisfactory inspection, the containment can be dismantled.
8. Air monitoring should only be conducted prior to occupancy if baseline air sampling was conducted and results are available.

#### **Mold Management Work Practice Level M-5**

**Perform all steps included in Mold Management Work Practice Level M-1, M-2, M-3, and M-4 AND the following:**

#### **A Small Isolated Area of Contamination (<10 square feet) in the HVAC System**

1. The affected section of the HVAC system should be isolated and sealed to prevent airflow to areas outside the affected work area. Shut down HVAC system as necessary to prevent airflow if affected area cannot be isolated.
2. Growth supporting materials that are contaminated, such as the paper on the insulation of interior lined ducts and filters, should be removed. Other contaminated materials that cannot be cleaned should be removed in sealed plastic bags.
3. All areas should be left dry and visibly free from contamination and debris.
4. A variety of biocides are recommended by HVAC manufacturers for use with HVAC components, such as, cooling coils and condensation pans. HVAC manufacturers should be consulted for the products they recommend for use in their systems.

#### **Areas of Contamination (>10 square feet) in the HVAC System**

1. Use Full-face respirators with HEPA cartridges and disposable protective clothing covering both head and shoes should be worn if contamination is greater than 30 square feet.
2. The affected section of the HVAC system should be isolated and sealed to prevent airflow to areas outside the affected work area. Shut down HVAC system as necessary to prevent airflow if affected area cannot be isolated.
3. Complete isolation of work area from the other areas of the HVAC system using plastic sheeting sealed with duct tape.
4. Airlocks and decontamination room if contamination is greater than 30 square feet.
5. It is strongly recommended that HVAC systems and duct work with significant growth be dismantled and disposed of and not cleaned.
6. The containment should be maintained until a visual inspection is conducted that determines an adequate level of cleanliness with no visible mold or moisture is present in the containment area. A boroscope should be used to visually inspect areas of the system that cannot be accessed.

**END OF APPENDIX E**



### Appendix F: Preconstruction/Renovation Inspection

Preconstruction/Renovation Inspection			
Date of Survey:		IP Inspector:	
Location:		Project Start Date:	
Project Coordinator:		Estimated Duration:	
Response Team Performing Work:		Permit Expiration Date:	
Supervisor:		Telephone:	
		YES/DATE	NO/DATE
A. Will construction affect exit routes from occupied areas adjacent to construction site?			
B. Are any of the following environmental hazards present?			
1	Asbestos		
2	Hazardous chemicals		
3	Confined spaces		
4	Other (i.e., Infection Control, etc.)		
C. Will any of the following systems be adversely affected?			
1	Fire Alarm		
2	Sprinkler		
3	Electric		
4	Domestic water		
5	Oxygen		
6	Sewage		
7	HVAC		
D. Infection Prevention			
1	Contractors given copy of Environment of Care policy and any other documents that must be reviewed to reduce risk of employee injury and illness.		
2	Documents reviewed with contractors and questions addressed or answered.		
3	Location of and erection methods for interim dust barriers reviewed.		
4	Dust barriers assessed for efficacy related to ability to prevent airborne particulate escape.		
5	Negative airflow ventilation and filtration in place and assessed for effectiveness.		
6	Equipment available for particulate escape such as HEPA vacuum and equipment found to be in working order.		
7	Plan for debris removal and control evaluated.		
8	Circulation and traffic control patterns reviewed and evaluated.		
9	Limitations/restrictions for outdoor construction/demolition activities reviewed with contractor.		
10	Exhaust fans in place and functioning.		
11	HEPA filtration unit in place in adjacent patient care area and functioning.		
Additional Comments:			
Permit Requested By:		Date:	
IP Inspector:		Date:	
Notes:			



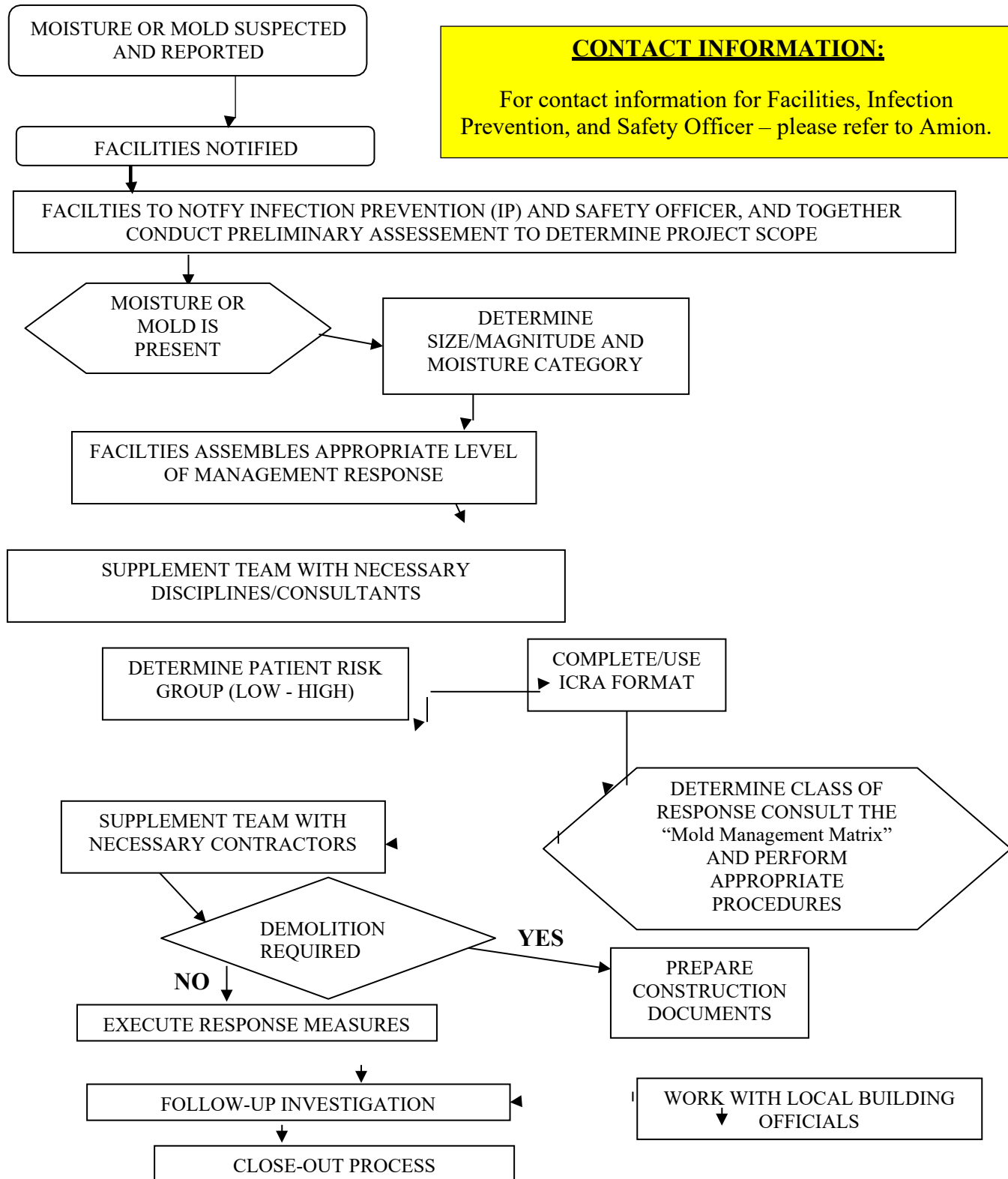
## Appendix G: Infection Control Risk Assessment (ICRA) Permit

Infection Control Risk Assessment (ICRA) Permit					
Type of ICRA: Water, Mold, and Construction			Permit No:		
Location:			Project Start Date:		
Project Coordinator:			Estimated Duration:		
Response Team Performing Work:			Permit Expiration Date:		
Supervisor:			Telephone:		
ACTIVITY			INFECTION CONTROL RISK GROUP		
YES	NO	CONSTRUCTION ACTIVITY	YES	NO	GROUP
		TYPE A: Inspection, non-invasive activity			GROUP 1: Low risk (Office areas)
		TYPE B: Small scale, short duration, minimal dust			
		TYPE C: Activity generates moderate to high levels of dust, demolition, or requires >1 work shift for completion			GROUP 2: Medium risk (Cardiology, Echocardiogram, Endoscopy, Nuclear Medicine, PT, Radiology/MRI, RT)
		TYPE D: Major demolition and construction activities requiring consecutive work shifts			
YES	NO	WATER INTRUSION (<48 hours or >48 hours without mold)			GROUP 3: High risk (ICU, ER, L&D, Lab, Medical Units, Newborn Nursery, Outpatient Surgery, Pediatrics, Pharmacy, PACU/Int, Surgical Units)
		CATEGORY I: Clean water			
		CATEGORY II: Gray water			
		CATEGORY III: Black water			
YES	NO	MOLD MANAGEMENT: Amount of mold identified			GROUP 4: Highest risk (Any area caring for immunocompromised patients, Burn Unit, Central Sterile Supply, ICU, OR including C-Section Rooms, Cardiac Cath Lab, Negative Pressure Isolation Rooms, Oncology, etc.)
		Less than 10 square feet			
		10 to 30 square feet			
		30 to 100 square feet			
		Greater than 100 square feet			
CONSTRUCTION ACTIVITY					
CLASS I		* Execute work by methods to minimize raising dust from construction operations. * Immediately replace any ceiling tile displaced for visual inspection. * Minor demolition for remodeling.			
CLASS II		All CLASS I requirements AND * Provide active means to prevent airborne dust from dispersing into atmosphere. * Water mist work surfaces to control dust while cutting. * Seal unused doors with dust tape. * Block off and seal air vents. * Wipe surfaces with disinfectant. * Contain construction waste before transport in tightly covered container. * Wet mop and/or vacuum with HEPA filtered vacuum before leaving work area. * Place dust mat at entrance and exit of work area. * Remove or isolate HVAC system in areas where work is being performed.			
CLASS III		All CLASS I and II requirements AND * Isolate HVAC system in area where work is being done to prevent contamination of the duct system. * Complete all critical barriers or implement control cube method before construction begins. * Maintain negative air pressure within work site utilizing HEPA equipped air filtration units. * Do not remove barriers from work area until completed project is thoroughly cleaned by EVS. * Vacuum work with HEPA filtered vacuums. * Wet mop with disinfectant. * Remove barrier materials carefully to minimize spreading of dirt and debris associated with construction. * Cover transport receptacles or carts. Tape covering.			
CLASS IV		All CLASS I, II, and III requirements AND * Seal holes, pipes, conduits, and punctures appropriately. * Construct anteroom and require all personnel to pass through this room so they can be vacuumed using a HEPA vacuum cleaner before leaving work site or they can wear cloth or paper coveralls that are removed each time they leave the work site. * All personnel entering work site are required to wear shoe covers.			
WATER INTRUSION					
W-1		* Identify and remove source of water intrusion. * Contain water to limited area. * Protect components, furnishings, etc. from direct contact with water. * Extract water from all locations impacted by water intrusion. * Determine actions to remediate and restore damaged materials. * Discard all unsalvageable contents and furnishings promptly.			
W-2		All W-1 requirements AND * Block off and seal supply and return air vents. * Redirect and restrict access to affected areas to minimize cross contamination from affected areas. * Evacuate High or Highest risk patients from area. * Protect or remove contents in the area from direct contact with water. * Remove solid matter and extract water from all impacted locations. Vacuums must be equipped with HEPA filters. * Decontaminate damaged hard surface materials with approved disinfectant to reduce microbial load. * Discard all highly absorbent, saturated materials promptly without cross contaminating unaffected areas. * Determine actions needed to remediate and restore damaged and/or contaminated materials.			
W-3		All W-1 and W-2 requirements AND * Discard all absorbent, saturated materials promptly. * Decontaminate sewage-damaged hard surface materials with approved disinfectant to reduce microbial load. * Remove all damaged porous materials. * Determine actions needed to complete remediation.			
MOLD MANAGEMENT					
M-1		* Identify and remove any source of water intrusion. * Remediation must be performed by appropriately trained staff using respiratory protection and PPE. * Restrict access to and keep work area unoccupied. * Use work practices that minimize mold disturbance. * Remove contaminated materials from building in sealed plastic bags. * Dispose of moldy materials in exterior dumpster. Bag shop objects in a manner that prevents puncture. * Remedial worker egress should be thoroughly cleaned and left dry and visibly free from contamination.			
M-2		All M-1 requirements AND * Restrict access to and keep work area unoccupied, seal unused doors with plastic. Place tacky mats at exit to prevent transporting mold and debris outside the area. * Use HEPA vacuum to capture airborne dust, if generated. * Remedial worker egress should be HEPA vacuumed, cleaned with detergent and left dry and visibly free from contamination.			
M-3		All M-1 and M-2 requirements AND * Clean, wet wipe, and HEPA vacuum and remove all movable objects from work area. * Clean supply and return air grills with HEPA vacuum. * Seal ventilation ducts/grills with plastic and duct tape. * Remove contaminated materials in sealed plastic bags and clean outside of bags with HEPA vacuum and wet wiping. * Work area barriers and egress should be HEPA vacuumed, cleaned with detergent and left dry and visibly free from contamination. * Remove barrier materials carefully to minimize spreading of dirt and debris associated with mold removal.			
M-4		All M-1, M-2, and M-3 requirements AND * Remediation must be performed by appropriately trained staff using full-face respiratory protection and PPE. * Restrict access to and keep work area unoccupied, completely seal work area with plastic sheeting and duct tape. * Use exhaust fan with HEPA filter to create negative air pressure, maintain airtight and decontamination room. * Remove contaminated materials in sealed plastic bags and clean outside of bags with HEPA vacuum. Wet wipe bags in the decontamination chamber prior to transport area outside building. * Contained area and decontamination room should be HEPA vacuumed and cleaned with damp cloth prior to removal of isolation barriers. * Maintain containment and negative pressure until adequate cleaning is validated and all visible dust is removed.			
M-5		All M-1, M-2, M-3, and M-4 requirements AND * Remediation should be conducted by qualified contractor or fully trained VMC staff using full respiratory protection and PPE. * Securely seal (isolate) affected HVAC section to ensure no air movement in the affected area. * Cover work area with plastic and seal with duct tape. * Use dust suppression methods during remediation. * Remove all mold growth supporting materials that cannot be cleaned. Seal in plastic bags and dispose promptly in exterior dumpster. * Transport debris during hours of least activity and along the most direct, least congested route. * Clean work area and surrounding area with HEPA vacuum, damp cloth and/or mop and detergent solution. * Area should be left dry and visibly free from contamination. * For areas >30 feet in width: Use plastic sheeting to completely isolate work area HVAC, use HEPA filter exhaust fan to create negative pressure, and strongly consider dismantling and disposal of all duct work with significant growth.			
Additional Requirements:					
Permit Requested By:			Date:		
Permit Authorized By:			Date:		
Notes/Extensions:					

## Appendix H: ICRA Compliance Monitoring

ICRA Compliance Monitoring						
Date of Survey:		Permit No:		Class/Level:		
Location:		Project Start Date:				
Project Coordinator:		Estimated Duration:				
Response Team Performing Work:		Permit Expiration Date:				
Supervisor:		Telephone:				
<b>Infection Prevention Inspectors:</b>			YES - NO - N/A			
Visit 1:	Visit 3:	VISIT:	1	2	3	4
Visit 2:	Visit 4:	DATE:				
<b>A. EXITS</b>						
1 Do exits provide free and unobstructed egress?						
2 Did personnel receive training for alternative exits?						
3 Are means of egress in construction area inspected daily?						
4 Is there free and unobstructed access to Emergency Department/Services and for emergency forces?						
<b>B. INFECTION PREVENTION</b>						
1 Permit posted and proper signage in place.						
2 No construction activity takes place within 25 feet of existing fresh air intakes.						
3 Materials used (i.e., fire retardants) comply with necessary safety regulations.						
4 Monitoring of impervious construction barriers, barricades sealed with no penetrations, meet requirements of permit class.						
5 Negative pressure verified, machines running, filters clean, and discharge hoses intact.						
6 Demonstrated compliance with traffic patterns.						
7 Demonstrated compliance with appropriate use of personal protective equipment.						
8 Demonstrated use of appropriate equipment to prevent airborne particulate matter/debris; this includes HEPA filtration units, HEPA vacuum equipment, and continuous use of exhaust fans.						
9 Ducts remain sealed/capped.						
10 Doors are closed and gaskets/hardware are intact.						
11 Methods of debris transportation are monitored and found to be consistent with process designed to minimize airborne particulate matter/debris.						
12 All windows and doors remain closed to prevent circulation of dust/debris.						
13 Carpet or sticky mats are clean and available at doorways for shoe dust collection.						
14 Adjacent areas with ceilings intact and floors clean, no dust tracked.						
15 Areas are found to be cleaned at the end of each day.						
16 No signs of water leakage.						
17 No signs of pests.						
18 Contractors following safe work practices (e.g., observe for trip and fall hazards, ladder safety).						
19 Patient care equipment and items removed from construction area.						
20 Ceiling tiles replaced when space above ceiling not being accessed (if occupied area, adjacent patient room doors are closed).						
Additional Comments:						

**Appendix I: EOC Program Roles & Responsibilities Flow Chart**



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STORE INCIDENT DOCUMENTATION AND  
COMPLETED ICRA FORM

**END OF APPENDIX I**

**DOCUMENT 00 73 10****SITE CONDITIONS****(Includes Pre-Bid Investigations)****ARTICLE 1 — GENERAL****1.01 Reference Documents and Definitions**

- .A Reference Document 00 71 00 (Contracting Definitions) including, without limitation, the following defined terms occurring frequently in this Document:
- .B For purposes of this Document 00 73 10, the term “Contractor” includes any Bidder performing its required pre-bid investigations necessary to preparing and submitting its Bid and execution of the Contract.
- .C Reference Document 00 31 00 Available Project Information.

**1.02 General**

- .A Reference Document 00 72 00 (General Conditions) regarding representations and warranties made by Contractor by submission of its Bid and execution of the Contract, including without limitation, Article 3.03 (Review of Contract Documents and Field Conditions).
- .B This Document 00 73 10 (Site Conditions) describes the investigations of the Work and the Site that Contractor is charged with having performed prior to submitting its Bid and the resulting knowledge of the Work, the Site, and conditions affecting construction that Contractor charged with possessing at the time it submits its Bid.
- .C This Document 00 73 10 (Site Conditions) covers the following additional topics:
  - .1 Owner-supplied information that Contractor may rely on in preparing its Bid and procedures Contractor must follow in order for Contractor to rely on other, different information.
  - .2 Owner-supplied information and other information Contractor must verify and measure through its own independent investigations.
  - .3 Contractor's required notification to Owner of additional information needed and/or discrepancies observed.
- .D Procedures, terms, and conditions that may apply during the Work in the event Contractor contends that actual conditions differ materially from those shown or indicated by Owner in the Contract Documents.
- .E Scope, responsibility, terms, and conditions affecting Contractor's work on the Site, pertaining to compliance with laws and regulations, management and care of existing conditions, utilities, and continuous areas.
- .F Procedures, terms, and conditions that apply during the Work regarding excavation, protection of utilities, utility connections, underground facilities, and discovery of cultural resources.

**ARTICLE 2 — REQUIRED INVESTIGATIONS PRIOR TO BIDDING**

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**2.01 Required Investigations: All Projects**

- .A Prior to submitting a Bid, Contractor shall visit the Site, examine thoroughly and understand fully the nature and extent of the Contract Documents, Work, Site, locality, actual conditions, as-built conditions, Document 00 31 00 (Available Project Information), and any other or different information made available (if any). Contractor's investigation shall include, without limitation, all local conditions, and Federal, State, County and local Codes and Laws, regulations and permit requirements that in any manner may affect cost, progress, site access, working hours, performance or furnishing of Work or which relate to any aspect of the means, methods, techniques, sequences, or procedures of construction to be employed by Contractor and safety precautions and programs incident thereto.
- .B Contractor's investigation shall include general and local conditions which can affect the Work or its cost including, but not limited to, conditions bearing upon transportation, disposal, handling, and storage of materials; the availability of labor, water, electric power, and roads; availability and traffic restrictions on access to the Site and the general vicinity of the Work; uncertainties of weather, water drainage, or similar physical conditions at the Site; the conformation and conditions of the ground; and the character of equipment and facilities needed preliminarily to and during Work performance.
- .C Contractor also acknowledges that it has satisfied itself as to the character, quality, and quantity of surface and subsurface materials or obstacles to be encountered insofar as this information is reasonably ascertainable from an inspection of the Site, access to the Site and territory surrounding the Site and examination of reasonably available records with respect to the Site, including all exploratory work done by Owner, available site information supplied by Owner, as well as from the Drawings and Specifications made a part of this Contract.

**2.02 Required Investigations: Specific Projects**

- .A For projects involving renovation of existing facilities, Contractor shall make all reasonable efforts to verify by independent investigation all above-ground and as-built conditions, including but not limited to, requesting additional information or verification of information as necessary. In performing its investigations, Contractor shall consider fully and anticipate that information supplied regarding existing above ground and as-built conditions at or contiguous to the Site is in many cases based on information furnished to Owner by others (e.g., the prior owner or builders), and that due to their age or their chain of custody since preparation, may not meet current industry standards for accuracy and may be inaccurate or incomplete.

**2.03 Required Investigations: Excavation and Utilities Relocation**

- .A For projects involving excavation or relocation of existing utilities, Contractor shall make reasonable efforts to verify information regarding Underground Facilities including, but not limited to, requesting additional information or verification of information as necessary. Because of the nature and location of the Project, the existence of Underground Facilities is deemed inherent in the Work of the Contract, as is the risk that as built records may contain inaccuracies regarding the depth, location, and size of Underground Facilities. Contractor shall, therefore, take care to note the existence and potential existence of Underground Facilities, in particular, above and below grade structures, new asphalt, meters or junction boxes, indicating the potential for drainage lines, storm drains, sewers, water, gas, electrical, chemical, hot water, and other similar items and utilities. Contractor shall carefully consider all supplied information, request additional information Contractor may deem necessary, and visually inspect the Site for above ground indications of Underground Facilities (such as, for example, and not by way of limitation, the existence of existing service laterals, appurtenances or other types of utilities, as indicating the presence of an

underground transmission main; or, other visible facilities, such as buildings, new asphalt, meters, and junction boxes on or adjacent to the Site). Contractor shall also consider fully the fact that information supplied regarding existing Underground Facilities at or contiguous to the Site is in many cases based on information furnished to Owner by others (e.g., the builders of such Underground Facilities or others), and that due to their age or their chain of custody since preparation, may not meet current industry standards for accuracy.

- .B Contractor shall also consider local underground conditions and typical practices for Underground Facilities, either through its own direct knowledge or through its subcontractors, and fully consider this knowledge in assessing the existing information and the reasonableness of its reliance.

#### **2.04 Required Investigations: Design Build Staff**

- .A Where the scope of work is design and construction (design build procurements), Contractor's pre-bid investigation shall include any and all constraints or requirements on design, engineering and resulting or affected construction imposed by applicable Codes and Laws, and all available Environmental Documents.

#### **2.05 Notification Duty**

- .A Based on the investigations and review required by this Document 00 73 10, Contractor shall completely and thoroughly compare and correlate all information provided regarding the Site, provided in Document 00 31 00 (Available Project Information), and information from Contractor's independent investigations and observations, with the information in the Contract Documents and learned from its required investigations, and shall provide Owner with prompt written notice of any and all conflicts, errors, ambiguities, or discrepancies of any type, that it discovered in or among the Contract Documents, information provided by Owner, and information determined by Contractor.
- .B Based the investigations and review required by this Document 00 73 10, Contractor shall, subject to Owner's approval, conduct any such additional or supplementary examinations, investigations, explorations, tests, studies and data compilations, concerning conditions (surface, subsurface, and Underground Facilities) at or contiguous to the Site or otherwise, which may affect cost, progress, performance or furnishing of Work or which relate to any aspect of the means, methods, techniques, sequences, or procedures of construction to be employed by Contractor and safety precautions and programs incident thereto or which Contractor deems necessary to determine that it could perform and furnish the Work in accordance with the time, price, and other terms and conditions of Contract Documents.
- .C By executing the Contract Agreement (Series 00 52 00), Contractor agrees that Owner has responded to and resolved any conflict, error, or ambiguity in the Contract Documents, in the information supplied in Document 00 31 00 (Available Project Information), and Site Conditions (Document 00 71 00), which Contractor has brought to Owner's attention.

#### **2.06 Knowledge Charged Contractor**

- .A Contractor agrees that during performance of the Contract, Contractor will be charged with knowledge of all information that a reasonable contractor experienced in the work of the Project should have learned in performing its required pre-bid investigations. Such knowledge shall also include, without limitation, information not provided by Owner and equally accessible to Contractor and Owner, such as information in the possession of other governmental sources, the existence and relevance either known or that should

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have been known by an experienced and reasonably prudent contractor in the exercise of due diligence.

- .B Contractor shall not be entitled to adjustment of the Contract Sum or Contract Time due to any information, error, inconsistency, omission, or conditions that Contractor, having conducted the reasonably thorough investigation and review required by this Document 00 73 10, should have known or could have known upon making reasonable inquiry. Contractor shall be responsible for the resultant losses including, without limitation, the cost of correcting Deficient Work.
- .C Contractor's duty to investigate, examine available data, and reasonably interpret data, is based on Contractor's knowledge and the knowledge of its available subcontractors for specialized work.

### **ARTICLE 3 — LIMITED RELIANCE ON CERTAIN AS BUILT INFORMATION AND TECHNICAL DATA REGARDING ABOVE GROUND AND SUBSURFACE CONDITIONS.**

#### **3.01 Owner's Disclaimers**

- .A Except as expressly permitted, Contractor shall rely on the results of its own independent investigation and shall not rely on Owner-supplied information regarding above-ground conditions and as-built conditions, and Contractor shall accept full responsibility for its verification work sufficient to complete the Work as intended.
- .B Owner does not expressly or impliedly warrant or represent that information as to above-ground conditions or as-built conditions indicated in the Contract Documents or supplied by Owner, is correctly shown or indicated, or otherwise complete for construction purposes.
- .C In executing the Contract Agreement (Series 00 52 00), Contractor may rely on Owner-supplied information regarding above-ground existing conditions only where such conditions (i) are hidden from view and not reasonably inferable from known information; (ii) are not reasonably accessible or subject to reasonable, independent verification or investigations; (iii) pertain to actual, physical conditions of the building structure; and, (iv) only to the extent that actual conditions are materially different from conditions ordinarily encountered in similar facilities. Contractor may also rely on Owner information regarding the presence or absence of hazardous materials.
- .D Conditions expected to be encountered at the work site and inherent in the work are defined by the information that would be obtained by careful examination of the Work as required herein, all information or data supplied or available identified in Document 00 31 00 (Available Project Information), and the express limitations on Contractor's use and reliance on available information in the Contract Documents including this Document 00 73 10.
- .E Regarding subsurface conditions other than Underground Facilities shown on the Contract Documents or otherwise supplied by Owner, Contractor may rely only upon the general accuracy of actual reported depths, actual reported character of materials, actual reported soil types, actual reported water conditions, or actual obstructions shown or indicated in the Contract Documents. Owner is not responsible for the completeness of any subsurface condition information, Contractor's conclusions or opinions drawn from any subsurface condition information, or subsurface conditions that are not specifically shown. (For example, Owner is not responsible for soil conditions in areas contiguous to areas where a subsurface condition is shown.)
- .F To the extent Contractor draws inferences from the Document 00 31 00 (Available Project Information) and wants to rely thereon, it may ask a bid question which Owner will respond with copy to all bidders.



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Reasonable inferences that Contractor draws are Contractor's own risk, unless Contractor issues a bid question that Owner responds to with a copy to all bidders.

### **3.02 Costs of Investigations and Planning**

- .A The cost of all of the following will be included in the Contract Sum and Contractor shall have full responsibility for (i) reviewing and checking all available information and data including, but not limited to, all information or data supplied or available identified in Document 00 31 00 (Available Project Information) and information on file at Underground Service Alert (USA North 811); (ii) locating all Underground Facilities shown or indicated in the Contract Documents, available information, or indicated by visual observation including, but not limited to, and by way of example only, engaging qualified locating services and all necessary backhoeing and potholing; (iii) coordination of the Work with the owners of such Underground Facilities during construction; and, (iv) the safety and protection of all such Underground Facilities and repairing any damage thereto resulting from the Work. Contractor shall notify owners of adjacent property and of Underground Facilities and utility owners when prosecution of the Work may affect them, and shall cooperate with them in the protection, removal, relocation, and replacement of their property.
- .B Owner will make available the Site for testing and investigations during the Bid period, pursuant to the terms of Document 00 21 00 (Access, Indemnity, and Release Agreement).

## **ARTICLE 4 — DUTIES AND RESPONSIBILITIES DURING CONSTRUCTION: UNDERGROUND FACILITIES**

### **4.01 Contractor To Locate and Protect Underground Facilities**

- .A Drawings may indicate above and below grade structures and Underground Facilities such as drainage lines, storm drains, sewers, water, gas, electrical, chemical, hot water, and other similar items and utilities. Contractor shall locate these known existing installations before proceeding with trenching or other operations that may cause damage. Contractor shall further locate, by carefully excavating with small equipment, potholing and principally by hand, all such utilities or installations that are to remain and that are subject to damage. If additional utilities whose locations were unknown are discovered, Contractor shall immediately report to Owner for disposition of the same.
- .B Additional utilities whose locations are unknown to Owner are suspected to exist in urban locations throughout the County. Contractor shall be alert to their existence; if they are encountered, Contractor shall immediately report to Owner with a recommended disposition of same. Contractor shall also investigate the existence of existing service laterals, appurtenances or other types of utilities, indicated by the presence of an underground transmission main or other visible facilities, such as buildings, new asphalt, meters and junction boxes, on or adjacent to the Site, even if not shown or indicated in information supplied by Owner or the regional notification center. Contractor shall immediately secure all such available information and notify Owner and the utility owner, in writing, of its discovery.
- .C At all times during construction, all operating Underground Facilities shall remain in operation, unless the Contract Documents expressly indicate otherwise. Contractor shall maintain such Underground Facilities in service where appropriate; shall repair any damage to them caused by the Work; and shall incorporate them into the Work, including reasonable adjustments to the design location (including minor relocations) of the existing or new installations. Contractor shall take immediate action to restore any in service installations damaged by Contractor's operations.
- .D Contractor shall have full responsibility for (i) reviewing and checking all available information and data and information supplied from the regional notification center; (ii) locating all Underground Facilities shown

or indicated in the Contract Documents, available information, or indicated by visual observation including, but not limited to, and by way of example only, engaging qualified locating services and all necessary back hoeing and potholing; (iii) coordination of the Work with the owners of such Underground Facilities during construction; and, (iv) the safety and protection of all such Underground Facilities and repairing any damage thereto resulting from the Work.

#### **4.02 Required Notifications**

- .A Before commencing work of digging trenches or excavation, Contractor shall also review all information available regarding subsurface conditions, including but not limited to information supplied in Document 00 31 00 (Available Project Information), and subject to the terms and conditions of the Contract Documents, Contractor shall also comply with Government Code sections 4216 to 4216.12.
- .B Contractor shall contact USA North 811, and schedule the Work to allow ample time for the center to notify its members and, if necessary, for any member to field locate and mark its facilities. Contractor is charged with knowledge of all subsurface conditions reflected in USA North 811 records. Prior to commencing excavation or trenching work, Contractor shall provide Owner with copies of all USA North 811 records secured by Contractor. Contractor shall advise Owner of any conflict between information provided in Document 00 31 00 (Available Project Information), the Drawings, and the information provided by USA North 811 records. Contractor's excavation shall be subject to and comply with the Contract Documents, including without limitation all applicable requirements set forth in the Contract Documents.
- .C Additional compensation or extension of time on account of utilities not shown or otherwise brought to Contractor's attention, including reasonable action taken to protect or repair damage, shall be determined as provided in the Contract Documents.

#### **4.03 Main and Trunk Lines**

- .A At no additional cost to Owner, Contractor shall incorporate into the Work main or trunk line utilities identified in the Contract Documents and other utilities or underground structures known or reasonably discernible and that will remain in service, including reasonable adjustments to the design location (including minor relocations) of the existing or new installations. Contractor shall take immediate action to restore any in service installations damaged by Contractor's operations. Should Owner determine that Contractor has not responded in a timely manner or not diligently pursued completion of the Work, Owner may restore service and deduct the costs of such action by Owner from the amounts due under the Contract.
- .B Consistent with Government Code section 4215, as between Owner and Contractor, Owner will be responsible for the timely removal, relocation, or protection of existing main or trunk line utility facilities located on the Site only if such utilities are not identified in the Contract Documents or Document 00 31 00 (Available Project Information). Owner will compensate Contractor for the cost of locating and repairing damage not due to Contractor's failure to exercise reasonable care, removing and relocating such main or trunk line utility facilities not indicated in the Contract Documents or through site information provided through Document 00 31 00 (Available Project Information) with reasonable accuracy, and equipment on the Project necessarily idled during such work.

#### **4.04 Responsibility for Unknown Underground Facilities**

- .A If an Underground Facility is uncovered or revealed at or contiguous to the Site which was not shown or indicated in the materials supplied by Owner or in information on file at USA North 811 or is otherwise reasonably available to Contractor, then Contractor shall, promptly after becoming aware thereof and

before further disturbing conditions affected thereby (and in no event later than seven (7) Days), and prior to performing any Work in connection therewith (except in an emergency as required by the Contract Documents), identify the owner of such Underground Facility and give written notice to that owner and to Owner. During such time, Contractor shall be responsible for the safety and protection of such Underground Facility.

- .B Contractor shall be allowed an increase in the Contract Sum or an extension of the Contract Time, or both, to the extent that they are attributable to the existence of any Underground Facility that is owned and was built by Owner only where the Underground Facility:
  - .1 Was not shown or indicated in the Contract Documents or in the information supplied pursuant to Document 00 31 00 (Available Project Information) or in information on file at USA North 811;
  - .2 Contractor did not have actual or constructive knowledge of it; and,
  - .3 Contractor could not reasonably have been expected to be aware of it or to have anticipated it from the information available. (For example, if surface conditions such as pavement repairs, valve covers, or other markings indicate the presence of an Underground Facility, then an adjustment of the Contract Sum or an extension of the Contract Time will not be due even if the Underground Facility was not indicated in the Contract Documents, was not in the information supplied to Contractor pursuant to Document 00 31 00 (Available Project Information), and/or was not in information on file at USA North 811 or otherwise reasonably available to Contractor.)
- .C Contractor shall bear the risk that Underground Facilities not owned or built by Owner may differ significantly in nature or locations shown in information made available by Owner pursuant to Document 00 31 00 (Available Project Information), in information on file at USA, or otherwise reasonably available to Contractor. Underground Facilities are inherent in construction involving digging of trenches or other excavations and Contractor is to apply its skill and industry to verify the information available.

## **ARTICLE 5 — DUTIES AND RESPONSIBILITIES DURING CONSTRUCTION: CONCEALED CONDITIONS AND HAZARDOUS MATERIALS**

### **5.01 Concealed Or Unknown Conditions**

- .A If either of the following conditions is encountered at Site when digging trenches or other excavations that extend deeper than four feet (4') below the surface, Contractor shall give a written Notice of Differing Site Conditions to Owner promptly before conditions are disturbed, except in an emergency as required by the Contract Documents, and in no event later than seven (7) Days after first observance of:
  - .1 Subsurface or Latent physical conditions which differ materially from those indicated in the Contract Documents; or,
  - .2 Unknown physical conditions of an unusual nature or which differ materially from those ordinarily encountered and generally recognized as inherent in work of the character provided for in the Contract Documents.
- .B In response to Contractor's Notice of Differing Site Conditions, Owner will investigate the identified conditions, and if they differ materially and cause increase or decrease in Contractor's cost of, or time required for, performance of any part of the Work, Owner will issue either a Change Order or Field Modification under the procedures described in the Contract Documents. If Owner determines that physical conditions at the Site are not Latent or are not materially different from those indicated in Contract Documents or that no change in terms of the Contract Documents is justified, Owner will so notify Contractor in writing, stating reasons. Contractor shall in all cases continue to prosecute the Work in accord with the Contract Documents as interpreted and decided by Owner.

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- .C Contractor shall not be entitled to any adjustment in the Contract Sum or Contract Time regarding claimed Latent or materially different Site conditions (whether above or below grade) if:
- .1 Contractor knew of the existence of such conditions at the time Contractor submitted its Bid;
  - .2 Contractor should have known of the existence of such conditions as a result of having complied with the requirements of Contract Documents;
  - .3 The information or conditions claimed by Contractor to be Latent or materially different consist of information, conclusions, opinions, or deductions of the kind that the Contract Documents precludes reliance upon; or,
  - .4 Contractor was required to give written Notice of Differing Site Conditions and failed to do so within the time required.
- .D If Owner and Contractor are unable to agree on entitlement to or as to the amount or length of any adjustment in the Contract Sum or Contract Time required under this paragraph, Contractor may proceed under Document 00 73 83 (Dispute Resolution).

## 5.02 Hazardous Materials

- .A Contractor must comply with all Federal, State, County and local laws, statutes, ordinances, and other regulations covering the use, storage, transportation, and disposal of any Hazardous Materials on the Project. Contractor must obtain all permits and pay all fees and taxes for all services and materials required to perform the Project.
- .B The term "Hazardous Materials" as used herein means any material that, because of its quantity, concentration, or physical or chemical characteristics, poses a significant present or potential hazard to human health and safety or to the environment if released into the workplace of the environment.
- .1 Prior to starting Work, Contractor must submit to Owner a list of all Hazardous Materials expected to be used on the Project. Contractor must keep a copy of the list at the Project Site. This list must include but not be limited to any cleaners, solvents, paints, or explosive charges used in the Work. Contractor must submit one (1) copy of OSHA Form 20 – Material Safety Data Sheet ("MSDS") for each material listed and must advise every person at or near the Project Site of these materials, of proper handling, and of proper action in case of accident or exposure.
  - .2 Contractor must safely contain and store all its Hazardous Materials, and in the event of spill or discharge, must immediately notify all required Federal, State, County and local agencies including the fire department. Contractor must protect personnel from exposure and provide treatment as necessary.
  - .3 Contractor must immediately advise Owner of any potentially Hazardous Materials encountered at the Project Site and must take all necessary action to prevent exposure of personnel until the material is identified and proper action can be taken.
- .C Contractor must not store or use any Hazardous Materials near air intakes or doors and windows serving persons on or off the Project Site without proper protection and safeguards to prevent exposure.
- .D Contractor must exercise all required precautions and safeguards in the storage, use, and disposal of Hazardous Materials. At all times Contractor has full responsibility for compliance with all applicable laws and statutes, or other provisions of the Contract, including without limitation Contractor's responsibility for damage and preservation of life and property.
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**5.03 Notice Of Discovered Hazardous Waste Or Materials Conditions**

- .A Contractor shall give a written Notice of Hazardous Materials Condition to Owner promptly, before any of the following conditions are disturbed (except in an emergency as required by the Contract Documents), and in no event later than twenty-four (24) hours after first observance of any:
    - .1 Material that Contractor believes may be hazardous waste or hazardous material, as defined in Section 25117 of the Health and Safety Code (including, without limitation, asbestos, lead, PCBs, petroleum and related hydrocarbons, and radioactive material) that is required to be removed to a Class I, Class II, or Class III disposal site in accordance with provisions of existing law ("hazardous material"); or,
    - .2 Other material that may present an imminent substantial danger to persons or property exposed thereto in connection with Work at the Site ("other materials").
  - .B Except as otherwise provided in the Contract Documents or as provided by applicable law, Contractor shall not be required to give any notice for the disturbance or observation of any such hazardous materials or other materials where such matter is disturbed or observed as part of the scope of Work under the Contract Documents (such as hazardous waste or hazardous material investigation, remediation or disposal activities which are identified as the subject of Work under the Contract Documents), where Contractor complies with all requirements in the Contract Documents and applicable law respecting such materials.
  - .C Contractor's Notice of Hazardous Materials Condition shall indicate whether the hazardous materials or other materials were shown or indicated in the Contract Documents to be within the scope of Work, and whether the hazardous materials or other materials were brought to the Site by Contractor, its Subcontractors, suppliers, or anyone else for whom Contractor is responsible.
  - .D Contractor shall not be entitled to any adjustment in the Contract Sum or Contract Time regarding claimed hazardous waste or materials if:
    - .1 Contractor knew of the existence of such hazardous materials or other materials at the time Contractor submitted its Bid;
    - .2 Contractor should have known of the existence of such hazardous material or other materials as a result of its having the responsibility to obtain additional or supplementary examinations, investigation, explorations, tests, studies, and data concerning the conditions at or contiguous to the Site prior to submitting its Bid; or,
    - .3 Contractor failed to give the written notice within the time required by the Contract Documents; or,
    - .4 Contractor failed to give advance written notice, at least sixty (60) Days prior to date when removal was required, of hazardous materials known to exist and required to be removed prior to execution of the Work.
  - .E If Owner determines that conditions involve hazardous materials or other materials and that a change in Contract Document terms is justified, Owner will issue either a Bid Addendum or Construction Change Directive under the procedures described in the Contract Documents, including without limitation Section 01 26 00 (Contract Modification Procedures). If Owner determines that conditions do not involve hazardous materials or other materials or that no change in the Contract Documents is justified, Owner will notify Contractor in writing stating the reasons for its determination.
  - .F If Owner and Contractor are unable to agree on entitlement to or as to the amount or length of any adjustment in the Contract Sum or Contract Time required, Contractor may proceed as provided in
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Document 00 73 83 (Dispute Resolution).

- .G In addition to the parties' other rights under the Contract Documents, if Contractor does not agree to resume Work based on a reasonable belief that it is unsafe, or does not agree to resume Work under special conditions, Owner may order the disputed portion of Work deleted from the Work, or performed by others, or Owner may invoke its right to terminate Contractor's right to proceed under the Contract Documents in whole or in part, for convenience or for cause as the facts may warrant. If Contractor does not agree with Owner's determination of any adjustment in the Contract Sum or Contract Time as a result, Contractor may proceed as provided in Document 00 73 83 (Dispute Resolution).

#### **ARTICLE 6 — DUTIES AND RESPONSIBILITIES DURING CONSTRUCTION: PRESERVATION OF CULTURAL RESOURCES**

- 6.01** Pursuant to the National Historic Preservation Act of 1966, State laws and County ordinances, the following procedures are implemented to ensure historic preservation and fair compensation to Contractor for construction delays that may occur due to cultural resources discoveries.
- 6.02** In the event potentially historical, architectural, archaeological, or cultural resources ("Resources") are discovered during subsurface excavations at the Project Site, the following procedures apply:
- .A Owner will issue a "Cultural Resources – Suspend Work Order" directing Contractor to temporarily suspend all operations at the location of such potential Resources.
- .B Such "Cultural Resources – Suspend Work Order" will be effective until such time as a qualified Consultant can assess the value of such Resources and make recommendations. Any "Cultural Resources – Suspend Work Order" will contain the following:
- .1 A description of the potential resource, its location, and the area where Contractor's Work is suspended;
- .2 A description of what part or all of Contractor's Work is suspended;
- .3 Instructions regarding suspension of orders by Contractor for materials and services;
- .4 Guidance regarding action to be taken by Subcontractors; and,
- .5 Estimated duration of the temporary suspension.
- .C If the Consultant determines that the potential find is indeed a cultural resource, Owner will, as expeditiously as possible, advise Contractor in writing of the action to be taken regarding the find, and the anticipated time frame and extent of any Work suspension.
- .D Adjustment of Contract Time and Contract Sum Relating to Resources
- .1 If, in the Notice to Bidders, the Work site was deemed "Archaeologically Sensitive," then the Contract Time(s) includes five (5) work days of temporary suspension for Resources finds and there will be no payment for such suspension or any inefficiencies related thereto, up to a maximum cumulative duration of five (5) work days delay to the Critical Path(s) of the Official Progress Schedule.
- .2 If a cultural discovery at an Archaeologically Sensitive site results in a cumulative Critical Path delay that exceeds five (5) work days, then Contractor may be entitled to an adjustment of the Contract Sum and/or Contract Time for the Critical Path delay in excess of five (5) work days. The Critical Path delay in excess of five (5) work days will be treated as an excusable compensable delay and the Contract Time will be extended in accordance with Article 8.05 (Delay and Time Extensions) of Document 00 72 00 (General Conditions), including, but not limited to, Contractor's obligation to provide documentation in support of the claimed delay.

- .3 If a cultural resource discovery was unforeseen (i.e., if the Work site was not deemed "Archaeologically Sensitive" in the Notice to Bidders), Contractor may be entitled to an adjustment of the Contract Time and/or Contract Sum in accordance with Article 8.05 (Delay and Time Extensions) of Document 00 72 00 (General Conditions), including, but not limited to, Contractor's obligation to provide documentation in support of the claimed delay.
- .4 If, as a result of a temporary suspension, Owner agrees that Contractor sustained a loss which could not have been avoided by judicious handling of Contractor's forces or equipment, or by redirection of forces or equipment to perform other Work under the Contract, Contractor will be paid for idle time of equipment and labor by force account as provided in Section 01 26 00 (Contract Modification Procedures).

**.E Documentation**

- .1 Beginning with the first Day of suspension, and for each following Day, Contractor must maintain detailed hourly records of the labor and equipment idled by such suspension, plus substantiation as to why such labor and equipment could not be used on other parts of the Work. Such records must be of a form acceptable to Owner, signed by Contractor, and are subject to verification by Owner.
- .2 Failure by Contractor to furnish the aforesaid records constitutes a waiver of Contractor's right to an adjustment of the Contract Sum and Contract Time.

**ARTICLE 7 — DUTIES AND RESPONSIBILITIES DURING CONSTRUCTION: CONNECTIONS TO OR ALTERATIONS TO EXISTING CONDITIONS AND FACILITIES**

- 7.01** In planning and performing the Work, every effort shall be made to minimize the levels of noise, dirt, dust, molds, biological organisms (e.g., aspergillus), fumes, odors, and similar items to the extent possible. Contractor shall remove, cut, alter, replace, and repair existing building infrastructure, including without limitation plumbing, medical gas, fire and life safety equipment, utilities, and casework, consistent with Contractor's coordination and planning responsibilities to not interfere with ongoing Owner's operations, as necessary to install new Work. Except as otherwise shown or specified, Contractor shall not cut, alter, or remove any structural Work, and shall not disturb any ducts, plumbing, steam, gas, or electrical Work without approval of Owner.
- 7.02** Unless otherwise specified or indicated, Contractor shall make all connections or alterations to existing facilities, including structures, drain lines, and utilities such as water, sewer, gas, telephone, and electric, necessary to complete the Work of the Contract Documents. In each case, Contractor shall provide advance notice to and receive permission from Owner or the owning utility prior to undertaking any connection or making any alterations.
- 7.03** Contractor shall restore existing conditions (walls, structures, partitions, floors, mechanical, and electrical Work, etc.) disturbed or removed as a result of performing required new Work to the original conditions. Existing conditions or facilities to be altered or extended and found to be defective in any way shall be reported to Owner before commencing Work. Materials and workmanship used in restoring conditions or facilities shall conform or exceed in type and quality that of original existing construction, except as otherwise shown or specified or required by codes or applicable standards.

**END OF DOCUMENT 00 73 10**

Document 00 73 16

**INSURANCE AND INDEMNITY REQUIREMENTS FOR  
CONSTRUCTION CONTRACTS**

**Indemnity**

Notwithstanding any other provision of this Agreement or the Contract Documents, Contractor shall indemnify, release, hold harmless, and defend, with counsel approved by County of Santa Clara (hereinafter "County"), County and its officers, agents, and employees from any claim, demand, suit, judgment, liability, loss, injury, or damage, or expense of any kind (including attorneys' fees and costs) arising out of, or in connection with, performance of this Agreement by Contractor and/or its officers, agents, employees, or subcontractors, excepting only loss, injury, or damage caused by the sole or active negligence or willful misconduct of personnel employed by County. It is the intent of the parties to this Agreement to provide the broadest possible coverage for County as allowed by law. Contractor shall reimburse County for all costs, attorneys' fees, expenses, and liabilities incurred with respect to any litigation or process in which Contractor contests its obligation to indemnify, defend, and/or hold harmless County under this Agreement and does not prevail in that contest.

**Insurance**

Without limiting the Contractor's indemnification of the County, the Contractor shall provide and maintain at its own expense, during the term of this Agreement, or as may be further required herein, the following insurance coverages and provisions:

**A. Evidence of Coverage**

Prior to commencement of this Agreement, the Contractor shall provide a Certificate of Insurance certifying that coverage as required herein has been obtained. Individual endorsements executed by the insurance carrier must accompany the certificate. In addition, a certified copy of the policy or policies shall be provided by the Contractor upon request.

This verification of coverage shall be sent to the requesting County department, unless otherwise directed. The Contractor shall not receive a Notice to Proceed with the work under the Agreement until it has obtained all insurance required and such insurance has been approved by the County. This approval of insurance shall neither relieve nor decrease the liability of Contractor.

**B. Qualifying Insurers**

1. All coverages, except surety, shall be issued by companies which hold a current policy holder's alphabetic and financial size category rating of not less than A- V, according to the current Best's Key Rating Guide or a company of equal financial stability that is approved by the County's Insurance Manager.
2. When surety bonds are required, they shall be issued by companies that meet the following minimum requirements:

- A. A California admitted surety with either a current A.M. Best rating of A IV or a current Standard and Poors (S&P) rating of A.

OR



B. An admitted surety insurer which complies with the provisions of the Code of Civil Procedure, Section 995.660\*.

OR

C. In lieu of 1 & 2, a company of equal financial size and stability that is approved by the County's Insurance Manager.

\* California Code of Civil Procedure Section 995.660 in summary, states that an admitted surety must provide: 1) the original, or a certified copy of instrument authorizing the person who executed the bond to do so, within 10 calendar days of receipt of a request to submit the instrument; 2) a certified copy of the Certificate of Authority issued by the Insurance Commissioner, within 10 calendar days of receipt of a request to submit the copy; 3) a certificate from County Clerk of Santa Clara County that Certificate of Authority has not been surrendered, revoked, canceled, annulled or suspended, within 10 calendar days of receipt of the certificate; 4) copies of the surety's most recent annual statement and quarterly statement filed with the Department of Insurance pursuant to Article 10, within 10 calendar days of receipt of a request to submit the statements.

C. Notice of Cancellation

All coverage as required herein shall not be canceled or changed so as to no longer meet the specified County insurance requirements without 30 days' prior written notice of such cancellation or change being delivered to the County of Santa Clara or their designated agent.

D. Insurance Required

1. Commercial General Liability Insurance - for bodily injury (including death) and property damage which provides limits as follows:

- a. Each occurrence - \$2,000,000
- b. General aggregate - \$4,000,000
- c. Products/Completed Operations aggregate \*\* - \$4,000,000
- d. Personal Injury - \$2,000,000

A minimum of 50% of each of the aggregate limits must remain available at all times unless coverage is project specific.

2. General liability coverage shall include:

- a. Premises and Operations
- b. \*\*Products/Completed Operations with limits of four million dollars (\$4,000,000) per aggregate to be maintained for three (3) years following acceptance of the work by the County.
- c. Contractual Liability expressly including liability assumed under this Agreement. If the Contractor is working within fifty (50) feet of a railroad or light rail operation,

any exclusion as to performance of operations within the vicinity of any railroad bridge, trestle, track, roadbed, tunnel, underpass or crossway shall be deleted, or a railroad protective policy provided.

- d. Personal Injury liability
- e. Owners' and Contractors' Protective liability
- f. Severability of interest
- g. Explosion, Collapse, and Underground Hazards (X, C and U)
- h. Broad Form Property Damage liability

3. General liability coverage shall include the following endorsements, copies of which shall be provided to the County:

a. **Additional Insured Endorsement**, which shall read:

"County of Santa Clara, and members of the Board of Supervisors of the County of Santa Clara, and the officers, agents, and employees of the County of Santa Clara, individually and collectively, as additional insureds."

Insurance afforded by the additional insured endorsement shall apply as primary insurance, and other insurance maintained by the County of Santa Clara, its officers, agents, and employees shall be excess only and not contributing with insurance provided under this policy. Public Entities may also be added to the additional insured endorsement as applicable and the contractor shall be notified by the contracting department of these requirements.

b. **Contractual Liability Endorsement:**

Insurance afforded by this policy shall apply to liability assumed by the insured under written contract with the County of Santa Clara.

c. **X C & U (Explosion, Collapse and Underground) Endorsement:**

Insurance afforded by this policy shall provide X, C and U Hazards coverage.

4. Claims Made Coverage

If coverage is written on a claims made basis, the Certificate of Insurance shall clearly state so. In addition to coverage requirements above, such policy shall provide that:

- a. Policy retroactive date coincides with or precedes the Contractor's start of work (including subsequent policies purchased as renewals or replacements).
- b. Contractor will make every effort to maintain similar insurance during the required extended period of coverage following project completion, including the requirement of adding all additional insureds.

- c. If insurance is terminated for any reason, Contractor agrees to purchase an extended reporting provision of at least two years to report claims arising from work performed in connection with this Agreement or Permit.
- d. Policy allows for reporting of circumstances or incidents that might give rise to future claims.

5. Automobile Liability Insurance

For bodily injury (including death) and property damage which provides total limits of not less than one million dollars (\$1,000,000) combined single limit per occurrence applicable to all owned, non-owned and hired vehicles.

6. Workers' Compensation and Employer's Liability Insurance

- a. Statutory California Workers' Compensation coverage including broad form all-states coverage.
- b. Employer's Liability coverage for not less than one million dollars (\$1,000,000) per occurrence.

7. Contractor's Pollution Liability

Contractor shall provide Contractor's Pollution Liability coverage including bodily injury, personal injury, and property damage from a pollution event resulting from the Work, operations or completed operations of the Project with limits not less than \$1,000,000 per claim or per occurrence and \$1,000,000 aggregate limits, including claim expenses and defense, written on a claims made or occurrence basis for the Project inclusive of the term of construction and a ten (10) year completed operations period, including coverage for mold. If the Work involves the removal of asbestos, the removal/ replacement of underground tanks and/or the removal of toxic chemicals and substances, Contractor or Subcontractor performing such Work shall provide the appropriate pollution coverage, with limits of no less than \$1,000,000 per claim or per occurrence.

8. Contractors' Equipment Insurance

On an "all risk" basis covering equipment owned, leased, or used by Contractor. If the total value of equipment is less than \$100,000 Contractor may self-insure this exposure. If total equipment value is \$100,000 or more, insurance is required. Such insurance shall include an insurer's waiver of subrogation in favor of the County. Contractor shall hold harmless the County for any loss or damage to the Contractor's equipment. This coverage may be waived by the Insurance Manager, but the Contractor hereby releases and holds harmless the County for any loss or damages to its equipment.

9. Builder's Risk Insurance

The County shall provide Builder's Risk insurance (first party property insurance) on an all risk basis including flood with a limit of no less than the full replacement value of the work, and covering the work and all materials incorporated therein, and insuring the interests of the County, Contractor, and subcontractors. Insurance shall contain insurer's waiver of subrogation in favor of the Contractor and subcontractors. Contractor shall be responsible for the first \$50,000 of any

loss. The County's provision of Builder's risk insurance is an economic convenience to the County, and does not change or revise the Contractor's responsibility for the Work until County Acceptance, including but not limited to, losses that may exceed the insurance limits. Contractor may secure additional insurance, in Contractor's sole and absolute discretion, and Contractor must include the cost of such insurance in Contractor's bid.

**E. Special Provisions**

The following provisions shall apply to this Agreement:

1. The foregoing requirements as to the types and limits of insurance coverage to be maintained by the Contractor and any approval of said insurance by the County or its insurance consultant(s) are not intended to and shall not in any manner limit or qualify the liabilities and obligations otherwise assumed by the Contractor pursuant to this Agreement, including but not limited to the provisions concerning indemnification.
2. The County acknowledges that some insurance requirements contained in this Agreement may be fulfilled by self-insurance on the part of the Contractor. However, this shall not in any way limit liabilities assumed by the Contractor under this Agreement. Any self-insurance shall be approved in writing by the County upon satisfactory evidence of financial capacity. Contractors obligation hereunder may be satisfied in whole or in part by adequately funded self-insurance programs or self-insurance retentions.
3. Should any of the work under this Agreement be sublet, the Contractor shall require each of its subcontractors of any tier to carry the aforementioned coverages, or Contractor may insure subcontractors under its own policies.
4. The County reserves the right to withhold payments to the Contractor in the event of material noncompliance with the insurance requirements outlined above.

**F. Bond Requirements**

1. Contract Bonds - Prior to execution of the Contract, Contractor shall file with the County on the approved forms, the two surety bonds in the amounts and for the purposes noted below, duly executed by a reputable surety company satisfactory to County, and Contractor shall pay all premiums and costs thereof and incidental thereto.

Each bond shall be signed by both Contractor and the sureties.

- a) The "payment bond for public works" shall be in an amount of one hundred percent (100%) of the Contract price, as determined from the prices in the bid form, and shall insure to the benefit of persons performing labor or furnishing materials in connection with the work of the proposed Contract. This bond shall be maintained in full force and effect until all work under the Contract is completed and accepted by the County, and until all claims for materials and labor have been paid.
- b) The "performance bond" shall be in an amount of one hundred percent (100%) of the Contract price as determined from the prices in the bid form, and shall insure the faithful performance by Contractor of all work under the Contract. It shall also

insure the replacing of, or making acceptable, any defective materials or faulty workmanship.

Should any surety or sureties be deemed unsatisfactory at any time by the County notice will be given Contractor to that effect and Contractor shall forthwith substitute a new surety or sureties satisfactory to the County. No further payment shall be deemed due or will be made under the Contract until the new sureties qualify and are accepted by the County.

All alterations, time extensions, extra and additional work, and other changes authorized by the Specifications, or any part of the Contract, may be made without securing consent of the surety or sureties on the contract bonds.

2. Fidelity Bonds – Required only if contractor will be receiving advanced funds or payments. Before receiving compensation under this Agreement, Contractor will furnish County with evidence that all officials, employees, and agents handling or having access to funds received or disbursed under this Agreement, or authorized to sign or countersign checks, are covered by a BLANKET FIDELITY BOND in an amount of AT LEAST fifteen percent (15%) of the maximum financial obligation of the County cited herein. If such bond is canceled or reduced, Contractor will notify County immediately, and County may withhold further payment to Contractor until proper coverage has been obtained. Failure to give such notice may be cause for termination of this Agreement, at the option of County.

G. Certificate Holder and Address.

County of Santa Clara, Insurance Compliance, P.O. Box 100085-ZB, Duluth, GA 30096.

**END DOCUMENT 00 73 16**

EXHIBIT B-1A

INSURANCE REQUIREMENTS FOR  
CONSTRUCTION CONTRACTS BETWEEN \$2,000,000 AND \$5,000,000

Indemnity

To the fullest extent allowed by law, the Contractor shall indemnify, defend, and hold harmless the County of Santa Clara (hereinafter "County"), its officers, agents and employees from any claim, liability, loss, injury or damage arising out of, or in connection with, performance of this Agreement by Contractor and/or its agents, employees or sub-contractors, excepting only loss, injury or damage caused by the sole negligence or willful misconduct of personnel employed by the County. It is the intent of the parties to this Agreement to provide the broadest possible coverage for the County. The Contractor shall reimburse the County for all costs, attorneys' fees, expenses and liabilities incurred with respect to any litigation in which the Contractor contests its obligation to indemnify, defend and/or hold harmless the County under this Agreement and does not prevail in that contest.

Insurance

Without limiting the Contractor's indemnification of the County, the Contractor shall provide and maintain at its own expense, during the term of this Agreement, or as may be further required herein, the following insurance coverages and provisions:

A. Evidence of Coverage

Prior to commencement of this Agreement, the Contractor shall provide a Certificate of Insurance certifying that coverage as required herein has been obtained. Individual endorsements executed by the insurance carrier must accompany the certificate. In addition, a certified copy of the policy or policies shall be provided by the Contractor upon request.

This verification of coverage shall be sent to the requesting County department, unless otherwise directed. The Contractor shall not receive a Notice to Proceed with the work under the Agreement until it has obtained all insurance required and such insurance has been approved by the County. This approval of insurance shall neither relieve nor decrease the liability of the Contractor.

B. Qualifying Insurers

1. All coverages, except surety, shall be issued by companies which hold a current policy holder's alphabetic and financial size category rating of not less than A- V, according to the current Best's Key Rating Guide or a company of equal financial stability that is approved by the County's Insurance Manager.

## EXHIBIT B-1A

2. When surety bonds are required, they shall be issued by companies that meet the following minimum requirements:

1. A California admitted surety with either a current A.M. Best rating of A IV or a current Standard and Poors (S&P) rating of A.

OR

2. An admitted surety insurer which complies with the provisions of the Code of Civil Procedure, Section 995.660\*.

OR

3. In lieu of 1 & 2, a company of equal financial size and stability that is approved by the County's Insurance Manager.

\* California Code of Civil Procedure Section 995.660 in summary, states that an admitted surety must provide: 1) the original, or a certified copy of instrument authorizing the person who executed the bond to do so, within 10 calendar days of receipt of a request to submit the instrument; 2) a certified copy of the Certificate of Authority issued by the Insurance Commissioner, within 10 calendar days of receipt of a request to submit the copy; 3) a certificate from County Clerk of Santa Clara County that Certificate of Authority has not been surrendered, revoked, canceled, annulled or suspended, within 10 calendar days of receipt of the certificate; 4) copies of the surety's most recent annual statement and quarterly statement filed with the Department of Insurance pursuant to Article 10, within 10 calendar days of receipt of a request to submit the statements.

### C. Notice of Cancellation

All coverage as required herein shall not be canceled or changed so as to no longer meet the specified County insurance requirements without 30 days' prior written notice of such cancellation or change being delivered to the County of Santa Clara or their designated agent.

## EXHIBIT B-1A

### D. Insurance Required

1. Commercial General Liability Insurance - for bodily injury (including death) and property damage which provides limits as follows:

- a. Each occurrence - \$2,000,000
- b. General aggregate - \$4,000,000
- c. Products/Completed Operations aggregate \*\* - \$4,000,000
- d. Personal Injury - \$2,000,000

A minimum of 50% of each of the aggregate limits must remain available at all times unless coverage is project specific.

2. General liability coverage shall include:

- a. Premises and Operations
- b. \*\*Products/Completed Operations with limits of four million dollars (\$4,000,000) per aggregate to be maintained for three (3) years following acceptance of the work by the County.
- c. Contractual Liability expressly including liability assumed under this Agreement. If the Contractor is working within fifty (50) feet of a railroad or light rail operation, any exclusion as to performance of operations within the vicinity of any railroad bridge, trestle, track, roadbed, tunnel, underpass or crossway shall be deleted, or a railroad protective policy provided.
- d. Personal Injury liability
- e. Owners' and Contractors' Protective liability
- f. Severability of interest
- g. Explosion, Collapse, and Underground Hazards (X, C and U)
- h. Broad Form Property Damage liability



## EXHIBIT B-1A

3. General liability coverage shall include the following endorsements, copies of which shall be provided to the County:

a. **Additional Insured Endorsement**, which shall read:

“County of Santa Clara, and members of the Board of Supervisors of the County of Santa Clara, and the officers, agents, and employees of the County of Santa Clara, individually and collectively, as additional insureds.”

Insurance afforded by the additional insured endorsement shall apply as primary insurance, and other insurance maintained by the County of Santa Clara, its officers, agents, and employees shall be excess only and not contributing with insurance provided under this policy. Public Entities may also be added to the additional insured endorsement as applicable and the contractor shall be notified by the contracting department of these requirements.

b. **Contractual Liability Endorsement:**

Insurance afforded by this policy shall apply to liability assumed by the insured under written contract with the County of Santa Clara.

c. **X C & U (Explosion, Collapse and Underground) Endorsement:**

Insurance afforded by this policy shall provide X, C and U Hazards coverage.

4. Claims Made Coverage

If coverage is written on a claims made basis, the Certificate of Insurance shall clearly state so. In addition to coverage requirements above, such policy shall provide that:

- a. Policy retroactive date coincides with or precedes the Contractor's start of work (including subsequent policies purchased as renewals or replacements).
- b. Contractor will make every effort to maintain similar insurance during the required extended period of coverage following project completion, including the requirement of adding all additional insureds.
- c. If insurance is terminated for any reason, Contractor agrees to purchase an extended reporting provision of at least two years to report claims arising from work performed in connection with this Agreement or Permit.
- d. Policy allows for reporting of circumstances or incidents that might give rise to future claims.

## EXHIBIT B-1A

### 5. Automobile Liability Insurance

For bodily injury (including death) and property damage which provides total limits of not less than one million dollars (\$1,000,000) combined single limit per occurrence applicable to all owned, non-owned and hired vehicles.

### 6. Workers' Compensation and Employer's Liability Insurance

- a. Statutory California Workers' Compensation coverage including broad form all-states coverage.
- b. Employer's Liability coverage for not less than one million dollars (\$1,000,000) per occurrence.

### 7. Contractor's Pollution Liability

Contractor shall provide Contractor's Pollution Liability coverage including bodily injury, personal injury, and property damage from a pollution event resulting from the Work, operations or completed operations of the Project with limits not less than \$1,000,000 per claim or per occurrence and \$1,000,000 aggregate limits, including claim expenses and defense, written on a claims made or occurrence basis for the Project inclusive of the term of construction and a ten (10) year completed operations period, including coverage for mold. If the Work involves the removal of asbestos, the removal/ replacement of underground tanks and/or the removal of toxic chemicals and substances, Contractor or Subcontractor performing such Work shall provide the appropriate pollution coverage, with limits of no less than \$1,000,000 per claim or per occurrence.

### 8. Contractors' Equipment Insurance

On an "all risk" basis covering equipment owned, leased, or used by the Contractor. If the total value of equipment is less than \$100,000 Contractor may self-insure this exposure. If total equipment value is \$100,000 or more, insurance is required. Such insurance shall include an insurer's waiver of subrogation in favor of the County. Contractor shall hold harmless the County for any loss or damage to the Contractor's equipment. This coverage may be waived by the Insurance Manager, but the Contractor hereby releases and holds harmless the County for any loss or damages to its equipment.

### 9. Builder's Risk Insurance

The County shall provide Builder's Risk insurance (first party property insurance) on an all risk basis including flood with a limit of no less than the full replacement value of the work, and covering the work and all materials incorporated therein, and insuring the interests of the County, Contractor,

## EXHIBIT B-1A

and subcontractors. Insurance shall contain insurer's waiver of subrogation in favor of the Contractor and subcontractors. The Contractor shall be responsible for the first \$50,000 of any loss. The County's provision of Builder's risk insurance is an economic convenience to the County, and does not change or revise the Contractor's responsibility for the Work until County Acceptance, including but not limited to, losses that may exceed the insurance limits. Contractor may secure additional insurance, in Contractor's sole and absolute discretion, and Contractor must include the cost of such insurance in Contractor's bid.

### E. Special Provisions

The following provisions shall apply to this Agreement:

1. The foregoing requirements as to the types and limits of insurance coverage to be maintained by the Contractor and any approval of said insurance by the County or its insurance consultant(s) are not intended to and shall not in any manner limit or qualify the liabilities and obligations otherwise assumed by the Contractor pursuant to this Agreement, including but not limited to the provisions concerning indemnification.
2. The County acknowledges that some insurance requirements contained in this Agreement may be fulfilled by self-insurance on the part of the Contractor. However, this shall not in any way limit liabilities assumed by the Contractor under this Agreement. Any self-insurance shall be approved in writing by the County upon satisfactory evidence of financial capacity. Contractors obligation hereunder may be satisfied in whole or in part by adequately funded self-insurance programs or self-insurance retentions.
3. Should any of the work under this Agreement be sublet, the Contractor shall require each of its subcontractors of any tier to carry the aforementioned coverages, or Contractor may insure subcontractors under its own policies.
4. The County reserves the right to withhold payments to the Contractor in the event of material noncompliance with the insurance requirements outlined above.

## EXHIBIT B-1A

### F. Bond Requirements

1. Contract Bonds - Prior to execution of the Contract, Contractor shall file with the County on the approved forms, the two surety bonds in the amounts and for the purposes noted below, duly executed by a reputable surety company satisfactory to County, and Contractor shall pay all premiums and costs thereof and incidental thereto.

Each bond shall be signed by both Contractor and the sureties.

- a) The "payment bond for public works" shall be in an amount of one hundred percent (100%) of the Contract price, as determined from the prices in the bid form, and shall insure to the benefit of persons performing labor or furnishing materials in connection with the work of the proposed Contract. This bond shall be maintained in full force and effect until all work under the Contract is completed and accepted by the County, and until all claims for materials and labor have been paid.
- b) The "performance bond" shall be in an amount of one hundred percent (100%) of the Contract price as determined from the prices in the bid form, and shall insure the faithful performance by Contractor of all work under the Contract. It shall also insure the replacing of, or making acceptable, any defective materials or faulty workmanship.

Should any surety or sureties be deemed unsatisfactory at any time by the County notice will be given Contractor to that effect and Contractor shall forthwith substitute a new surety or sureties satisfactory to the County. No further payment shall be deemed due or will be made under the Contract until the new sureties qualify and are accepted by the County.

All alterations, time extensions, extra and additional work, and other changes authorized by the Specifications, or any part of the Contract, may be made without securing consent of the surety or sureties on the contract bonds.

2. Fidelity Bonds – Required only if contractor will be receiving advanced funds or payments. Before receiving compensation under this Agreement, Contractor will furnish County with evidence that all officials, employees, and agents handling or having access to funds received or disbursed under this Agreement, or authorized to sign or countersign checks, are covered by a BLANKET FIDELITY BOND in an amount of AT LEAST fifteen percent (15%) of the maximum financial obligation of the County cited herein. If such bond is canceled or reduced, Contractor will notify County immediately, and County may withhold further payment to Contractor until proper coverage has been obtained. Failure to give such notice may be cause for termination of this Agreement, at the option of County.

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**DOCUMENT 00 73 19****HEALTH AND SAFETY REQUIREMENTS****ARTICLE 1 — SAFE USE OF PESTICIDES**

- 1.01** Contractor must comply with all Federal, State, and local rules and regulations governing pesticides that are required or used in performing Work.
- 1.02** The term pesticide includes, but is not limited to: herbicides, insecticides, fungicides, rodenticides, germicides, nematocides, bactericides, inhibitors, fumigants, defoliants, desiccants, soil sterilants, repellents, and any substance or mixture of substances intended for preventing, repelling, mitigating, or destroying weeds, insects, diseases, rodents, or nematodes, and any substance or mixture of substances intended to use as a plant regulator, defoliant, or desiccant.
- 1.03** Contractor must comply with Division B28 of the Santa Clara County Ordinance Code relating to integrated pest management and pesticide use. Division B28 includes, but is not limited to specific requirements for:
1. Restricted or prohibited use of certain pesticides;
  2. Record keeping;
  3. Reporting;
  4. Public notice and posting requirements.

**ARTICLE 2 — TRENCHING AND EXCAVATION**

- 2.01** Before any excavation, Contractor must, pursuant to California Government Code section 4216 and Cal/OSHA 8CCR1540, outline the excavation in white paint (preferably chalk or water base), provide two workdays notice to Underground Service Alert (1-800-227-2600), obtain a locator number, and follow all necessary procedures to avoid underground facility damage.
- 2.02** Before any excavation five feet or more in depth:
1. Contractors must, pursuant to California Labor Code section 6705, submit to Owner specific plans showing details of provisions for worker protection from caving ground. This in no way relieves Contractor from the requirement of maintaining safety in all operations performed by Contractor or Subcontractors. Submit four (4) copies of the plans.
  2. The detailed plans showing design of all shoring, bracing, sloping, or other provisions shall be prepared at Contractor's sole expense by a California registered Civil or Structural Engineer. Owner's acceptance only constitutes acknowledgment of the submission and does not constitute review or approval of the designs, design assumptions, criteria, accuracy, completeness, suitability for use, implementation, or any other quality of the plans, which are solely the responsibility of Contractor and Contractor's Engineer.

**ARTICLE 3 — WORKER'S SANITARY PROVISIONS AND USE OF OWNER'S FACILITIES**

- 3.01** Contractor must conform to the rules and regulations for sanitary provisions established by the State, the County of Santa Clara, and any other applicable jurisdictions.
- 3.02** Contractor must Provide and maintain toilets for use by its employees and the employees and representatives of Owner. These accommodations must be maintained in a neat and sanitary condition, and must comply with all applicable laws, ordinances, and regulations pertaining to public health and

sanitation.

- 3.03** Contractor's personnel must not use Owner's facilities without Owner's express written permission, which will be at Owner's sole discretion. Such Owner's facilities include but are not limited to toilet facilities, food service facilities (cafeteria and coffee shop), utilities services of any kind, carts, fire extinguishers (except in emergencies), parking, storage space, and any other facilities and services.

**END OF DOCUMENT 00 73 19**

**DOCUMENT 00 73 39****EQUAL OPPORTUNITY REQUIREMENTS****ARTICLE 1 — EQUAL OPPORTUNITY REQUIREMENTS**

- 1.01** The County of Santa Clara is an equal opportunity employer. Contractor must comply with all applicable Federal, State, and local laws and regulations including Santa Clara County's equal opportunity requirements. Such laws include but are not limited to the following: Title VII of the Civil Rights Act of 1964 as amended; Americans with Disabilities Act of 1990; The Rehabilitation Act of 1973 (Sections 503 and 504); California Fair Employment and Housing Act (Government Code Section 12900 *et seq.*); California Labor Code Sections 1101 and 1102. Contractor must not discriminate against any Subcontractor, employee, or applicant for employment because of age, race, color, national origin, ancestry, religion, sex/gender, sexual orientation, mental disability, physical disability, medical condition, political beliefs, organizational affiliations, or marital status in the recruitment, selection for training including apprenticeship, hiring, employment, utilization, promotion, layoff rates of pay or other forms of compensation.

**END OF DOCUMENT 00 73 39**

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DOCUMENT 00 73 43

## LABOR AND WAGE RATE REQUIREMENTS

## ARTICLE 1 - GENERAL

## 1.01 PREVAILING WAGE REQUIREMENT

- .A All workers employed in the Work must be paid rates at least equal to the prevailing wage rates last adopted by the Director of Industrial Relations, which rates are filed in the Office of the Clerk of the Board of Supervisors, are incorporated herein by reference and may be inspected upon request. The rates are also available on the State of California Department of Industrial Relations website at California Department of Industrial Relations Home Page. <http://www.dir.ca.gov/DLSR/PWD/index.htm>
- .B The work is subject to compliance monitoring and enforcement by the Department of Industrial Relations. No contractor or subcontractor may be awarded a contract for public work on a public works project awarded on or after April 1, 2015 unless registered with the Department of Industrial relations pursuant to Labor Code section 1725.5. Additional information regarding prevailing wage and the Compliance Monitoring Unit (CMU) requirements is available upon request from the Office of the Clerk of the Board of Supervisors or on the State of California Department of Industrial Relations Web Site: [www.dir.ca.gov](http://www.dir.ca.gov)
- .C Contractor must comply with all applicable requirements of Division 2, Part 7, Chapter 1 of the California Labor Code.
- .D Contractor must be registered with the California Department of Industrial Relations at the time of Bid or Proposal, and at all times throughout the duration of the Project.

## 1.02 LABOR

- .A Hours of Labor. Eight (8) hours labor constitutes a legal day's work. Contractor shall forfeit as a penalty to Owner \$25.00 for each worker employed in the execution of the Contract by Contractor or any Subcontractor for each calendar day during which such worker is required or permitted to work more than eight (8) hours in any one calendar day or forty (40) hours in any one calendar week in violation of the provisions of the California Labor Code, and in particular, Sections 1810 through 1815 thereof, except that work performed by employees of Contractor or any Subcontractor in excess of eight (8) hours per day, or forty (40) hours during any one week, shall be permitted upon compensation for all hours worked in excess of eight (8) hours per day, or forty (40) hours per week, at not less than one and one half- (1-1/2) times the basic rate of pay, as provided in Section 1815.
- .B Prevailing Wage
  - .1 The Work to be performed pursuant to this contract is "public works" project subject to California Labor Code section 1771 *et seq.* and the applicable implementing regulations. The General Prevailing Wage Rates issued by the California Department of Industrial Relations may be adjusted by the State during the term of this Contract. Notwithstanding any other provisions of this Contract, Contractor will not be entitled to any adjustment in compensation rates in the event there are adjustments to the General Prevailing Wage Rates.
  - .2 Contractor shall comply with California Labor Code section 1775, whereby Contractor shall be assessed a penalty for each calendar day or portion thereof, for each worker paid less than the stipulated prevailing rates for such work or craft in which such worker is employed for any Work done pursuant to the Contract by Contractor or any Subcontractor in violation of the California Labor Code and in particular Section 1770 through Section 1780. In addition to said penalty and pursuant to Section 1775, Contractor shall pay each worker the difference between such stipulated prevailing wages and the amount paid to each worker for each calendar day or portion thereof for which each worker was paid less than the stipulated prevailing wage rate.



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- .3 Contractor and each Subcontractor must, pursuant to California Labor Code section 1776, submit a certified weekly payroll within ten (10) Days after the Owner's request for submission of certified weekly payroll records. The certified payroll must include the date of actual payment of wages for each worker employed on the Project and a breakdown of each payment including all fringe benefits included in such wage for each worker. Contractor is responsible for compliance with California Labor Code section 1776.
  - .4 Contractor must submit two (2) copies of said payroll to Owner on the California Department of Industrial Relations standard Form A-1-131 "Public Works Payroll Reporting Form." Other forms may be used provided they exactly duplicate the format, dimensions, and wording of Form A-1-131.
  - .5 Pursuant to the provisions of California Labor Code section 1770 and following, the California Department of Industrial Relations has ascertained the general prevailing rate of wages (which rate includes employer payments for health and welfare, vacation, pension, and similar purposes) applicable to the Work, for straight time, overtime, Saturday, Sunday, and Holiday work. The Holiday wage rate listed shall be applicable to all holidays recognized in the collective bargaining agreement of each craft, classification, or type of workers concerned. Said prevailing wage rates are on file in the Office of the Clerk of the Board of Supervisors, incorporated herein by reference, and copies of which are available to any interested party on request. The rates are also available on the State of California's Department of Industrial Relations home page website at <http://www/dir.ca.gov>.
  - .6 If Contractor uses a craft or classification not shown on the prevailing wage determinations, Contractor may be required to pay the wage rate of that craft or classification most closely related to it, shown in the general determinations in effect when the Bids were received. Pursuant to California Labor Code section 1773.2, Contractor shall prominently post a copy of such prevailing wages at each job site.
  - .7 Pursuant to Public Contract Code section 6109, Contractor shall not perform Work on this public works project with any Subcontractor who is ineligible to perform Work on a public works project pursuant to Section 1777.1 or Section 1777.7 of the Labor Code. Any contract on a public works project entered into between Contractor and a debarred Subcontractor is void as a matter of law. A debarred Subcontractor may not receive any public money for performing Work as a Subcontractor on a public works contract, and any public money that may have been paid to a debarred Subcontractor by Contractor on this Project shall be returned to Owner. Contractor shall be responsible for the payment of wages to workers of a debarred Subcontractor who has been allowed to work on the Project.
  - .8 Pursuant to Labor Code section 1771.5.b.6, Owner will withhold contract payments equal to the amount of underpayment and applicable penalties when, after investigation, it is established that underpayment of prevailing wage has occurred.
- .C Certified Payrolls**
- .1 Contractor must submit two (2) copies of certified weekly payrolls for the periods covered by each Progress Payment. Certified Payroll records must be submitted within ten (10) Days from the Progress Payment period end date.
  - .2 Pursuant to California Labor Code section 1776, in the event that Contractor fails to comply within the ten (10)-day submission period, Contractor must forfeit twenty-five dollars (\$25) for each calendar day, or portion thereof, for each worker, until strict compliance is effectuated.
  - .3 Pursuant to California Labor Code section 1776, the responsibility for compliance with the requirements of California Labor Code section 1776 is the responsibility of Contractor.
- .D Apprentices.** Contractor's attention is directed to the provisions of Section 1777.5 and Section 1777.6 of the California Labor Code regarding the employment of apprentices by Contractor and any
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Subcontractors, and Section 1777.7 regarding penalties for noncompliance. Contractor and all Subcontractors shall comply with the requirements of said Sections in the employment of apprentices. It is Owner's policy to encourage the employment and training of apprentices on public works contracts in accordance with local apprenticeship standards.

**END OF DOCUMENT 00 73 43**

## DOCUMENT 00 73 49

## LABOR STABILIZATION AGREEMENT

## ARTICLE 1 - GENERAL

## 1.01 Project Labor Agreement

- .A** This Project is subject to a Project Labor Agreement (PLA) to be entered into between the County of Santa Clara and the Santa Clara and San Benito Counties Building and Construction Trades Council (CBCT), and the signatory unions. A copy of the PLA is attached as Attachment 1 to this Document 00 73 49. Copies of the signatory unions' Collective Bargaining Agreements are identified in the PLA.
- .B** The successful Bidder or Proposer must evidence agreement and be bound by the PLA by signing and submitting to the County of Santa Clara the Appendix A to the PLA, Agreement to be Bound upon Award of Contract.
- .C** I represent and warrant that I have reviewed and understand the provisions of the Project Labor Agreement and agree that if awarded this contract I will sign and submit Appendix A to the Project Labor Agreement to the County of Santa Clara along with all other required Contract forms.
- .D** I represent and warrant that I am authorized to sign below:

<b>Signature Block</b> ( <i>Signature Block must be completed in ink and changes must be initialed</i> )	
Contractor's Authorized Representative's Signature:	Date:
Contractor's Authorized Representative's Name and Title	

END OF DOCUMENT 00 73 49

**DOCUMENT 00 73 53****ANTI-POLLUTION MEASURES****ARTICLE 1 - GENERAL****1.01 AIR POLLUTION CONTROL**

- .A** Contractor and each Subcontractor must comply with all air pollution control rules, regulations, ordinances, statutes, and Project specific permit requirements of the Bay Area Air Pollution Control District and all other regulatory agencies that apply to any Work performed. If there is a conflict between the Bay Area Air Pollution Control District rules, regulations, ordinances, and statutes and the rules, regulations, ordinances, and statutes of other regulatory agencies, the most stringent shall govern.
- .B** Contractor must not discharge smoke, dust, or any other air contaminants into the atmosphere in such quantity as will violate any regulations.
- .C** Contractor must minimize dust nuisances resulting from performance of the Work, both inside and outside the Project limits, by applying either water or dust palliative, or both.

**1.02 WATER POLLUTION CONTROL**

- .A** Contractor must comply with all Federal, State, and local water pollution prevention and storm drain pollution prevention rules, regulations, ordinances, statutes, guidelines, and Project specific permit requirements.
- .B** If required by law, ordinance, regulation, code, permit, or the requirements of the Contract Documents, Contractor must prepare a Project Specific Storm Water Pollution Prevention Program (SWPPP).
- .C** Contractor must exercise every reasonable precaution to protect storm drains, channels, and all bodies of water from pollution, and must conduct and schedule operations so as to avoid or minimize muddying and silting of any waters. Contractor must construct whatever facilities are necessary or requested by Owner to provide prevention, control, and abatement of water pollution.
- .D** No provision of the Contract Documents relieves Contractor of responsibility for compliance with California Fish and Game Code section 5650 *et seq.*, and Section 12015 *et seq.*, and applicable regulations of the Regional Water Quality Control Board, Santa Clara County flood control and water district requirements, or other applicable statutes relating to prevention and removal of water pollution.
- .E** Compliance with water pollution requirements does not relieve Contractor from responsibility to comply with all provisions of the Contract Documents, and more particularly Contractor's responsibilities for damage and preservation of property.

**END OF DOCUMENT 00 73 53**

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DOCUMENT 00 73 63

SECURITY REQUIREMENTS

ARTICLE 1 — SECURITY REQUIREMENTS

- 1.01** Prior to entering or working in secured facilities operated by Santa Clara County Department of Corrections (DOC), Contractor personnel are required to obtain Security Clearance.
- 1.02** Clearance requires a background check:
- .A** Background checks are to be done by the Sheriff's Department.
  - .B** Contractor must make arrangements as per the Notice to Bidders.
  - .C** Security clearance requirements:
    - .1** No warrants
    - .2** Not currently on probation or parole
    - .3** No felony convictions or no-contest pleas
    - .4** Minimum of three (3) years since last misdemeanor conviction or no-contest plea
    - .5** Not currently on bail and/or pending criminal charges
    - .6** Previous convictions or no-contest plea for violence, assaultive behavior, and sexual offenses may result in denial of security clearances regardless of time elapses since adjudication of charges
    - .7** Any other factors the Department deems a risk to safety and security
  - .D** If the clearance is denied, the involved party will be asked to leave the facility.
  - .E** Anyone entering the facility is required to have photo identification.
  - .F** Security clearances may be immediately and permanently revoked if Contractor's actions create a security risk.
  - .G** Request security clearances for dates covering both mandatory and non-mandatory site visits.

END OF DOCUMENT 00 73 63

**DOCUMENT 00 73 73****COMPLIANCE WITH LAWS AND REGULATIONS****ARTICLE 1 — COMPLIANCE WITH LAWS AND REGULATIONS**

- 1.01** Contractor must keep informed of governmental regulations that may affect the Work. Contractor must observe and comply with, and must cause all agents, employees, Subcontractors, and Suppliers to observe and comply with said regulations. Contractor shall protect, defend, and hold harmless Owner and all its officers, employees, and consultants against any liability or claim arising from or based upon the violation of any such regulations by Contractor, its agents, employees, representatives, Subcontractors, and Suppliers.
- 1.02** This Contract is a Type I Contract, subject to the Resolution of Contracting Principles adopted by the Board of Supervisors on October 28, 1997. Accordingly, Contractor must comply with all of the following:
- .1** Contractor must, during the term of this Contract, comply with all applicable federal, state and local rules, regulations, and laws.
  - .2** Contractor must maintain financial records adequate to show that Owner funds paid pursuant to the Contract were used for purposes consistent with the terms of the Contract. These records must be maintained during the term of this Contract and for a period of five (5) years from the termination of this Contract or until all Claims, if any, have been resolved, whichever period is longer, or longer if otherwise required pursuant to other provisions of this Contract.
- 1.03** The failure of Contractor to comply with the applicable iteration of this Document 00 73 73 or any portion thereof may be considered a material breach of this Contract and may, at the option of Owner, constitute a basis for the termination of the Contract. Contractor will be furnished reasonable notice of any intended termination based on noncompliance with this Document 00 73 73 (or the applicable iteration) and the opportunity to respond and discuss the Owner's intended action.

**ARTICLE 2 — UNFAIR BUSINESS PRACTICES CLAIMS**

- 2.01** Contractor's attention is directed to Section 7103.5 of the Public Contract Code and Government Code sections 4550 through 4554, which are applicable to Contractor and its Subcontractors: In entering into a public works contract or a subcontract to supply goods, services, or materials pursuant to a public works contract, Contractor or Subcontractor offers and agrees to assign to the awarding body all rights, title, and interest in and to all causes of action it may have pursuant to Section 4 of the Clayton Act (15 U.S.C. Sec. 15) or pursuant to the Cartwright Act (Chapter 2 (commencing with Section 16700) of Part 2 of Division 7 of the Business and Professions Code), arising from purchases of goods, services, or materials pursuant to the public works contract or the subcontract. This assignment shall be made and become effective at the time the awarding body tenders Final Payment to contractor, without further acknowledgment by the parties.

**ARTICLE 3 — SECURITIES IN LIEU OF RETENTION**

- 3.01** Public Contract Code section 22300 provides that Contractor has the option to deposit securities with an escrow agent as a substitute for retention earnings required to be withheld by Owner. At the request and expense of Contractor, securities equivalent to the amount withheld shall be deposited with Owner or with a state or federally chartered bank in California as the escrow agent, who shall then pay those moneys to Contractor. Upon satisfactory completion of the Contract, the securities shall be returned to Contractor.

- 3.02** Alternatively, Contractor may request and Owner shall make payment of retentions earned directly to the escrow agent at the expense of Contractor. At the expense of Contractor, Contractor may direct the investment of the payments into securities and Contractor shall receive the interest earned on the investments upon the same terms provided for in this Article 3 for securities deposited by Contractor. Upon satisfactory completion of the Contract, Contractor shall receive from the escrow agent all securities, interest, and payments received by the escrow agent from Owner, in accordance with the terms of this Article 3.
- 3.03** Securities eligible for investment under this Article 3 shall include those listed in Section 16430 of the Government Code, bank or savings and loan certificates of deposit, interest-bearing demand deposit accounts, standby letters of credit, or any other security mutually agreed to by Contractor and Owner. Contractor shall be the beneficial owner of any securities substituted for monies withheld and shall receive any interest thereon.
- 3.04** For subcontractors performing more than five percent (5%) of Contractor's total bid, if Contractor elects to receive interest on moneys withheld in retention by Owner, Contractor shall, at the request of any subcontractor, make that option available to the subcontractor regarding any moneys withheld in retention by Contractor from the subcontractor. If Contractor elects to receive interest on any monies withheld in retention by Owner, then the subcontractor shall receive the identical rate of interest received by Contractor on any retention moneys withheld from the subcontractor by Contractor, less any actual pro rata costs associated with administering and calculating that interest. In the event the interest rate is a fluctuating rate, the rate for the subcontractor shall be determined by calculating the interest rate paid during the time that retentions were withheld from the subcontractor. If Contractor elects to substitute securities in lieu of retention, subcontractor may substitute securities in exchange for the release of monies held in retention by Contractor, by mutual consent of subcontractor and Contractor. Contractor shall not require any subcontractor to waive any provision of this Article 3.04.
- 3.05** Contractor and Owner shall use Document 00 62 90, Escrow Agreement for Security Deposits in Lieu of Retention, as the form of escrow agreement for the Contract.

#### **ARTICLE 4 — STOP NOTICES**

- 4.01** Civil Code sections 9350 through 9356 set forth rights that Contractor and all persons furnishing work under the Contract with respect to any fund for payment of construction costs. Contractor and all persons furnishing Work under the Contract shall comply with the requirements of Chapter 2 (commencing with Section 8100) of Title 1 of the Civil Code.
- 4.02** Owner shall withhold funds on receipt of a properly executed stop payment notice, in accordance with Civil Code sections 9358 through 9364.

**END OF DOCUMENT 00 73 73**

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**DOCUMENT 00 73 80****APPRENTICESHIP PROGRAM****ARTICLE 1 - COMPLIANCE REQUIRED**

**1.01** Contractor and Subcontractors shall comply with the requirements of California Labor Code sections 1776, 1777.5, and 1777.6 concerning the employment of apprentices by Contractor or Subcontractors. Failure to comply may result in penalties, including loss of the right to bid on or receive public works contracts.

.A NOTE: for CMAR projects, there shall be no self-performance by Contractor.

**ARTICLE 2 - CERTIFICATION OF APPROVAL**

**2.01** California Labor Code section 1777.5, as amended, requires a Contractor or Subcontractor employing tradespersons in any apprenticeable occupation to apply to the joint apprenticeship committee nearest the site of a public works project and which administers the apprenticeship program in that trade for a certification of approval. The certificate shall also fix the ratio of apprentices to journeypersons that will be used in performance of the Contract. The ratio of work performed by apprentices to journeypersons in such cases shall not be less than one hour of apprentices work for every five hours of labor performed by journeypersons (the minimum ratio for the land surveyor classification shall not be less than one apprentice for each five journeypersons), except:

- .A When unemployment for the previous three month period in the area exceeds an average of fifteen percent (15%);
- .B When the number of apprentices in training in the area exceeds a ratio of one to five;
- .C When a trade can show that it is replacing at least one thirtieth (1/30) of its membership through apprenticeship training on an annual basis state-wide or locally; or,
- .D Assignment of an apprentice to any work performed under a public works contract would create a condition which would jeopardize their life or the life, safety, or property of fellow employees or the public at large or if the specific task to which the apprentice is to be assigned is of such a nature that training cannot be provided by a journeyperson.

**ARTICLE 3 - FUND CONTRIBUTIONS**

**3.01** Contractor is required to make contributions to funds established for administration of apprenticeship programs if Contractor employs registered apprentices or journeypersons in any apprenticeable trade on such contracts and if other Contractor's on the public works site are making such contributions.

**ARTICLE 4 - APPRENTICESHIP STANDARDS**

**4.01** Information relative to apprenticeship standards, wage schedules, and other requirements may be obtained from the Director of the California Department of Industrial Relations, or from the Division of Apprenticeship Standards and its branch offices.

**END OF DOCUMENT 00 73 80**



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**DOCUMENT 00 73 83****DISPUTE RESOLUTION****ARTICLE 1 — REFERENCES, DEFINITIONS, GENERAL PROVISIONS****1.01 Statutes**

- .A California Civil Code section 1511
- .B California Public Contract Code section 9204

**1.02 Related Contract Documents**

- .A Document 00 72 00 (General Conditions)
- .B Document 00 73 10 (Site Conditions)
- .C Specifications, including without limitation:
  - .1 Section 01 26 00 (Contract Modification Procedures)
  - .2 Section 01 45 00 (Quality Control)
  - .3 Section 01 77 00 (Procedures for Substantial Completion and Close Out)
  - .4 Section 01 81 00 (Inspection by Building Officials)
  - .5 Section 01 91 00 (Commissioning)

**1.03** Compliance with the Dispute Resolution procedures provided for herein is a condition precedent to filing a Claim.

**1.04** The parties may modify this Document and the procedures prescribed herein by written agreement executed by both parties. Owner's execution of any agreement to modify this Document 00 73 83 is void unless approved by County Counsel as to form and legality.

**1.05** Each party shall bear their own costs of any kind or nature, including but not limited to attorneys' fees, incurred in relation to the dispute resolution process set forth in this Document 00 73 83. Contractor's costs incurred in seeking relief for Disputes and Claims are not recoverable from Owner.

**1.06** CALCULATION OF ALL MONETARY AMOUNTS RELATING TO ALL DISPUTES AND CLAIMS (INCLUDING WITHOUT LIMITATION CLAIMS MADE UNDER PUBLIC CONTRACT CODE SECTION 9204) SHALL BE DONE IN THE SAME MANNER AS CHANGE ORDERS PER SECTION 01 26 00 (CONTRACT MODIFICATION PROCEDURES). NO SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES MAY BE CLAIMED, REQUESTED, OR RECOVERED BY CONTRACTOR OR BY ANY SUBCONTRACTOR.

**ARTICLE 2 - DISPUTE RESOLUTION PROCESS****2.01 Identifying, Presenting, and Documenting A Dispute**

- .A "Dispute" means an alleged act, error, or omission of Owner, its agents or employees, or action,

condition, or other situation that has occurred that Contractor alleges may entitle it to an adjustment of the Contract Price or Contract Time and which, in Contractor's opinion, is beyond the scope of the Contractor's Work required by the Contract Documents, and that Contractor asserts or believes it may assert is the responsibility of Owner. The term "Dispute" is intended to be construed broadly and include disagreements of all types.

.B Contractor's duty of notification and continuing duty of notification.

- .1 Every Dispute shall be stated with specificity in writing and signed under penalty of perjury and presented to the Owner's Project Manager in a "Notice of Dispute" within ten (10) Days from the date Contractor discovers or reasonably should discover the Dispute. Contractor shall provide this Notice of Dispute even if Contractor has not yet been damaged, delayed, or incurred extra cost when Contractor discovers, or reasonably should discover, the alleged act, error, omission, condition, or situation giving rise to the Dispute.
- .2 The Notice of Dispute shall be accompanied by all Documents substantiating Contractor's position regarding the Dispute and shall:
  - .a Summarize the Dispute, including underlying facts, entitlement, schedule analysis, and quantum calculations;
  - .b Identify all of the issues, events, conditions, circumstances, and/or causes giving rise to the Dispute;
  - .c Provide a chronology of relevant events to date and correspondence;
  - .d In the event that Contractor seeks money in connection with the Dispute, provide an analysis of Dispute cost and all supporting Documentation of costs and any other damages claimed;
  - .e In the event Contractor asserts an effect on any schedule Milestones and/or Contract Time, include all pertinent scheduling data demonstrating the impact(s) on the Critical Path, Milestone(s), and/or Contract Time in the Dispute. Contractor shall provide schedules and schedule analysis compliant with the Contract Documents, including but not limited to Document 01 32 00 to justify time extension(s) (if requested);
  - .f Identify all pertinent dates and/or durations and all actual and/or anticipated effects on the Contract Sum, Milestones, and/or Contract Time;
  - .g Include email digital photographs of the Dispute and provide Owner with contact information for all involved subcontractors and/or suppliers of any tier to facilitate the Owner's review of Notice of Dispute;
  - .h A detailed cost breakdown of the amounts Contractor is seeking, including actual cost records demonstrating that those costs have actually been incurred. To the extent the alleged costs have not been incurred at the time the Dispute is submitted, actual cost records must be submitted on a current and ongoing basis not less than once a week during any period(s) costs are allegedly incurred. A cost record will be considered current if submitted within seven (7) Days of the date the cost reflected in the record is allegedly incurred. At the direction of Owner, the alleged extra costs may be subject to further verification procedures (by way of example only and not by limitation, such as having an inspector verify the performance of alleged work on a daily basis); and,
  - .i If Contractor's Dispute involves an alleged error or omission in the Contract Documents:
    - .i An affirmative representation under penalty of perjury by Contractor and any affected subcontractors and suppliers that the alleged error or omission was not discovered prior to submitting a proposal for the Work; and,
    - .ii A detailed statement demonstrating that the alleged error or omission reasonably could not have been discovered.

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- .3 Dispute Updates Required. If the unresolved Dispute or Claim persists longer than a single calendar month from the Notice of Dispute, then on the first day of each month, for each month until the Dispute is resolved, and any Work allegedly ascribed to the Dispute ceases, Contractor shall submit to Owner a Document titled "Dispute Update" that shall update and quantify all elements of the Dispute as completely as possible. Contractor's failure to submit a Dispute Update or to quantify costs every month shall result in waiver of the Dispute for that month-long period. Dispute Updates stating that damages, total damages (direct and indirect), schedule impact, and/or any time extension will be determined at a later date shall not comply with this subparagraph and shall result in Contractor waiving its claim(s) of damage(s) of any kind or nature during the period covered by the noncompliant Dispute Update.
  - .4 Dispute Log. Contractor shall maintain a continuing "Dispute Log" that shall list all outstanding Disputes and their value and status, and provide such log to Owner monthly as a condition of its monthly payment application when such is due. Such log shall be deemed Contractor's representation of any and all Disputes then outstanding. Any Dispute that Contractor fails to include on the Dispute Log shall be deemed either waived and/or abandoned.
  - .C Failure to include as part of a Notice of Dispute all relevant supporting Documentation shall be deemed to have assented that the Work lies within the scope of the Contract Documents and shall result in waiver, release, discharge, and relinquishment of any right to assert, request, or demand any entitlement to an adjustment of the Contract Time or Contract Sum on account of any Documentation that was available to Contractor but not included as part of the Notice of Dispute. Contractor waives the right to assert, request, or demand any entitlement to an adjustment of the Contract Time or Contract Sum based on any Documentation that was available to Contractor at the time the Notice of Dispute was submitted but not provided until a later Dispute Update.
  - .D A timely Notice of Dispute is a condition precedent to Contractor seeking any further relief, including filing a Claim.

## **2.02 Review of Notice of Dispute**

- .A Owner will review the Notice of Dispute and issue a written decision ("Decision on Dispute") to Contractor within thirty (30) Days from the date the Notice of Dispute and all supporting Documentation are received by Owner. Owner has the option to meet with the Contractor or with any other party before issuing its Decision on Dispute.
- .B If Owner does not issue a Decision on Dispute within thirty (30) Days after receipt of the Notice of Dispute (and all supporting Documentation), then Owner will be deemed to have rejected the Dispute in its entirety, and if Contractor intends to seek additional relief regarding the unresolved issues, Contractor shall proceed with the Claims procedure below.
- .C If Owner's Decision on Dispute completely resolves the Dispute, Owner will prepare and process a Change Order, if applicable, or proceed in accordance with the resolution.
- .D If Owner's Decision on Dispute provides that Owner rejects the Dispute in whole or in part and Contractor intends to seek additional relief regarding the unresolved issues of the Dispute, Contractor shall proceed with the Claims procedure below.

- 2.03** Contractor shall require each Subcontractor (including any sub-Subcontractor and supplier) to comply with the dispute resolution procedures set forth in this Document 00 73 83 and to provide Contractor with timely notice and Documentation of all Disputes. Contractor shall present as its Disputes, all Subcontractor, sub-Subcontractor and supplier Disputes of any type, and prove them under the terms of the Contract Documents. Owner shall not be directly liable to any Subcontractor, any supplier, or any other person or organization, or to any surety for or employee or agent of any of them, for damages or extra costs of any

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type arising out of or resulting from the Project. If Contractor asserts or intends to assert "pass through" Disputes of Subcontractors, then Contractor shall provide all Documentation including Documentation of liquidating agreements, supporting such Disputes.

**ARTICLE 3 - CLAIMS PROCEDURE (IN COMPLIANCE WITH PUBLIC CONTRACT CODE SECTION 9204(d))**

- 3.01** "Claim" refers to "claim" as defined in Public Contract Code section 9204.
- 3.02** Every Claim shall be stated with specificity in writing and signed under penalty of perjury and presented to Owner's Project Manager within ten (10) Days from the Decision on Dispute.
- 3.03** It is the intent of this Document that all Claims filed after the Decision on Dispute shall be in compliance with Public Contract Code section 9204.
- 3.04** Individual unresolved Disputes may be aggregated into one or more Claim(s).
- 3.05** In the following paragraphs the term "section" shall refer to this Document 00 73 83.3; the term "public entity" shall mean Owner.
- .A Upon receipt of a claim pursuant to this section, the public entity to which the claim applies shall conduct a reasonable review of the claim and, within a period not to exceed forty-five (45) days, shall provide the claimant a written statement identifying what portion of the claim is disputed and what portion is undisputed. Upon receipt of a claim, a public entity and a contractor may, by mutual agreement, extend the time period provided in this subdivision.
  - .B If the public entity needs approval from its governing body to provide the claimant a written statement identifying the disputed portion and the undisputed portion of the claim, and the governing body does not meet within the forty-five (45) days or within the mutually agreed to extension of time following receipt of a claim sent by registered mail or certified mail, return receipt requested, the public entity shall have up to three (3) days following the next duly publicly noticed meeting of the governing body after the forty-five (45)-day period, or extension, expires to provide the claimant a written statement identifying the disputed portion and the undisputed portion.
  - .C If the claimant disputes the public entity's written response, or if the public entity fails to respond to a claim issued pursuant to this section within the time prescribed, the claimant may demand in writing an informal conference to meet and confer for settlement of the issues in dispute. Upon receipt of a demand in writing sent by registered mail or certified mail, return receipt requested, the public entity shall schedule a meet and confer conference within thirty (30) days for settlement of the dispute.
  - .D Within ten (10) business days following the conclusion of the meet and confer conference, if the claim or any portion of the claim remains in dispute, the public entity shall provide the claimant a written statement identifying the portion of the claim that remains in dispute and the portion that is undisputed. Any payment due on an undisputed portion of the claim shall be processed and made within sixty (60) days after the public entity issues its written statement. Any disputed portion of the claim, as identified by the contractor in writing, shall be submitted to nonbinding mediation, with the public entity and the claimant sharing the associated costs equally. The public entity and claimant shall mutually agree to a mediator within ten (10) business days after the disputed portion of the claim has been identified in writing. If the parties cannot agree upon a mediator, each party shall select a mediator and those mediators shall select a qualified neutral third party to mediate with regard to the disputed portion of the claim. Each party shall bear the fees and costs charged by its respective mediator in connection with the selection of the neutral mediator. If mediation is unsuccessful, the parts of the claim remaining in dispute shall be subject to applicable procedures outside this section.

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- .E For purposes of this section, mediation includes any nonbinding process, such as neutral evaluation or a dispute review board, in which an independent third party or board assists the parties in dispute resolution through negotiation or by issuance of an evaluation. Any mediation utilized shall conform to the timeframes in this section.
  - .F Unless otherwise agreed to by the public entity and the contractor in writing, the mediation conducted pursuant to this section shall excuse any further obligation under Public Contract Code section 20104.4 to mediate after litigation has been commenced.
  - .G Failure by the public entity to respond to a claim from a contractor within the time periods described in this subdivision or to otherwise meet the time requirements of this section shall result in the claim being deemed rejected in its entirety. A claim that is denied by reason of the public entity's failure to have responded to a claim, or its failure to otherwise meet the time requirements of this section, shall not constitute an adverse finding with regard to the merits of the claim or the responsibility or qualifications of the claimant.
  - .H Amounts not paid in a timely manner as required by the negotiations required under Public Contract Code section 9204 shall bear interest at 7 percent per annum.
  - .I Contractor shall present as its Claims all subcontractor claims or supplier claims of any type or nature provided that the subcontractor or supplier claims comply with the Contract Documents. Owner shall not be directly liable to any Subcontractor, any supplier, or any other person or organization, or to any surety for or employee or agent of any of them, for damages or extra costs of any type arising out of or resulting from the Project. If Contractor asserts or intends to assert "pass through" Claims of Subcontractors, then Contractor shall provide all Documentation including liquidating agreements supporting such Claims.
  - .J Claim Documentation:
    - .1 The Claim shall be accompanied by all Documentation substantiating Contractor's position regarding the Claim and shall:
      - .a Summarize the Claim, including underlying facts, entitlement, schedule analysis, and quantum calculations;
      - .b Identify all of the issues, events, conditions, circumstances, and/or causes giving rise to the Claim;
      - .c Provide a chronology of relevant events to date and correspondence;
      - .d In the event that Contractor seeks money in connection with the Claim, provide an analysis of Claim cost and all supporting Documentation of costs and any other damages claimed;
      - .e In the event Contractor asserts an effect on any schedule Milestones and/or Contract Time in a Claim, Contractor shall include all pertinent scheduling data demonstrating the impact(s) on the Critical Path, Milestone(s), and/or Contract Time and shall provide schedules and schedule analysis compliant with the Contract Documents, including but not limited to Section 01 32 00, to justify time extension(s) (if requested);
      - .f Identify all pertinent dates and/or durations and all actual and/or anticipated effects on the Contract Sum, Milestones, and/or Contract Time;
      - .g Include email digital photographs of the Claim and provide Owner with contact information for all involved subcontractors and/or suppliers of any tier to facilitate the Owner's review of the Claim;
      - .h If Contractor's Claim involves alleged extra work by Contractor or its subcontractors, a detailed cost breakdown of the amounts Contractor is seeking, including actual cost records demonstrating that those costs have actually been incurred. To the extent alleged costs have not yet been incurred at the time the Claim is submitted, actual cost records must be submitted
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- on a current and ongoing basis not less than once a week during any period(s) costs are allegedly incurred. A cost record will be considered current if submitted within seven (7) Days of the date the cost reflected in the record allegedly is incurred. At the direction of Owner, alleged extra costs may be subject to further verification procedures (by way of example only and not by limitation, such as having an inspector verify the performance of alleged work on a daily basis); and,
- .i If Contractor's Claim involves an alleged error or omission in the Contract Documents:
    - .1 An affirmative representation under penalty of perjury by Contractor and any affected subcontractors and suppliers that the alleged error or omission was not discovered prior to submitting a proposal for the Work; and,
    - .2 A detailed statement demonstrating that the error or omission reasonably could not have been discovered.
  - .K Failure to include as part of a Claim all relevant supporting Documentation shall be deemed to have assented that the Work lies within the scope of the Contract Documents and shall result in waiver, release, discharge, and relinquishment of any right to assert, request, or demand any entitlement to an adjustment of the Contract Time or Contract Sum on account of any Documentation that was available to Contractor but not included as part of the Claim. Contractor waives the right to assert, request, or demand any entitlement to an adjustment of the Contract Time or Contract Sum based on any Documentation that was available to Contractor at the time the Claim was submitted but not provided until a later Claim Update (see Article 3.05.L).
  - .L Claim Updates Required. If the unresolved Claim persists longer than a single calendar month from the filing of the Claim, then on the first day of each month, for each month until the Claim, including any Work done related to the Claim ceases, Contractor shall submit to Owner a Document titled "Claim Update" that shall update and quantify all elements of the Claim as completely as possible. Contractor's failure to submit a Claim Update or to quantify costs every month shall result in waiver of the Claim for that month-long period. Claim Updates stating that damages, total damages (direct and indirect), schedule impact, and/or any time extension will be determined at a later date shall not comply with this subparagraph and shall result in Contractor waiving its claim(s) for damage(s) of any kind or nature during the period covered by the non-compliant Claim Update.
  - .M Claim Log. Contractor shall maintain a continuing "Claims Log" that shall list all outstanding Claims and their value and status, and provide such log to Owner monthly as a condition of its monthly payment application when such is due. Such log shall be deemed Contractor's representation of any and all Claims then outstanding. Any Claim that Contractor fails to include on the Claims Log shall be deemed either waived and/or abandoned.
  - .N Each party shall bear their own costs of any kind or nature, including but not limited to attorneys' fees, incurred in relation to the filing or otherwise seeking relief for a Claim made pursuant to Public Contract Code section 9204.

#### ARTICLE 4 - INTERPRETATION AND EXECUTION

- 4.01 Timely compliance with the procedures in this Document 00 73 83 for (1) Notice of Dispute and (2) Claim, which is then subject to the procedures in Public Contract Code section 9204, constitutes a mandatory administrative remedy that Contractor must diligently pursue and exhaust. Failure to timely pursue any administrative remedy shall be deemed a waiver of additional proceedings including legal action. Compliance is mandatory and is a precondition to Contractor's right to bring a legal action against Owner.
- 4.02 This Document 00 73 83 shall not be interpreted to supersede or limit any and all Contract notification procedures, procedures within the Contract Documents for administration of the Work, including but not

limited to, procedures regarding changes to the Contract Documents, changes from conditions indicated in the Contract Documents, changes in the Contract Time(s), liquidated damages, differing site conditions and utility conflicts, testing and inspections, quality control completion and close out of the Contract. Rather, Contractor shall diligently pursue and comply with all such contract procedures.

- 4.03** Notwithstanding the pendency of contract administration procedures or disputes procedures set forth herein, Contractor shall at all times prosecute the Work in accordance with the Contract Documents as determined and directed by Owner. Contractor's sole and exclusive remedy for Disputes and Claims shall be the procedures of this Document 00 73 83.
- 4.04** In any dispute resolution proceeding arising from the Contract Documents, including formal or informal proceedings for resolution of Disputes and/or Claims, the disputes shall be resolved by looking first to the terms of the Contract Documents. Only when the answer to the Dispute and/or Claim is not found in the Contract Documents, may the dispute be answered by reference to the more general prevailing laws. It is the intent of this provision to formalize the right of the parties, at all times, to rely on the terms of the Contract Documents.
- 4.05** Contractor shall consult with its own legal counsel regarding the requirements of the California Government Code and the California Public Contract Code and shall not request or purport to rely on legal interpretations from the Owner regarding these codes.
- 4.06** The time requirements set forth in this Document are subject to extension, in Owner's sole discretion. No other feature or requirement of these Dispute and Claim procedures herein (including waiver provisions), may be waived or altered absent a written Change Order signed by both parties and approved as to form and legality by the Office of the County Counsel and as to form by legal counsel for Contractor.
- .1 All Contractor requests for an extension of time shall be made in advance of time periods expiring. If Contractor requests an extension of the time period to file the Notice of Dispute, then Contractor's written request must include Contractor's certification that Contractor has complied with all notification procedures under the contract that may apply (e.g., differing site conditions, time extension, change order requests), pursuant to which Contractor will provide Owner with contemporaneous notification of the work and cost that is equivalent to or exceeds the information required under this Document 00 73 83. Owner may not grant an extension without this certification.

## **ARTICLE 5 - SETTLEMENT EFFORTS AND MEDIATION**

- 5.01** Mediation hereunder shall be subject to all confidentiality requirements of the California Evidence Code and mediation and settlement efforts shall be and remain confidential.
- 5.02** Any mediators appointed hereunder to mediate a Claim shall be limited in their scope to the Claim for which mediation is demanded.
- 5.03** Owner shall not be deemed to waive or alter any provision under this Document 00 73 83, if at Owner's sole discretion, a Claim is administered in a manner not in accord with this Document 00 73 83. Under no circumstance may settlement negotiations or actions taken towards settlement of disputes or claims by either party be asserted as a waiver or impairment of rights, duties, or obligations under the Contract Documents, including without limitation, the requirements of this Document 00 73 83. Owner may at all times assert and enforce all terms of this Document 00 73 83.

## **ARTICLE 6 - RESOLUTION OF CONTRACT CLAIMS**

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- 6.01** Upon failure of mediation under Public Contract Code section 9204 or other statutory authority, in Owner's sole discretion, the parties shall use the judicial reference procedure as set forth below.
- 6.02** The referee shall be a retired California state court judge. The parties shall not seek to appoint a referee that may be disqualified pursuant to California Code of Civil Procedure section 641 or 641.2 without the prior written consent of both parties.
- 6.03** If the parties are unable to agree to a referee within ten (10) Days, then the referee will be selected by the court in accordance with Code of Civil Procedure section 640(b).
- 6.04** The referee shall conduct the proceedings in accordance with the California Code of Civil Procedure, the State of California and Santa Clara County Rules of Court, and the California Evidence Code, except as specifically agreed to by the parties and approved by the referee.
- 6.05** The referee's decision shall be decided under and in accordance with the law of the State of California, supported by substantial evidence and, in writing, contain the basis for the decision, findings of fact, and conclusions of law.
- 6.06** The decision of the referee shall be entered as a judgment in the court in accordance with the provisions of the Code of Civil Procedure sections 644 and 645. The decision of the referee shall be appealable to the same extent and in the same manner that such decision would be appealable if rendered by a judge of the superior court.
- 6.07** Costs of Conducting Judicial Reference Proceeding. The cost of conducting a judicial reference proceeding shall be borne equally by the parties. The filing fee, witness fees, costs of discovery, or any other cost necessarily incurred by one party shall not be shared by any other party, except that the referee may allow the prevailing party to recover its costs and necessary disbursements, except attorneys' fees, on the same basis as is allowed in civil actions. These costs shall be taxed as in civil actions.
- 6.08** No party to this Agreement may recover its attorneys' fees from the other.

**ARTICLE 7 – ADDITIONAL PUBLIC CONTRACT CODE REQUIREMENTS**

- 7.01** The provisions of Public Contract Code section 20104 *et seq.* relating to the resolution of construction claims of three hundred seventy-five thousand dollars (\$375,000.00) or less which arise between a contractor and a local agency are incorporated here by this reference.

**END OF DOCUMENT 00 73 83**



**SECTION 01 25 00  
SUBSTITUTION PROCEDURES****ARTICLE 1 - GENERAL****1.01 SUMMARY**

- .A This Section includes:
  - .1 Part 1 – General
    - .a 1.01 – Summary
    - .b 1.02 – General
    - .c 1.03 – Substitutions
    - .d 1.04 – Submission Requirements
    - .e 1.05 – Installation of Substitutions
    - .f 1.06 – Owner's Action
  - .2 Part 2 – Forms
    - .a Form 01 25 00-F1 (Substitution Request Form)

**1.02 GENERAL**

- .A Owner's Authorized Representative may consider proposals for Substitution of a service, Product, material, process, or article only when such proposals are:
  - .1 Submitted within the time periods stated in the Contract Documents;
  - .2 Accompanied by full and complete technical data;
  - .3 Submitted with all supporting information requested by Owner's Authorized Representative to substantiate or prove quality, delivery time, and cost; and,
  - .4 Accompanied by Substitution Request Form (Form 01 25 00-F1) at the end of this Section 01 25 00, properly completed by Contractor, and properly certified by Contractor's Authorized Representative. If the Substitution request is a pass through request from a Subcontractor, both Contractor's Authorized Representative and an officer of the Subcontractor must certify the Substitution request.
- .B Substitution requests will not be considered if (1) the Contract Documents provide that the use of the item specified is supported by a finding based on one or more of the reasons stated in Public Contract Code section 3400(b); or, (2) there are at least three Products specified by brand name.
- .C The burden of proof as to the equality of any service, Product, material, process, or article Contractor proposes for Substitution rests with Contractor.
- .D Contractor must not order substitute services, Products, materials, or articles without prior written acceptance of the Substitution by Owner's Authorized Representative.
- .E Owner has the right to reject Substitution proposals due to insufficient information.
- .F Contractor must certify that proposed Substitution meets or exceed all the requirements of the Contract Documents.
- .G Contractor must assume responsibility for Owner's additional costs related to the redesign and/or modifications to any parts of the Work and/or Contract Documents caused by the Substitution(s).

- .H Contractor's Substitution requests that do not comply with the requirements of the Contract Documents may be returned to Contractor without review.
- .I If Contractor's Substitution request is returned without review or returned rejected, Contractor must furnish the originally specified items.

### 1.03 SUBSTITUTIONS

- .A Whenever in the Contract Documents any material, Product, thing, or service is indicated or specified by grade, patent, brand, trade, or proprietary name, or by manufacturer, such specifications shall be deemed to be followed by the term "or equal" unless (1) the Contract Documents provide that use of the item specified is supported by a finding based on one or more of the reasons stated in Public Contractor Code section 3400(b); or, (2) there are at least three manufacturers/supplier specified by brand name in the Contract Documents, followed by the phrase "no substitutions."
- .B If Contractor requests Owner's approval of any material, Product, thing, or service as an "or equal," the process for Owner's acceptance of a Substitution must be followed as described below and per this Section 01 25 00.
- .C Contractor may submit a proposal for an "or equal" material, Product, thing, or service at any time within thirty-five (35) Days after the official start date stated in the Notice to Proceed. At the sole discretion of Owner's Authorized Representative, Owner may give written consent to the submission of a Product Substitution request after expiration of the thirty-five (35) Day time limit.
- .D If the material, Product, thing, or service offered by Contractor is not, in the opinion of Owner's Authorized Representative, substantially equal or better than that specified, then Contractor must furnish that material, Product, thing, or service specified or one that in the opinion of the Owner's Authorized Representative is substantially equal or better in every respect.
- .E The burden of proof as to the equality of any material, Product, thing, or service Contractor proposes for Substitution is the responsibility of Contractor.
- .F The opinion of Owner's Authorized Representative of the substantial equality or superiority of any material, Product, thing, or service proposed for Substitution will be based on, but not be limited to, consideration of such factors (examples only, and not by limitation) as physical characteristics of weight, gauge, composition, hardness, toughness, ductility, durability, brittleness, etc., as compared to the specified item, or as delineated in the Contract Documents; dimensional compatibility with the materials it combines with to produce a unified system; compatibility with Products in use by Owner elsewhere; all aspects of finished appearance including form, texture and color, that may affect other design elements; performance, functionality, and ease and economy of maintenance and operation. Owner's Authorized Representative will review and respond in writing to Substitution submittals within twenty-one (21) Days after receipt of all information Owner requires to make a final determination. Requests that do not comply with the requirements of the Contract Documents may be returned to Contractor without review.
- .G Owner may consider proposals for Substitution of materials, Products, things, or services. Such proposals must be accompanied by full and complete technical data, and all other information requested by the Owner in order to evaluate the proposed Product Substitution. Owner may require substantiating documents to prove quality, delivery time, and/or cost. The burden of proof as to comparative quality, suitability, and performance of offered materials, Products, things, or services is the responsibility of Contractor. Owner's Authorized Representative will be the sole judge as to such matters. In the event Owner's Authorized Representative rejects the use of such Alternative(s) submitted, then one of the particular materials, Named Products, things, or services originally specified in the Contract Documents must be provided.

- .H Contractor is responsible for all design and engineering costs, Submittal and resubmittal costs, and costs of associated changes, for the review and acceptance of all proposed and accepted Product Substitutions. Costs incurred by Owner to process, design, engineer, or adapt Substitutions may be deducted from payments to Contractor.

#### 1.04 SUBMISSION REQUIREMENTS

- .A Limit each request to one proposed Substitution.
- .B Submit five (5) copies of each request for Substitution.
- .C Identify product, fabrication, or installation method to be replaced including specification section number and title and Drawing numbers and titles.
- .D Include five (5) copies of completed and signed Substitution Request Form 01 25 00-F1, furnished at the end of this Section 01 25 00.
- .E Submit the following documentation:
  - .1 Statement indicating why specified material or Product cannot be provided.
  - .2 Coordination information including:
    - .a A list of changes or modifications needed to other parts of the Work that are necessary to accommodate proposed Substitution, including without limitation, changes during installation.
    - .b A list of changes or modifications to Work performed by Owner and/or separate contractors that are necessary to accommodate proposed Substitution.
  - .3 Detailed comparison including:
    - .a Comparison of significant qualities of proposed Substitution with those of the Work specified. Significant qualities include but are not limited to attributes such as performance, weight, size, durability, visual effect, and specific features and requirements indicated.
  - .4 Drawings to same (or larger) scale as pertinent portions of Contract Documents, marked to show:
    - .a How differences will be accommodated;
    - .b Complete system/assembly as revised; and,
    - .c Difference(s) in size, configuration, connections, service, accessibility, or any other significant characteristics.
  - .5 Contractor must show complete layout of system unless it is identical to the layout shown in the Contract Documents. Show unchanged portion to indicate clearances, etc. relative to changed portion.
  - .6 Wherever applicable, include complete detail drawings of supports for all Substitute equipment and complete load calculations for adequacy of support prepared and signed by a California Registered Engineer.
  - .7 Product Data, including drawings and descriptions of Products and fabrication and installation procedures.
  - .8 Samples, where applicable or requested.
  - .9 List of similar installations for completed projects with project names and addresses and names and addresses of architects and owners.

- .10 Material test reports from a qualified testing agency indicating and interpreting test results for compliance with requirements indicated.
- .11 Research/evaluation reports evidencing compliance with building codes in effect for Project from a model code organization acceptable to authorities having jurisdiction.
- .12 Evidence that proposed product provides specified Warranty.
- .13 Cost information, including a proposal of change, if any, in the Contract Sum.
- .F Submit a detailed comparison of proposed progress schedules with and without using the proposed Substitution, showing effect on the Contract Time(s).
- .G If the specified Product cannot be provided within the Contract Time(s), include letter from manufacturer, on manufacturer's letterhead, stating the reason(s) for the lack of availability or delays in delivery.
- .H Provide Contractor's certification that proposed Substitution complies with requirements in the Contract Documents and is appropriate for applications indicated.
- .I Provide Contractor's waiver of rights to additional payment or time that may subsequently become necessary because of failure of proposed Substitution to produce indicated results or because of time impacts on schedule of Owner review period required of proposed Substitution.

**1.05 INSTALLATION OF SUBSTITUTIONS**

- .A Contractor must replace any Substitution(s) installed without Owner's consent with the specified item(s) at Contractor's expense.
- .B Contractor must not proceed with any Product Substitution or change until Owner's Authorized Representative has completed all reviews, made recommendations, and granted written consent.
- .C If Owner's Authorized Representative accepts a Product Substitution, Contractor must make all changes in the Work including changes to Contract and Record Documents at no additional cost to Owner.
- .D If an accepted Product Substitution is more expensive than the specified material, process, or article Contractor must bear all additional costs of such material, process, or article so provided.
- .E If mechanical, electrical, structural, or other changes are required for the Installation or fit of Alternative materials, articles, or equipment, or because of deviations from Contract Drawings and Specifications, such changes must not be made without written consent of Owner's Authorized Representative, and must be made without additional cost to Owner.

**1.06 OWNER'S ACTION**

- .A If necessary, Owner will request additional information or documentation within fourteen (14) Days of receipt of a request for Substitution.
- .B Owner will notify Contractor of acceptance or rejection of proposed substitution within twenty-one (21) Days of receipt of request, or seven (7) Days of receipt of additional information or documentation, whichever is later.

**ARTICLE 2 - FORMS**

## FORM 01 25 00-F1

## "SUBSTITUTION REQUEST FORM"

All Substitution requests must be accompanied by the following form, completed by Contractor, and properly certified pursuant to Section 01 25 00.

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PROJECT: \_\_\_\_\_

OWNER'S PROJECT NUMBER: \_\_\_\_\_

TO: \_\_\_\_\_

FROM: \_\_\_\_\_ DATE: \_\_\_\_\_

RE: \_\_\_\_\_

SPECIFICATION TITLE: \_\_\_\_\_

DESCRIPTION: \_\_\_\_\_

SECTION: \_\_\_\_\_ PAGE: \_\_\_\_\_ DOCUMENT/PARAGRAPH: \_\_\_\_\_

PROPOSED SUBSTITUTION: \_\_\_\_\_

MANUFACTURER: \_\_\_\_\_

ADDRESS: \_\_\_\_\_

PHONE: \_\_\_\_\_ EMAIL: \_\_\_\_\_

TRADE NAME: \_\_\_\_\_ MODEL NUMBER: \_\_\_\_\_

INSTALLER: \_\_\_\_\_

ADDRESS: \_\_\_\_\_

PHONE: \_\_\_\_\_ EMAIL: \_\_\_\_\_

HISTORY: ☐ New Product ☐ 2-5 Years Old ☐ 5-10 Years Old ☐ More Than 10 Years Old

## SIMILAR INSTALLATION:

Project: \_\_\_\_\_ Architect: \_\_\_\_\_

Address: \_\_\_\_\_ Owner: \_\_\_\_\_

Date Installed: \_\_\_\_\_

Differences between proposed substitution and specified product:

\_\_\_\_\_  
\_\_\_\_\_.Required point-by-point comparative data attached. ☐ Yes ☐ NoThe supporting data attached consists of ☐ Drawings ☐ Product Data ☐ Samples ☐ Tests ☐ Reports ☐ OtherProposed substitution affects other parts of Work: ☐ No ☐ If Yes, please explain:

\_\_\_\_\_

Reason for not providing specified item:

\_\_\_\_\_

☐ Savings ☐ Cost to Owner for accepting substitution: \$ \_\_\_\_\_Proposed Substitution changes Contract Time. ☐ No ☐ Yes \_\_\_\_\_ Days

## THE UNDERSIGNED CERTIFIES:

1. Proposed Substitution has been fully investigated and determined to be equal or superior in all respects to specified product.
2. Same Warranty will be provided for proposed Substitution as for specified product.
3. Same maintenance service and source of replacement parts, as applicable, is available.
4. Proposed Substitution will have no adverse effect on other trades and will not affect or delay progress as indicated on the current version of the Official Progress Schedule.
5. Cost and time data as stated above is complete and accurate.
6. Contractor and, if applicable, Subcontractor waives any and all right to claim additional costs and time related to accepted Substitution, whether currently known or unknown.
7. Proposed Substitution does not affect dimensions and functional clearances.
8. Coordination, installation, and changes in the Work as necessary for accepted Substitution have been or will be performed in all respects.

## Contractor's Certification:

Submitted by:

\_\_\_\_\_ Signed by: \_\_\_\_\_

Firm: \_\_\_\_\_

Phone: \_\_\_\_\_ Email: \_\_\_\_\_

Address: \_\_\_\_\_  
\_\_\_\_\_

**Subcontractor's Certification:**

Submitted by:

\_\_\_\_\_ Signed by: \_\_\_\_\_

Firm: \_\_\_\_\_

Phone: \_\_\_\_\_ Email: \_\_\_\_\_

Address: \_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
List Attachments:

**DESIGNER OF RECORD REVIEW AND ACTION**

Substitution Recommended - Make Submittals in accordance with Section 01 33 00, "Submittal Procedures."

Substitution Recommended as Noted - Make submittals in accordance with Section 01 33 00, "Submittal Procedures."

Substitution Rejected - Use specified Products.

Substitution Request Received too late - Use specified Products.

Signed by:

\_\_\_\_\_ Date: \_\_\_\_\_

Additional Comments: ☐ Contractor ☐ Subcontractor ☐ Supplier ☐ Manufacturer ☐ Architect

\_\_\_\_\_

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**OWNER ACCEPTANCE**

Substitution Accepted - Make submittals in accordance with Section 01 33 00, "Submittal Procedures."

Substitution Accepted as Noted - Make submittals in accordance with Section 01 33 00, "Submittal Procedures."

Substitution Rejected - Use specified Products.

Substitution Request Received too late - Use specified Products.

Signed by:

Date: \_\_\_\_\_

\_\_\_\_\_  
Owner's Authorized Representative

**END OF SECTION 01 25 00**



**SECTION 01 26 00  
CONTRACT MODIFICATION PROCEDURES**

**PART 1 GENERAL****1.01 RELATED DOCUMENTS AND SECTIONS**

- A.** Document 00 73 83 (Dispute Resolution)

**1.02 DEFINITIONS**

- A.** Reference Document 00 71 00 (Contract Definitions) for definitions of:
1. Field Modification;
  2. Change Order;
  3. Request for Information (RFI); and,
  4. Construction Change Directive.
- B.** Price Request: A written request prepared by the Design Professional of Record requesting Contractor submit to Owner and Design Professional of Record an estimate of the effect of a proposed change in the Work on the price and the Contract Time.

**1.03 REQUESTS FOR INFORMATION**

- A.** If Contractor discovers alleged conflicts, omissions, or errors in the Contract Documents, or has any questions concerning interpretation or needs clarification of Contract Documents that cannot be answered by reviewing the Contract Documents or by reasonable inference, Contractor must submit to Owner, in writing, an RFI complying with the requirements of this Document.
- B.** Contractor shall be responsible for any delay in the construction progress due to any untimely submission of an RFI or Design Professional's review.
- C.** If Owner does not receive an RFI, or Contractor proceeds with Work pertaining to a submitted RFI without receiving a written response from Owner, Contractor shall be deemed to relieve Owner of any Claim for added cost or extension of time, and may, in addition, be responsible for additional liability or costs associated with the RFI.
- D.** An RFI is not a Contract amendment and cannot modify the Contract Sum, Contract Time, the Contract Documents, or change any requirement of the Contract Documents.
- E.** Before submitting an RFI, Contractor shall diligently review the Contract Documents for information responsive to the RFI, including information incorporated by reference. Contractor shall not issue an RFI seeking information contained in the Contract Documents, including information incorporated by reference. An RFI is invalid if the RFI response is contained in or inferable from the Contract Documents including information incorporated by reference.
- F.** RFI time requirements:
1. All RFIs, whether by Contractor, a Subcontractor or Supplier at any tier, must be submitted by Contractor to Owner.
    - a. All RFIs must be submitted by Contractor to Owner before 3:00 p.m. RFIs received after 3:00 p.m. will be date stamped as received the following workday.

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2. All RFIs originating with Contractor (not a Subcontractor or Supplier of any tier) shall be submitted to Owner within three (3) Days from the date Contractor discovers or reasonably should discover the need for an RFI, or will be considered untimely.
  3. All RFIs from Subcontractors or Suppliers to Contractor that Contractor cannot answer shall be submitted by Contractor to Owner within forty-eight (48) hours of Contractor's receipt of the RFI from the Subcontractor or Supplier, or will be considered untimely.
  4. Untimely submission of an RFI will preclude Contractor from asserting any claims against Owner for delay or for labor impact with regard to that RFI.
  5. RFIs must be submitted sufficiently early that they may be adequately researched and answered by Owner without affecting any Critical Path Activity of the Work.
  6. Contractor shall be responsible for any delay in the construction progress due to delayed submission of an RFI.
- G. Documenting an RFI.
1. RFIs must be numbered sequentially and be presented in the format furnished by or acceptable to Owner's Project Manager. Contractor must append an alpha character to the initial RFI number to identify RFI resubmissions. (Example: The first iteration of follow-up RFIs starts by appending an "A," the second iteration would be assigned a "B," and so on, for as many follow-up iterations as necessary to resolve the issue.)
  2. RFIs that pertain to work on the Critical Path shall be so identified with supporting reference to Contractor's most recent accepted schedule update. Compliance with this requirement shall not constitute compliance with any other contract notice requirement. Failure to meet this requirement shall waive any right to time extension arising from any delay in responding to such RFI.
  3. Contractor must clearly and concisely set forth the issue for which interpretation or clarification is sought, indicating Specification Division, Section, Part, and Paragraph number, or the Document, Article, Part, and Sub-Part numbers, Contract Drawing number, activity number from the Official Progress Schedule, details or other pertinent items involved, and state why a response is required. Contractor's Quality Control (QC) Manager or designee shall review and initial RFI to indicate review and concurrence in the information requested.
  4. Each RFI must be limited to one issue requiring response from Owner. Contractor shall make suggestions and interpretations of the issue raised by each RFI.
  5. In each RFI, Contractor must set forth its own interpretation or understanding of the requirements, along with reasons why it has reached such an interpretation or understanding. Where an RFI contains a suggested solution, Contractor shall indicate potential cost considerations and alternative lower cost methods considered.
- H. Owner's RFI Response.
1. Responses to RFIs will be issued by Owner in writing (RFI Response) within fourteen (14) Days unless Owner notifies Contractor in writing that a response will take longer. The fourteen (14) Day response time begins when the RFI is date-stamped as received by Owner.
  2. An RFI Response is not a contract amendment and cannot modify the Contract Sum, Contract Time, the Contract Documents, or change any requirement of the Contract Documents.
  3. If Contractor alleges that an RFI Response changes any requirement(s) of the Contract Documents, Contractor must, within seven (7) Days of receipt of the RFI Response and

before proceeding under the RFI Response, notify the Owner in writing that Contractor considers the RFI Response to change a requirement(s) of the Contract Documents. Failure by Contractor to give timely written notice that Contractor believes an RFI Response changes a requirement(s) of the Contract Documents waives Contractor's right to seek an adjustment in the Contract Time or Contract Sum according to this Section 01 26 00 or Document 00 73 83 (Dispute Resolution) for costs or time incurred in connection with the Work described in the RFI.

- I. Contractor shall not issue an RFI to Owner to clarify Contractor-prepared or reviewed construction documents.
- J. Contractor shall be responsible for its costs to implement and administer RFIs throughout the Project. Regardless of the number of RFIs submitted, Contractor shall not be entitled to additional compensation for the effort required to submit RFIs.
- K. Contractor shall be liable to Owner for all costs incurred by Owner associated with processing, reviewing, evaluating, and responding to any RFI, including without limitation fees of the Design Professional and any other design consultant to the Design Professional or Owner, if Owner reasonably determines that the RFI:
  - 1. Does not reflect adequate or competent supervision or coordination by the Contractor or any Subcontractor;
  - 2. Does not reflect Contractor's adequate or competent knowledge of the requirements of the Work or the Contract Documents;
  - 3. Requests an interpretation or decision of a matter where the information sought is equally available to Contractor as to Owner; or,
  - 4. Where the answer could reasonably be found by reviewing the Contract Documents or material incorporated therein.
  - 5. At Owner discretion, such costs may be deducted from progress payments or from final payment.

#### **1.04 FIELD MODIFICATION**

- A. Owner may furnish additional detailed written and/or graphic instructions to explain the Work more fully, and such instructions become a part of the requirements of the Contract Documents ("Field Modification").
- B. Should a Field Modification, in the opinion of Contractor, constitute Work in excess of the requirements of the Contract Documents, Contractor must submit written notice to Owner within seven (7) Days following receipt of the Field Modification, and in any event prior to commencement of the Work thereon.
- C. If in Owner's reasonable judgment the Field Modification constitutes Work in excess of the requirements of the Contract Documents, the Field Modification will be revised or the additional Work will be added by Change Order or Construction Change Directive.

#### **1.05 CHANGES GENERALLY**

- A. Owner may at any time, without notice to the Sureties, by written Order, make changes in the Work within the scope of the Contract Documents, including but not limited to additions, deletions or other revisions, changes in the Contract Documents, and in the method and manner of performing the Work.
- B. Should Contractor contend that any written Order, RFI response, Field Modification, or any other notice from Owner requires work is outside the scope of the Contract Documents, or should Contractor

become aware of any other costs it has incurred and asserts are outside the scope of the Contract Documents and for which Contractor contends Owner is responsible in whole or in part; Contractor shall provide Owner a timely Notice of Dispute for such work complying with the requirements of Document 00 73 83 (Dispute Resolution).

- C. Cost and time proposal for written Orders, RFI Response, Field Modification, or other Owner notice:
1. Within seven (7) Days of receipt of any written Order, RFI Response, Field Modification, or other Owner notice directing changes in the Work, Contractor must submit, in a format acceptable to Owner, Contractor's proposed cost and time proposal detailing the amount to be added to or deducted from the Contract Sum and Contract Time due to the change in the Work directed by Owner.
  2. Calculating adjustment of the Contract Sum and/or Contract Time shall be determined in accordance with Section 01 26 00, art. 1.06(E)(4), "Force Account Work."
  3. Contractor's cost and time proposal must include:
    - a. Detailed estimates and other documentation supporting the proposed cost;
    - b. Detailed estimates and other documentation supporting the proposed adjustments of the Contract Time. All requests, whether disputed or undisputed, for adjustment to the Contract Time must be supported by a detailed schedule analysis as specified in Section 01 32 00 (Construction Progress Documentation).
    - c. If requested by Owner, Contractor shall further substantiate its cost and time proposal, to be received by Owner within seven (7) Days of Owner's request for further substantiation of the cost and time proposal.
  4. Failure to agree on Contractor's cost and time proposal:
    - a. If, after Contractor has submitted its cost and time proposal, Owner and Contractor fail to successfully negotiate and agree on a time and/or cost for the changed Work, Owner may issue a Construction Change Directive and Contractor must proceed with the changed Work.
    - b. If Contractor disputes any portion of the Construction Change Directive, Contractor must maintain time and materials records as specified in Section 01 26 00, art. 1.06(E)(4), "Force Account Work." If Contractor fails to maintain such records or fails to submit such records within fifteen (15) Days following completion of the changed Work, Owner's estimate will be used for the purpose of final adjustment in Contract Time and Contract Sum.
  5. Failure to submit a timely and complete cost and time proposal.

If Contractor fails to submit a cost and time proposal that contains the required information and documentation within the times set forth above, Owner may issue a Construction Change Directive. The Contract Sum and Contract Time will be changed in accordance with Owner's estimate of cost and time, or other pricing metric, unless, within fifteen (15) Days following completion of the changed Work or with written notice to delete the Work, Contractor submits to Owner written evidence that Owner's estimate and/or pricing metric was in error.

## 1.06 CONTRACT MODIFICATIONS

### A. No changes without authorization.

1. There shall be no change whatsoever in the Drawings, Specifications, or in the Work without an executed Change Order or Construction Change Directive authorized by Owner as provided herein. Owner shall not be liable for the cost of any extra work, any changes to the Contract Time, or any substitutions, changes, additions, omissions, or deviations from the Drawings and

Specifications unless the Owner has authorized the same and the cost thereof has been approved in writing by an executed Change Order or Construction Change Directive.

2. No extension of time for performance of the Work shall be allowed unless request for such extension is made at the time changes in the Work are ordered, and such time duly adjusted in writing in the Change Order or Construction Change Directive. The provisions of the Contract Documents shall apply to all such changes, additions, and omissions with the same effect as if originally embodied in the Drawings and Specifications.
3. Contractor shall immediately perform all work that has been authorized by a properly executed Change Order or Construction Change Directive. Contractor shall be fully responsible for any and all delays and/or expenses caused by Contractor's failure to expeditiously perform such Work.
4. Should any Change Order result in an increase in the Contract Sum, the cost of that Change Order shall be agreed to in writing by Contractor and Owner and be subject to the monetary limitations set forth in Public Contract Code section 20137. In the event Contractor proceeds with any change in Work without an executed Change Order or Construction Change Directive, Contractor waives any claim of additional compensation or time for that additional work.
5. Contractor understands, acknowledges, and agrees that the reason for Owner authorization is so that Owner may have an opportunity to analyze the Work and decide whether the Owner shall proceed with the Change Order or Construction Change Directive or alter the Project so that a change in Work becomes unnecessary.

**B. Price Request.**

1. Scope of Price Request. A Price Request shall contain adequate information, including any necessary Drawings and Specifications, to enable Contractor to provide the cost breakdowns required herein. Contractor shall not be entitled to any additional compensation for preparing a response to a Price Request, whether or not the Contractor's response is ultimately included in a Change Order or Construction Change Directive.

**C. The methods for Contract modification are:**

1. Field Modification;
2. Change Order, through negotiation, based on estimates of increase or decrease in Contract Time and/or Contract Sum;
3. By Owner, through the issuance of a Construction Change Directive; or,
4. By no-cost Change Order documenting the use of Contingency (if applicable to Project).

**D. Change Order.**

1. Upon Owner's written request, Contractor must provide a cost and time proposal according to and complying with the requirements of Section 01 26 00., art. 1.05.

**E. Construction Change Directive.**

1. Construction Change Directives may occur:
  - a. Based on Owner's estimate of increase or decrease in Contract Time and/or Contract Sum, whether or not negotiations are initiated as provided above;
  - b. For work to be done on by Force Account (time and materials, cost not to exceed) basis in accordance with Section 01 26 00, art. 1.06(E)(4) ("Force Account Work"), whether or not negotiations are initiated as provide above; and,

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- c. In the absence of agreement on the terms of a Change Order.
2. Any disagreement as to the sum of the Construction Change Directive or timing of payment shall be resolved pursuant to the processes in Documents 00 72 00 (General Conditions) and 00 73 83 (Dispute Resolution).
3. Adjustment of compensation under Construction Change Directive that is not Force Account Work shall be limited to labor, materials and equipment, construction equipment, and services as more fully described below. All proposed cost requests by Contractor, including under Change Orders, Construction Change Directives and use of Contingency (if applicable to Project) shall include an itemized breakdown with the following detail:
- a. Labor. Labor breakdown by trade classification, wage rates and estimated hours.
- i. Labor costs shall only include fringe benefits as determined by the Department of Industrial Relations for the applicable prevailing wage. No other costs will be included as labor burden, including without limitation, State and Federal Payroll Taxes (e.g. FICA, Medicare, Unemployment, SSI), liability insurance, and workers' compensation Insurance. Compensation for labor includes the necessary payroll cost for labor including the first level supervision directly engaged in performance of the change. Wages shall not exceed current prevailing wages in the locality where the change is performed. Use of a classification that would increase labor cost will not be permitted. Labor shall include "First Line Supervision," which means a working foreman or lead craft worker other than the Project Superintendent. Exceptions to the above will be permitted only if Contractor establishes to the satisfaction of Owner the necessity for payment at higher rates or classification.
- b. Materials and equipment. Compensation for materials and equipment includes the necessary cost for materials and equipment directly required for performance of the change. Cost of materials and equipment may include costs of transportation and delivery, and shall include material quantities and types of products. If discounts by Suppliers are available to Contractor, they must be credited to Owner. If materials and equipment are obtained from supply or source(s) owned by, or partially owned by Contractor, payment will not exceed current wholesale price for such materials and equipment.
- i. If, in Owner's opinion, the cost of materials and equipment exceeds what is usual and proper, or if Contractor fails to furnish satisfactory evidence of cost from Supplier, the cost of materials and equipment shall be the lowest current wholesale price at which similar materials and equipment are available in quantities required. Owner reserves the right to furnish materials and equipment required for performance of the change(s) and Contractor has no right to Claim for costs or mark-ups on such materials and equipment furnished by Owner.
- c. Construction equipment: Compensation shall be only for use of equipment directly required for performance of the change, and will be calculated as provided in Section 01 26 00, article 1.06(E)(4), "Force Account Work."
- d. Services. Compensation shall be only for the necessary cost of Approved services directly required for the performance of the change.
- e. In addition to those costs defined in Article 1.06(E)(4) below, the following cost items are deemed to be included as part of mark-ups in 1.06(E)(4) below:
- i. Clean-up, including street sweeping;
- ii. QC efforts, including work by the QC staff and Special Inspectors;

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- iii. Document control, updating As-Built Documents, and document printing;
  - iv. Submittal preparation and processing;
  - v. All vehicle costs incidental to performing work of the Change Order or Construction Change Directive;
  - vi. Cost estimating;
  - vii. Protection of facilities and work-in-place;
  - viii. Traffic control;
  - ix. Field trailer and associated costs such as phone, computers, etc.;
  - x. Tool use and general construction consumables;
  - xi. Effort related to LEED; and,
  - xii. Incidental engineering work.
4. Force Account Work.
- a. General.
    - i. Owner may, at any time, through the issuance of a Construction Change Directive order Contractor to have Work performed on a Force Account (time and materials, cost not to exceed) basis ("Force Account Work"). When Contractor performs Force Account Work, the labor, materials and equipment used in performing such Work are subject to Owner's Approval. As used in this Section 01 26 00, article 1.06(E)(4), "Force Account Work," the word "Work" means Force Account Work.
    - ii. Owner will issue a Construction Change Directive directing Contractor to proceed with the Work on a Force Account basis, and a not-to-exceed budget will be established by Owner.
    - iii. Contractor shall be responsible for all cost(s) related to the administration of the Force Account Work. The markup for overhead and profit set forth in this Section 01 26 00, article 1.06(E)(4) shall be full compensation to Contractor to administer Force Account Work under a Construction Change Directive.
    - iv. Contractor shall notify Owner's Authorized Representative(s) at least twenty-four (24) hours prior to proceeding with any of the Force Account Work. Contractor shall also notify Owner when it has consumed eighty percent (80%) of the not-to-exceed budget on the Construction Change Directive. In no event shall Contractor exceed the not-to-exceed amount on the Construction Change Directive unless specifically authorized in writing by Owner. Contractor will not be compensated for Force Account Work if Contractor fails to timely notify the Owner regarding commencement of Force Account Work or reaching eighty percent (80%) of the Force Account not-to-exceed budget on the Construction Change Directive; or for any Work that exceeds the Force Account not-to-exceed budget on the Construction Change Directive.
    - v. Contractor shall diligently proceed with the Work, and on a daily basis, submit a daily Force Account report on a form supplied by Owner no later than 5:00 p.m. each day as more fully described in this Section 01 26 00, article 1.06(E)(4).
    - vi. In the event Contractor and Owner reach a written agreement on a set cost for the work while the work is proceeding based on a Force Account Directive, Contractor's signed daily Force Account reports shall be discontinued and all previously signed reports shall be invalid.

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- b. Payment for Force Account Work.**
- i.** Owner will only pay for actual costs verified in the field by Owner and its Authorized Representative(s) on a daily basis.
    - A.** The total payment as provided in Section 01 26 00, article 1.06(E)(4), "Force Account Work," constitutes full compensation to Contractor for performance of Force Account Work.
    - B.** Contractor will be paid the direct costs for labor, materials, and equipment used in performing the Work determined as hereinafter provided except where agreement has been reached to pay in accordance with Section 01 26 00, article 1.06(E)(4)(h), "Specialized Services." If materials and equipment are obtained from a supply or source owned in whole or in part, by Contractor, payment for such materials and/or equipment shall not exceed current wholesale prices for such materials and equipment.
    - C.** If, in the reasonable opinion of Owner, the cost of materials and equipment is excessive, or if Contractor fails to furnish satisfactory evidence of costs from Suppliers, the cost of materials and equipment will be the lowest current wholesale price at which similar materials and equipment are available in quantities required.
    - D.** No costs will be allowed for time while construction equipment is not being operated, idle, or on stand-by, for any reason, unless such times have been Approved in advance by Owner.
  - ii.** Markups: To the total of the direct costs computed as provided in Section 01 26 00, article 1.06(E)(4)(c), "Labor," Section 01 26 00, article 1.06(E)(4)(d), "Materials," and Section 01 26 00, article 1.06(E)(4)(e), "Equipment Rental," the following maximum markups will be added:
    - A.** Fifteen percent (15%) to labor;
    - B.** Ten percent (10%) to materials; and,
    - C.** Ten percent (10%) to equipment rental.
    - D.** The above markups constitute full compensation for all overhead costs (general overhead, supervision, office expenses (home and field), field office facilities, utilities, Contract Bonds and insurance of all types, and transportation) including all items of expense not specifically designated as cost or equipment rental in Section 01 26 00, article 1.06, sub-parts 1.06(E)(4)(c), 1.06(E)(4)(d), and 1.06(E)(4)(e). The total payment made as provided constitutes full compensation for the Work performed.
  - iii.** When forces other than Contractor perform Work, Contractor must reach agreement with such other forces as to the distribution of the payment made by Owner for such Work. Owner will accept no additional markups by reason of the performance of Force Account Work by a Subcontractor or other forces.
- c. Labor.**
- i.** Contractor will be paid the cost of labor for the workers (including first level supervision when authorized by Owner) used in the actual and direct performance of the Work. Contractor must document labor hours expended in its Daily Report, identified in Section 01 32 00. The cost of labor, whether the employer is Contractor, Subcontractor or other forces, will be the sum of the following items.



- A. Actual Wages. Actual wages paid include two components: (1) direct labor costs actually paid to the employee; and, (2) any employer payments to or on behalf of workers for health and welfare, pension, vacation, and similar purposes.
  - B. Labor Surcharges. To the direct labor costs, as defined in Section 01 26 00, article 1.06(E)(4)(c)(i)(A), "Actual Wages", will be added a current labor surcharge as set forth in the California Department of Transportation publication entitled "Labor Surcharge and Equipment Rental Rates" which is in effect on the date when the Work is accomplished and which is a part of the Contract. Said labor surcharge constitutes full compensation for all payments imposed by State and Federal laws and for all other payments made to, or on behalf of, the workers, other than actual wages as defined in Section 01 26 00, article 1.06(E)(4)(c)(i)(A), "Actual Wages" and subsistence and travel allowance as specified in Section 01 26 00, article 1.06(E)(4)(c)(i)(C), "Subsistence and Travel Allowance."
  - C. Subsistence and travel allowance. The actual allowance paid to such workers in compliance with labor agreements.
- d. Materials.
  - i. Owner furnished. Owner may furnish such materials as it deems advisable, and Contractor has no right to Claim for costs and markup on such materials.
  - ii. Contractor provided. Only materials provided by Contractor, necessary to and actually used in the Work will be paid for. The cost of such materials will be the cost to the purchaser, whether Contractor, Subcontractor, or other Supplier thereof, unless the following apply:
    - A. If a cash or trade discount by the actual Supplier is offered or available to the purchaser, it must be credited to Owner, whether or not such discount was actually received;
    - B. If materials are procured by any method, which is not a direct purchase from an actual Supplier, the cost of such materials shall be deemed to be the price, paid to the actual Supplier as determined by Owner. No markup except for actual costs incurred in the handling of such materials will be permitted;
    - C. If materials are obtained from a supply or source owned in whole or in part by the purchaser, payment therefore will not exceed the price paid by the purchaser for similar materials provided from said source on Contract items, or the current wholesale price for such materials delivered to the Project Site, whichever price is lower;
    - D. If in Owner's opinion the cost of such materials is excessive, then the cost of such materials shall be deemed to be the lowest current wholesale price at which such materials are available in the required quantities delivered to the Project Site, less any discounts as provided in Section 01 26 00, article 1.06(E)(4)(d)(ii)(A); and,
    - E. If Contractor does not furnish satisfactory evidence of the cost of such materials from the actual Supplier thereof, the cost shall then be determined in accordance with Section 01 26 00, article 1.06(E)(4)(d)(ii)(D), above.
- e. Equipment Rental.
  - i. Rental Rate. Contractor will be paid for the use of equipment at the rental rate listed for such equipment in the latest edition of the California Department of Transportation, Labor Surcharge and Equipment Rental Rates, regardless of ownership and any rental or other

agreement, if such may exist for the use of such equipment entered into by Contractor. If it is deemed necessary by Owner to use equipment not so listed, prior to the Work being done, Owner will establish a suitable rental rate for such equipment. Contractor may furnish any cost data that might assist Owner in establishing such rental rate.

- A. The aforesaid rental rates shall be deemed to include the cost of fuel, power, oil, lubrication, supplies, small tools, necessary attachments, repairs and maintenance of all kinds, depreciation, storage, insurance, labor (except for construction equipment operators), and any and all costs to Contractor incidental to the use of such construction equipment.
  - B. Operators of rental equipment will be paid for as provided in Section 01 26 00, article 1.06(E)(4)(c), "Labor." All equipment must be in good working condition and suitable for the purpose for which it is to be used, as judged solely by Owner.
  - C. Unless otherwise specified, Manufacturer's ratings and Manufacturer approved modifications shall be used to classify equipment for determining applicable rental rates. A power unit of at least the minimum rating recommended by the Manufacturer shall power equipment that has no direct power unit.
  - D. Individual pieces of equipment or tools having a replacement value of five hundred dollars (\$500) or less, whether or not consumed by use, are considered to be small tools and no rental payment will be made.
  - E. Rental time will not be allowed while equipment is inoperative due to breakdowns.
- f. Equipment on the Work.
- i. The rental time to be paid for equipment already on the Project Site will be the time the equipment is in operation on the Work being performed, and in addition, will include the time required to move the equipment to the location of the Work and return it to the original location, except that moving time will not be paid if the equipment is used at the Project Site for activities besides Force Account Work.
  - ii. Loading and transporting costs will be allowed, in lieu of moving time, when equipment is moved by means other than its own power, except that no payment will be made if equipment is used at the Project Site for activities besides Force Account Work.
  - iii. The following will be used in computing the rental time of equipment on the Work:
    - A. When hourly rates are listed, less than thirty (30) minutes of operation will be considered to be one-half (1/2) hour of operation; and,
    - B. When daily rates are listed, less than four (4) hours of operation will be considered to be one-half (1/2) day of operation.
  - iv. Payment to Contractor for the use of equipment as set forth above shall constitute full compensation of Contractor for the cost of fuel, oil, lubricants, supplies, small equipment, necessary attachments, repairs and maintenance of any kind, depreciation, storage, insurance, labor (except for equipment operators), and any and all costs to Contractor incidental to use of the equipment.
- g. Equipment not on the Work.
- i. For the use of equipment moved in solely to perform Force Account Work, and used exclusively for such Work, Contractor will be paid the rental rates determined as provided

in Section 01 26 00, article 1.06(E)(4)(e), "Equipment Rental," and for the cost of transporting the equipment to the Work site, all in accordance with the following provisions:

- A. Contractor must obtain Owner's approval before transporting any equipment to the Project Site;
  - B. Owner will pay the cost of loading and unloading Approved equipment; and,
  - C. The cost of transporting equipment in low bed trailers shall not exceed the hourly rates charged by established haulers.
- ii. The cost of transporting equipment shall not exceed the applicable minimum established rates of the California Public Utilities Commission.
  - iii. Should Contractor desire to return the equipment to a location other than the location from where it was transported to the Work site, Owner will pay the cost of transportation in accordance with the above provisions, provided such payment will not exceed the cost of transporting the equipment to the Work site.
  - iv. Payment for transporting, loading and unloading equipment, as provided above will not be made if the equipment is used in any other way than on Force Account Work.
  - v. The rental period will begin when the equipment is unloaded at the Work site, will include each day that the equipment is at the Work site, excluding Saturdays, Sundays, and Owner's legal holidays, unless the equipment is used to perform the Work on such days, and will terminate at the end of the day when Owner directs Contractor to discontinue use of such equipment.
  - vi. Rental time will be paid as follows:

<u>Hours equipment is in operation</u>	<u>Hours to be paid</u>
0.0 .....	4.00
0.5 .....	4.25
1.0 .....	4.50
1.5 .....	4.75
2.0 .....	5.00
2.5 .....	5.25
3.0 .....	5.50
3.5 .....	5.75
4.0 .....	6.00
4.5 .....	6.25
5.0 .....	6.50
5.5 .....	6.75
6.0 .....	7.00
6.5 .....	7.25
7.0 .....	7.50
7.5 .....	7.75
8.0 .....	8.00
Over 8.0 .....	Actual hours in operation

- vii. The hours to be paid for equipment that is operated less than eight (8) hours due to breakdowns shall not exceed eight (8) less the number of hours the equipment is inoperative due to breakdowns.

- 
- viii. When hourly rates are listed, less than thirty (30) minutes of operation will be considered to be one-half (1/2) hour of operation.
  - ix. When daily rates are listed, payment for one-half (1/2) day will be made if the equipment is not used. If the equipment is used, payment will be made for one (1) day.
  - x. The minimum rental time to be paid for the entire rental period on an hourly basis will not be less than eight (8) hours or if on a daily basis will not be less than one (1) day.
  - xii. Payment to Contractor for use of equipment as set forth above shall constitute full compensation of Contractor for the cost of fuel, oil, lubricants, supplies, small equipment, necessary attachments, repairs and maintenance of any kind, depreciation, storage, insurance, labor, (except for equipment operators) and any and all costs to Contractor incidental to use of the equipment.
- h. Specialized Services.
- i. When Owner and Contractor agree that Contractor's Subcontractor cannot perform a special service or item of Work, such service or Work item may be performed by a specialist. Invoices for such service or Work item may be accepted based on the current market price thereof without complete itemization of labor, material, and equipment rental costs when it is impractical and not in accordance with the established practice of the special service industry to provide such complete itemization.
  - ii. In those instances where Contractor is required to perform Work necessitating a fabrication or machining process in a facility away from the Project Site, the charges for the Work performed in such facility may, by agreement, be accepted as a specialist billing.
  - iii. To the specialist invoice price, less a credit to Owner for any cash or trade discount offered or available, whether or not such discount may have been taken, will be added a ten percent (10%) markup in lieu of the markups provided in Section 01 26 00, article 1.06(E)(4)(b)(ii).
- i. Independently owned and operated equipment.
- i. When independently owned and operated equipment is used to perform Work, Contractor will be paid for the equipment and operator, as follows.
    - A. Payment for the equipment will be made in accordance with Section 01 26 00, article 1.06(E)(4)(e), "Equipment Rental." Payment for the cost of labor and subsistence or travel allowance will be made at the rates paid by Contractor to other workers operating similar equipment already on the Project or, in the absence of such other workers, at the rates for such labor established by collective bargaining agreements for the type of worker and location of the Work, whether or not the owner-operator of the independently owned and operated equipment is actually covered by such an agreement.
    - B. A labor surcharge will be added to the cost of labor described herein, in accordance with provisions in Section 01 26 00, article 1.06(E)(4)(c)(i)(B), "Labor Surcharges." To the direct cost of Equipment Rental and Labor, computed as provided herein, will be added those markups for equipment rental and labor as provided in Section 01 26 00, article 1.06(E)(4)(c) and (e).
- j. Adjustment of Contract Time.
- i. The Milestone Completion Date(s) and Contract Completion date will not be changed because of Force Account Work unless Contractor demonstrates, pursuant to Document

00 72 00 (General Conditions, "Delays and Time Extensions") that such Work actually affected the Contract Time(s).

**k. Records.**

- i. Contractor must maintain records (Daily Reports identified in Section 01 32 00) that provide a clear distinction between the performance of the Force Account Work and the performance of all other operations.
- ii. From the above records, Contractor must furnish Owner completed daily Force Account Work reports, on forms furnished by or acceptable by Owner for each day's Force Account Work. Contractor's daily Force Account Work reports:
  - A. Must be submitted not later than 5:00 p.m. each workday;
  - B. Must itemize the materials used;
  - C. Must cover the direct cost of labor and the charges for equipment rental, whether provided by Contractor, Subcontractor, or other forces;
  - D. Must provide names or identifications and classifications of workers, the hourly rate of pay and hours worked, and the size, type and identification number of equipment and hours operated; and,
  - E. Must identify the type and model of equipment used.
- iii. Before presenting the daily Force Account Work reports to Owner, Contractor must compile the estimated daily and to-date cumulative cost of the Work.
- iv. Material charges must be substantiated by valid copies of vendor invoices. Such invoices must be submitted with the daily Force Account Work reports, or if not available, they must be submitted with subsequent daily Force Account Work reports. Should said vendor invoices not be submitted within sixty (60) Days after the date of delivery of the material, Owner reserves the right to establish the cost of such materials at the lowest current wholesale prices at which said materials are available in the quantities concerned, delivered to the location of the Work, less any discounts provided in Section 01 26 00, articles 1.06(E)(5) and 1.08.
- v. Contractor must sign each daily Force Account Work report under penalty of perjury.
- vi. Owner will compare Owner's records with Contractor's completed daily Force Account Work reports and make any necessary adjustments. When these daily Force Account Work reports are agreed upon and signed by both parties, said reports become the basis of payment for the Work performed, but do not preclude subsequent adjustment based on a later audit by Owner. Owner will not sign, nor will Contractor receive compensation for work the Owner cannot verify.
- vii. Contractor will provide a weekly Force Account summary indicating the status of each Force Account Directive in terms of percent complete of the not-to-exceed budget and the estimated percent complete of the Work.
- viii. In the event Contractor and Owner reach a written agreement on a set cost for the work while the work is proceeding based on a Force Account Directive, Contractor's signed daily force account reports shall be discontinued and all previously signed reports shall be invalid.

**5. Mark-ups for Added or Deleted Work.**

- 
- a. General. The following markups for performance of changes constitute full compensation for all costs not covered by Section 01 26 00, article 1.06(D) and (E)(1)-(4) above, including profit, direct and indirect overhead, extended overhead, insurance, taxes and Contract Bonds.
- i. For portions of added Work performed by Subcontractor(s), the Subcontractor(s) must compute its costs as follows:
- A. For labor, fifteen percent (15%); and,
- B. Materials, equipment, construction equipment, and services mark-up not to exceed ten percent (10%).
- ii. When the added Work includes Work performed by Subcontractors, the total aggregate of all mark-ups for added Work, regardless of the number of tiers of Subcontractors and Sub-subcontractors used, shall be:
- A. Labor mark-up not to exceed twenty-five percent (25%); and,
- B. Materials, equipment, construction equipment, and services mark-up not to exceed ten percent (10%).
- iii. Deleted Work. When Work is deleted, Owner is entitled to a credit for the deleted Work. The credit must include direct labor, materials, equipment, and supervision plus overhead and profit of Contractor and Subcontractor, as applicable for the deleted Work. Deleted overhead and profit shall be computed as five percent (5%) of the direct labor, materials, equipment, and supervision (e.g., if a \$10,000 direct cost item of Work were deleted, the credit to the Owner would be \$10,500).
- iv. Combinations of added and deleted Work. The costs before markups of added and deleted Work must be separately estimated. If the difference between such costs results in an increase, the markups for added Work will be applied to such difference. If the difference in such costs results in a decrease, the markups for deleted Work will be applied to such difference.
- b. General Limitations. Cost to Contractor for a change that exceeds market values prevailing at the time of the change will not be allowed unless Contractor establishes that all reasonable means for performance of the change at prevailing market values have been investigated and the excess cost could not be avoided. Notwithstanding actual charges to Contractor on Work performed by Contractor or others, no markups will be paid in excess of those specified above.
- c. Contractor has no right to an adjustment in Contract Time or Contract Sum after accepting Final Payment pursuant to this Contract.
6. By Unit Prices stated in the Contract Documents or subsequently agreed upon in writing by Change Order.
- a. Each unit price is conclusively presumed to include an amount considered by Contractor to be adequate to cover all Contractor's costs plus overhead and profit for each separately identified unit price item.
- b. If there is any variance of less than twenty-five percent (25%) between the Owner's estimated number of units of Work proposed on the Bid Form and the actual number of units of authorized Work performed, there shall not be an adjustment of unit prices by reason of overruns or underruns; each unit of authorized Work performed will be paid for at the Contract unit price for that item of Work.

- c. If the final quantity of any item of authorized Work varies from Owner's estimated quantity for that item of Work by twenty-five percent (25%) or more, the unit price for that item of work will be adjusted by Change Order.
- d. All changes in Contract Sum and Contract Time due to quantity variations in unit price Work accepted by Owner's Authorized Representative are subject to Approval by the Board of Supervisors upon Completion of the Contract by Approval of a final balancing Change Order.

**1.07 DELETED WORK**

- A. When Work is deleted, Owner is entitled to a credit for the deleted Work based on bid values, or agreed payment values in the schedule of values, if available, otherwise value of deleted work measures stated herein for modifications.
- B. If Contractor has ordered acceptable material for the deleted Work before the date of notification of such deletion by Owner, and if orders for such material cannot be canceled, such material will be paid for by Owner at Contractor's actual cost. In such case, the material paid for will become Owner's property and Owner will pay the actual cost of any further handling. If the material is returnable to the vendor and if Owner so Directs, Contractor must return the material and Owner will pay the actual costs of returning the material, including reasonable and verifiable handling and restocking charges. The actual costs or charges to be paid by Owner to Contractor for materials as provided in this paragraph will be computed in the same manner as if the Work were to be paid for on a Force Account basis as provided in Section 01 26 00, article 1.06(E)(4) ("Force Account Work").

**1.08 DIFFERING SITE CONDITIONS**

- A. Reference Document 00 73 10.
- B. Contractor has no right to an adjustment in Contract Sum or Contract Time pursuant to Document 00 73 10, unless Contractor submitted the notice required therein and as required in this Section 01 26 00. Owner may extend the notification time upon Contractor's written request in order to obtain additional relevant information.

**1.09 DISALLOWED ELEMENTS IN CONTRACTOR CHANGE ORDERS AND IN CONTRACTOR CLAIMS**

- A. Reference Document 00 73 83 (Dispute Resolution).
- B. WAIVER OF SPECIAL, INCIDENTAL AND CONSEQUENTIAL DAMAGES. Contractor may not claim, request, or receive in any change order or Claim submitted under Document 00 73 83 (Dispute Resolution), and by submission of its bid and execution of the Agreement expressly waives claims or requests for any and all types of special, incidental, or consequential damages, whether claimed on the basis of contract, negligence, or any other tort.
- C. Disallowed, non-recoverable, and waived claims and costs include, but are not limited to:
  - 1. Interest cost of any type other than those mandated by statute;
  - 2. Claim preparation or filing costs;
  - 3. Legal fees or expenses;
  - 4. Costs of preparing or reviewing Change Order or Construction Change Directive proposals;
  - 5. Lost revenues;
  - 6. Loss of anticipated profits;
  - 7. Lost income or earnings;
  - 8. Schedule preparation costs;

- 
9. Submittal preparation costs;
  10. Costs of idled equipment when such equipment is not yet at the site or has not yet been employed on the Work;
  11. Lost earnings or interest on unpaid retainage;
  12. Claims consulting costs;
  13. The costs of corporate officers or staff visiting the site or participating in meetings with Owner;
  14. Any compensation due to the fluctuation of foreign currency conversions or exchange rates; and,
  15. Loss of other business.
- D. Adjustment of Contract Time. Contract Time will not be adjusted for changes that do not impact the Critical Path of the Official Progress Schedule. For Contract Time to be adjusted, Contractor must first document, and Owner must agree, that the change affected the Critical Path of the Official Progress Schedule and how the change increased (or decreased) the Contract Time to complete the Work.
- E. Contractor shall price Claims and provide preliminary pricing information for Disputes under Document 00 73 83 (Dispute Resolution) using the methods stated herein.

#### **1.10 CHANGE ORDER LIMITS AND SECOND SIGNATURE REQUIREMENTS**

- A. Change Orders requiring second signatures.
1. Unless provided otherwise by attachment to this Section 01 26 00, all Change Orders over \$5,000 require second signature of Director of Department or Agency administering the Contract.
- B. Change Orders permitted to be signed under delegated authority consistent with Board of Supervisors Approval.
1. Reference General Conditions, Document 00 72 00, "Authority Limits," regarding limits of Change Order Authority. For convenience, Subparagraph E thereof is repeated below:

"When so authorized by the Board of Supervisors, additive changes shall be subject to the limits of Public Contract Code section 20142, and time extension shall be limited, as follows:

    - a. Not to exceed five thousand dollars (\$5,000) when the total amount of the original contract does not exceed fifty thousand dollars (\$50,000),
    - b. Not to exceed 10 percent of the amount of any original contract that exceeds fifty thousand dollars (\$50,000), but does not exceed two hundred fifty thousand dollars (\$250,000).
    - c. For contracts whose original cost exceeds two hundred fifty thousand dollars (\$250,000), the extra cost for any change or addition to the work so ordered shall not exceed twenty-five thousand dollars (\$25,000), plus 5 percent of the amount of the original contract cost in excess of two hundred fifty thousand dollars (\$250,000). In no event, however, shall any such change or alteration exceed two hundred ten thousand dollars (\$210,000)."
- C. Change Orders and Construction Change Directives that must be brought to the Board of Supervisors directly:
1. All Change Orders and Construction Change Directives in excess of the amounts set forth above.
- D. Change Orders and Construction Change Directives requiring approval as to form and legality by County Counsel or County Risk Manager:
1. Contractor's attention is also directed to Paragraphs "F" and "G" of General Conditions, Document 00 72 00, "Authority Limits," regarding modifications and change orders requiring approval as to



form and legality by the Office of County Counsel or as to form by the County Risk Manager as a condition to effectiveness.

#### 1.11 OWNER'S CHANGE ORDER AND CONSTRUCTION CHANGE DIRECTIVE FORMS

- A. Use of attached Owner Change Order and Construction Change Directive forms is mandatory for all Change Orders and Construction Change Directives.
- B. All Change Orders must include the following certification by the Contractor. The parties acknowledge that if a Change Order is approved that does not include this language, that Change Order shall be deemed to include this certification language:
  - 1. The undersigned Contractor approves the foregoing as to the changes, if any, and the Contract Sum specified for each item and as to the extension of time allowed, if any, for completion of the entire Work as stated herein, and agrees to furnish all labor, materials and service, and perform all work necessary to complete any additional work specified for the consideration stated herein. Submission of sums which have no basis in fact or which Contractor knows are false are at the sole risk of Contractor and may be a violation of the False Claims Act set forth under Government Code section 12650 *et seq.* It is understood that the changes herein to the Contract shall only be effective when approved by the Board of Supervisors.
  - 2. It is expressly understood that the value of the extra Work or changes expressly includes any and all of the Contractor's costs, expenses, field overhead, home office overhead, and profit, both direct and indirect, resulting from additional time required on the Project or resulting from delay to the Project. Any costs, expenses, damages, or time extensions not included are deemed waived.
- C. Contractor's acceptance of the terms of a Construction Change Directive without providing Notice of Dispute (Document 00 73 83, Dispute Resolution) within the time frames set forth in Document 00 73 83 shall constitute waiver of any Dispute or Claim arising from the terms of the Construction Change Directive.
- D. Changes or interlineations to Change Order form and/or Construction Change Directive form are not permitted by Contractor.
- E. Should Contractor disagree with the terms, conditions, amounts, time, or the accord and satisfaction and release in a Change Order, Contractor shall perform the Work without delay and follow the Dispute procedures under Document 00 73 83 (Dispute Resolution), including without limitation notice and documentation requirements for the disputed element(s) of the Change Order, prior to execution of the Change Order.
- F. Should Contractor disagree with the terms of a Construction Change Directive, Contractor shall perform the Work without delay and follow the Dispute Resolution procedures set forth in Document 00 73 83, including without limitation notice and documentation requirements.
- G. Upon receipt of a Notice of Dispute related to a Change Order or Construction Change Directive, Owner will have all rights available under the Contract Documents, including without limitation, to conduct further negotiations, to countersign Change Orders, to direct the work proceed on Force Account basis, to change or cancel or decline to proceed with Work in the Change Order or Construction Change Directive, and all other rights and remedies in the Contract Documents.
- H. If Contractor provides a Notice of Dispute but thereafter fails to complete Dispute Resolution Procedures under Document 00 73 83 within the specified time frames, Contractor shall be deemed to have abandoned and withdrawn the Notice of Dispute. Any Change Order previously subject to the abandoned or withdrawn Notice of Dispute shall then be treated as having been mutually executed without qualification.
- I. Mutually executed Change Orders, without qualifications, shall constitute a full accord and satisfaction, and release, of all Contractor (and if applicable, Subcontractor) claims for additional time, money, or

other relief arising from or relating to the changed work, including without limitation, impacts of all types, cumulative impacts, inefficiency, overtime, delay, and any other type of claim. Any demand or request for any adjustment to the Contract Time or the Contract Sum relating to any change incorporated into a Change Order that Contractor does not present to Owner before signing the Change Order shall be deemed waived.

- J. Notwithstanding any Dispute or Claim regarding Contract Time and/or Contract Sum, and/or whether work falls within the Contract Documents, Contractor must prosecute the Work, including work that is the subject of a Dispute, to completion as directed by Owner.

**1.12 DEFERMENT OF DISPUTE PROCEDURES – NOT USED**

**1.13 APPLICABILITY TO SUBCONTRACTORS**

- A. All requirements under this Section 01 26 00 shall be equally applicable to Change Orders or Construction Change Directives issued to Subcontractors by the Contractor.

**PART 2 PRODUCTS (Not Used)**

**PART 3 EXECUTION (Not Used)**

**PART 4 FORMS**

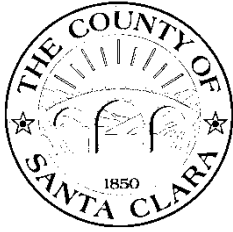
**4.01 CHANGE ORDER FORM**

- A. Owner's Change Order form is Attached. Use of Owner's form is mandatory.

**4.02 CONSTRUCTION CHANGE DIRECTIVE FORM**

- A. Owner's Construction Change Directive Form is attached. Use of Owner's form is mandatory.

**END OF SECTION 01 26 00**

**County of Santa Clara**

Facilities and Fleet Department  
Capital Programs Division

2310 N. First Street, 2<sup>nd</sup> Floor, Suite 200  
San Jose, California 95131-1101  
(408) 993-4600 FAX (408) 993-4695

**CHANGE ORDER NO. (X)**

PROJECT TITLE: \_\_\_\_\_ PROJECT NO.: AC \_\_\_\_\_

CONTRACT NO.: \_\_\_\_\_

CONTRACTOR: \_\_\_\_\_ SHEET 1 OF \_\_\_\_\_

**PROPOSED CHANGE ORDER NUMBERS COVERED BY THIS CHANGE:**  
\_\_\_\_\_

**TERMS AND CONDITIONS OF CHANGE:** Contractor is hereby directed to make changes set forth below. By its signature on this Change Order, Contractor agrees that the net change in the Contract Sum stipulated below shall constitute full compensation, accord and satisfaction, for all costs and requests for costs, associated with the changed work, including labor, material and equipment costs, rescheduling, overhead, profit and any other costs arising directly or indirectly from the changed work, including without limitation, delay and disruption. Contractor further agrees that the additional contract time allotted (if any) is sufficient, and that there shall be no further time extensions or delay claims resulting from this Change Order. Contractor certifies the net adjustment in Contract Sum reflects costs of labor, equipment and materials, including all markups, calculated in conformance with contract measures in Section 01 26 00 (Modification Procedures). Payment of adjusted Contract Sum includes final and full compensation, accord and satisfaction, for all labor, equipment, materials, incidentals and mark-up to perform the work and claims resulting therefore; no additional compensation will be allowed.

1. The undersigned Contractor approves the foregoing as to the changes, if any, and the Contract Sum specified for each item and as to the extension of time allowed, if any, for completion of the entire Work as stated herein, and agrees to furnish all labor, materials and service, and perform all work necessary to complete any additional work specified for the consideration stated herein. Submission of sums which have no basis in fact or which Contractor knows are false are at the sole risk of Contractor and may be a violation of the False Claims Act set forth under Government Code section 12650 *et seq.*
2. It is expressly understood that the value of the extra Work or changes expressly includes any and all of the Contractor's costs, expenses, field overhead, home office overhead, and profit, both direct and indirect, resulting from additional time required on the Project or resulting from delay to the Project. Any costs, expenses, damages, or time extensions not included are deemed waived.

**DESCRIPTION OF WORK TO BE PERFORMED:**  
\_\_\_\_\_

(Note to project manager: the scope should be very specific. Include as an attachment to the actual change order any Consultant-issued Information Bulletins, Plans/drawings and specifications, etc.)

By reason of this change, the Contract Time is hereby increased by \_\_\_\_\_ calendar days. The previous Substantial Completion date of \_\_\_\_\_ is changed to a new Substantial Completion date of \_\_\_\_\_.

The Contract Sum due to this Change Order is hereby increased (decreased) by \$ \_\_\_\_\_.

IMPORTANT: Contractor ☐ is not, ☐ is required to sign this document and return \_\_\_\_ copies to the Capital Programs office.

We the undersigned have given careful consideration to all aspects of the change order proposed and hereby agree.

**Not Mandatory:**

Reviewed by: \_\_\_\_\_  
Design Professional of Record

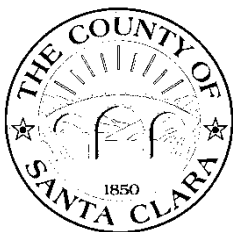
**Mandatory:**

\_\_\_\_\_  
Owner's Authorized Representative

\_\_\_\_\_  
Contractor's Authorized Representative, Name, Position

**APPROVED AS TO FORM AND LEGALITY**

\_\_\_\_\_  
Deputy County Counsel

**County of Santa Clara**Facilities and Fleet Department  
Capital Programs Division2310 N. First Street, 2<sup>nd</sup> Floor, Suite 200  
San Jose, California 95131-1101  
(408) 993-4600 FAX (408) 993-4695**CONSTRUCTION CHANGE DIRECTIVE NO. (X)**PROJECT TITLE: \_\_\_\_\_ PROJECT NO.: CP \_\_\_\_\_  
CONTRACT NO.: \_\_\_\_\_  
CONTRACTOR: \_\_\_\_\_ SHEET 1 OF \_\_\_\_

Except as provided herein, all terms and conditions of the contract referenced above remain unchanged and in full force and effect. The price shown herein includes consideration for all costs associated with the changed work allowed under the Contract, including labor, material and equipment costs, overhead, profit and any other costs arising directly or indirectly from the changed work.

**DESCRIPTION OF WORK TO BE PERFORMED:**

You are hereby directed to make the following change(s) in the Contract:

Documentation supporting proper completion of work by this Construction Change Directive and as required by Section 01 26 00 (Contract Modification) **must** be attached to Contractor's pay application.

**PROPOSED ADJUSTMENTS:**

1. The Contract Sum is proposed to: ☐ be adjusted ☐ remain unchanged.

A. The proposed basis of adjustment to the Contract Sum:

- ☐ Lump Sum (increase) (decrease) of \$ \_\_\_\_\_
- ☐ Unit Price of \$ \_\_\_\_\_ per \_\_\_\_\_  
(use additional pages if necessary)
- ☐ Time and Materials, Not to Exceed (Force Account) \$ \_\_\_\_\_

2. The Contract Time is proposed to: ☐ be adjusted ☐ remain unchanged.

A. The proposed adjustment, if any to the Contract Time:

- ☐ an increase of \_\_\_\_\_ days

☐ a decrease of \_\_\_\_\_ days

B. By reason of this change, the Owner proposes a new completion date of \_\_\_\_\_.

**By Owner and Design Professional of Record:**

When signed by the Owner and Design Professional of Record and received by Contractor, this document becomes effective IMMEDIATELY, and the Contractor shall proceed with the changes described above.

COUNTY OF SANTA CLARA

DESIGN PROFESSIONAL OF RECORD

\_\_\_\_\_  
Authorized Signature                      Date

\_\_\_\_\_  
Company Name

\_\_\_\_\_  
Printed Name

\_\_\_\_\_  
Authorized Signature                      Date

\_\_\_\_\_  
Printed Name

APPROVED AS TO FORM AND LEGALITY

\_\_\_\_\_  
Deputy County Counsel

**By Contractor (optional for Construction Change Directive):**

Signature by Contractor indicates Contractor's agreement with the proposed adjustments in Contract Sum and Contract Time set forth in this Construction Change Directive as full and complete satisfaction of any direct or indirect additional costs incurred by Contractor in connection with performance of the work subject to this Construction Change Directive.

\_\_\_\_\_  
Company Name

\_\_\_\_\_  
Printed Name

\_\_\_\_\_  
Signature                                      Date

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**SECTION 01 29 00  
PAYMENT PROCEDURES**

**ARTICLE 1 - GENERAL**

**1.01 SUMMARY**

- .A This Section includes:
  - .1 Article 1 - General
    - .a 1.01 – Summary
    - .b 1.02 – Composition and Scope of Contract Sum
    - .c 1.03 – Definitions
    - .d 1.04 – Schedule of Values
    - .e 1.05 – Payment for Materials On-Hand
    - .f 1.06 – Payments for Work - Generally
    - .g 1.07 – Applications for Payment
    - .h 1.08 – Progress Payments
    - .i 1.09 – Payment Application Form and Submission
    - .j 1.10 – Basis and Effect of Payment
    - .k 1.11 – Administrative Submittals Coinciding With Payment Applications
    - .l 1.12 – Retentions
    - .m 1.13 – Securities in Lieu of Retention
    - .n 1.14 – Stop Payment Notices
    - .o 1.15 – Payments Withheld
    - .p 1.16 – Payment for Material and Equipment Not Yet Incorporated Into the Work
  - .2 Article 2 – Forms
    - .a Schedule of Values Form 01 29 00 – 1 F-1
    - .b Sub-contractor payment Form 01 29 00– F-2
    - .c Unconditional Waiver Form 01 29 00 F-3
    - .d Conditional Waiver Form 01 29 00– F-4

**1.02 COMPOSITION AND SCOPE OF CONTRACT SUM**

- .A The Contract Sum for performance of the Work under the Contract Documents, or under any Allowance or Alternate, shall include full compensation for all Work required under the Contract Documents, including without limitation, all services, labor, materials, taxes, transport, handling, storage, supervision, administration, and all other items necessary for the satisfactory completion of the Work, whether or not expressly specified or indicated, incidental work and unexpected expenses, and all terms, conditions, requirements, and limitations set forth in the Contract Documents. For design-build contracts, or for work under performance specifications or other provisions delegating design responsibility to Contractor, the term “services” shall include design, architecture, engineering, and professional services.
- .B The Contract Sum may be expressed as lump sum, unit price, GMP, allowance, or combination thereof. The Contract Sum, whether lump sum, unit price, or otherwise, shall be deemed to include all costs necessary to complete required Work, including Contractor overhead and profit, all costs (if any) for loss or damage arising from nature of Work or prosecution of the Work, and from action of elements.

- .C Unless the Contract Documents expressly provide otherwise, the Contract Sum shall be deemed to include:
  - .1 Any and all costs arising from any unforeseen difficulties which may be encountered during, and all risks of any description connected with, prosecution of Work or any Work item (whether lump sum or unit price) until Acceptance by Owner;
  - .2 All expenses incurred due to suspension, or discontinuance of, Work or any Work item (whether lump sum or unit price) as provided in Contract Documents;
  - .3 Escalation to allow for cost increases between time of Contract award and completion of Work or any Work item (whether lump sum or unit price).
- .D Unit Price Items
  - .1 Quantity of Work to be paid for under any item for which a unit price is fixed in Contract Documents shall be determined by Owner based on, so far as practicable, actual number of units satisfactorily completed, as determined by Owner and certified by Contractor, within prescribed or ordered limits, and no payment will be made for Work unsatisfactorily performed or done outside of limits.
  - .2 Unit Prices shall apply to Work covered by unit prices so long as actual quantities performed on the Project are not less than seventy-five percent (75%) or greater than one hundred twenty-five percent (125%) of the estimated quantities set forth in Contractor's Bid or Proposal, or otherwise stated in the Contract Documents. If actual quantities exceed these parameters, then the unit price shall be adjusted by an amount to reflect the Contractor's incremental cost differential resulting from increased or decreased economies of scale.
- .E Lump Sum Items
  - .1 When the estimated quantity for a specific portion of Work is not indicated and/or Work is designated as lump sum, payment will be on a lump sum basis for Work satisfactorily completed in accordance with Contract Documents.
  - .2 Payment for lump sum Work, or items of Work subject to a lump sum (e.g., without limitation, change order work), shall be made on the basis of satisfactory completion of such Work or work item, earned in progressive stages in accordance with the Contract Documents, up to but not exceeding the Contractor's percentage completion of the Work or item.
  - .3 Lump sum items shall be paid based upon the approved Schedule of Values, which shall be used to measure progressive payments based upon satisfactory progress towards completion of the item.
- .F Allowance Items
  - .1 Allowances: Allowance Work will be authorized by Owner in writing, following change order procedures to determine cost, supporting documentation, and authorization to proceed. Unused allowance amounts at Contract completion shall reduce the Contract Sum accordingly.
  - .2 Unless specifically and expressly provided otherwise, all Allowances are deemed Owner-controlled Allowances subject to Owner's discretion to authorize (or not).
- .G Owner does not expressly, or by implication, agree, warrant, or represent in any manner, that actual amount of Work will correspond with amount shown or estimated and reserves right to increase or decrease amount of any class or portion of Work, to leave out entire Work Item or Items, or to add work not originally included in Contractor's Bid or Proposal, or the Contract Documents, when in its judgment such change is in best interest of Owner. No change in Work shall be considered a waiver of any other condition of Contract Documents. No claim shall be made for anticipated profit, for loss of profit, for damages, or for extra payment whatsoever, except as otherwise expressly provided for in Contract



Documents, because of any differences between the amount of work actually done and estimated amount as set forth herein, or for elimination of Work Items.

### 1.03 DEFINITIONS

- .A **Definable Feature of Work (DFOW)** – A portion of the Work that is (1) separate and distinct from other tasks; (2) has common control requirements and work crews; and, (3) is continuous by location on the site. For example, typical Section 03 00 00 Concrete work would have a separate DFOW for footings; first floor slab (unless, for example, the slab were continuously poured with the footings); second floor slab, etc. All Critical Path activities are DFOWs. Non-Critical Path activities may also be DFOWs.
- .B **Materials On Hand** – Acceptable materials procured and delivered to the Project Site and suitably protected but not yet used in the Project, and at sole written discretion of Owner's Authorized Representative, acceptable materials stored at off-Site locations. All off-Site storage must be in secured facilities with insurance coverages acceptable to Owner. Contractor's surety must consent in writing to Contractor's request for payment for materials stored off-Site.

### 1.04 SCHEDULE OF VALUES

- .A Within twenty-one (21) Days after the Notice to Proceed, provide a Schedule of Values (SOV) (cost breakdown) organized by Definable Feature of Work (DFOW) and signed by the same person who will sign payment applications. The SOV must total the lump sum price, including additive or alternate bid items, if any, of the Contract award.
- .B Contractor's overhead, profit, insurance, cost of bonds (except to the extent expressly identified in a Contract item), and/or other financing, as well as "general conditions costs," (e.g., Site cleanup and maintenance, temporary roads and access, off-Site access roads, temporary power and lighting, security, et al.), shall be on a separate line item apart from the DFOWs.
- .C The prices in the SOV shall be used only for determining the amount of each progress payment. A SOV may be rejected if, in Owner's opinion, any item is unbalanced.
- .D Where more than one Subcontractor comprises the work of a Work item or activity, the SOV shall show a separate line item for each subcontract. Contractor shall furnish such breakdown of the total Contract Sum by assigning dollar values (cost estimates) to each applicable Progress Schedule network activity, which cumulative sum equals the total Contract Sum. This breakdown may be referred to as the Schedule of Values, Work Breakdown Structure, or both.
- .E Mobilization cost and payment is governed by Section 01 29 00.1.08 (Mobilization Costs).
- .F Except as Directed by Owner, Submittal activities, Shop Drawing activities, and other similar administrative or engineering activities apart from subsection (B) above must be included in the value of each DFOW.
- .G The following cost line items must be listed separately in the SOV:
  - .1 A lump-sum amount for submitting the Monthly Schedule Update, pursuant to Section 01 32 00;
  - .2 A lump-sum amount for updating monthly the As-Built drawings pursuant to Section 01 32 50;
  - .3 A lump sum amount for Commissioning per Section 01 91 00;
  - .4 A lump sum amount for all general conditions and other soft costs as set forth in subsection (B) above; and,
  - .5 A lump sum amount for the Work of the Series 01 70 00 specifications (General and Supplementary Conditions). Such amount shall be in an amount not less than two and one-half percent (2.5%) of the Contract Sum, to include without limitation:

- .a Completion and delivery of Operation and Maintenance data, pursuant to Section 01 78 23;
  - .b Completion and delivery of Warranties per Section 01 78 36;
  - .c Final cleaning pursuant to Section 01 74 00; and,
  - .d Completion of demonstration and training, per Section 01 79 00.
- .H If using "Mobilization" Alternate "B" as defined in Section 01 29 00.1.08, a separate line item must be presented for Owner-acceptance of Project Acceptance Submittals, as defined in Section 01 33 00.
- .I After Owner accepts Contractor's Cost Breakdown, Contractor cannot change the SOV without the express written approval of Owner's Project Manager.

#### **1.05 PAYMENT FOR MATERIALS ON HAND**

- .A Materials On Hand must be collected together and separated from other materials and clearly identified as property of Owner and must be accessible to Owner at all reasonable times for examination or other purposes.
- .B For Materials On Hand to be considered for payment, Contractor must request payment for them on Owner furnished or Owner Approved forms including accompanying documentation as required by Owner. Contractor must submit four (4) copies to Owner not later than ten (10) Days prior to the end of the payment application period. All accompanying documentation required by Owner including evidence of purchase (and warehouse receipt when required) must be attached to the original. Contractor must certify in writing that the subject materials meet the requirements of the Contract Documents.
- .C Contractor must submit and Owner must have accepted all shop drawings and submittals for the Materials On Hand prior to Contractor's request for payment for said Materials On Hand.
- .D The provisions allowing payment for Materials On Hand are intended to be applied to large items of equipment and construction materials of special manufacture or order for the Project.
- .E For Materials On Hand, stored off-Site, Contractor must provide:
- .1 Bill of sale from the manufacturer for the materials stored off-site;
  - .2 Warehouse receipt that is a complete list and inventory of materials manufactured, stored, and delivered to the storage site; and,
  - .3 Receipts for materials removed from the off-site storage facility and delivered to the Project Site.

#### **1.06 PAYMENT FOR WORK - GENERALLY**

- .A For unit price Bid items, the quantities listed by Owner in the Bid/Proposal schedule do not govern payment. Payment to Contractor will be made only for the actual quantities of Contract items constructed in accordance with the requirements of the Contract Documents. Upon completion of construction, if the actual quantities show either an increase or a decrease from the quantities stated in the Bid/Proposal schedule, the Contract unit prices will prevail and are not subject to adjustment.
- .B Payment will not be made for materials wasted or disposed of in a manner not called for pursuant to the Contract Documents; rejected material of any kind; material damaged or rejected after it has been placed; and, material placed outside of the Work limits shown on the Drawings. No compensation will be made for disposing of rejected or excess material.
- .C Whenever Owner performs any portion of the Work at Contractor's request, the cost thereof will be charged against Contractor, and may be deducted from any amount due or to become due from Owner.

- .D Whenever immediate action is required to prevent impending injury, death, or property damage, and precautions which are Contractor's responsibility have not been taken, Owner may, after reasonable attempt to notify Contractor, cause such precautions to be taken and charge the cost thereof to Contractor, or may deduct such cost from any amount due or become due from Owner. Owner's action or inaction given such circumstances shall not be construed as relieving Contractor or its Surety from any liability for such circumstances.
- .E Payment does not relieve Contractor from its obligations pursuant to the Contract Documents, nor is such payment to be construed to be acceptance of any of the Work. Responsibility of ownership shall remain with Contractor who is obligated to store, protect, repair, replace, rebuild, or otherwise restore any fully or partially completed Work for which payment has been made; or replace any materials or equipment required to be Provided pursuant to the Contract which may be damaged, lost, stolen, or otherwise degraded in any way before Acceptance of the Work, except as provided in Document 00 72 00.9.05, (Use Before Acceptance).

#### 1.07 APPLICATIONS FOR PAYMENT

- .A The cut-off date (last day) for each progress payment is the last day of the month or as otherwise Directed by Owner.
- .B The period of construction Work covered by each application for payment is the period beginning the first day of the payment application period and ending with the last day of the payment application period.
- .C Before the end of each payment application period, Contractor and Owner's Project Manager will jointly review Contractor's estimate of items of Work completed and acceptable Materials On Hand for which Contractor is requesting a progress payment. The joint review (job walk) will occur at the Project site.
- .D Each application for payment shall list each Contract modification executed prior to date of submission, including identifier (e.g., Change Order No.), and a description of the Work activities, consistent with the descriptions of original Work activities. Contractor shall submit a monthly Contract modification status log to Owner.
- .E Prior to the joint review, Contractor must provide Owner with two (2) copies of a progress estimate worksheet showing each activity on the Official Progress Schedule that has been started but is not yet complete. The worksheet will be used during the joint review to document the actual physical percentage complete of each started but uncompleted activity.
- .F After the joint review, Contractor must prepare on Owner furnished or Owner Approved forms, a formal request for payment. Two (2) copies the formal request for payment must be submitted to Owner no later than one (1) Day after the end of the payment period.
- .G Commencing with the second request for payment, Contractor must provide with the submission of the formal request for payment, one (1) original Unconditional Waiver and Release upon Progress Payment from each listed Subcontractor or material Supplier paid under the prior month's pay request. The release must be on Owner's form.
- .H With the submission of the formal request for payment, Contractor must provide four (4) copies of an updated Schedule of Values, showing the total value, percentage completed, and earned value of each item. The updated Schedule of Values must be submitted to Owner on Owner-furnished or Owner Approved forms.
- .I Contractor must submit a progress narrative report accompanying each payment application. The report must describe general construction progress to date; whether the Project is on-schedule to meet the current contract completion date, or behind schedule; and, if the Project is behind schedule, describe factors that are causing delay and any anticipated delaying factors and their potential impact.

- .J Payment will be due to Contractor thirty (30) Days after receipt and acceptance by Owner of an undisputed properly prepared progress payment request from Contractor.

### 1.08 PROGRESS PAYMENTS

- .A General: Contractor will be paid for the actual field accepted quantities for the various items of work in accordance with the following provisions and the requirements of this Section 01 29 00; however, in no event will the total payment exceed the total Contract Sum.
- .B Schedule of Values (Cost Breakdown): As required by this Section 01 29 00, Contractor must prepare and submit for Owner's acceptance a Schedule of Values (cost breakdown) of the Work totaling the Contract Sum including Owner accepted additive and deductive Bid items, if any. The Schedule of Values must be supported by such data to substantiate its accuracy as Owner may require. The dollar values in the Schedule of Values will be used for determining the amount of each progress payment. A Schedule of Values may be rejected if, in Owner's opinion, any item is unbalanced.
- .C Mobilization Costs: Where Contract provides for payment of Mobilization, payment for Mobilization will be made by one of two means, Alternate A or Alternate B (below). Contractor shall select the means applicable to this project when preparing and submitting the Cost Breakdown, pursuant to this Section 01 29 00:

**Alternate A** – Coincides with **Mobilization**, Alternate A. Partial payment for Mobilization will be made in percentages as follows (less retainage):

Contract Amount Completed	Payment for Mobilization
5%	50% of amount Bid for Mobilization, or 5% of original Contract Sum, whichever is less.
10%	75% of amount Bid for Mobilization, or 7.5% of original Contract Sum, whichever is less.
20%	95% of amount Bid for Mobilization, or 9.5% of original Contract Sum, whichever is less.
50%	100% of amount Bid for Mobilization, or 10% of original Contract amount, whichever is less.

- .1 If Mobilization payments are based on a percentage of the original Contract Sum, no payment for Mobilization will be made after the base Contract amount completed exceeds sixty-five percent (65%).
- .2 If Mobilization payments are based on an amount Bid for Mobilization, upon Completion of all Work on the Project, payment of any amount Bid for Mobilization in excess of ten percent (10%) of the original Contract amount will be paid.

**Alternate B** – Coincides with **Mobilization**, Alternate B. Contractor will include separate line items in the Schedule of Values/Cost Breakdown or cost-loaded construction schedule, as applicable, for Mobilization and Demobilization. Demobilization includes, but is not necessarily limited to: movement of personnel, equipment, temporary offices, buildings and other facilities, supplies and incidentals off the Project Site, and submission of Project Acceptance submittals, as defined in Section 01 33 00. If using Alternate B, separate from Mobilization, the Schedule of Values/Cost Breakdown or cost-loaded construction schedule

may have a separate line item for bonds and insurance, which are payable after Contractor demonstrates proof of payment.

- .D Owner may refuse to process Contractor's payment request or may withhold all or a portion of payments due Contractor until Contractor has met the requirements of the Official Project Schedule.
- .E Owner's Project Manager will review the Record Documents prior to and as a condition of approving each progress payment.
- .F Owner's Project Manager will establish the monthly pay period end dates. Contractor must base its monthly progress payment period end dates on the dates established by Owner.
- .G Establishing the Work completed for each monthly request for payment is an estimate only, and no inaccuracy or error in said estimates operate to release Contractor or its Sureties from damages arising from such Work or from complying with each and every provision of the requirements of the Contract Documents. Owner has the right to correct any error made in any estimate for payment.
- .H No such estimate or payment is required to be made when, in Owner's judgment, the Work is not proceeding in accordance with the requirements of the Contract Documents, or when in Owner's judgment the total value of the Work done since the last pay estimate amounts to less than \$500.
- .I Contractor is not entitled to have any payment made for Work performed so long as any lawful or proper Order concerning the Work or any portion thereof given by Owner to Contractor shall not have been followed.

#### **1.09 PAYMENT APPLICATION FORM AND SUBMISSION**

- .A Use forms as furnished or Approved by Owner.
- .B Complete every entry on form.
- .C All amounts billed must be submitted as whole dollar amounts.
- .D A person authorized to sign legal documents for Contractor must sign the formal payment application.
- .E Owner will return incomplete applications "Returned without Action."
- .F Entries must match the line items on the Approved Schedule of Values/Cost Breakdown.
- .G Include amounts of executed Contract modifications as separate line items in the Schedule of Values/Cost Breakdown.
- .H Submit the signed original and one (1) copy of each application for payment to Owner by a method ensuring receipt by Owner within 24 hours.
- .I Submit completed Record of Subcontractor Payments, signed by the same person who signs the payment application.
- .J Applications for progress payments shall not be processed without an Owner Approved Updated Official Progress Schedule.

#### **1.10 BASIS AND EFFECT OF PAYMENT**

- .A Payment will be made by Owner, based on Owner review of the plans and specifications, observations at the Site, and the data comprising the payment application. Payment will not be a representation that Owner has:
  - .1 Made exhaustive or continuous on-Site inspections to check the quality or quantity of Work;
  - .2 If applicable, thoroughly checked Contractor prepared Design Development and/or Contract Documents for compliance with Bridging Documents, code, and other agency requirements;

- .3 Reviewed construction means, methods, techniques, sequences, or procedures;
- .4 Reviewed copies of requisitions received from Subcontractors and material suppliers and other data requested by Owner to substantiate Contractor's right to payment; or,
- .5 Made examination to ascertain how or for what purpose Contractor has used money previously paid on account of the Contract Sum.

#### 1.11 ADMINISTRATIVE SUBMITTALS COINCIDING WITH PAYMENT APPLICATIONS

- .A Administrative actions and submittals that must coincide with submittal of each application for payment include the following:
  - .1 Certified payroll (must be submitted within ten (10) Days from payment period end date);
  - .2 Updated As-Built Documents (must be updated prior to payment period end date);
  - .4 Updated proposed Official Progress Schedule (must be submitted with request for progress payment);
  - .5 Updated Submittal Log (must be submitted with request for progress payment);
  - .6 Monthly report, pursuant to paragraph 1.07.I above (must be submitted within three (3) Days from payment period end date); and,
  - .7 Record of Subcontractor payments (see form below).
- .B Final Payment Application
  - .4 Submit, on forms furnished or Approved by Owner, four (4) copies of a final application for payment with supporting documentation not previously submitted and accepted, including, but not limited, to the following:
    - .a Evidence of completion of Project closeout requirements;
    - .b Contractor's original, executed Conditional Waiver and Release upon Final Payment (on Owner's form);
    - .c Final Release form;
    - .d Original Unconditional Waiver and Release upon Progress Payment from each Subcontractor and material Supplier for payments made up to the prior pay request; and,
    - .e Other documents as required by Owner.
  - .5 Provided that Owner has recorded a Notice of Completion, thirty-five (35) Days after the date of recording of the Notice of Completion by the County Recorder, Owner's Authorized Representative will process the request for final payment for the Work. Owner will withhold from final payment such amounts that are in Dispute between Owner and Contractor, amounts subject to offset/setoff, and all other amounts that must be withheld by law (e.g., stop payment notice sums), in the manner provided by law.

#### 1.12 RETENTIONS

- .A Owner will retain five percent (5%) of the estimated value of the Work done, which includes the value of materials procured and delivered but not yet used, or procured and stored in accordance with this Section 01 29 00, as part security for the fulfillment of the Contract requirements by Contractor, and will pay to Contractor, while Contractor continues to carry on the Work, the balance not retained, as aforesaid, after deducting therefrom all previous payments and all sums to be withheld or retained

pursuant to the provisions of the Contract Documents or allowed or required by law. No such estimate or payment shall be construed to be an acceptance of any defective Work or improper materials.

- .B In addition to any remedy authorized by law, all or a portion of the Contract Sum due Contractor and considered necessary by Owner to satisfy pending or reasonably anticipated suits or claims for damages, may be withheld by Owner until disposition has been made of such suits or claims.

### 1.13 SECURITIES IN LIEU OF RETENTION

- .A In accordance with the provisions of Public Contract Code section 22300, substitution of securities for any monies withheld under Contract Documents to ensure performance is permitted under following conditions.
- .B At request and expense of Contractor, securities listed in Section 16430 of the Government Code, bank or savings and loan certificates of deposit, interest bearing demand deposit accounts, standby letters of credit, or any other security mutually agreed to by Contractor and Owner which are equivalent to the amount withheld under retention provisions of Contract shall be deposited with Controller or with a state or federally chartered bank in California, as the escrow agent, who shall then pay such monies to Contractor. Upon satisfactory completion of Contract, securities shall be returned to Contractor.
- .C Alternatively, Contractor may request and Owner shall make payment of retentions earned directly to the escrow agent at the expense of Contractor. At the expense of Contractor, Contractor may direct the investment of the payments into securities and receive the interest earned on the investments upon the same terms provided for securities deposited by Contractor. Upon satisfactory completion of the work of the Contract Documents, Contractor shall receive from escrow agent all securities, interest, and payments received by the escrow agent from Owner. Contractor shall then pay to each Subcontractor, not later than 20 Days after receipt of the payment, the respective amount of interest earned, net of costs attributed to retention withheld from each Subcontractor, on the amount of retention withheld to ensure the performance of Contractor.
- .D Contractor shall be beneficial owner of securities substituted for monies withheld and shall receive any interest thereon.
- .E Contractor may enter into an escrow agreement, form included in Contract Documents, as authorized under Public Contract Code section 22300, specifying amount of securities to be deposited, terms and conditions of conversion to cash in case of default of Contractor, and termination of escrow upon completion of Contract Documents.
- .F Public Contract Code section 22300, in effect upon Contractor's execution of the Contract, is hereby incorporated in full by this reference and shall supersede anything inconsistent therewith.
- .G Any escrow agreement entered into pursuant to this Section 01 29 00 must be executed on the form furnished in the Contract Documents, Document 00 62 90 (Escrow Agreement For Securities In Lieu of Retention). If Contractor elects to receive interest on monies withheld in retention by a public agency, or to deposit securities in lieu of retention, Contractor must, at the request of any Subcontractor performing more than five percent (5%) of the Contract Sum, make that option available to the Subcontractor.

### 1.14 STOP PAYMENT NOTICES

- .A Owner will comply with California Civil Code Title 3, Chapter 1, Section 9000 and following, regarding stop payment notices.

- .B All preliminary and stop payment notices must be sent to Owner's Project Manager, in accordance with the Contract Documents and the above-referenced statutory scheme.

#### 1.15 PAYMENTS WITHHELD

- .A Owner may withhold payment(s) in whole or in part to such extent as may be necessary to protect Owner from loss from but not limited to:
  - .1 Defective work not remedied;
  - .2 Third party claims filed or reasonable evidence indicating probable filing of such claims;
  - .3 Failure of Contractor to make payments properly to Subcontractors for labor, materials, or equipment;
  - .4 Reasonable evidence that the Work cannot be completed for the unpaid balance of the Contract Sum, including any Liquidated Damages thereby due;
  - .5 Damage to Owner or separate contractor, damage to the Work, or damage to other work or property;
  - .6 Reasonable evidence that the Work or designated portions of the Work will not be or had not been completed within the Contract Time;
  - .7 Failure to carry out the Work in accordance with the requirements of the Contract Documents, including failure to make required Submittals;
  - .8 Failure to submit certified payroll records;
  - .9 Filed stop payment notices;
  - .10 Failure or refusal of Contractor to fully comply with the Contract requirements; or,
  - .11 Amounts deemed necessary by Owner to satisfy pending or reasonable anticipated suits or claims for damages.
- .B Whenever Owner withholds any monies otherwise due Contractor, Owner will furnish written notice of the amount withheld and the reasons therefore to Contractor.

#### 1.16 PAYMENT FOR MATERIAL AND EQUIPMENT NOT YET INCORPORATED INTO THE WORK

- .A No payment shall be made for materials or equipment not yet incorporated into the Work, except as specified elsewhere in the Contract Documents or as may be agreed to by Owner in its sole discretion. Where Contractor requests payment on the basis of materials and equipment not incorporated in the Work, Contractor must satisfy the following conditions set forth in this Section.
- .B The materials and/or equipment shall be delivered and suitably stored at the Site or at another local location agreed to in writing, for example, a mutually acceptable bonded and insured warehouse.
- .C Full title to the materials and/or equipment shall vest in Owner at the time of delivery to the Site, warehouse or other storage location. Obtain a negotiable warehouse receipt, endorsed over to Owner for materials and/or equipment stored in an off-Site warehouse. No payment will be made until such endorsed receipts are delivered to Owner.
- .D Stockpiled materials and/or equipment shall be available for Owner inspection, but Owner shall have no obligation to inspect them and its inspection or failure to inspect shall not relieve Contractor of any obligations under the Contract Documents. Materials and/or equipment shall be segregated and labeled or tagged to identify these specific Contract Documents.



- .E After delivery of materials and/or equipment, if any inherent or acquired defects are discovered, defective materials and/or equipment shall be removed and replaced with suitable materials and/or equipment at Contractor's expense.
- .F At Contractor's expense, insure the materials and/or equipment against theft, fire, flood, vandalism, and malicious mischief, as well as any other coverages required under the Contract Documents.
- .G Contractor's payment application shall be accompanied by a bill of sale, invoice, or other documentation warranting that Owner has received the materials and equipment free and clear of all liens and evidence that the materials and equipment are covered by appropriate property insurance and other arrangements to protect Owner interest therein, all of which must be satisfactory to Owner. This documentation shall include, but not be limited to, conditional releases of mechanics' liens and stop payment notices from all those providing materials and equipment as to which the payment application relates, as well as unconditional releases of the same from the same as to the previous payment application to the extent they have not already been provided. Amounts previously paid for materials and equipment prior to incorporation into the Work shall be deducted from amounts otherwise due Contractor as they are incorporated.

**PART 2 - FORMS**

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**FORM 01 29 00-F1**  
**SCHEDULE OF VALUES**

**CONTRACTOR:** \_\_\_\_\_

**ADDRESS:** \_\_\_\_\_

**BID PACKAGE:** \_\_\_\_\_

**CONTRACT NUMBER:** \_\_\_\_\_

<b>SCHEDULE OF VALUES ITEM:</b>	<b>TOTAL VALUE</b>
<b>MOBILIZATION</b> (Defined in Section 01 29 00)	
SCHEDULE UPDATES (Use for "larger" projects)	
AS-BUILT DOCUMENTS UPDATES	
DEMOBILIZATION (if using Alternate "B" from Section 01 29 00)	
OPERATION AND MAINTENANCE MANUALS	
Definable Features of Work (examples:) EARTHWORK	
UNDER SLAB UTILITIES	
FOUNDATIONS	
FIRST FLOOR SLAB	
etc.	
etc.	
TOTAL OF ALL ITEMS (must equal bid amount)	

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**Contractor's Representative Signature**  
**[Printed Name]**

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**Title**

---

**Date**

## FORM 01 29 00-F2

**RECORD OF SUBCONTRACTOR PAYMENTS**

Name of Project or Site \_\_\_\_\_ Contract No. \_\_\_\_\_

Period Covered: From: Award To: \_\_\_\_\_

Attached to Payment Application # \_\_\_\_\_ For the same period

Date Submitted \_\_\_\_\_ Issued by \_\_\_\_\_  
(Contractors Representative)

This form must be updated monthly and the updated, signed form must be attached to each payment application.

Subcontractor (including Fed Tax ID#, phone # & FAX #)	Total Amount (from Cost Breakdown)	Amount Paid Since Last Pay Application	Total Amount Paid to Date
Subcontractor (continue on additional pages)			
Subtotal this Page			
Total, other pages			
<b>TOTALS</b>			

In accordance with Section 01 29 00, I certify and declare under penalty of perjury that the information provided on this form is a true and accurate record of payments.

\_\_\_\_\_  
Contractor's Representative  
(Name Printed)\_\_\_\_\_  
Signature\_\_\_\_\_  
Date

## FORM 01 29 00-F3

**UNCONDITIONAL WAIVER AND RELEASE UPON  
PROGRESS PAYMENT****UNCONDITIONAL WAIVER AND RELEASE UPON  
PROGRESS PAYMENT**

Civil Code Section 8134

**NOTICE TO CLAIMANT: THIS DOCUMENT WAIVES AND RELEASES LIEN, STOP PAYMENT NOTICE, AND PAYMENT BOND RIGHTS UNCONDITIONALLY AND STATE THAT YOU HAVE BEEN PAID FOR GIVING UP THOSE RIGHTS. THIS DOCUMENT IS ENFORCEABLE AGAINST YOU IF YOU SIGN IT, EVEN IF YOU HAVE NOT BEEN PAID. IF YOU HAVE NOT BEEN PAID, USE A CONDITIONAL WAIVER AND RELEASE FORM.**

The undersigned has been paid and has received a progress payment in the sum of \$ \_\_\_\_\_ (AMOUNT OF CHECK) for labor, services, equipment or material furnished to \_\_\_\_\_ (YOUR CUSTOMER) on the job of \_\_\_\_\_ (OWNER) located at \_\_\_\_\_ (JOB DESCRIPTION) and does hereby release any mechanics lien, stop payment notice, or bond right that the undersigned has on the above referenced job to the following extent.

This release covers a progress payment for labor, services, equipment, or material furnished to \_\_\_\_\_ (YOUR CUSTOMER) through \_\_\_\_\_ (DATE) only and does not cover any retentions retained before or after the release date; extras furnished before the release date for which payment has not been received; extras or items furnished after the release date. Rights based upon work performed or items furnished under a written change order which has been fully executed by the parties prior to the release date are covered by this release unless specifically reserved by the claimant in this release. This release of any mechanics lien, stop payment notice, or bond right shall not otherwise affect the contract rights, including rights between parties to the contract based upon a rescission, abandonment, or breach of the contract, or the right of the undersigned to recover compensation for furnished labor, services, equipment, or material covered by this release if that furnished labor, services, equipment, or material was not compensated by the progress payment.

Dated: \_\_\_\_\_

\_\_\_\_\_  
(COMPANY NAME)By: \_\_\_\_\_  
(NAME, TITLE)

## FORM 01 29 00-F4

**CONDITIONAL WAIVER AND RELEASE UPON  
FINAL PAYMENT**

Civil Code Section 8136

**NOTICE: THIS DOCUMENT WAIVES THE CLAIMANT'S LIEN, STOP PAYMENT NOTICE, AND PAYMENT BOND RIGHTS EFFECTIVE ON RECEIPT OF PAYMENT. A PERSON SHOULD NOT RELY ON THIS DOCUMENT UNLESS SATISFIED THAT THE CLAIMANT HAS RECEIVED PAYMENT.**

Upon receipt by the undersigned of a check from \_\_\_\_\_ (MAKER OF CHECK) in the sum of \$ \_\_\_\_\_ (AMOUNT OF CHECK) payable to \_\_\_\_\_ (PAYEE OR PAYEES OF CHECK) and when the check has been properly endorsed and has been paid by the bank upon which it is drawn, this document shall become effective to release any mechanics lien, stop payment notice, or bond right the undersigned has on the job of \_\_\_\_\_ (OWNER) located at \_\_\_\_\_ (JOB DESCRIPTION). Rights based upon labor or service provided, or equipment or material delivered, pursuant to a written change order that has been fully executed by the parties prior to the date that this document is signed by the claimant, are waived and released by this document unless specifically reserved by the claimant in this release.

This release covers the final payment to the undersigned for all labor, services, equipment, or material furnished on the job, except for disputed claims for additional work in the amount of \$ \_\_\_\_\_ (AMOUNT OF CHECK). Before any recipient of this document relies on it, the party should verify evidence of payment to the undersigned.

Dated: \_\_\_\_\_

\_\_\_\_\_  
(COMPANY NAME)

By: \_\_\_\_\_

\_\_\_\_\_  
(NAME, TITLE)

## FORM 01 29 00-F5

**UNCONDITIONAL WAIVER AND RELEASE UPON FINAL PAYMENT**

Civil Code Section 8138

**NOTICE TO CLAIMANT: THIS DOCUMENT WAIVES AND RELEASES LIEN, STOP PAYMENT NOTICE, AND PAYMENT BOND RIGHTS UNCONDITIONALLY AND STATES THAT YOU HAVE BEEN PAID FOR GIVING UP THOSE RIGHTS. THIS DOCUMENT IS ENFORCEABLE AGAINST YOU IF YOU SIGN IT, EVEN IF YOU HAVE NOT BEEN PAID. IF YOU HAVE NOT BEEN PAID, USE A CONDITIONAL WAIVER AND RELEASE FORM.**

Name of Claimant: \_\_\_\_\_

Name of Customer: \_\_\_\_\_

Project: \_\_\_\_\_

Owner: County of Santa Clara

**Unconditional Waiver and Release**

This document waives and releases lien, stop payment notice, and payment bond rights the claimant has for all labor and service provided, and equipment and material delivered, to the customer on this job. Rights based upon labor or service provided, or equipment or material delivered, pursuant to a written change order that has been fully executed by the parties prior to the date that this document is signed by the claimant, are waived and released by this document, unless listed as an Exception below. The claimant has been paid in full.

**END OF SECTION 01 29 00**

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**SECTION 01 31 00  
PROJECT MANAGEMENT AND COORDINATION**

**ARTICLE 1 - GENERAL**

**1.01 CONTRACTOR'S ON-SITE PERSONNEL**

- .A** At a minimum, Contractor must provide the list of full-time staff of key personnel who must be on-Site at all times when Work is being performed. No Work may begin on-Site until Contractor submits such list, and Owner Approves.
- .B** Contractor's General Superintendent (Superintendent) who is responsible for the administration of Contractor's Work and the coordination of the Work of Contractor's Subcontractors and suppliers. The Superintendent must be on-Site at all times Work is being performed. **No Work may proceed on the site without the presence of the Superintendent or his/her Owner-accepted Alternate. The Superintendent may not be absent from the Project Site for more than two (2) consecutive weeks and/or 20 (twenty) total work days in the course of any 12 (twelve) month period. Any absence beyond these periods may be cause for Owner to direct the removal of the individual as the Superintendent.**
- .C** The Superintendent may also function as the Responsible Person for accident prevention, pursuant to Document 00 72 00.10, and as Contractor's Authorized Representative, pursuant to Document 00 72 00.3. If the Superintendent does function in these two (2) capacities, the appointment letter, described below, must so state these additional duties.

  - .1** Within seven (7) days after the start date for the Work identified in the Notice to Proceed (NTP), Contractor must submit for acceptance by Owner, four (4) copies of an appointment letter for the Superintendent. The appointment letter must be accompanied by a detailed resume for the candidate documenting the candidate's relevant experience and providing at least three (3) current references.
  - .2** Duties will include, but not be limited to:

    - .a** Present on the Work Site at all times during performance of Work, with complete authority to take any action necessary to ensure conformance with the requirements of the Contract Documents.
    - .b** Confer with Owner, Contractor's personnel, and Subcontractors to discuss and resolve matters such as work procedures and construction problems.
    - .c** Plan, organize, and direct activities concerned with the construction and maintenance of the Project.
    - .d** Immediately stop any work that does not comply with requirements of the Contract Documents, and direct removal and replacement of any defective Work.
    - .e** Supervise, coordinate, direct, and lead workers engaged in construction activities.
    - .f** Work with the Project scheduler to prepare the preliminary (if applicable), baseline, and updated Project Schedules in a logical sequence of activities to meet the Project Milestones.
    - .g** Review and monitor the activities of all trades to assure compliance with safety plans, building codes, and regulatory agency requirements.
    - .h** Investigate damages, accidents, and delays. Take necessary action to prevent their recurrences and take corrective action as warranted.
    - .i** Take actions to address the results of delays, bad weather, and emergencies on the Site.

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- .j Coordinate the scheduling of Work activities to facilitate testing and inspection by Contractor's Quality Control (QC) Manager, QC Specialists and testing labs.
  - .k Assist, prepare, and oversee the preparation of all submittals required by Section 01 50 00 (Temporary Facilities and Controls).
  - .l Assist in the preparation of the Temporary Fire Protection Plan per Section 01 51 16.
  - .m Assure that Work areas and Project Site is cleaned and maintained per Section 01 74 00 (Cleaning and Waste Management).
  - .n Schedule and conduct meeting with Owner to discuss Solid Waste Management and Recycling Plan per Section 01 35 63.
  - .o Prepare Solid Waste Management and Recycling Plan per Section 01 35 63.
  - .p Attend all key Project Meetings including, but not limited to, Preconstruction Conference, Schedule Orientation Meeting, Progress Meetings, Commissioning Meetings, Demonstration and Training Meetings, and Closeout Conference.
  - .3 Qualifications: A minimum of five (5) years of experience as a superintendent, construction project manager, or construction manager on similar size and type of construction projects that included the major trades involved with this Project.
  - .D QC Manager or Alternate QC Manager. Responsibilities, duties and qualifications of the QC Manager and Alternate QC Manager are set forth in Section 01 45 00.
  - .E The following key personnel must be on-Site during specified periods of Work when Work is being performed: QC Specialist(s).

## 1.02 OTHER CONTRACTOR'S PERSONNEL

- .A Contractor's Project Manager
  - 1. Contractor's Project Manager will be responsible for Contractor's personnel and will have overall responsibility to manage and administer the Contract. Contractor's Project Manager will have the authority to legally bind Contractor.
  - 2. Contractor's Project Manager will not be required to be full-time; however, their on-Site presence must be of sufficient time so as to facilitate operations, decisions, and administration of the Work and Contract.
  - 3. At minimum, Contractor's Project Manager will be required to attend the following meetings:
    - a. Pre-Bid Conference
    - b. Preconstruction Conference
    - c. Schedule Orientation Meeting
    - d. Progress Meetings
    - e. Closeout Conference
    - f. Coordination and Mutual Understanding Meeting [Note to Specifier: If using the <\$1M CQC spec, this meeting does not exist.]
    - g. Solid Waste Management and Recycling Plan Meeting [Note to Specifier: Include if necessary. For a small project, this is unlikely.]



- .B Contractor must provide all other administrative and supervisory personnel as needed or required for timely compliance with all administrative requirements of the Contract Documents and proper coordination of the performance of the Work.

### 1.03 COORDINATION

- .A Contractor must not delegate Contractor's responsibility for coordination of the Work to any Subcontractor.
- .B Contractor must provide a General Superintendent whose sole responsibility is administration of the Contractor's Work and the coordination of the Work of the Contractor's Subcontractors and suppliers.
- .C Contractor must provide administrative and supervisory personnel as needed or required for timely compliance with all administrative requirements of the Contract Documents and proper coordination of the performance of the Work.
- .D Contractor must ensure that each Subcontractor provides personnel as reasonably required for management and coordination of the Subcontractor's Work and for coordination of the Subcontractor's Work with the Work of the entire Project.
- .E Contractor must coordinate the Work to ensure efficient and orderly installation of each part of the Work of the entire Project including but not limited to:
  - 1. Coordinating all aspects of the Work as required to provide Owner with a complete and operable facility.
  - 2. Coordinating the Work with the work of other contractors and entities to ensure efficient and orderly installation of each part of the Work of the entire Project.
  - 3. Coordinating installation of different components and systems of the Work to ensure maximum accessibility for required maintenance, service, and repair.
  - 4. Coordinating the Work included in different sections of the Contract Documents that depend on each other for proper installation, connection, and operation.
  - 5. Coordinating the Work of all Subcontractors and suppliers.
  - 6. Coordinating the Work in such a manner to avoid delays and permit proper and efficient installation of the Work by all Subcontractors.
  - 7. Coordinating electrical/mechanical Work, particularly between general trades and mechanical/electrical trades, including the work of Owner and other contractors, so that sleeves, hangers, chases, openings, etc., required for pipe, conduit, and other installations of like character are duly and properly Provided and Installed as Work progresses.
  - 8. Coordinating all cutting, fitting and patching that may be required to make the parts of the Work come together properly for the completed Project as shown or as reasonably implied by the Contract Documents.
  - 9. Coordinating for future installation of work by others that is not included in Contractor's Work but is shown or specified in the Contract Documents.
  - 10. Coordinating delivery of materials in accordance with the Official Progress Schedule.
  - 11. Coordinating and cooperating in the timing and sequencing of Contractor's Work with the work of other contractors or Owner.
  - 12. Sequencing the Work to obtain the best results where installation of one component of the Work depends on installation of other components, before or after its own installation.

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13. Making adequate provisions to accommodate items scheduled for later installation by Contractor, Owner, or other contractors.
  14. Checking the drawings of Owner or other contractors for interferences with Contractor's Work and promptly reporting to Owner, in writing, any potential interferences between Contractor's Work and the work of Owner or the work of other contractors.
  15. Utilizing the Contract Documents and Owner accepted Submittals to check and coordinate the Work so that no interferences or conflicts between trades occur. This checking and coordination must be performed and completed before construction is commenced in each affected area and may require the preparation and submission of Coordination Drawings.
  16. Furnishing to other contractors, whose work is fitted to Contractor's Work, copies of accepted Submittals including but not limited to Record Documents, Coordination Drawings, details, and erection drawings; and furnishing other contractors with full information regarding the Fabrication, assembly, and installation of Contractor's Work.
  17. Preparing memoranda for distribution to each party involved, outlining special procedures required for coordination. Include such items as required notices, reports, and list of attendees at meetings. Preparing similar memoranda for Owner and separate contractors if coordination of their Work is required.
  18. Resolving disputes between Subcontractors.

#### 1.04 PRE-WORK VERIFICATION

- .A Prior to starting a particular type or kind of Work:
  - .1 Review all Contract Documents and other relevant data related to the type or kind of Work to be performed.
  - .2 Check Owner accepted Submittals and verify dimensions at Project Site.
  - .3 Review manufacturers' instructions applicable to conditions under which Work is to be installed.
  - .4 Inspect areas, surfaces, or construction receiving the Work.
  - .5 Report to Owner in writing and concerns, issues, or problems observed during Contractor's pre-work verification.
- .B Start of Work shall signify compliance with the above requirements and acceptance of previously placed construction or substrates as being in satisfactory condition to achieve proper installations and first quality workmanship as intended under these Contract Documents. Failure to so inspect and report to Owner shall constitute an acceptance of the previously placed construction or substrates.

#### 1.05 ADMINISTRATIVE ACTIONS

- .A Administrative actions include, but are not limited to, the following:
    - .1 Project meetings. (See Section 01 31 19 (Project Meetings).)
    - .2 Preparation, update, and revision of the Official Progress Schedule. (See Section 01 32 00 (Construction Progress Documentation).)
    - .3 Delivery and review of Submittals. (See Section 01 33 00 (Submittal Procedures).)
    - .4 Project closeout activities. (See Section 01 77 00 (Closeout Procedures).)
  - .B Coordinate timing of required administrative actions with construction activities and activities of Owner and other contractors to avoid conflicts and ensure orderly progress of the Work.
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**1.06 CONSERVATION**

- .A Coordinate Work to ensure that operations are carried out with consideration given to conservation of energy, water, and materials.
- .B Salvage materials and equipment involved in performance of, but not actually incorporated into, the Work.

**END OF SECTION 01 31 00**

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**SECTION 01 31 19  
PROJECT MEETINGS****ARTICLE 1 - GENERAL****1.01 DEFINITIONS**

- .A **Decision/Action Tracking Report** – A report prepared by Contractor recording all actions, commitments, and decisions (items) made at various Project Meetings and conferences. At a minimum, the report must track the name of the person responsible for the item, a description of the required action or decision, the initiation date of the item, the due date for the item, actual completion date of the item, and the current status of the item. Provide one (1) copy of the Decision/Action Tracking Report to all attendees and four (4) copies to Owner within twenty-four (24) hours of the meeting or conference.

**1.02 PROJECT MEETINGS****.A General**

- .1 Contractor must inform participants of date and time of each meeting and preside at all required meetings throughout progress of the Work unless otherwise directed by Owner.
- .2 Contractor must prepare an agenda for all meetings and provide same to all attendees prior to the meetings.
- .3 Contractor must attend all meetings as required by the Contract Documents.
- .4 Contractor must attend and/or conduct additional meetings as Directed by the Owner's Project Manager.
- .5 Contractor must conduct meetings and conferences at the Project Site in the Contractor's on-Site temporary job trailer, unless otherwise indicated or required by Owner.
- .6 Contractor must prepare and distribute meeting minutes as required in individual sections of the Project Manual.
- .7 Whether or not Contractor is responsible for the meeting minutes, Contractor must maintain notes from all meetings and conferences in the form of a Decision/Action Tracking Report.

**.B Preconstruction Conference**

- .1 Owner's Project Manager will schedule and conduct a Preconstruction Conference in the time period between the Clerk of the Board of Supervisors' acceptance of Contractor's bonds and insurance, and ten (10) Days after the County issues the Notice to Proceed.
- .2 Conference will be held at Project Site or another convenient location designated by Owner's Project Manager.
- .3 Participants:
  - .a Owner's Project Manager;
  - .b Owner's Project Inspector;
  - .c Designer of Record;
  - .d Contractor's Authorized Representative (mandatory attendance required);
  - .e Contractor's QC Manager (mandatory attendance required) (Section 01 45 00);
  - .f Major Subcontractors (mandatory attendance required);
  - .g Appropriate manufacturers;

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- .h Appropriate Suppliers; and,
  - .i Other interested parties as decided between Owner and Contractor.
- .4 All participants at the conference must be familiar with Project and authorized to conclude matters relating to the Work.
- .5 Agenda: Items of significance to be discussed at the Preconstruction Conference include:
- .a Introductions;
  - .b Notice to Proceed (NTP);
  - .c Direction from Owner;
  - .d Emergencies;
  - .e Required notifications;
  - .f Contractor Quality Control (QC) System;
  - .g Testing and Inspection Laboratory;
  - .h Coordination;
  - .i Normal hours of work;
  - .j Workplace environment;
  - .k Use of Project Site;
  - .l Security;
  - .m Disruption of Owner's normal operations;
  - .n Use of Owner's facilities;
  - .o Temporary Facilities and Controls;
  - .p Accepting material deliveries;
  - .q General correspondence;
  - .r Additional Detailed Instructions;
  - .s Field Modifications;
  - .t Requests For Information (RFI);
  - .u Contract Modification;
  - .v Progress Payments;
  - .w Submittals (List of Owner's Submittal reviewers);
  - .x Record Documents;
  - .y Owner Furnished Contractor Installed (OFCI) equipment;
  - .z Procurement issues;
  - .aa Project Meetings;
  - .bb Permits;
  - .cc Fire Marshal issues;
  - .dd Subcontractor issues;
  - .ee Waste management and recycling requirements;
  - .ff Permanent utilities;
  - .gg Progress cleaning;
  - .hh Environmental issues;

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- .ii Schedule; and,
    - .jj Liquidated damages.
  - .6 Owner will prepare meeting minutes of the Preconstruction Conference and distribute minutes to the attendees.
  - .C Schedule Orientation Meeting (Section 01 32 00).
  - .D Project partnering meeting (if applicable).
  - .E Solid Waste Management Plan Meeting (Section 01 35 63).
  - .F Quality Control Meetings. Contractor must conduct and take minutes of all meetings required by Section 01 45 00 (Contractor's Quality Control (QC) System), including but not limited to:
    - .1 Coordination and Mutual Understanding Meeting.
    - .2 Recurring QC Meetings.
    - .3 Preparatory Phase Meetings.
    - .4 Work Phase Meetings.
  - .G Progress Meetings
    - .1 Owner's Project Manager will establish a schedule of construction Progress Meetings. The frequency of these Progress Meetings shall be at the discretion of Owner's Project Manager, and shall be no more often than once each week. Contractor must attend Progress Meetings at the times and locations scheduled. The Progress Meetings will be located at the Contractor's on-site field office unless Owner's Project Manager approves an alternate location.
    - .2 Attendees:
      - .a Owner's Project Manager;
      - .b Owner's Project Inspector;
      - .c Contractor's Authorized Representative;
      - .d QC Manager ([Section 01 45 00](#));
      - .e Appropriate Subcontractor(s);
      - .f Appropriate Suppliers; and,
      - .g Other entities concerned with current progress or involved in planning, coordination, or performance of future activities must be represented at these meetings.
    - .3 Agenda:
      - .a Review and update Contractor's Decision/Action Tracking Report from previous Progress Meeting.
      - .b Schedule Review
        - .i Review progress since the last meeting;
        - .ii Compare current progress against Official Progress Schedule;
        - .iii Determine how construction behind schedule will be expedited; and,
        - .iv Discuss whether schedule revisions are required to ensure that current and subsequent activities will be completed within the Contract Time.
      - .c Review present and future needs of each entity present, including the following:
        - .i Interface requirements;
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- .ii Sequence of operations;
  - .iii Status of Submittals;
  - .iv Status of key deliveries;
  - .v Status of off-site fabrication;
  - .vi Site access issues;
  - .vii Site utilization;
  - .viii Temporary Facilities and Controls; and,
  - .ix Normal hours of work
  - .d Progress cleaning
  - .e Contract modifications
  - .f Review updated reports:
    - .i Submittal Log;
    - .ii Procurement Status Log (if applicable);
    - .iii RFI log;
    - .iv Testing Plan and Log; and,
    - .v Short Interval Schedule (if applicable).
  - .4 At a minimum, Contractor must maintain notes for all Progress Meetings in the form of a Decision/Action Tracking Report. One (1) copy of the Decision/Action tracking report must be provided to all attendees and four (4) copies must be submitted to Owner within twenty-four (24) hours of the meetings.
  - .5 Closeout Conference (Section 01 77 00).
  - .H Commissioning Meetings (Section 01 91 00).
  - .I Demonstration and Training meetings (Section 01 79 00).

**END OF SECTION 01 31 19**

**SECTION 01 31 20  
COORDINATION DRAWINGS**

**ARTICLE 1 - GENERAL****1.01 SCOPE**

- .A Coordination of Utility Systems, including piping and equipment, in above-ceiling spaces, utility chases, and utility rooms.
- .1 The Contract Documents are generally diagrammatic in nature with respect to mechanical, electrical, fire protection, and security/voice data systems. Not every bend, offset, and direction change is shown in the Contract Documents. The Contract Documents represent that these systems will fit in the spaces allotted; however, it is the responsibility of Contractor to assign space priorities and lay out and route the systems so they will fit efficiently in the allotted spaces and allow for convenient and code-conforming access to all valves, dampers, and other devices.
  - .2 The layout of utility rooms is also diagrammatic in nature. The Contract Documents represent that the equipment identified to be installed in utility rooms will fit in the spaces allotted. However, because the Contractor must submit and provide for equipment to be installed in utility rooms, it is Contractor's responsibility to lay out the equipment such that all equipment will fit.
  - .3 Contractor must examine all of the Contract Drawings, especially architectural drawings for ceiling space dimensions, and structural drawings for beam/column obstructions, and make allowances in Contractor's planned coordination efforts, work sequence, and routing of the systems.
  - .4 Routing shown for pipes, ducts, and conduits on Drawings are shown by graphic symbols only; make runs parallel with lines of building.
  - .5 Utilize spaces efficiently to maximize accessibility for other installations, for maintenance, and for repairs.
  - .6 Conceal pipes, ducts, and wiring in finished areas, unless otherwise indicated; coordinate locations of fixtures and outlets with finish elements.
  - .7 Size ductwork, mechanical pipe, plumbing, electrical, and sprinkler system components as shown in the Contract Documents and Drawings. Downsizing of mechanical, electrical, and plumbing (MEP) systems is not permitted.
- .B If this space is checked \_\_\_\_\_ (marked with an X), Contractor shall prepare and submit for County Approval, pursuant to Section 01 33 00, four (4) copies of Coordination Drawings. Contractor shall prepare Coordination Drawings to resolve potential installation and constructability problems prior to Installation so that the Contract Time and Contract Sum are not impacted. [Note to specifier: Please ensure the highlighted areas are tailored to your project.]
- .1 Pricing of Coordination Drawings. Contractor shall include, as a separate line item in the Schedule of Values (Section 01 29 00) the line item value for preparation of Coordination Drawings.
  - .2 Unless otherwise specifically stated in the Contract Documents, or needed for proper coordination of the Installation of early Work, all Coordination Drawing Submittals are due to Owner no later than the date specified by Owner after the Commencement Date (Document



00 52 00) stated in the Notice to Proceed. If no due date is listed in the Notice to Proceed, Coordination Drawing Submittals shall be due no later than **one hundred fifty (150) Days** after the Commencement Date stated in the Notice to Proceed.

- .3 Coordination Drawings shall include dates and signatures of Contractor and all Subcontractors whose work occurs in the affected space. Coordination Drawings shall be subject to examination by Owner at any time.
- .4 Contractor shall require Subcontractors to develop Subcontractor Coordination Plans of the same scale as Contractor's Coordination Drawings to assist in making transcripts for transfer to Coordination Drawings; use approved Shop Drawings for Coordination Drawings.
- .5 Unless a longer period is specifically stated elsewhere in the Contract Documents, allow at least twenty-one (21) Days for Owner's review and return of all Coordination Drawings Submittals and resubmittals. (See Sections 01 33 00 (Submittal Procedures), 01 33 10 (Submittal Log).)
- .6 Revise Coordination Drawings when Field Modifications, Constructive Change Directives, and/or Change Orders (Section 01 26 00) are issued which affect Work indicated in Coordination Drawings, and as subsequent Work is added to areas containing existing Work.
- .7 As part of the As-Built Document submittal, submit final Coordination Drawings reflecting Work incorporated by subsection (6), above.
- .8 **Coordination Drawings shall clearly show:**
  - a. **The layout and routing** of mechanical, electrical, fire protection, and security/voice data systems in above-ceiling spaces, utility chases, raised flooring (if applicable), other interstitial spaces, and underground ducts. Elements to include in Coordination Drawings include, but are not necessarily limited to:
    - .i Mechanical ducts and pipes, including floor penetrations;
    - .ii Plumbing pipes, including supply and gravity drain lines;
    - .iii Fire branch lines and sprinkler heads;
    - .iv Electrical bus ducts;
    - .v Voice/data cable trays and conduits;
    - .vi Interstitial space access;
    - .vii Identification and resolution of interfering structural elements: beams, columns, slabs, hangers, bracing, etc. and mechanical/electrical systems;
    - .viii Identification and resolution of conflicts with mechanical/electrical systems and fire-rated walls;
    - .ix Identification and resolution of conflicts between mechanical/electrical systems and suspended ceilings and/or light fixtures;
    - .x Identification and resolution of conflicts between mechanical/electrical systems and insulation;
    - .xi Security system elements;
    - .xii The relationship of components that are shown on separate Shop Drawings or Submittals;

- .xiii Seismic restraints when required on systems;
- .xiv All Work above ceilings performed by separate entities that must interface or for which space provided is limited; and,
- .xv Other elements as necessary.
- b. **The actual physical relationships of the various elements and systems and their interfacing with other elements and systems.** The Drawings use graphic symbols to show certain physical relationships. Establishing and coordinating the actual physical relationships is the responsibility of Contractor. Layout and arrange all elements to contribute to safety and efficiency while maintaining the intent of the design. Before work proceeds in areas of potential conflict for installing different components of the Work, Contractor shall prepare Coordination Drawings for review and Approval by Owner, that clearly demonstrate resolution of any conflicts.
- c. **Dimensions and elevations where conflicts may exist.** Final Coordination Drawings shall show resolution of any potential field conflicts.
- d. **The location, for maintenance and repair purposes, of all above-ceiling valves, fire dampers, control devices, meters and gauges, and heating coils, and the access hatches (in "hard lid") ceilings that provide a means of access to these devices.** These devices and appurtenances must be located such that a person has unimpeded access to perform maintenance, repair, or replacement. "Unimpeded access" means that a person can access the device from a location immediately below the device, via the removal of a lay-in ceiling tile, or an access door/panel. All above-ceiling valves, fire dampers, control devices, and heating coils shall be located such that there are no interferences from systems furniture, or above-ceiling mechanical or electrical systems. The Coordination Drawings must clearly represent this accessibility.
- e. **How equipment, controls, valves, power panels, and disconnects will fit in equipment room(s) space,** while maintaining code compliance, as well as the manufacturer's maintenance requirements with respect to clearance.
- f. **The maintenance of fire-rating of so-designated walls.** Contractor shall review the architectural Drawings for the location of fire-rated walls, and ensure that the placement of ducts, pipes, or other systems do not compromise the fire-rating of walls. If ducts do penetrate fire-rated walls, the Coordination Drawings must show such penetrations, and shall indicate the placement of required fire-smoke dampers. If the fire rating of designated walls cannot be maintained due to pipe or duct penetrations, as part of the Coordination Drawing process Contractor shall immediately bring these situations to the attention of Owner.

**.C Coordination of Schedules and Subcontractors.** Contractor shall:

- .1 Meet at Project Site with installer and representatives of manufacturers and fabricators who are involved in or affected by unit of Work prior to Installation of each major unit of Work which requires coordination and interfacing with other Work. Review progress of other Work and preparations for particular Work under consideration.
- .2 Coordinate matching finish, texture, color, etc. for the new Work on existing components in the Project, if applicable.
- .3 Coordinate Work of like materials by submitting pilot samples to Owner for review of acceptable ranges of finish textures and color variation.

- .4 Coordinate completion and cleanup Work of various trades in preparation for Substantial Completion and occupancy.
- .5 Coordinate schedules, submittals, and Work of the various trades to ensure efficient and orderly sequence of Installation of construction, with provisions for accommodating items to be installed later. Coordinate the Work among the Specifications and Drawings. Work shown on any drawing or specification is required by the Contract Documents irrespective of the trade subdivision. Contractor shall require each trade Subcontractor to review all other subdivisions of the documents for related Work and shall coordinate the subcontracts accordingly.
- .6 Require all parties involved in the performance of the Work to cooperate in the overall coordination of the Work under the direction of Contractor. Each party, when requested to do so, shall furnish information concerning its portion of the Work, and shall respond promptly and reasonably to the decisions and requests of persons designated with coordination, supervisory, administrative, or similar authority.
- .7 Coordinate the tolerances of all materials to ensure a proper fit in achieving the requirements of the Contract Documents.

#### **1.02 STRUCTURAL, MECHANICAL, AND ELECTRICAL COORDINATION**

- .A Contractor shall coordinate steel Shop Drawings to include any and all penetrations of framing members resulting from the coordination of the Work of the mechanical and electrical subcontractors.
- .B If penetrations in steel framing members are required, steel Shop Drawings shall be reviewed and approved by the mechanical, electrical, and plumbing subcontractors prior to submission to Owner for review and subsequent fabrication by Contractor.

#### **1.03 CONTRACTOR RESPONSIBILITIES**

- .A Oversee preparation of Coordination Drawings, if required by this Section.
- .B Assign space priorities.
- .C Notify Owner in writing of unresolved conflicts or interferences found during preparation of Coordination Drawings.
- .D Coordination Meetings: Conduct general project coordination meetings with Subcontractors at least weekly at regularly scheduled times convenient for all parties involved. These meetings are in addition to specific meetings held for other purposes, such as regular Project Meetings and special pre-Installation meetings. Request representation at each meeting by every party currently involved in coordination or planning for the Work of the entire Project. Keep Owner informed about coordination meetings. Conduct meetings in a manner which will resolve coordination problems. Record results and minutes of each meeting and distribute copies to everyone in attendance and to Owner. Owner may attend weekly jobsite meetings with Subcontractors.

#### **1.04 NON-CONFORMING WORK**

- .A Work not Installed within designated coordination areas in compliance with Owner Approved Coordination Drawings will be considered non-conforming Work subject to removal and replacement at no additional cost to Owner.

#### **1.05 SUBMITTAL REQUIREMENTS**

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- .A If Coordination Drawings are required by this Section, submit to Owner one (1) reproducible and four (4) copies of each Coordination Drawing.
- .B Submit combined, comprehensive mechanical and electrical systems Coordination Drawings.
- .C Comply with requirements of:
  - .1 Section 01 33 00 (Submittal Procedures).
  - .2 Section 01 45 00 (Contractor's Quality Control (QC) System).
- .D Signatures required on each sheet of Coordination Drawings:
  - .1 Coordination Drawing(s) must be signed and dated by Contractor and individual Subcontractors.
  - .2 By act of signature and submittal of the single combined Coordination Drawing(s), Contractor and each Subcontractor acknowledge that Work for which Contractor or said Subcontractor is responsible has been coordinated with the Work of Contractor and all other Subcontractors.

**END OF SECTION 01 31 20**

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**SECTION 01 32 00.2**  
**CONSTRUCTION PROGRESS DOCUMENTATION**

**ARTICLE 1- GENERAL**

**1.01 DEFINITIONS**

- .A Baseline Schedule.** Contractor's Schedule presenting an orderly and realistic plan for completion of the entire Work of the Project. When Approved by Owner's Project Manager, Contractor's Baseline Schedule becomes the initial version of the Official Progress Schedule. The Baseline Schedule is Contractor's schedule prepared in chart or graph format, consistent in all respects with the Contract Time(s) and order of Work, presented in sufficient detail to show the chronological and dependency (critical path method (CPM)) relationship of all activities of the Project including, but not limited to: planned starting and completion dates of various activities, milestone completion date(s), submittal of Shop Drawings and Product Data, procurement of materials and equipment, and deliveries of materials and equipment.
- .B Critical Path.** The sequence or network of predecessor/successor Project activities on the Baseline Schedule or most recently Approved Official Progress Schedule which will take the longest time to reach Substantial Completion. The duration of the Critical Path is the sum of the activities' durations along the path. The duration of the Critical Path represents the minimum time required to reach Substantial Completion of the Project. Any delays along the Critical Path would indicate an impact to the Contract Time and/or Contract Sum.
- .C Float.** The number of work/calendar days an activity can be delayed without impacting the Project completion date. The Project "owns" float, and all costs associated with the use or exhaustion of Project Float are non-compensable delay.
- .D Progress Schedule.** Contractor's schedule prepared in accordance with the requirements of the Contract Documents.
- .E Preliminary Contract Schedule.** Contractor's Progress Schedule presenting its detailed sequence of early operations including procurement of materials and equipment for a minimum of ninety (90) Days from the official Contract start date stated in the Notice to Proceed.
- .F Recovery Schedule.** Contractor's detailed schedule indicating how Contractor intends to recover lost time/mitigate delay to the Contract Time.
- .G Revised Official Progress Schedule.** Contractor's written request to revise the current version of the Official Progress Schedule. If Owner accepts Contractor's request to revise the Official Progress Schedule, it becomes the new current version of the Official Progress Schedule.
- .H Updated Official Progress Schedule.** The current version of the Official Progress Schedule updated to include the actual start and finish dates of activities and the percentage of completion of each activity. Actual start and finish dates must be identical to the actual start and finish dates indicated on Contractor's Short Interval Schedule submissions.
- .I Weather Calendar.** An Activity Calendar that must be submitted concurrent with the Baseline Schedule, demonstrating the anticipated effects of rain on the Contractor's schedule.

**ARTICLE 2- PRODUCTS**

- 2.01 SCHEDULING SOFTWARE.** Contractor may use any commercially available scheduling software that is reasonably up to date.

**ARTICLE 3- EXECUTION**

**3.01 SCHEDULE ORIENTATION MEETING**

- .A** Within fourteen (14) Days of the official Contract start date stated in the Notice to Proceed, Owner's

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Project Manager will conduct a Schedule Orientation Meeting to review the requirements of the Contract Documents for preparing, submitting, updating, and revising the various Project schedules. This meeting is separate from the Preconstruction Conference and is dedicated exclusively to discussions about the scheduling requirements for the Project.

- .B Contractor must review the requirements of the Contract Documents related to scheduling prior to the meeting and be prepared to discuss its general approach to meeting the requirements. This meeting must be attended by:
  - .1 Owner's Project Manager or designee;
  - .2 Contractor's Authorized Representative;
  - .3 Contractor's QC Manager (See Section 01 45 00); and,
  - .4 Any other personnel deem advisable to attend by Owner or Contractor.
- .C The following items will be reviewed and discussed during the meeting:
  - .1 Schedule preparation and submission requirements;
  - .2 Level of involvement of Subcontractors in the schedule development effort;
  - .3 Schedule updates;
  - .4 Schedule revisions;
  - .5 Recovery schedules;
  - .6 Establishing the time element of Change Orders; and,
  - .7 Holidays and hours of work.

### 3.02 PRELIMINARY CONTRACT SCHEDULE

- .A If the duration of the Project is greater than one hundred eighty (180) Days, Contractor must submit five (5) copies of a **Preliminary Contract Schedule** no later than twenty-one (21) Days after the Commencement Date as stated in Notice to Proceed. If directed by Owner's Project Manager, the **Preliminary Contract Schedule** submittal must include schedule prints (plots) and corresponding electronic data files on hard drives or flash drives. The drives must be permanently labeled to indicate the contents and include the submittal number and data date.
- .B Owner will review the **Preliminary Contract Schedule** for conformance with the requirements of the Contract Documents. Within fourteen (14) Days after receipt, Owner's Project Manager will accept the **Preliminary Contract Schedule** or return it with comments, in which case Contractor must revise and resubmit the **Preliminary Contract Schedule**.
- .C The Preliminary Contract Schedule must include:
  - .1 Contractor's general plan of Work in accordance with the Milestones and Project Time(s) stated in the Contract Documents.
  - .2 Details of Contractor's planned mobilization.
  - .3 Sequence of early operations including procurement of materials and equipment for a minimum of ninety (90) Days from the official Contract start date stated in the Notice to Proceed.
  - .4 All mandatory activities, sequences, and durations required in the Contract Documents including but not limited to:
    - .a A start Milestone for the Notice to Proceed;

- .b An activity for verification of all existing conditions and dimensions (see Document 00 73 10 (Site Conditions));
  - .c An activity for installation of temporary site enclosure fence (see Section 01 50 00 (Temporary Facilities and Controls)); and,
  - .d Submission of all pre-construction submittals.
- .D Owner's Project Manager will review the Preliminary Contract Schedule for conformance with the requirements of the Contract Documents. Owner's Project Manager will return the Preliminary Contract Schedule with comments within twenty-one (21) Days after receipt.
- .E Contractor must use the Owner-accepted Preliminary Contract Schedule with Owner's comments as the basis for the Baseline Schedule submission. Unless otherwise requested by Contractor and approved in writing by Owner's Project Manager, the activities, durations, and logic that appear in the Owner-accepted Preliminary Contract Schedule must remain unchanged in the Baseline Schedule submission.

### 3.03 BASELINE PROGRESS SCHEDULE

- .A Contractor must submit five (5) copies of a **Baseline Schedule** no later than sixty (60) Days after receipt of the Notice to Proceed (NTP). If directed by Owner's Project Manager, the **Baseline Schedule** submittal must include schedule prints (plots) and corresponding electronic data files on hard drives or flash drives. The drives must be permanently labeled to indicate the contents and include the submittal number and data date.
- .B Owner will review the **Baseline Schedule** for conformance with the requirements of the Contract Documents. Within twenty-one (21) days after receipt, Owner's Project Manager will accept the **Baseline Schedule** or return it with comments, in which case Contractor must revise and resubmit the **Baseline Schedule**. After acceptance of the **Baseline Schedule** by Owner, it will become the initial version of the **Official Progress Schedule**.
- .C The **Baseline Schedule** submission must include and/or comply with the following minimum requirements:
- .1 Provide a time scaled, computer-generated CPM schedule in precedence format, using software such as Microsoft Project, with the Critical Path highlighted. No more than fifteen percent (15%) of activities can be critical or "near critical." "Critical" is defined as having zero Days of Total Float Time, and "Near Critical" is defined as having one to five (1-5) Days of Total Float Time.
  - .2 Show the plan for completion of the Work for each Milestone within the time(s) specified. Each activity must be coded to its corresponding Milestone.
  - .3 All completion Milestones required by the Contract Documents must be shown on the specific Milestone completion date(s) identified in the Contract Documents and must be attached to a seven (7)-day/week activity calendar. The seven (7)-day/week activity calendar must have no non-work days.
  - .4 Include dependencies (relationships) and logic ties between activities.
  - .5 Schedules which show negative float will not be accepted by Owner, nor will negative float be a basis for time extensions for Change Order activities, except for those activities shown on the Critical Path.
  - .6 Float is owned by the Project. Float is administered by Owner. No extensions to the Contract Time will be granted, nor delay damages paid, unless a delay occurs which impacts the Critical Path and consumes all available Float.
  - .7 Open-ended activities are not permitted.

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- .8 Unless otherwise Approved in writing by Owner's Project Manager, no single activity on the schedule shall have duration longer than fifteen (15) work days, except for fabrication, procurement, Punch List, and equipment commissioning (run-in) activities.
  - .9 Activity durations shall be the total number of actual days required to perform each activity.
  - .10 Unless a longer period is specifically stated in the Contract Documents, Owner will have a minimum of twenty-one (21) Days to review Complete Submittals. (See Section 01 33 00 (Submittal Procedures).)
  - .11 Do not schedule activities that are dependent on Submittal acceptance or material delivery to start earlier than the expected approval or delivery dates.
  - .12 **Procurement.**
    - .a Identify as separate activities procurement of "major" equipment and materials. Major pieces of equipment include the following: **[Note to specifier: edit this list!]**
      - .i Air Handling Units;
      - .ii Emergency Generators;
      - .iii Elevators;
      - .iv Chiller Units
      - .v Fire Pumps;
    - .b At a minimum, procurement of major equipment and materials must include the following three (3) dependent activities:
      - .i Review and accept Submittal;
      - .ii Fabricate/Manufacture; and,
      - .iii Delivery.
  - .13 Identify as separate activities the installation of all Owner Furnished Contractor Installed Items. If Contractor requires product installation information for Owner Furnished Items, include specific interface flags indicating when product installation information is required.
  - .14 If Section 01 91 00 is included in this Contract, include activities such as pre-functional testing and functional testing, and other Commissioning activities, as defined in Section 01 91 00. Include Milestones for Contractor completion and certification for each Milestone Completion Certification.
  - .15 Include a separate activity **of XX work day duration [Note to specifier: Complete as needed]** for Owner and Contractor to prepare Punch List, pursuant to Section 01 45 00.
  - .16 Show the number of days needed by Contractor to correct deficiencies in the completed Work (Punch List durations) after receipt of Punch list from Owner.
  - .17 Contractor's Punch list activities must be shown as starting no earlier than Contractor's receipt of Owner prepared Punch List.
  - .18 Show activities for Owner Training and submission of Operation and Maintenance manuals.
  - .19 The data/status date for the Schedule must be the first day of the Contract Time as stated in the Notice To Proceed.
  - .20 Show each Milestone required by the Contract Documents as independent. Do not tie (link) milestones together.
  - .21 Include a Project start milestone for the Notice to Proceed.
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- .22 Unless otherwise requested by Contractor and approved in writing by Owner's Project Manager, the activities, durations, and logic that appear in Owner- accepted Preliminary Contract Schedule must remain unchanged in the Baseline Schedule submission.
  - .23 Activities must be included for all required reviews, approvals, permits, and inspections performed by or issued by regulatory agencies.
  - .24 **Weather:**
    - .a Contractor must consider, and the Baseline Schedule must include, the anticipated impact of weather delays on the completion of the Work.
    - .b Contractor must submit, for Owner acceptance, a separate Weather Calendar indicating the number of anticipated days of work "lost" per month due to weather.
    - .c The Weather Calendar shall be based on a combination of historical weather data for the site/geographical area and the nature of Contractor's planned Work during a given month.
    - .d The consideration of anticipated weather delays on completion of the Work must then be included in the Baseline Schedule.

### 3.04 OFFICIAL PROGRESS SCHEDULE

- .A The Owner-accepted Baseline Schedule becomes the initial version of the Official Progress Schedule.
- .B The Official Progress Schedule must not be revised without the prior written Approval of Owner's Project Manager.

### 3.05 MONTHLY UPDATE OF THE OFFICIAL PROGRESS SCHEDULE

- .A Contractor must submit a monthly update to the Official Progress Schedule. All updates must be submitted with four (4) prints (plots) of the Updated Official Progress Schedule and corresponding electronic date files on hard drives or flash drives. The drives must be permanently labeled to indicate the contents and include the submittal number and data date.
- .B The submission of the Updated Official Progress Schedule must coincide with the submission the monthly progress payment request.
- .C The Updated Official Progress Schedule must **not** include:
  - .1 Added or deleted activities;
  - .2 Changes to the network logic; or,
  - .3 Any other changes, revisions, or modifications of any kind.
- .D Each month Contractor must submit four (4) copies of a monthly report with each payment request:
  - .1 The monthly report must include:
    - .a A description of Work accomplished during the billing period associated with each payment request;
    - .b A description of problem areas affecting progress of the Work; and,
    - .c Current and anticipated delaying factors and their impact.
  - .2 Contractor's monthly report must be submitted within three (3) days after the payment period end date.

### 3.06 REVISED OFFICIAL PROGRESS SCHEDULE

- .A A Revised Official Progress Schedule must be submitted by Contractor whenever Contractor desires to change its sequence or method of construction, add or delete activities, change logic ties or

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constraints (restraints), incorporate Approved Change Orders into the schedule, or whenever directed by Owner's Project Manager.

- .B All revision requests must be in writing, must explain in narrative why each activity change or revision is being requested, and must be based on the most recent Owner accepted Updated Official Progress Schedule.
- .C When out of sequence activities appear in the Updated Official Progress Schedule, Contractor must submit a Revised Official Progress Schedule. The Revised Official Progress Schedule must incorporate a revised schedule logic that conforms to current job status.
- .D All Revised Official Progress Schedule revision requests must be submitted with four (4) prints (plots) of the requested revisions.
- .E If Owner's Project Manager accepts the Revised Official Progress Schedule, it will become the new current version of the Official Progress Schedule.
- .F Original Activity Durations must not be revised. The Remaining Duration for an Activity can be updated to indicate the time required to complete the Activity.
- .G When the schedule is revised to incorporate Change Order activities, each Change Order must have its own discrete activities. The sum of the values of the activities for each Change Order shown on the Official Progress Schedule must equal the dollar value of the Change Order.

### 3.07 SHORT INTERVAL SCHEDULE

- .A An updated Short Interval Schedule (SIS) must be submitted to Owner at each Progress Meeting. Each attendee at the Progress Meeting must be provided one (1) copy of the SIS.
- .B The Short Interval Schedule must be submitted throughout the entire Contract Time.
- .C The Short Interval Schedule must be a four (4)-week schedule and include the past week, the week submitted, and two (2) weeks thereafter.
- .D The Short Interval Schedule must contain sufficient detail to evaluate daily progress and manpower/equipment loading, must correlate with the current version of the Official Progress Schedule, and must reference the appropriate activity numbers.
- .E The Short Interval Schedule must indicate all planned and actual tests and inspections. (See also Section 01 43 00.)

### 3.08 RECOVERY SCHEDULE

- .A If any activity falls more than fourteen (14) Days behind schedule, upon Owner's request, Contractor must submit a Recovery Schedule within seven (7) Days indicating how Contractor intends to make up the lost time. Form and detail of the Recovery Schedule must be appropriate to explain and display how Contractor intends to reschedule delinquent activities to regain compliance with the Contract Time(s).
- .B If Owner's Authorized Representative accepts Contractor's Recovery Schedule, Contractor must submit a Revised Official Progress Schedule revision request as required by this Section 01 32 00, above. The Revised Official Progress Schedule must be based on and limited to the modifications indicated in the Recovery Schedule and accepted by Owner's Authorized Representative.

### 3.09 TIME EXTENSIONS

- .A If Owner's Authorized Representative Approves a time extension request, a Change Order extending the Contract Time will be issued.
- .B No time extensions to the Contract Time will be granted, nor delay damages paid, unless a delay occurs which impacts the Critical Path and consumes all available Float.

- .C Upon receipt of an executed Change Order, modifying the Contract Time or earlier if directed in writing by Owner, Contractor must submit a request for revision to the Official Progress Schedule. The revision request must be based on and limited to the modifications to the Contract Time identified in the Change Order.
- .D Owner is not obligated to consider time extension requests unless the requests are made in accordance with the requirements of the Contract Documents.

### 3.10 SUBMITTAL LOG

- .A Within twenty-one (21) Days after the Contract start date stated in the Notice to Proceed, Contractor must Submit four (4) copies of a Submittal Log and corresponding electronic data files on hard drives or flash drives. Submittal Log must be prepared in accordance with the requirements of Section 01 33 10, "Submittal Log." The drives must be permanently labeled to indicate the contents and include the submittal number and data date.
- .B Unless otherwise specifically stated in the Contract Documents, no Submittal shall show an Owner's review and return duration of less than twenty-one (21) Days. (See Section 01 33 00, art. 1.04, "Minimum Submittal Review Times" and Section 01 33 00, art. 1.02, "Scheduling").
- .C Owner may refuse to take action on any Submittal without prior receipt and acceptance of the Submittal Log.
- .D Submittals must indicate the corresponding activity numbers on Contractor's Preliminary Contract Schedule.
- .E Each week, on a day agreed to between Contractor and Owner's Project Manager, Contractor must review the Submittal Log with Owner's Project Manager. If requested by Owner's Project Manager prior to the weekly meeting, Contractor must provide Owner's Project Manager with one (1) copy of an updated Submittal Log and corresponding electronic data files on hard drives or flash drives indicating the current status of all required Submittals. The drives must be permanently labeled to indicate the contents and include the submittal number and data date.
  - .1 The updated Submittal Log must be grouped by Definable Feature of Work. The format of the Submittal Log shall follow the requirements outlined in Section 01 33 10.
- .F After acceptance of Contractor's Submittal Log by Owner's Project Manager, Contractor must make all Submittals in accordance with the "Anticipated Date for Submission to Owner" indicated in the Log. Owner has the right to return all Submittals to the Contractor "Returned Without Review," if the Submittal is submitted prior to the "Anticipated Date for Submission to Owner."

### 3.11 PROJECT REPORTS

- .A Contractor's Daily Report
  - .1 Contractor must submit a Contractor's Daily Report, in a form prescribed or accepted by Owner, for each day worked. At a minimum the report must indicate:
    - .a All workers by trade;
    - .b Segregated worker activity for Force Account work;
    - .c Subcontractor activity;
    - .d Equipment on site;
    - .e Material deliveries;
    - .f Tests and Inspections performed;
    - .g Weather conditions;

- .h Indication of start of new activities, or completion of activities;
  - .i Other significant items.
- .2 Each Contractor's Daily Report must be submitted to Owner's Project Manager or designee at the jobsite on the next workday by 9:00 a.m.
- .B Other Reports
  - .1 Contractor must submit to Owner, as specified or Directed, copies of all other reports required by the Contract Documents or other Governmental Agencies including but not limited to:
    - .a Certified Payroll;
    - .b Copies of incident or accident and injury reports;
    - .c Force Account Reports and Documentation;
    - .d Monthly Progress narrative, pursuant to Section 01 29 00 (Payment Procedures).

**END OF SECTION 01 32 00.2**

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**SECTION 01 32 50  
RECORD DOCUMENTS (AS-BUILTS)**

**ARTICLE 1- GENERAL**

**1.01 DEFINITIONS**

- .A As-Built.** Documents or Drawings that convey the final “as-built” state of the Project. In addition to the definition of “As-Built Documents” in Document 00 71 00 (Contract Definitions), As-Built Documents also consist of the following:
- .1** Contract Drawings;
  - .2** Project Manual;
  - .3** Owner Approved Coordination Drawings (if required by Section 01 31 20);
    - .a** HVAC ductwork drawings shall also be submitted individually as well as part of Coordination Drawings;
  - .4** Structural steel Shop Drawings; and,
    - .a** The structural steel subcontractor need not submit the entire set of structural steel Shop Drawings as As-Built Drawings. Only those Drawings that are changed from the initial set of Owner Accepted structural steel Shop Drawings should be submitted as As-Built Documents prior to Owner’s Acceptance of the Project.
  - .5** Contractor Design-build aspects of the project, such as Fire Protection systems.
- .B Final As-Built Documents.** Project Manual, Contract Drawings, and Coordination Drawings (if required by Section 01 31 20) that include: Addenda, Contract Modifications, Field Modifications, Requests for Information (RFI), Submittals information.
- .C Concealed Work.** That Work which is not visible without disturbing the finished construction Work. Concealed Work includes all above-ceiling Work; Work in foundation slabs and below grade; Work underground and/or in trenches, etc.
- .D Substantial Completion Milestone, Substantial Completion, Construction Milestone, Milestone Completion.** These terms may be used synonymously in Contract Documents to refer to Substantial Completion. Except where the reference or context is an Intermediate Milestone, the term Milestone refers to Substantial Completion.

**1.02 AS-BUILT DOCUMENTS**

- .A As-Built Drawings**
- .1** Contractor must maintain at the Project Site at least one set of As-Built Drawings (as defined in Article 1.03(A) above), and As-Built Coordination Drawings (if required by Section 01 31 20) indicating the actual configuration of the Project as it is constructed.
  - .2** Contractor must maintain the As-Built Drawings and Coordination Drawings in good and current condition and post all changes and clarifications to the As-Built Documents on a daily basis. The changes must be posted in red pencil.
  - .3** Contractor must handle the As-Built Drawings and Coordination Drawings with great care. Contractor must not use the As-Built Drawings or Coordination Drawings for any other purpose, and must keep them clean and readable.

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- .4 The As-Built Drawings and Coordination Drawings must provide sufficient detail to make it possible to correctly and easily locate, identify, and establish sizes and routing of all piping and duct that are “concealed” above ceiling and in utility chases.
  - .5 As-Builts must be updated on a continuous basis to indicate conditions encountered, change orders issued, and the final configuration of the Project as it was constructed. As-Builts include any change or clarification to the Contract Documents and dimensional information showing the actual locations of Installed components of the Work.
  - .6 Changes made to shop drawings during the submittal process must be reflected in the appropriate construction contract drawing(s).
  - .7 The As-Built Drawings and/or the Owner-accepted final Coordination Drawings must indicate, by appropriate notations, all modifications or changes made to the Drawings by Addenda, Contract Modification, RFI, or Field Modification.
    - .a When Owner issues drawings and/or sketches making changes to the design, Contractor may post these changes to the As-Built set of drawings by one of two methods:
      - .i Pasting the drawing/sketch on the blank page opposite the design drawing, and referencing in red pencil on the As-Built drawing the Owner-issued sketch/drawing; or,
      - .ii Making changes to the actual original design drawing, in red pencil.
    - .b If Contractor must make field adjustments from the Owner-issued sketch/design change, Contractor must draw any “adjustments” in red pencil on the As-Built drawings.
  - .8 If Work is installed differently from, or in a location other than that shown on the Contract Drawings, or if Contractor finds existing conditions to be different than indicated on the Contract Drawings, Contractor must accurately note such variations on the As-Builts Drawings in red pencil. These updates are to be made on a daily basis as the Work progresses.
  - .9 Contractor must update, on the As-Built Drawings, any changes/updates to the following:
    - .a Lighting Control Panel(s), including panel schedule;
    - .b Fire Alarm Control Panel;
    - .c Electrical panel(s) and panel schedules; and,
    - .d Final Air Balancing numbers for supply and return duct outlets.
  - .10 Label each page of the field set of the As-Built Drawings, “As Built Drawings” in neat large printed letters in the lower right hand corner. Label each page of the field-set of the Owner-accepted final Coordination Drawings, “As Built Coordination Drawings.”
  - .11 Contractor must post to the As-Built Drawings, Project Manual, and Coordination Drawings (if required by Section 01 31 20), on a daily basis all:
    - .a Addenda;
    - .b Contract Modifications;
    - .c Field Modifications;
    - .d Requests for Information;
    - .e Approved Product Substitutions.
- .B As-Built Coordination Drawings must be provided with a cover sheet and a table of contents.
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**.C As-Built Project Manual**

- .1** Contractor must post to the As-Built Project Manual on a daily basis:
  - .a** All modifications or changes made to the Project Manual by:
    - .i** Addenda;
    - .ii** Contract Modification;
    - .iii** Field Modification;
    - .iv** Request for Information (RFI);
    - .v** Approved Product Substitutions.
  - .b** For Products selected and used in the Work of the Project:
    - .i** For each Product actually Provided and/or Installed, legibly mark each section of the Project Manual to record:
      - .1** Manufacturer;
      - .2** Trade name;
      - .3** Catalog number;
      - .4** Supplier.

**1.03 CONCEALED WORK**

- .A** The As-Built Documents must indicate the locations of underground Work such as utility lines, and wet pipe utility lines permanently embedded in concrete slabs (floor and foundation).
  - .1** Do not conceal any of the above Work until required information is recorded in the As-Built Documents.
  - .2** The specific location of all turns, centerline, invert elevations and rates of fall in underground and concealed Work must be indicated.
  - .3** Dimensions to column lines, walls, or other prominent features must be used for proper reference.
  - .4** Legibly mark to record actual construction:
    - .a** Depths of various elements of foundation in relation to finish first floor datum.
    - .b** Dimensional sizing, and horizontal and vertical locations of underground utilities and appurtenances, referenced to permanent surface improvements.
      - .i** Give sufficient horizontal and vertical dimensions to accurately trace route and invert of each concealed line or item.
      - .ii** Accurately locate each capped, plugged, or stubbed line.
- .B** Accurately locate each capped, plugged, or stubbed line both internal and external to the building.
- .C** Accurately note any previously unidentified utility lines and structures encountered during site work.

**1.04 MAINTENANCE OF DOCUMENTS AND SAMPLES**

- .A** Store As-Built Documents and Coordination Drawings (if required by Section 01 31 20), in Contractor's field office apart from documents used for construction.
- .B** Provide files and racks for storage of As-Built Documents.

- .C Maintain all documents in a clean, dry, legible condition, and in good order.
- .D Do not use As-Built Documents for construction purposes.
- .E Make As-Built and Record Set documents available at all times for inspection by Owner's Project Manager.

#### 1.05 FINAL AS-BUILT DOCUMENTS

- .A Contractor must maintain at the Project Site at least one (1) copy of the As-Built Documents, and Coordination Drawings (if required by Section 01 31 20).
- .B As-Built Product Data:
  - .1 Maintain one (1) copy of each Owner-accepted Product Data Submittal at the Project Site.
  - .2 Mark-up changes in actual Work in comparison with submitted information.
    - .a Include both variations in product as delivered to Project Site and variations from manufacturer's instructions and recommendations for installation.
    - .b Give particular attention to concealed products and portions of the Work which cannot otherwise be readily discerned at a later date by direct observation.
  - .3 Note related Contract Modifications, if any.

#### 1.06 PROGRESS PAYMENTS

- .A Owner's Project Inspector shall review the As-Built Documents prior to and as a condition of approving each progress payment.

#### 1.07 REQUIREMENTS AND PREPARATION FOR SUBSTANTIAL COMPLETION

- .A Contractor must mark each sheet of the drawings "As-Built Drawings" and mark the cover of the Final As-Built Project Manual "Final As-Built Project Manual."
- .B Contractor must sign each drawing in the final set of As-Built Drawings, and Coordination Drawings (if required by Section 01 31 20), and sign the cover of the final As-Built Project Manual.
- .C Work shall not be recommended for Substantial Completion until Owner's Project Manager receives satisfactory Final As-Built Documents, and As-Built Coordination Drawings (if required by Section 01 31 20), from Contractor.
- .D All changes recorded in the Final As-Built Documents, and As-Built Coordination Drawings (if required by Section 01 31 20), must be of good drafting quality.
- .E The marked up As-Built Drawings and Project Manual maintained by Contractor during construction in conformance with Contract Documents, must be submitted to Owner for review and acceptance. Contractor shall correct any non-conforming elements identified by Owner in its review.

#### 1.08 SUBMITTALS REQUIRED FOR SUBSTANTIAL COMPLETION

- .A Contractor must submit prior to Substantial Completion of the Project, the final As-Built Drawings and Coordination Drawings (if required by Section 01 31 20), and the final As-Built Project Manual.
- .B Accompany submittal with a transmittal letter, in duplicate, containing:
  - .1 Date;
  - .2 Project title and number;
  - .3 Contractor's name and address;



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- .4 Title and number of each Record Document (As-Built); and,
  - .5 QC Manager As-Built Document Certification (See Section 01 45 00).
  - .C Prior to Owner issuance of Notice of Substantial Completion of the Work, submit evidence of compliance with the requirements of Governing Agencies and regulatory authorities:
    - .1 Certificates of Inspection:
      - .a Elevators;
      - .b Fire Marshal.
    - .2 Other Certificates: [Note to Specifier: Fill out or remove as needed.]
    - .3 Occupancy Certificate from local building department.
  - .D Owner may, in its sole and unfettered discretion, accept substantially complete submittals required for Substantial Completion, and only when accompanied by adequate assurances Contractor will fully complete all outstanding submittals within thirty (30) Days.
- 1.09** Samples.
- .A Before Owner's recommendation of Final Acceptance to the Board, pursuant to Document 00 72 00.11.07, "Recommendation for Acceptance," Owner's Project Manager will meet with Contractor at Project Site to determine which, if any, of submitted samples maintained by Contractor during progress of the Work shall be transmitted to Owner for record purposes.
  - .B Comply with Owner's instructions for packaging, identification marking, and delivery to Owner's sample storage space.

**END OF SECTION 01 32 50**

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**SECTION 01 33 00  
SUBMITTAL PROCEDURES**

**ARTICLE 1 - GENERAL**

**1.01 DEFINITIONS**

- .A Action Submittals.** Submittals requiring Owner's written response.
- .B Informational Submittals.** Submittals not requiring Owner's written response for example, Survey notes, QC Manager's Daily Report, Laboratory test reports, etc.
- .C Preconstruction Submittals.** Submittals requiring Owner's acceptance before Contractor may proceed with the performance of on-site Work. These submittals include, but are not limited to, the CQC Plan, Fire Protection Plan, Qualifications of Key Personnel, Qualifications of Scheduler (if applicable to this contract), SWPPP (if applicable), etc. Except for the CQC Plan, which must be certified by the CQC Manager pursuant to Section 01 45 00, all Preconstruction submittals may be signed by Contractor's Authorized Representative (Section 01 31 00), Contractor's Project Manager, or an Officer of Contractor.
- .D Product Data Submittals.** Submittals associated with, and necessary for, the accomplishment of a specific Definable Feature of Work (DFOW). These Submittals include information such as shop drawings; samples; product certifications; Subcontractor qualifications; Manufacturer's instructions and factory test reports; Contractor designs and calculations (such as curtain walls, pre-cast concrete, etc.); equipment and systems data for Commissioning (if applicable), etc. These submittals require Owner's acceptance before Contractor may proceed with the DFOW associated with the submittals. Product Data submittals demonstrate to Owner how Contractor proposes to conform to the requirements of the Contract Documents. The CQC Manager must certify all Product Data Submittals, pursuant to Section 01 45 00.
- .E Project Management Submittals.** Submittals essential to the effective management of the Project. These submittals include, but are not limited to, the construction Progress Schedule; submittal log; Cost Breakdown/Cost Loaded Schedule; permit applications such as permits from the Fire Marshal; Coordination Drawings; Procurement Status Log (if applicable); and, Commissioning Submittals (Section 01 91 00, if applicable). Project Management Submittals are Action Submittals. Except for Coordination Drawings, invoices and Commissioning submittals, which must be certified by the CQC Manager pursuant to Section 01 45 00, all Project Management submittals may be signed by Contractor's Authorized Representative (Section 01 31 00), Contractor's Project Manager, or an Officer of Contractor.
- .F Management Information Submittals.** Submittals that provide Owner with information about the status of the Project. These submittals include Contractor Daily Reports, CQC reports, daily force account reports, accident reports, et al. Management Information Submittals are Informational Submittals.
- .G Milestone Submittals.** Submittals for Intermediate Milestones will be defined by Milestone. These submittals are Action Submittals. The CQC Manager must certify all Milestone submittals pursuant to Section 01 45 00.
- .H Substantial Completion Milestone Submittals.** Submittals required to achieve the Project's Substantial Completion Milestone are Action Submittals. The CQC Manager must certify all Substantial Completion Milestone Submittals pursuant to Section 01 45 00. Substantial Completion Milestone Submittals include, but are not necessarily limited to:

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- .1 Milestone Certifications;
  - .2 Manufacturer's field test reports;
  - .3 Operation and Maintenance Manuals;
  - .4 As-Built documents;
  - .5 Warranties and Guarantees;
  - .6 All other submittals referenced in the Contract Documents as due on or before Project Completion;
- .I **Final Acceptance Submittals.** Only those submittals which the Contract Documents designate expressly as required for "Final Acceptance" of a Project may be submitted after Contractor achieves the Substantial Completion Milestone.

## 1.02 SCHEDULING

- .A Schedule preparation and processing of Submittals in accordance with other sections of the Contract Documents and the specific Submittal deadlines and timeframes stated below.
- .1 Unless otherwise specifically stated in the Contract Documents, or specifically Approved or Directed in writing by Owner's Project Manager, all Preconstruction Submittals are due no later than forty-five (45) Days from the Official Start Date stated in the Notice to Proceed. (See this Section 01 33 00.) General acceptance of Contractor's Progress Schedule, Submittal Log, or other related submittals by Owner does not constitute specific Approval by Owner's Project Manager for deviation from the forty-five (45) Day cut-off date for Preconstruction Submittals. Contractor must make a specific request in writing for each proposed deviation and Owner's Project Manager must grant specific written Approval for each proposed deviation to the cut-off date.
  - .2 Unless a longer period is specifically stated in the Contract Documents, allow no less than ten (10) Days, or as specified by Owner, for Owner's review and return of all Submittals and resubmittals, unless this time is specifically modified in the technical sections of the Project Manual. (See this Section 01 33 00.1.04, "Minimum Submittal Review Times" and Section 01 33 10, "Submittal Log".)
  - .3 Contractor must submit complete and contract-conforming Product Data Submittals to Owner with sufficient time to allow for Contractor procurement of the product, so as not to affect Contractor's construction progress. All Product Data Submittals must be provided to Owner by the date specified by Owner from the start date stated in the Notice to Proceed. All product data submittals are Action Submittals.
  - .4 Contractor must submit complete and contract-conforming Project Management Submittals to Owner timely enough so as not to affect Contractor's construction progress. All Project Management Submittals, except for Coordination Drawings (Section 01 31 20) must be provided to Owner within ninety (90) Days from the start date stated in the Notice to Proceed. For the timeframe for submission and acceptance of Coordination Drawings refer to Section 01 31 20.
  - .5 Contractor must submit complete and contract-conforming Milestone Completion submittals before Owner will issue a Milestone Completion letter. All Milestone Completion submittals, including O&M manuals, Commissioning test results, etc. are Action Submittals requiring Owner acceptance of the Submittal.
  - .6 All Project Acceptance (close-out) submittals must be submitted within ten (10) Days of final milestone completion of the Project, unless an earlier milestone is specifically established for these Submittals. The County of Santa Clara Board of Supervisors will not make final Acceptance of the Project unless all Project Close-out submittals have been accepted by Owner's Authorized Representative (OAR).

**1.03 DEVIATIONS**

- .A Specifically identify each proposed deviation from the requirements of the Contract Documents.
  - .1 Making notations only on the Submittal to identify the deviation is not sufficient to satisfy this requirement. (See also this Section 01 33 00.)
  - .2 Each proposed deviation must be clearly highlighted, encircled, noted, or otherwise clearly identified on the Submittal and individually explained in writing in the transmittal accompanying the Submittal.
  - .3 Making notations on the Submittal without the attached written explanation will not relieve Contractor of responsibility for deviation from the requirements of the Contract Documents.
  - .4 Unless specific deviations have been noted in writing by Contractor and specifically accepted in writing by Owner or Designer of Record, no deviations from the requirements of the Contract Documents are permitted.
- .B If a Submittal contains no proposed deviation(s) from the requirements of the Contract Documents, Contractor must indicate on the transmittal accompanying the Submittal that the Submittal contains "No Deviations" from the requirements of the Contract Documents.

**1.04 SUBMITTALS**

- .A Contractor's Responsibilities
  - .1 Contractor must, at its own expense, provide for Owner's review all Submittals required by the Contract Documents.
  - .2 If a Submittal deadline submission date is not stated in the Contract Documents for a specific Submittal or group of Submittals, make the Submittal or group of Submittals far enough in advance to avoid any Critical Path delay to the Official Progress Schedule.
  - .3 Before submission, Contractor must:
    - .a Determine and verify all field dimensions and conditions;
    - .b Verify and correlate all dimensions in the Contract Documents with field dimensions and conditions;
    - .c Verify materials, catalog numbers, and similar data;
    - .d Coordinate the Work of Subcontractors with the Work of Contractor;
    - .e Coordinate the Work of the Subcontractors' Work with that of each other;
    - .f Review and coordinate all Subcontractors' Submittals with the requirements of the Contract Documents;
    - .g Review and coordinate all Submittals with Submittals previously accepted by Owner;
    - .h Coordinate as required with all public agencies involved;
    - .i Secure necessary approvals from public agencies and/or authorities having jurisdiction and others and signify by stamp or other means that they have been secured;
    - .j Verify the feasibility of the construction methods;
    - .k Coordinate the Submittal with Construction safety precautions; and,
    - .l Review and coordinate all Contractor's Submittals with the requirements of the Contract Documents.

- 
- .4 Submittals must be provided to Owner as complete Submittal(s) for each Definable Feature of Work and must not be submitted piecemeal. Owner has the right to withhold action on partial Submittals until the missing Submittal items are received, or return the partial Submittal to Contractor "Returned Without Action." At Owner's sole discretion, Owner may agree to review a Contractor's partial Submittal. If Owner agrees to review a Contractor's partial Submittal, and the submittal is marked "No Exceptions Taken," or "Make Corrections Noted," Owner's acceptance of the partial Submittal is subject to its compatibility with future Submittals and additional partial Submittals for portions of the Work not covered in the reviewed partial Submission, and does not constitute acceptance of the deletion of specified or required items not shown in the partial Submission.
  - .5 Coordinate submission of Submittals for related parts of the Work so the Submittals may be reviewed concurrently. Owner has the right to withhold action on a Submittal requiring coordination with other Submittals until related Submittals are received.
  - .6 Deferred submittals. For deferred submittals where Contractor is responsible for design, Contractor shall not rely on As-Built Documents as the only source of information and must validate any existing conditions that will be required, replaced, or modified. Contractor must validate quantities matching the new design and coordinate with all other disciplines. Contractor shall be responsible for identifying all devices and equipment on the construction drawings to ensure the Work will fully and completely align with existing conditions, as well as avoid impact to the Critical Path.
  - .7 Prior to submission to Owner, Contractor must certify all Submittals for compliance with the requirements of the Contract Documents. Owner and Owner's Consultants are entitled to rely upon Contractor's certification and the accuracy and completeness of Contractor's efforts supporting such certification.
  - .8 Contractor must resubmit Submittals as required until Owner's acceptance is obtained.
  - .9 Contractor must make any required corrections and resubmit corrected Submittals until achieving acceptance.
  - .10 Unless otherwise specifically stated in the Contract Documents, Contractor must resubmit Submittals requiring resubmission within ten (10) Days or as specified by Owner to return Submittal by Owner.
  - .11 On resubmittals, clearly indicate all revisions, changes, and deviations from the original Submittal. This includes directing specific attention, in writing, to revisions other than those requested by Owner on previous Submittals.
  - .12 Contractor must include answers to any questions or clarifications required by Subcontractors and/or Suppliers.
- .B Submittal Copies**
- .1 Generally, the number of required copies of Submittals is established or summarized in Section 01 33 10, "Submittal Log."
  - .2 If the required number of Submittal copies are not specifically established or summarized in Section 01 33 10, "Submittal Log," Contractor must provide the number of copies indicated below:
    - .a One (1) reproducible copy and three (3) prints of each:
      - .i Shop Drawing;
      - .ii Coordination Drawing;
      - .iii Erection plan;
      - .iv Equipment installation plan; and,
-

- .v As-Built's (record drawings).
  - .b Four (4) copies of each:
    - .i Product Data sheet;
    - .ii Manufacturer, Vendor, or Subcontractor Certification;
    - .iii Catalog Cut;
    - .iv Operation and Maintenance Data;
    - .v Qualifications;
    - .vi Laboratory Test Reports;
    - .vii Owner demonstration and training materials including videotapes;
    - .viii Quality Control Plan;
    - .ix Solid Waste Management Plan; and,
    - .x Storm Water Pollution Prevention Plan (SWPPP).
  - .c Four (4) copies of each:
    - .i Fire Protection Plan;
    - .ii Incident Reports; and,
    - .iii Accident Reports.
  - .d Two (2) copies of each:
    - .i Progress Schedules (plus one (1) electronic copy);
    - .ii Project Manual (as-built);
    - .iii Hazardous Waste Manifests;
    - .iv Permits;
    - .v Cost Breakdown (plus one (1) electronic copy);
    - .vi Survey Records;
    - .vii Dispute documentation (plus one (1) electronic copy);
    - .viii Claim (original signature required on each claim certification);
    - .ix Payment Application; and,
    - .x Material on Hand Payment Request.
  - .e Two (2) copies of each:
    - .i Sample; and,
    - .ii Meeting Minutes (plus one (1) copy to each meeting participant and one (1) electronic copy in CD format).
  - .f Four (4) copies of all other Submittals.
- .C Minimum Submittal Review Times**
- .1 Time for review shall commence on Owner's receipt of a Complete Submittal.

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- .2 Time for review shall end on Owner's return of Submittal.
  - .3 Allow at least ten (10) Days or as specified by Owner for Owner's review and return following Owner receipt of a Complete Submittal. More specific times may be provided for in Section 01 33 00 of the Project Manual, or in the individual specification Sections of the Contract Documents.
  - .4 Allow additional time if processing must be delayed to permit coordination with subsequent Submittals. Owner will advise Contractor when a Submittal being processed must be delayed for coordination.
  - .5 Allow at least ten (10) Days for Owner's review and response to resubmittals, except when more specific times are provided for in the individual specification Sections of the Contract Documents.
- .D Action and Distribution**
- .1 When "No Exceptions Taken" is indicated, Contractor may proceed with Fabrication, Manufacture, or construction, provided such Work complies with the requirements of the Contract Documents.
  - .2 When "Make Corrections Noted" is indicated, Contractor may proceed with Fabrication, Manufacture, or construction, provided such Work complies with the requirements of the Contract Documents and the corrections noted. The above two categories are considered as accepted Submittals.
  - .3 When other notations are indicated, Contractor is advised that no Work shall be Fabricated, Manufactured, or constructed, and Contractor must make a revised submission.
  - .4 Contractor must promptly distribute copies of the accepted Submittals to its Subcontractors, Suppliers, vendors, Fabricators, Manufacturers, Governing Authorities, and others as required or needed.
  - .5 Submittals received from sources other than through Contractor's office will be "Returned Without Action" or may be discarded.
  - .6 Submittals that are not required by the Contract Documents will not be reviewed and will be returned to the Contractor "Returned Without Action" or may be discarded.
  - .7 Informational Submittals, on which Owner is not required to take action, will not be returned to the Contractor.
- .E Use for Construction**
- .1 Use only final Submittals with mark(s) indicating acceptance by Owner or Designer of Record.
  - .2 No portion of Work requiring Submittals shall be commenced until Owner or Designer of Record, on the Owner's behalf, has accepted the Submittal.
  - .3 Contractor must Fabricate, construct and furnish all Work in accordance with the accepted Submittals.
  - .4 Contractor must immediately upon receipt from Owner, distribute Owner accepted Submittals to all parties concerned.
  - .5 Contractor must keep at least one (1) copy of each accepted Submittal at the job site as part of the "Record Set."

## **1.05 SHOP DRAWINGS**

- .A Shop Drawings are Submittals.**

- .B Contractor must furnish Shop Drawings for temporary work and methods of construction such as formwork, false work, and for other temporary work and methods of construction Contractor proposes to use.
- .C Contractor must furnish scaled drawings showing how the Work of all trades (HVAC, plumbing, fire protection, electrical, etc.) will coordinate to form a complete Installation, and where Work affects existing buildings or parts thereof, and/or existing utilities.
- .D Present Shop Drawings in a clear and thorough manner. Identify details by reference to sheet and detail, schedule, and room numbers shown on Drawings.

#### 1.06 COORDINATION DRAWINGS [SUBJECT TO REVISIONS RE: BIM]

- .A The Contract Documents indicate general arrangement and location of the various systems and elements of Work. Final locations, elevations, clearances, etc., are governed by actual equipment and material Provided by Contractor and by actual building conditions.
- .B Before Work is Installed, Contractor must carefully examine the Contract Documents, Submittals, and Shop Drawings relating to the entire Work with each other and the actual building conditions and verify that the Work will be accommodated in spaces provided.
- .C Contractor must prepare Coordination Drawings when:
  - .1 Limited space is available for installation of different components;
  - .2 Coordination is required for installation of products and materials Fabricated by separate entities;
  - .3 The relationship of components is shown on separate Shop Drawings.
  - .4 Coordination Drawings are specifically required by other sections of the Project Manual.

#### 1.07 SAMPLES

- .A Contractor must submit without charge such Samples as may be required by the Contract Documents.
- .B Unless a greater quantity is required elsewhere in the Contract Documents, three (3) of each required Sample must be Submitted.
- .C Tags or labels shall be securely affixed to samples and contain as a minimum, the following information: Project Name, Contractor's Name, Contract Title and Number, Date, Transmittal Number, Product Manufacturer's or Fabricator's Name, trade name, lot style, color, model, etc., locations of use, and Contract Document reference.
- .D Owner will retain one of each Sample.
- .E Contractor must not use any materials or equipment for which Samples are required to be submitted until Owner has performed such Submittal review, save only at Contractor's risk and expense.
- .F Owner's review of any Sample is only for the characteristics thereof or for the uses named in such review and no other. Owner's acceptance of any Sample is not a modification or change of any requirements of the Contract Documents. Upon Owner's acceptance of any Sample or material, no additional Sample of that material will be considered and no change in brand or make is permitted.
- .G Where variation in color, pattern, texture, or other characteristic is inherent in the material or product to be Provided, Contractor must Submit at least three (3) multiple units that show approximate limits of the variations. Installed items or materials exceeding the variation of the accepted samples are considered defective Work.

#### 1.08 SUBMITTAL FORMAT



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- .A The submittal transmittal cover sheet, set forth in this Section, must be filled out and accompany each Submittal.
    - .1 Itemize each proposed deviation from the requirements of the Contract Documents. If a Submittal contains no proposed deviation(s), indicate that the Submittal contains "No Deviations." Owner and Designer of Record may return Submittals "Returned Without Action" that do not list proposed deviations or state that Submittal contains "No Deviations" from the Contract Documents.
    - .2 Pursuant to Section 01 45 00 the Quality Control Manager must certify all submittals.
  - .B Contractor must number all Submittals serially and continue in sequence. Resubmittals must have suffix letter A, B, C, etc. following the original Submittal number.
  - .C Each Action submittal must have a separate table of contents. Each product in the submittal must be identified in the table of contents. The Table of Contents (TOC) must also identify the manufacturer, make, and model number of each product.
  - .D Within the body of the submittal, each product section must be tabbed to match the table of contents and must be separated from adjacent product sections with a blank sheet of heavy duty bond paper.
  - .E Each submittal must be bound either in a 3-ring binder or in plastic spiral.

#### 1.09 ACTION SUBMITTALS

- .A Prepare and submit Action Submittals required by individual sections of the Project Manual.
- .B Refer to Section 01 33 10, "Submittal Log," for the number of copies to be submitted.
- .C Product Data.
  - .1 Collect information into a single Complete Submittal for each Definable Feature of Work and type of product or equipment.
  - .2 If information must be specially prepared for Submittal because standard printed data are not suitable for use, submit as Shop Drawings, not as Product Data.
  - .3 Mark each copy of each Submittal to show which Products and options are applicable.
  - .4 Include the following information, as applicable:
    - .a Manufacturer's product specifications;
    - .b Manufacturer's installation instructions;
    - .c Standard color charts;
    - .d Manufacturer's catalog cuts;
    - .e Diagrams showing factory-installed wiring, controls, and piping diagrams;
    - .f Printed performance curves, performance characteristics, and capacities;
    - .g Operational range diagrams;
    - .h Mill reports;
    - .i Standard product operating and maintenance manuals;
    - .j Compliance with recognized trade association standards;
    - .k Compliance with recognized testing agency standards;
    - .l Application of testing agency labels and seals;

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- .m Notation of coordination requirements; and,
    - .n Show wiring, piping diagrams, controls.
  - .D Shop Drawings
    - .1 Preparation: Include the following information, as applicable:
      - .a Dimensions;
      - .b Identification of Products;
      - .c Fabrication and installation drawings;
      - .d Roughing-in and setting diagrams;
      - .e Wiring diagrams showing field-installed wiring, including power, signal, and control wiring;
      - .f Shop work manufacturing instructions;
      - .g Templates and patterns;
      - .h Schedules;
      - .i Design calculations;
      - .j Compliance with specified standards;
      - .k Notation of coordination requirements;
      - .l Notation of dimensions established by field measurement; and,
      - .m Identify details by reference to Drawing and detail, schedule, or room numbers shown and specified.
    - .2 Wiring Diagrams: Differentiate between manufacturer-installed and field-installed wiring.
    - .3 Sheet Size: Except for templates, patterns, and similar full-size drawings, submit Shop Drawings on sheets at least 8-1/2" x 11" (215 mm x 280 mm) but no larger than 36" x 48" (914 mm x 1219 mm).
    - .4 Contractor must review and coordinate all Subcontractors' Shop Drawings before submission to Owner. If required or needed, Contractor must prepare and submit Coordination Drawings.
    - .5 Submittals must be complete for each item of Work and must not be submitted piecemeal.
    - .6 Present Shop Drawings in a clear and thorough manner. Identify details by reference to sheet and detail, Schedule, and room numbers shown on Drawings.
  - .E Manufacturer's Instructions: Prepare written or published information that documents Manufacturer's recommendations, guidelines, and procedures for installing or operating a product or equipment.
    - .1 Include name of product and name, address, and telephone number of manufacturer.
    - .2 Include the following, as applicable:
      - .a Preparation of substrates;
      - .b Required substrate tolerances;
      - .c Sequence of installation or erection;
      - .d Required installation tolerances;
      - .e Required adjustments; and,
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.f Recommendations for cleaning and protection.

**.F Samples**

- .1 Refer to Section 01 33 10, "Submittal Log" and the Technical Specifications for the number of Samples to be submitted.
- .2 Each Sample must clearly note the manufacturer, trade name, product, lot style, color, model, etc., locations of use, and Contract Document reference.

**.G Coordination Drawings (See also Section 01 31 20, "Coordination Drawings")**

- .1 Contractor must prepare and submit drawings to demonstrate the coordination of methods, materials, equipment, plans, or sequence Contractor proposes to use when:
  - .a Coordination Drawings are specifically required by other sections of the Project Manual;
  - .b Limited space is available for installation of different components;
  - .c Coordination is required for installation of Products and materials Fabricated by separate entities; and/or,
  - .d The relationship of components is shown on separate Shop Drawings or Submittals.
- .2 Coordination Drawings must be submitted in the format required for Shop Drawings.

**1.10 INFORMATIONAL SUBMITTALS**

**.A Prepare and submit Informational Submittals required by other section of the Project Manual.**

**.1 Number of Copies**

- .a Refer to Section 01 33 10, "Submittal Log", for the number of copies to be submitted.
- .b Owner will not return copies.

**.B Material Certificates:** Prepare written statements on manufacturer's letterhead certifying that material complies with the requirements of the Contract Documents. An officer or other individual authorized to sign documents on behalf of that entity must sign certificates and certifications.

**.C Material Test Reports:** Prepare reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting test results of material for compliance with the requirements of the Contract Documents.

**.D Preconstruction Test Reports:** Prepare reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting results of tests performed before installation of product, for compliance with performance requirements.

**.E Field Test Reports:** Prepare reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting results of field tests performed either during installation of product or after product is installed in its final location, for compliance with the requirements of the Contract Documents.

**.F Manufacturer's Field Reports:** Prepare written information documenting factory-authorized service representative's tests and inspections. Include the following, as applicable:

- .1 Name, address, and telephone number of factory-authorized service representative making report;
- .2 Statement on condition of substrates and their acceptability for installation of product;
- .3 Statement that Products at Project Site comply with the requirements of the Contract Documents;

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- .4 Summary of installation procedures being followed, whether they comply with requirements and, if not, what corrective action was taken;
  - .5 Results of operational and other tests and a statement of whether observed performance complies with requirements;
  - .6 Statement whether conditions, Products, and installation will affect Warranty/Guarantee; and,
  - .7 Other required items indicated in individual sections of the Contract Documents.

#### **1.11 TRANSMITTAL DISTRIBUTION**

##### **.A Parallel Distribution of Submittals**

- .1 Contractor is required to make parallel distribution of Submittals to multiple Submittal reviewers.
- .2 Refer to Section 01 33 10, "Submittal Log," for distribution of Submittals.
- .3 Contractor must, at its own expense, make parallel distribution of all Submittals.
- .4 Submittals must be concurrently transmitted to all parallel reviewers.

#### **1.12 OWNER'S ACTION**

##### **.A General**

- .1 See also this Section 01 33 00.1.04.D, "Action and Distribution."
- .2 Owner will not review Submittals that do not bear Contractor's certification stamp and will return them "Returned Without Action."

##### **.B Action Submittals: Owner will review each Submittal, make marks to indicate corrections or modifications required, and return it.**

- .1 Owner will place a cover sheet on each submittal (See Forms, below) and will mark appropriately to indicate action taken, as follows:
  - .a Final Unrestricted Release: When "No Exceptions Taken" is indicated, Contractor may proceed with Fabrication, Manufacture, or construction, providing such Work complies with the requirements of the Contract Documents. Final acceptance will depend on that compliance.
  - .b Final-but-Restricted-Release: When "Make Corrections Noted" is indicated, Contractor may proceed with Fabrication, Manufacture, or construction, providing such Work complies with the requirements of the Contract Documents and the corrections noted. Final acceptance will depend on that compliance.
  - .c When marked "No Exceptions Taken" or "Make Corrections Noted" the Submittal is considered acceptable.
  - .d Returned for Resubmittal: Where the Submittal is marked "Revise and Resubmit," do not proceed with the Work covered by the Submittal, including purchasing, Fabrication, delivery, or other activity for the product Submitted. Revise or prepare a new Submittal according to the Owner's or Designer of Record's notations and corrections.
  - .e Rejected: Where the Submittal is marked "Rejected", do not proceed with the Work covered by the submittal, including purchasing, Fabrication, delivery, or other activity for the product Submitted. Prepare a new Submittal for a product that complies with the requirements of the Contract Documents.

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- .f Incomplete: Where the submittal is marked "Submit Additional Information," do not proceed with the Work covered by the Submittal. Prepare additional information requested, or required by the Contract Documents, that indicates compliance.
  - .g Returned Without Action: Where the submittal is marked "Returned Without Action," it was not reviewed and Contractor must not proceed with the Work covered by the Submittal. Prepare a new Submittal that complies with the requirements of the Contract Documents.
  - .C Resubmittals: Contractor must make all required corrections and submit corrected resubmittals until achieving final acceptance. Contractor must append an alpha character to the initial Submittal number to identify the resubmission. The first iteration of the resubmittal starts by appending an "A," the second iteration would be assigned a "B," and so on for as many follow-up iterations as are necessary to achieve acceptance of the Submittal by Owner.
  - .D Information Submittals: Information Submittals, on which Owner is not required to take action, will not be returned to Contractor.
  - .E Submittals received from sources other than through Contractor's office will be "Returned Without Action" or may be discarded.

**ARTICLE 2 - FORMS** Sample Transmittal Cover form:

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CONTRACTOR SUBMITTAL TRANSMITTAL LETTER FOR ACTION SUBMITTALS

Date \_\_\_\_\_

To: [\(County of Santa Clara Project Manager\)](#)From: [\(Name of Contractor\)](#)

Project Name and Number: \_\_\_\_\_

Forwarded herewith is the following submittal number  
(per 01 33 00): \_\_\_\_\_

Place an "x" as appropriate in the boxes below:

- ☐ This is a revision/re-submittal of Submittal No.: \_\_\_\_\_
- ☐ This Submittal contains deviations from the Contract requirements. (Contractor must identify all deviations pursuant to Section 1.03 of Section 01 33 00)
- ☐ This Submittal contains no deviations from the Contract requirements.

Definable Feature of Work \_\_\_\_\_

Specification Section(s) included in this submittal \_\_\_\_\_

Name of Subcontractor(s) involved in preparing this submittal: \_\_\_\_\_

The following are enclosed (check all applicable):

<input type="checkbox"/> Shop Drawings	<input type="checkbox"/> Test Reports
<input type="checkbox"/> Product Data	<input type="checkbox"/> Manufacturer's Certificates
<input type="checkbox"/> Samples	<input type="checkbox"/> Factory Test Reports
<input type="checkbox"/> Design Data	<input type="checkbox"/> Other

Submittal Certification:

The (equipment) (material) (article) shown and marked in this submittal is in compliance with the Contract Documents, is a complete submittal, has been coordinated with all other approved submittals, and can be properly installed in the allocated spaces.

Certified by Contractor's QC Manager:

\_\_\_\_\_, Date \_\_\_\_\_  
(Signature)

**County of Santa Clara Action:**

Date: \_\_\_\_\_

From: [Project Manager](#)

To: [Contractor](#)

Re: Submittal No.: \_\_\_\_\_

The following action has been taken on this submittal:

\_\_\_\_ No exceptions taken

\_\_\_\_ Submit Additional Information

\_\_\_\_ Revise and Resubmit

\_\_\_\_ Make corrections as noted; No other exceptions taken

\_\_\_\_ Rejected

\_\_\_\_ Returned without Action

Signed \_\_\_\_\_

Comments: [\(see attached page for continuation of comments\)](#)

**END OF SECTION 01 33 00**

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SECTION 01 33 10  
SUBMITTAL LOG

## PART 1 - GENERAL

## 1.01 SUMMARY

- .A This Section includes:
  - .1 Part 1 – General
    - .a [1.01 – Summary](#)
    - .b [1.02 – Related Sections](#) (NOT USED)
    - .c [1.03 - Definitions](#)
    - .d [1.04 - Contractor Responsibilities](#)
    - .e [1.05 - Scheduling](#)
    - .f [1.06 - Submittal Log Information](#)
    - .g [1.07 - Grouping and Sorting Submittals](#)
    - .h [1.08 -Submittal Distribution and Number of Copies](#)
    - .i [1.09 –Submission Procedures](#)
    - .j [1.10 - Submittal Log Maintenance](#)
  - .2 Part 2 – Products (Not Used)
  - .3 Part 3 – Execution (Not Used)
  - .4 Part 4 – Forms
    - .a [Table 01 33 10-1, “Partial Submittal Log Information”](#)

## 1.02 RELATED SECTIONS (NOT USED)

## 1.03 DEFINITIONS

- .A **Action Submittals** - Submittals requiring Owner’s written response and/or Acceptance.
- .B **Informational Submittals** - Submittals not requiring Owner’s written response (survey notes, QC Manager’s Daily Report, Laboratory test reports, etc.).
- .C **Preconstruction Submittals** – Submittals requiring Owner’s acceptance before Contractor may proceed with the performance of on-site Work. These submittals include, but are not limited to, the CQC Plan, Fire Protection Plan, Qualifications of Key Personnel, Qualifications of Scheduler (if applicable to this contract), SWPPP (if applicable to this contract), etc. Except for the CQC Plan, which must be certified by the CQC Manager pursuant to Section 01 45 00, all Pre-construction submittals may be signed by Contractor’s Authorized Representative (Section 01 31 00 1.04; Document 00 72 00 3.05), Contractor’s Project Manager, or an Officer of the Contractor. Preconstruction Submittals are Action Submittals.
- .D **Product Data Submittals** – Submittals associated with, and necessary for, the accomplishment of a specific Definable Feature of Work (DFOW) and include information such as shop drawings; samples; product certifications; sub-contractor qualifications; Manufacturer’s instructions and factory test reports; contractor designs, etc. These submittals require Owner’s acceptance before Contractor may



proceed with the DFOV associated with these submittals. Product Data submittals demonstrate to Owner how Contractor proposes to conform to the requirements of the Contract Documents. The CQC Manager must certify all Product Data Submittals, pursuant to Section 01 45 00. Product Data Submittals are Action Submittals.

- .E **Project Management Submittals** – Submittals essential to the effective management of the Project. These submittals include, but are not limited to: the construction progress schedule; submittal log; Cost Breakdown/Cost Loaded Schedule; permit applications such as permits from the Fire Marshal; Coordination Drawings; Procurement Status Log (if applicable to this contract); and Commissioning Submittals (Section 01 91 00 – if applicable to this contract). Except for Coordination Drawings, invoices and Commissioning submittals, which must be certified by the CQC Manager pursuant to Section 01 45 00, all Project Management submittals may be signed by Contractor's Authorized Representative (Section 01 31 001.04; Document 00 72 00 3.05), Contractor's Project Manager, or an Officer of the Contractor. Project Management Submittals are Action Submittals.
- .F **Management Information Submittals** – Submittals that provide Owner information about the status of the Project. These submittals include Contractor Daily Reports, CQC reports, Daily Force Account reports, Accident reports, and others. Management Information Submittals are Informational Submittals.
- .A **Milestone Submittals** – Submittals for Intermediate Milestones will be defined by Milestone. These submittals are also Action Submittals.. The CQC Manager must certify all Milestone submittals pursuant to Section 01 45 00
- .B **Substantial Completion Milestone Submittals** – Submittals required to achieve the Project's Substantial Completion Milestone are Action Submittals. The CQC Manager must certify all Substantial Completion Milestone Submittals pursuant to Section 01 45 00. Substantial Completion Milestone Submittals include:
  - .1 Milestone Certifications;
  - .2 Manufacturer's field test reports;
  - .3 Operation and Maintenance Manuals;
  - .4 As-Built documents;
  - .5 All other submittals referenced in the Contract Documents as due on or before Substantial Completion. Reference Section 01 77 00.
- .C **Final Acceptance Submittals**
  - .1 Only those submittals which the Contract Documents designate expressly as required for "Final Acceptance" of a Project may be submitted after Contractor achieves the Substantial Completion Milestone.
  - .2 Reference Section 01 77 00.
  - .3

#### 1.04 CONTRACTOR RESPONSIBILITIES

- .A Contractor is responsible for developing and maintaining a Submittal Log for all Contractor Submittals. This effort includes:
  - .1 Developing a Submittal Log to identify and track all **Action Submittals** required by the Contract Documents.
  - .2 Providing copies of the Submittal Log to Owner in form acceptable to Owner's Project Manager.
  - .3 Maintaining an up-to-date Submittal Log and Submitting four (4) copies to Owner's Project Manager each month.
  - .4 Reviewing the Submittal Log at weekly Progress Meetings.

- .B Additionally, at each scheduled Progress meeting, Contractor shall provide look-ahead listing of all submittals planned to be provided to Owner during the forthcoming three (3) week period.

#### 1.05 SCHEDULING

- .A Prepare and Submit four (4) copies of the Submittal Log to Owner no later than ten (10) Days or as mutually agreed upon date after the Official Start Date stated in the Notice to Proceed.
- .B Allow at least ten (10) Days or as mutually agreed upon date for Owner's review and return of Submittal Log.
- .C At each scheduled Progress meeting provide a look-ahead listing of all submittals planned to be provided to Owner during the forthcoming three (3) week period.

#### 1.06 SUBMITTAL LOG INFORMATION

- .A The Submittal Log, at a minimum, must contain the following information for each required **Action Submittal**:
  - .1 All submittals shall be grouped by Definable Feature of Work.
  - .2 A unique Submittal tracking number. Any re-submittals must be so identified.
  - .3 Description of the Submittal.
  - .4 Date Owner-acceptance required so as not to impact the project's critical path schedule.
  - .5 Actual Date Transmitted to Owner.
  - .6 Date due from Owner per Review Time allowed by Contract Documents (no less than ten (10) Days or as mutually agreed upon date).
  - .7 Project Manual section(s) requiring submission of Submittal.
  - .8 Actual date when Contractor received Submittal(s) back from Owner.
  - .9 Owner's action on Submittal (No Exceptions Taken, Make Corrections Noted, Revise and Resubmit, Rejected, or Returned Without Action).
  - .10 Comments/Remarks.
- .B Table 01 33 10-1 contains a partial listing of the Submittal requirements. After verifying the accuracy and completeness of the information contained in Table 01 33 10-1, Contractor may incorporate the information into Contractor's Submittal Log.

#### 1.07 SUBMITTAL DESCRIPTIONS/DESIGNATION

- .A Submittals are designated as follows:
  - .1 Submittal Designation (SD)
    - .a **Pre-Construction Submittals**
      - .1 SD-00 Preconstruction Submittals
        - .a Preconstruction Submittals include but are not limited to
        - .b All Submittals requiring Owner's acceptance before Contractor may proceed with on-site work. (Section 01 33 00)
        - .c Except as otherwise specifically stated in the Contract Documents or specifically Approved by Owner's Project Manager, all required Preconstruction Submittals must be submitted within forty-five (45) Days after the start date for the Work as stated in the Notice to Proceed. (Section 01 33 00.1.06.)

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**.b SD -01 Project Management Submittals**

- .1 These submittals are due to Owner within ninety (90) days of the Notice to Proceed.

**.c SD-02 Shop Drawings (Product Data Submittals)**

- .1 Shop Drawings fall under the definition of Product Data Submittals and include but are not limited to
  - .a Drawings, diagrams and schedules specifically prepared to illustrate some portion of the Work.
  - .b Diagrams and instructions from a manufacturer or fabricator for use in producing the product and as aids to Contractor for integrating the product or system into the project.
  - .c Drawings prepared by or for Contractor to show how multiple systems and interdisciplinary Work will be coordinated.
  - .d Coordination Drawings.

**.d SD-03 Product Data (Product Data Submittals)**

- .1 Product Data includes but is not limited to
  - .a Catalog cuts, illustrations, diagrams, performance charts, product certifications, manufacturer's instructions and factory test reports.
  - .b Instructions and brochures illustrating size, physical appearance and other characteristics of materials or equipment for a Work item.

**.e SD-04 Samples (Product Data Submittals)**

- .1 Samples fall under the definition of Product Data submittals and include but are not limited to
  - .a Physical examples of materials, equipment or workmanship that illustrate functional and aesthetic characteristics of a material or product and establish standards by which the Work can be judged.
  - .b Color samples from the manufacturer's standard line (or custom colors if specified) to be used in selecting or approving colors for the Work.
  - .c Field samples and mock-ups constructed on the Project Site establishing standards by which the Work can be judged. Includes assemblies or portions of assemblies that are to be incorporated into the Work and those that will be removed at conclusion of the Work.

**.f SD-05 Contractor Design Data (Product Data Submittals)**

- .1 Contractor Design Data falls under the definition of Product Data submittals and includes but is not limited to
  - .a Calculations; and
  - .b Mix designs.
  - .c Analyses or other data pertaining to a part of the Work.

**.g SD-06 Certificates, Certifications, and Qualifications**

- .1 Certificates may include (from the Definitions paragraph above) Product Data submittals, Project Management submittals, and Substantial Completion submittals. These include but are not limited to

- 
- .a Material attesting that product, system or material meets the requirements of the Contract Documents.
    - .b Documents required of Contractor, Supplier, or Subcontractor, related to the acceptability of methods, procedures, or personnel qualifications.
    - .c Substantial Completion Certifications.
    - .d Waste Disposal Certificates.
  - .2 Qualifications include but are not limited to
    - .a QC Manager qualifications;
    - .b Assistant QC Manager Qualifications; and
    - .c CPM Scheduler Qualifications.
  - .h **SD-07 Manufacturer's Instructions (Product Data Submittals)**
    - .1 Manufacturer's Instructions fall under the definition of Product Data submittals and include but are not limited to
      - .a Preprinted material describing installation of a product, system or material, including special notices.
      - .b Material Safety Data Sheets.
  - .i **SD-08 Manufacturer's Field Reports**
    - .1 Manufacturer's Field Reports include factory test reports (Product Data submittals) and field test reports (Substantial Completion submittal) include, but are not limited to
      - .a Information documenting factory-authorized service representative's tests and inspections.
  - .j **SD-9 Operation and Maintenance Data (Substantial Completion Submittals)**
    - .1 Operation and Maintenance Data falls under the definition of Substantial Completion submittals and include but are not limited to
      - .a Data that is provided by the manufacturer, or the system provider, to explain or demonstrate the operation and maintenance of equipment and/or systems.
      - .b All Contractor provided training materials.
  - .k **SD-10 Spare Parts and Keys (Project Acceptance Submittals)**
    - .1 Spare Parts and Keys falls under the definition of Project Acceptance submittals and include but are not limited to
      - .a Keys; and
      - .b All items designated a spare parts.
  - .l **SD-11 Project Acceptance/Closeout Submittals**
    - .1 Closeout Submittals falls under the definition of Project Acceptance submittals and include but are not limited to
      - .a Documentation to record compliance with technical or administrative requirements of the Contract Documents required before Owner's Authorized Representative will recommend Acceptance of the Work to the County Board of Supervisors.
      - .b Record Documents.

.c Executed Warranties and Guarantees.

.m **SD-12 Substantial Completion Submittals**

.1 Substantial Completion Submittals include but are not limited to

.a Contractor's Substantial Completion Certification; and

.b Contractor's Project Completion Certification.

.n **SD-13 Statutory/Regulatory Submittals**

.1 Statutory/Regulatory Submittals fall under the definition of Project Management submittals. They include but are not limited to

.a Excavation Plans;

.b Air Quality District Permits and Approvals;

.c Encroachment Permits; and

.d Confined space entry permits.

.o **SD-14 Project Management Submittals**

.1 Include but are not limited to

.a Basic Contract Schedule;

.b Monthly Earnings Forecast;

.c Cost Breakdown;

.d Monthly Billings;

.e Submittal Log;

.f Procurement Status Log; and

.g Solid Waste Management Plan;

.p **SD-15 Permit Submittals (e.g. Fire Marshal)**

.q **Other**

.1 Any Submittal not reasonably included in the SD designations identified above.

**1.08 SUBMITTAL NUMBER OF COPIES**

- .A Contractor must provide the designated number of copies unless a greater number is specifically required elsewhere in the Contract Documents. In addition to hard copies Owner may require electronic submissions.

**1.09 SUBMISSION PROCEDURES**

- .A Submit in accordance with Section 01 33 00, "Submittal Procedures", Section 01 45 00, "Contractor Quality Control" and Section 01 32 00, "Construction Progress Documentation."
- .B Contractor must verify the accuracy and completeness of the Submittal Log before Submitting to Owner.
- .C Before providing the initial Submittal Log to Owner, Contractor must certify the Submittal Log for compliance with the requirements of the Contract Documents including coordination of the Submittal Log with Contractor's Preliminary Contract Schedule.
- .D Submit four (4) copies of the initial Submittal Log to Owner's Project Manager no later than twenty-one (21) Days after the Work Start Date stated in the Notice to Proceed.

- .E Submit four (4) copies of the updated Submittal Log to Owner's Project Manager each month prior to submission of Contractor's monthly pay request. Before providing each monthly update of the Submittal Log to Owner, Contractor must certify the Submittal Log for compliance with the requirements of the Contract Documents including coordination of the Submittal Log with the Official Progress Schedule.

#### 1.10 SUBMITTAL LOG MAINTENANCE

- .A Contractor must update the Submittal Log electronic file as Submittal actions occur.
- .B Contractor must maintain the Submittal Log at Project Site until Owner's Authorized Representative recommends Acceptance of the Work to the County Board of Supervisors.

#### PART 2 - PRODUCTS (Not used)

#### PART 3 - EXECUTION (Not Used)

#### PART 4 - FORMS

Table 01 33 10-1.

**Note to Contractor:** this table, while a comprehensive listing of submittals required by the Project Manual Divisions 0 & 1, is not all-inclusive. Contractor must verify the individual Project Manual Sections as to the exact submittals required. Those submittals that are shaded may not apply to this specific contract. Contractor to verify actual requirements.

	Description	Paragraph	Deadline	Copies	SD Number	(I) Info or (A) Action
Pre-Construction Submittals	QC Manager - Qualifications	01 45 00	7 Days after Notice of Award, and before starting any Work	2	SD-00 SD-06	A
	Land Surveyor Qualifications	01 71 23.1.10.A	Before starting any survey Work	2	SD-01 SD-06	A
	Key Personnel Qualifications	01 31 00.1.04	7 Days after Start Date in NTP, and before starting any Work	2	SD-00	A

	Description	Paragraph	Deadline	Copies	SD Number	(I) Info or (A) Action
	QC Manager, Alternate - Qualifications	01 45 00	7 Days after Start Date in NTP, and before starting any Work	2	SD-00 SD-06	A
	QC Manager, Assistant - Qualifications	01 45 00	7 Days after Start Date in NTP, and before starting any Work	2	SD-00 SD-06	A
	QC Plan - Draft	01 45 00	14 Days after Start Date in NTP, and before starting any Work	2	SD-00	A
	OFCI Manager Identification	01 64 00.1.04	Before starting Work	2	SD-00 SD-01	I
	Fire Marshal Permits Submittal	01 33 20	Obtain Fire Marshal Permits before starting any F/P work	7/4	SD-15	A
	Responsible Person - Accidents Prevention	00 72 00.8.01.D 01 31 001.04	Obtain Owner's acceptance before starting Work	2	SD-01	A
	Hazardous Materials List	00 72 00.4.08.C	Obtain Owner's acceptance before starting Work	6	SD-00 SD-01 SD-13 SD-8	A

	Description	Paragraph	Deadline	Copies	SD Number	(I) Info or (A) Action
Pre-Construction Submittals	QC Plan - Final	01 45 00	Obtain Owner's acceptance before starting Work	3	SD-00 SD-01	A
	Confined Space Entry Program	01 50 00.1.07.N	Obtain Owner's acceptance before starting Work	3	SD-00 SD-01 SD-13	A
	SWPPP	01 57 00.1.04.E	Obtain Owner's acceptance before starting Work	3	SD-00 SD-01 SD-13	A
	Fire Protection Plan	01 51 16.1.04.A	Obtain Owner's & Fire Marshal's acceptance before starting Work	6	SD-00 SD-01 SD-13 SD-15	A
	Contractor's Authorized Representative	01 31 001.04 00 72 00 3.05.A & .B	Before Mobilization	2	SD-00 SD-01	A
	Temporary Utility Poles or Electric Extensions Plan	01 50 00.1.09.A.5	Before Mobilization	3	SD-01 SD-13	A
	Contact Telephone Number List	01 50 00.1.05.B.4	Before Mobilization	6	SD-00 SD-01	I



	Description	Paragraph	Deadline	Copies	SD Number	(I) Info or (A) Action
	Contractor Field Office Trailer Details and Proposed Location.	01 50 00.1.09.A	Before Mobilization	2	SD-00 SD-01	A
	Storage Areas Locations	01 50 00.1.09 .A.3	Before Mobilization	2	SD-00 SD-01	A
	Site Map & Egress Points	01 50 00.1.09.A	Before Mobilization	6	SD-00 SD-01	A
	Location of Site Fencing	01535 1.04	Prior to start of Work	4	SD-00	A
	Fire Department Access Roadways	01 50 00 1.09 .B .2	Prior to start of Work	4	SD-00	A
	Site Map showing: Fabrication Area; Equipment Maintenance Area; and Parking Area	01 50 00 1.09 .A	Prior to start of work	6	SD-00	A
	Description of Temporary Barriers	01 50 00 1.09 .A	Prior to start of Work	6	SD-00	A
Pre-Construction Submittals	Details of Owner's trailer	01 52 002.01	Prior to mobilization	2	SD-00	A

	Description	Paragraph	Deadline	Copies	SD Number	(I) Info or (A) Action
Project Management Submittals	Scheduler - Qualifications	01 32 00	7 Days after Start Date in NTP	2	SD- 01	A
	Schedule Orientation Meeting	01 32 00 3.02	14 Days after Start Date in NTP	1 for each attendee		
	Preliminary Schedule (first 90 days of project work). Used for projects in excess of 180 days duration	01 32 00	21 days after receipt of NTP	2	SD-01	A
	Baseline Schedule	01 32 00	60 days after receipt of NTP	6	SD-01 SD-14	A
	Weather Calendar	01 32 00	Concurrent with Baseline Schedule	6	SD-01 SD-14	A
	Schedule of Values	01 29 00.1.04.	21 days after receipt of NTP	2	SD-00 SD-14	A
	Cost Breakdown for Cost-Loaded CPM Schedules	01 32 00 3.10.A	With Preliminary and Baseline Schedule	6 + CD	SD-00 SD-14	A
	Procurement Status Log	01 32 00 3.13.C.1 & 2	21 Days after Start Date in NTP	6 + CD	SD-00 SD-14	A
	OFCI Delivery Schedule	00 72 00 3.10 .C .3 01 64 00.1.06.A	28 Days after Start Date in NTP	6	SD-01 SD-14	A

	Description	Paragraph	Deadline	Copies	SD Number	(I) Info or (A) Action
Project Management Submittals	Submittal Log -	01 32 00 01 33 10.1.05 & .06	28 Days after Start Date in NTP	5	SD-00	A
	Aboveground Storage Tank Greater Than 60 Gallons.	01 50 00.1.08.S.5	Before ordering any aboveground storage tank	4	SD-01 SD- 13SD-15	A
	Request for Cutting work or Alteration	01 73 29 1.06	Before Commencing any cutting work	6	SD-01	A
	Worker Protection Details for trenching > 5'	00 72 00 3.05	Before any excavation >5'	2	SD-01	A
	Substitution Requests	01 25 00.1.05	35 Days after Start Date in NTP	5	SD-00 SD-01	A
	Solid Waste Management and Recycling Plan.	01 35 63.1.05.A.1 .b	45 Days after Start Date in NTP	2	SD-01 SD-14	A
	Coordination Drawings	01335.1.05	150 Days after Start Date in NTP, or earlier as needed.	5	SD-01 SD-02	A
	Special Reports (Up to 2 Per Month)	01 32 00 3.06.H	As Required	As Req'd		
	Permits	00 72 00.3.08.D.4	Upon receipt of Permits	2	SD-01	A

	Description	Paragraph	Deadline	Copies	SD Number	(I) Info or (A) Action
	Scaffolding Stability—calculations demonstrating, signed by P.E.	01 50 00	Prior to erection of scaffolding	3	SD-01	A
	Lift Plan for “Critical” lifts by cranes or Helicopters	01 50 00	Ten days before execution of lift	3	SD-01	A
	Recovery Schedule	01 32 00 3.09.B	Within 7 days if Activity 14 days late	2 + CD	SD-01 SD-14	A
Project Management Submittals	Suspension due to encountering Archaeologically sensitive materials	00 72 00 8.05	Daily notification	2	SD-01	A
	Corrective Action Plan	01 45 0001 45 00.1.13.E.3	By 10 a.m., 3 Work days after receipt of a testing Non-Compliance Notice	2	SD-01 SD-14	A
	Qualifications of Commissioning Coordinator	01 91 00	Before submission of any Commissioning Submittals	6	SD-01	A
	Official Progress Schedule - Revised	01 32 00	When Contractor desires to alter sequence of construction	2	SD-01 SD-14	A

	Description	Paragraph	Deadline	Copies	SD Number	(I) Info or (A) Action
	Proposed Change Cost and Time Estimates	01 26 00	7 Days after receipt of proposed PCO from Owner	3	SD-14	A
	Payment Request	01 29 00.1.07.H	1 day after each payment period end date	2	SD-14	A
	Payment Request - Materials On Hand, including bill of sale and warehouse receipt	01 29 00.1.05	10 Days before each payment period end date	2	SD-14	A
	Cost Breakdown Update	01 29 00.1.06.F	1 day after each payment period end date	2	SD-14	A
	Time Extensions	01 32 00 3.11	With Request for time extension	2 + CD	SD-14	A
	Material Compliance Certificate for use of materials before testing	00 72 00.3.11.G.1	With Delivery	2	SD-06	A
Project Management Submittals	Training Facilitator Qualifications	01 79 00.1.04.A	6 weeks before instruction	2	SD-06 SD-11	A
	Instructional Program Outline	01 79 00.3.03.A.1	6 weeks before instruction	3	SD-12	A

	Description	Paragraph	Deadline	Copies	SD Number	(I) Info or (A) Action
	Instructor Qualifications	01 79 00.3.03.C.2 .a	6 weeks before instruction	2	SD-06 SD-12	A
	Videotape Operator Qualifications	01 79 00.3.03.C.3 .a	6 weeks before instruction	2	SD-06 SD-12	A
Product Data Submittals	Product Data	Various Sections	Owner acceptance prior to start of DFO	6	SD-02, 03, 04, 05, 07, 08,	A
	Samples	00 72 00.3.03.A	As Required	2	SD-00	A
	Approval of Foreign Fabrication of Steel	00 72 00.3.11..D	50 days before commence- ment of fabrication	6	SD-06	
Management Information Submittals	Daily force Account Work Reports.	00700.6.08 .K.3 01 32 00	Daily by next Work day	2		I

	Description	Paragraph	Deadline	Copies	SD Number	(I) Info or (A) Action
	Daily Report - Contractor's/Sub contractor'	00 72 00 3.03 01 32 0001 32 00 3.13.A & B	Daily by next Work day	2		I
	QC Report - Daily - QC Specialist's	01 45 0001 45 00.1.08.D.4	Daily by next Work day	2		I
	QC Report - Daily	01 45 0001 45 00.1.14.D.1	Daily, by next Work day	2		I
	Preparatory Phase Check List	01 45 0001 45 00.1.14.E.1	Daily, by next Work day	2		I
	Work Phase Check List	01 45 0001 45 00.1.14.F.1	Daily, by next Work day	2		I
	3-Week look-ahead of planned submittals	01 33 10 1.04 and 1.05	At each Progress Meeting	2		!
	Critical Path Delay Notification	00 72 00.7.07.B	24 hours after the beginning of any Critical Path delay	2		I
	Delay forecast Owner Notification	00 72 00.7.07.E.2	Within 7 Days of recognition of any delay	2		I
	Delay Time Impact Documentation	00 72 00.7.07.C	14 Days after any Critical Path delay	2		I
	Notice of Potential Claim		14 days after each event	2		I

	Description	Paragraph	Deadline	Copies	SD Number	(I) Info or (A) Action
	Notification of Differing Site conditions	01 26 00.1.09	24 hours after discovery	2		I
	Notification prior to covering Work	00 72 00 10.03	2 days prior	2		I
	Rework Items List	01 45 00	Monthly	2		I
	As-Built Record Update	01 32 50	2 Days before each payment period end date	N/A		I
	Testing, Inspection, Acceptance, or Approval Certificates	00 72 00.10.02.D	2 Days after completion of each test or inspection	6		I
Management Information Submittals	Laboratory Reports	01430 1.07 01 45 00	By 10 a.m., 2 Days after completion of each test or inspection	3		I
	Accident Report - Contractor / Subcontractor	00 72 00.3.03.H	24 hours after an accident	2		I
	Incident Report - Contractor / Subcontractor	00 72 00.3.03.G	24 hours after an incident	2		I
	Testing Plan and Log Updated	01 45 00.1.13.E.4	At each QC or Progress Meeting	2		I
	QC Meeting Minutes	01 45 0001 45 00.1.11.A.2	2 Work days after each QC meeting	2		I



	Description	Paragraph	Deadline	Copies	SD Number	(I) Info or (A) Action
	Monthly Progress Report	01 32 0001 32 00 01 29 00.1.08	With each payment request	2		I
	Certified Weekly Payrolls	01 29 00.1.08.A.1	10 Days from each Payment Period end date	2		I
	Earned Value Statement	01 29 00.1.08.A.4	Monthly with each Payment Request	2		I
	Procurement Status Log Update	01 29 00.1.08.A.5	Monthly with each Payment Request	2		I
	Short Interval Schedule (SIS)	01 32 0001 32 00 01 31 1901 31 19.1.04. F	At each Progress Meeting	1 for each attendee		I
	Procurement Status Log Updated	01 32 00 01 31 19.1.04.	At each Progress Meeting	1 for each attendee		I
	RFI Log Update	01 31 1901 31 19.1.04 .F	At each Progress Meeting	1 for each attendee		I
	Official Progress Schedule - Update	01 29 00 001 32 00	Monthly with each Payment Request	2 + CD		I

	Description	Paragraph	Deadline	Copies	SD Number	(I) Info or (A) Action
Management Information Submittals	Submittal Log - Update	01 32 00 01 29 00 01 33 10.1.09.E	Monthly with each Payment Request, or as requested by Owner	2 + electronic version		I
	Decision/Action Tracking Report.	01 31 1901 31 19.1.04.A	24 Hrs after each project meeting	1 for each attendee		I
Substantial Completion Submittals	O&M Manual - Draft	01 77 00.1.07.A.1	60 Days before project Substantial Completion	3	SD-09 SD-12	A
	O&M Manuals, final	01 77 00	Before Substantial Completion	3	SD-09 SD-12	A

	Description	Paragraph	Deadline	Copies	SD Number	(I) Info or (A) Action
	Substantial Completion Certification	00 72 00 11.03, 11.05 01 45 0001 45 00	When all Substantial Completion Work is complete	2	SD-07 SD-12	A
	Hazardous Waste Manifests	01 77 00 1.12 01 74 00.1.09.B.7 00 72 00 4.08 .C	Before Substantial Completion	2	SD-11 SD-12	I
	Certificates of acceptance of "Specialty systems" including State Elevator Inspector; County Fire Marshal; Building Department	01 32 50 1.10 .D	Prior to Substantial Completion of the Work	2	SD-11 SD-12	A
	Commissioning Final Report	01 91 00	01 91 00 paragraph 3.09	2	SD-11 SD-12	A
	Spare Parts, Keys and Key Cabinet	01 77 00.1.06.	Prior to Substantial Completion of the Work			A
	Project Completion Certification	01 77 00 1.09 01 45 0001 45 00	Prior to Substantial Completion by owner	2	SD-11 SD-12	A
	QC Specialist CBC Chapter 17 Final Report	01 45 001 45 00		2		A

	Description	Paragraph	Deadline	Copies	SD Number	(I) Info or (A) Action
Project Acceptance Submittals	Samples	01 32 50 1.10 .C	Before Owner recommends Board Acceptance of Project	Per tech- nical specs		A
	As-built Documents	00 72 00 11.06 01 32 50.1.09 & .10	Before Owner recommends Board Acceptance of Project	2	SD-12	A
	SWPPP Notice Of Termination (NOT)	01 57 00.1.04.G	Before Owner recommends Board Acceptance of Project	2	SD-11 SD-12	I
	QC Record Binders	01 77 00 1.12 .A .6 01 45 0001 45 00	Prior to Acceptance by owner	2	SD-12	I
	Solid Waste Summary	01 35 63 1.05 .B 01 77 00.1.13 .A	Before Owner recommends Board Acceptance of Project	2	SD-11 SD-12	I
	Warranty/Guaran- ty Register and Extended Warranty forms.	01 78 36 1.05 01 77 00.1.13 .A	Before Owner recommends Board Acceptance of Project	2	SD-11 SD-12	I

	Description	Paragraph	Deadline	Copies	SD Number	(I) Info or (A) Action
	Warranty form	01 77 00.1.13 .A 00 72 00.11.11	Before Owner recommends Board Acceptance of Project	2	SD-11 SD-12	I
	Contractor's Survey Records.	01 71 23 1.10 .B 01 77 00.1.12.A.7	Before Owner recommends Board Acceptance of Project	1	SD-11 SD-12	I
	Execution of Contractor's Final Release	01 29 00 1.08 .B 01 77 00.1.14.A.3	Before Owner recommends Board Acceptance of Project	2	SD-11 SD-12	I
	Instruction Participants and Time	01 79 00.3.03.D	Before Owner recommends Board Acceptance of Project	2	SD-11 SD-12	I
	Demonstration and Training Videotape (S).	01 79 00.3.03.F	Before Owner recommends Board Acceptance of Project	2	SD-11	I
Project Acceptance Submittals	Project Completion Certification executed by an Officer of the Contractor	00 72 00.11.07.B	After Substantial Completion of the Work and submission of all close- out documents	2	SD-11 SD-12	I

	Description	Paragraph	Deadline	Copies	SD Number	(I) Info or (A) Action
	Record drawings for Fire Protection Systems	01 33 20 1.05 .B	Before Owner recommends Board Acceptance of Project	1	SD-11 SD-12	I
	Payment Application - Final	01 29 00.1.08.B	After all Project Records have been submitted	2	SD-11 SD-12	A

END OF SECTION 01 33 10

---

**SECTION 01 33 20**  
**OFFICE OF THE FIRE MARSHAL PERMITS, SANTA CLARA COUNTY**

**PART 1 - GENERAL**

**1.01 SUMMARY**

.A This section includes:

.1 Part 1 – General

.a 1.01 Summary

.b 1.02 Related Documents and Sections (NOT USED)

.c 1.03 References

.d 1.04 Overview

.e 1.05 Submittals

.f 1.06 Fees

.g 1.07 Inspection and Testing

.2 Part 2 – Products (Not Used)

.3 Part 3 – Execution (Not Used)

.4 Part 4 – Forms (Appendices)

.a Appendix (a): Sample Permit Application Form 01331 F-1

.b Appendix (b): Automatic Fire Sprinkler System Information Sheet 01331 F-2

.c Appendix (c): Fire Alarm and Detection System Information Sheet 01331 F-3

.d Appendix (d): Hood and Duct System 01331 F-4

.e Appendix (e): Fire Hydrants 01331 F-5

.f (Not Used)

.g Appendix (g): Fire Service Installations (SD&S No. SP-2)

.h Appendix (h): Construction Site Fire Safety (SD&S No. SI-7)

.i Appendix (i): Fire Lane Marking (SD&S No. A-6)

.j Appendix (j): Bollards for Private Fire Hydrants (SD&S No. B-1)

**1.02 RELATED DOCUMENTS AND SECTIONS (NOT USED)**

**1.03 REFERENCES**

.A California Building Code

.B NFPA

.C California Fire Code

**1.04 OVERVIEW**

.A Installation and Acceptance permits are required from the Office of the Fire Marshal, Santa Clara County Fire Department, for the following work:

- 
- .1 sprinkler systems including NFPA 13, 13R and 13D
  - .2 NFPA 24 Underground Fire Service
  - .3 NFPA Standpipe System
  - .4 fire hydrants (NFPA 24)
  - .5 water tanks (NFPA 22)
  - .6 monitoring equipment
  - .7 fire alarm/detection systems
  - .8 fire protection systems including: hood and duct systems; CO2 systems; and CFC-free systems.
- .B Each of the items of work above requires the submission of separate permits.
- .C The licensed Fire Protection sub-contractor (C-10; C-16; C-34; C-36) is responsible for completing the installation permit application, located at [http://www.sccfd.org/forms/fire\\_protection\\_systems.pdf](http://www.sccfd.org/forms/fire_protection_systems.pdf), submitting the permit application to the Office of the Fire Marshal, Santa Clara County, and receiving the approved permit before proceeding with Work. None of the above described Work may proceed without receipt of an approved Fire Marshal permit.
- .D In addition to any other inspections required pursuant to this Contract in Section 01 45 00 and other Sections of the Contract Documents, the Fire Marshal shall conduct compliance inspections, and final acceptance inspections, of Contractor's Work described elsewhere in this Section. The "compliance inspections" are for Fire Marshal compliance only and do not relieve Contractor from performing all Work to the standards established by the entirety of the Contract Documents.

## 1.05 SUBMITTALS

### .A Product Data Submittals

- .1 The submittal process for Fire Marshal permitted work takes place in two steps:
  - .a Following the requirements of Section 01 33 00 Submittals, Section 01 45 00 Contractor Quality Control, and the individual governing specification sections, Contractor makes submittals to Owner without the actual Permit application. These Submittals must fulfill all the requirements of the individual governing Specification Sections and the processing procedures described in Section 01 33 00 will be followed. The Submittal processing times established in Section 01 33 00 apply to this step.
  - .b After Owner's acceptance of these Submittals the licensed fire protection contractor shall complete the Fire Marshal Permit application form, attached as appendix (a) to this Section, and submit the following directly to the Office of the Fire Marshal:
    - i. Plan submittal information described in the applicable appendices (b), (c), (d), or (e) of this section (the Contractor must check with the Office of the Fire Marshal for the latest version of these appendices; the appendices of this section are provided for information only). For items of work defined in 1.04 A. above for which there is not an associated appendix to this section, the Contractor must contact the Office of the Fire Marshal to obtain specific submittal requirements.
    - ii. A completed permit application form for each item of Work.
    - iii. A copy of Owner's submittal acceptance form for the corresponding submittal, stamped and signed by Owner's Authorized Representative, along with all Submittal review comments provided to the contractor.



- 
- .2 Permit review/processing time for Step (2), Fire Marshal Permit applications, is fifteen (15) working days from the date of the Fire Marshal stamped receipt of the documents. Contractor must submit one original, signed permit application with the original complete submittal package, four (4) copies of the permit application. One of the copies shall be to Owner.
  - .B Project Close-out Submittals
    - .1 Prior to Project Acceptance by the County Board of Supervisors, Contractor must submit Record drawings of the Fire Alarm and Fire Sprinkler Systems, to Owner for Acceptance. Contractor shall take all field As-Built drawings and, using CAD systems, prepare Record Drawings incorporating in a "finished manner" all changes made to the initial designs for the Fire Protection systems. Record drawings shall include Underground Facilities including fire lines, hydrants, water tanks and all fire protection systems within or on the actual buildings.

#### 1.06 FEES

- .A Contractor is responsible for payment of all Fire Marshal fees.

#### 1.07 INSPECTION AND TESTING

- .A The process of achieving final acceptance by the Fire Marshal of Fire Protection Systems Work is one that occurs throughout the course of the project and is not simply achieved through a one-time final inspection.
  - .1 Contractor must obtain, from the Fire Marshal, the Construction Inspection Record form, so that Fire Marshal intermediate and final inspections may be documented and maintained by Contractor.
- .B Installation of Fire Sprinkler systems and Fire Hydrants requires the conduct of specific progress inspections, and issuance of a signed inspection notice, by the Fire Marshal before work may proceed in the next sequential step. Page 3 of appendix (b) describes these inspections. Contractor must provide forty-eight (48) hours written notice to Owner's construction inspector, on a form agreed to by Owner, to schedule the performance of these inspections.
  - .1 Contractor must complete the NFPA forms "Contractor's Material and Test Certificate for Underground Piping," and "Contractor's Material and Test Certificate for Aboveground Piping," have these forms signed by the Fire Marshal, and submit completed copies to the Fire Marshal and to Owner's Project Manager, prior to achieving Milestone completion. These forms are available from the County Fire Marshal.
- .C Contractor is required to commission all systems defined in Section 01 91 00 of these documents. Commissioning of fire protection/fire detection systems is in addition to any final testing that must be conducted to obtain the Fire Marshal acceptance permit. (Note to spec writer: remove this section if Section 01 91 00 is not part of this contract)
- .D For Fire Alarm systems, Contractor must perform one hundred percent (100%) pre-testing of all F/A components and submit the form "Fire Alarm System Record of Completion" to Owner and the Fire Marshall prior to the Fire Marshal conducting the final test and acceptance inspection of the Fire Alarm system.
- .E The Fire Marshal and Contractor must perform all final acceptance testing of the systems described in this Section, and the Fire Marshal must issue an acceptance notification, before contractual Milestone completion of the Work can be established. Contractor must provide forty-eight (48) hours written notice to Owner's construction inspector, on a form agreed to by Owner, to schedule the performance of these tests. Scope of the tests is defined in appendices (b) – (e) of this Section.
- .F Contractor is required to pay for all re-testing beyond that defined in appendices (b) – (e) of this Section.

- 
- .G Contractor's Commissioning Coordinator (CC) must be on site during the commissioning (functional testing) of all Fire systems defined in Section 01 91 00 of the Contract Documents. No functional testing may be performed without the on-site presence of the CC. (Note to spec writer: remove this section if Section 01 91 00 is not part of this contract) (Not Used)

PART 3 - **PRODUCTS** (Not Used)

PART 4 - **EQUIPMENT** (Not Used)

PART 5 - **FORMS** (Appendices)

- .A Appendix (a): Sample Permit Application Form
- .B Appendix (b): Automatic Fire Sprinkler System Information Sheet
- .C Appendix (c): Fire Alarm and detection system information sheet
- .D Appendix (d): Hood and Duct Systems
- .E Appendix (e): Fire Hydrants
- .F (Not Used)
- .G Appendix (g): Fire Service Installations (SD&S No. SP-2)
- .H Appendix (h): Construction Site Fire Safety (SD&S No. SI-7)
- .I Appendix (i): Fire Lane Marking (SD&S No. A-6)
- .J Appendix (j): Bollards for Private Fire Hydrants (SD&S No. B-1)

APPENDIX (g)  
1-2**Office of the Fire Marshal**

Santa Clara County Fire Department

701 Miller Street

San Jose, California 95110

TEL (408) 993-4604

FAX (408) 993-4777

**PERMIT APPLICATION****INSTALLATION / MODIFICATION OF FIRE PROTECTION SYSTEM**

(ORIGINALS ONLY ACCEPTED - CAREFULLY READ &amp; COMPLETE BOTH SIDES OF THIS APPLICATION)

**BUILDING PROJECT IDENTIFICATION:**

Address of Building Project: \_\_\_\_\_

Building Project Name: \_\_\_\_\_

County Project No. \_\_\_\_\_ Project Manager \_\_\_\_\_

**CONTRACTOR/APPLICANT INFORMATION:**

Contractor Company Name: \_\_\_\_\_

Tele # - include area code: \_\_\_\_\_ Fax # \_\_\_\_\_

Mailing Address: \_\_\_\_\_

City/State/ZIP: \_\_\_\_\_

License Classification: \_\_\_\_\_ License Number: \_\_\_\_\_ Exp: \_\_\_\_\_  
(C-10, C-16, C-34, C-36)**VALUATION:**

Contract Price for Work: \$ \_\_\_\_\_

**SCOPE OF WORK (check one):****Sprinkler Systems:**

- ☐ NFPA 13   ☐ NFPA 13-R / 13-D  
☐ NFPA 24 Fire Service Underground  
☐ Standpipe System (NFPA 14)

☐ **Fire Hydrants (NFPA 24)**

- ☐ Water Tanks (NFPA 22)  
☐ Monitoring Equipment  
☐ Fire Alarm/Detection Systems

**Fixed Prot. Systems:**

- ☐ Hood & Duct System  
☐ CO2   ☐ CFC Free (NFPA 2001)  
☐ Other \_\_\_\_\_

**WORKERS' COMPENSATION DECLARATION**

I hereby affirm under penalty of perjury one of the following declarations:

- ☐ I have and will maintain a Certificate of Consent to self-insure for Workers' Compensation, as provided for by Section 3700 of the Labor Code, for the performance of the work for which this permit is issued.
- ☐ I have and will maintain Workers' Compensation Insurance, as required by Section 3700 of the Labor Code, for the performance of the work for which this permit is issued. My workers' compensation insurance carrier and policy number are:

Carrier: \_\_\_\_\_ Policy No. \_\_\_\_\_

## APPENDIX (b)

<b>STANDARD DETAILS &amp; SPECIFICATIONS</b>  <b>SUBJECT:</b> Automatic Fire Sprinkler System Submittals	<b>SD&amp;S No. SP - 1</b> Rev. Date: 01-20-00 Eff. Date: 11-01-98 Approved By: DJM Page 1 of 8
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## SCOPE

Provide designers and installers with guidance on Santa Clara County Office of the Fire Marshal policies and procedures relative to proper submittals on the design and installation of fire protection systems.

## REQUIREMENTS

Plans submitted for review of fire sprinkler system installations or modifications must include the following information, as required in National Fire Protection Association (NFPA) Standards 13 and 24, and the Santa Clara County Office of the Fire Marshal. All work must be performed by a licensed contractor: C-16 for overhead systems; A, C-34 or C-36 for underground work.

*(Attachments for high-piled storage and seismic bracing are part of this document.)*

- I. **Plan Submittal Information:** Must be included on all drawings -
  - A. Name of property owner and tenant—and the County project number.
  - B. Site street address, including floor and suite designation.
  - C. Point of compass.
  - D. Symbol legend, complying with NFPA 170.
  - E. Ceiling construction and height.
  - F. Full-height cross section.
  - G. Location and height of interior partitions and potential obstructions.
  - H. Occupancy or intended use of each room or area.
  - I. Location and size of concealed spaces.
  - J. Areas where no fire sprinklers are installed.
  - K. Water flow information – List source of information.
  - L. Other sources of water supply.
  - M. Make, model, type and orifice size of each sprinkler used.
  - N. Temperature rating and location of high-temperature sprinklers.
  - O. Total area protected by each system on each floor.
  - P. Make, type, model and size of alarm valves.
  - Q. Type and location of alarm devices.
  - R. Pipe type and schedule of wall thickness.
  - S. Nominal pipe size and length, center-to-center.
  - T. Location and size of riser nipples.
  - U. Type of fittings and joints, along with the location of wall welds and bends.
  - V. Type and location of hangers, sleeves, braces and methods of securing sprinklers.  
Include seismic bracing calculations for each brace and point of connection.
  - W. All control valves, check valves, drain pipes and test connections.
  - X. Size, length and location of the supply underground, points of connection to the city main, types of valves, meter size, and valve pits.



OFFICE OF THE FIRE MARSHAL, SANTA CLARA COUNTY

701 Miller Street • San Jose CA 95110 • Phone: 408.993.4604



Appendix (b)

**SD&S No. SP-1**

Page 2 of 8

Automatic Fire Sprinkler System Submittals

**II. Underground Submittals:**

In addition to the information required in Section I above, submittals for underground fire service piping also must include:

- A. Thrust block area calculations.
- B. Elevation details reflecting depth of bury and trench details.
- C. Type of piping, manufacturer, class designation, schedule of wall thickness, pipe size, length and location of the connection to the public main.
- D. Location and type of control valves, meters, backflow prevention devices, etc.
- E. Method of corrosion protection.

**III. Water Flow Information:**

Projects for this office cross numerous jurisdictional boundaries and guidelines. Contact this office at 408-993-4604 for specific details.

**IV. Tenant Improvement Projects:**

In addition to the criteria outlined in Section I above, the plans shall reflect enough of the existing system to effect a proper evaluation of the design, and its impacts to the existing pipe. Prior to placing an existing system out of service, the contractor shall contact this office at 408-993-4604 and provide this office with the following:

- Name and address of the building where the work is being performed.
  - The timeframe that the system will be out of service.
- All fire sprinkler systems shall be placed back in service by 5:00 p.m., unless alternate arrangements have been authorized in writing by this office.

**V. Roof Outlets:**

Buildings four stories or greater in height shall be provided with a roof manifold designed to supply 155 psi at the outlet; and consisting of two, two and one-half inch (2 ½") gated valves. All piping shall be painted safety yellow.

**VI. Hydraulically Designed Systems:**

Provide the following information on the data plate:

- A. Name, address and contractor's state license number of the installing contractor.
- B. Method of protection for non-metallic piping.
- C. Design density and area.

**VII. Minimum Submittal Requirements:**

- A. The County general conditions ("Control of Work") dictate the minimum number required (typically 4). One copy will be retained by this office. This office requires shop drawings at 1/8":1' or 1/4":1' scale, with a maximum size of 30" by 44" utilizing nationally recognized symbols as outlined in NFPA Standard 170. For tenant improvements involving 15 heads or less with no new branch or supply piping, submittal of a site plan highlighting the area of work may be acceptable—Contact this office for details.
- B. For ceiling structural members, the truss manufacturer must certify that the design loads of the water-filled pipe, plus 250 pounds, are accounted for in their designs and that the proposed method of hanging (supporting) of the pipe is acceptable.

**OFFICE OF THE FIRE MARSHAL, SANTA CLARA COUNTY**

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APPENDIX (6)

## SD&amp;S No. SP-1

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Automatic Fire Sprinkler System Submittals

- C. Seismic bracing load calculations for the zone of influence, and each brace type.
- D. Hydraulic calculations.
- E. Manufacturer's device cut sheets (minimum three sets).
- F. A completed, original, wet-signed Permit Application form from this office.  
Note: A separate application is required for the overhead and underground submittals. Individual permits will be issued.
- G. A copy of a current business license for the city in which the work occurs.
- H. Proof of Workers' Compensation Insurance.

**VIII. Inspections:**

The approved permit application entitles the applicant to one (1) combination rough inspection and hydrostatic test, and one (1) re-inspection for the entire project (no phased inspections). Those inspections necessary after the re-inspection are subject to additional fees. Appointments are scheduled a minimum of 48 hours in advance. Contact this office prior to 3:30 p.m. at 408-993-4604 for scheduling. **A copy of the approved plans and the permit must be on the job site at all times.**  
The permit number will be required to schedule any inspections.

The Santa Clara County Office of the Fire Marshal requires the following inspections and tests of system installations, modifications and alterations.

- A. Welded pipe inspection upon its arrival at the job site, prior to installation.
- B. Rough piping inspection prior to ceiling installation.
- C. Inspection of thrust blocks, rods and coatings for underground pipe.
- D. Hydrostatic test at 200 psi for a period of two (2) hours for all overhead and underground piping within the scope of work. Underground piping shall be thoroughly flushed upon completion of the test to remove any debris. Tenant modifications of an area equal to 25% of the total system shall be lead-tested at 50 psi above static pressure.
- E. For hydro testing of underground piping, the pipe shall not be covered—centerline fill is okay; however, joints/connections shall be visible for inspection. This office shall witness the underground flush. When performing an underground flush, the contractor shall use a minimum 2 ½" fire hose with a burlap bag in good condition secured at the end of the hose to collect any debris for inspection. When necessary, the end of the hose shall be adequately secured to prevent possible injury—Particular attention is needed when flushing hydrant system installations utilizing hoses.
- F. **FINAL INSPECTION:** All work must be complete and the above required inspections must be completed prior to scheduling the final inspection.

jsh  
Atts.



OFFICE OF THE FIRE MARSHAL, SANTA CLARA COUNTY

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APPENDIX (b)

SD&amp;S No. SP-1

Automatic Fire Sprinkler System Submittals

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**FIRE PROTECTION SYSTEM DESIGN  
FOR STORAGE AREAS/OCCUPANCIES  
WHERE AVAILABLE STORAGE IS GREATER THAN 12 FEET IN HEIGHT**

The information on the following two pages may be reproduced on the plans.

Design of fire protection systems shall comply with the provisions outlined in the California Fire Code (CFC) Article 81 and the National Fire Protection Association (NFPA) Standards 231 and 231-C when high-piled combustible storage, as defined in the California Fire Code is provided. Where conflicts arise between these Standards, the more restrictive provisions shall apply.

As outlined in CFC Article 81, the submittal package must include the following additional information:

1. Floor plan of the building showing the locations and dimensions of high-piled storage areas.
2. Cross section of building reflecting available height of storage and coordination with rack installations.
3. Number of tiers within each rack, if applicable: \_\_\_\_\_
4. Commodity clearance between the top of storage and the sprinkler deflector for each storage arrangement: \_\_\_\_\_
5. Storage aisle width: ☐ 4 feet ☐ 8 feet
6. Maximum pile volume for each storage array: \_\_\_\_\_
7. Commodity Classification (circle): I II III IV Plastics \_\_\_\_  
A. Per CBC Article 81: ☐ Banded ☐ Encapsulated ☐ Non-encapsulated  
B. Other potential hazards: \_\_\_\_\_
8. Type(s) of shelving: \_\_\_\_\_
9. Dimensions and locations of transverse and longitudinal flue spaces:  
A. Transverse: \_\_\_\_\_  
B. Longitudinal: \_\_\_\_\_



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(APPENDIX (b))

**SD&S No. SP-1**

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Automatic Fire Sprinkler System Submittals

10. Type of fire suppression and fire detection systems: \_\_\_\_\_
- A. Ceiling design density: \_\_\_\_\_
- B. Manufacturer of sprinklers: \_\_\_\_\_ Model: \_\_\_\_\_
- C. Temperature rating of sprinklers: \_\_\_\_\_
- D. NFPA 231-C Design figure used: \_\_\_\_\_
- E. ☐ Single Row Racks ☐ Double Row Racks
- F. In-Rack sprinklers provided? ☐ Yes ☐ No  
☐ 1 row ☐ Multiple rows
11. Location(s) of valves controlling water supply of ceiling and in-rack sprinklers.
12. Type, location and specifications for smoke-removal and curtain board systems.
13. Additional information regarding required design features, commodities, storage arrangement and fire protection features within high-piled storage areas shall be provided at the time of permit.

:jsh

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APPENDIX (b)

SD&S No. SP-1

Automatic Fire Sprinkler System Submittals

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THE FOLLOWING TWO (2) SHEETS MAY BE USED  
AS REPRODUCIBLE MASTERS FOR THE PURPOSE OF  
CALCULATING EACH SEISMIC BRACE.

(SEE ATTACHED EXAMPLE)

THOSE BRACES THAT HAVE THE SAME LOAD AND  
AND POINT OF ATTACHMENT MAY BE LISTED  
ON THE SAME SHEET.

**THESE CALCULATIONS MUST ACCOMPANY  
THE SUBMITTAL PACKAGE.**



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APPENDIX (b)

AUTOMATIC FIRE SPRINKLER SYSTEM  SEISMIC LOADING CALCULATIONS SWAY BRACE ASSEMBLIES		PROJECT: _____ SHEET _____ OF _____ ADDRESS: _____			
SPRINKLER CONTRACTOR: ADDRESS: _____		TELEPHONE: _____ FAX: _____ DESIGNER: _____			
BRACE IDENTIFICATION NO. (TO BE USED ON PLANS): _____	<input type="checkbox"/> LATERAL BRACE <input type="checkbox"/> LONGITUDINAL BRACE				
LENGTH OF SWAY BRACE: _____	ORIENTATION OF CONNECTING SURFACE: _____ (TABLE 4-6.4.3.5.4)				
DIAMETER OF SWAY BRACE: _____	FASTENER (TABLE 4-6.4.3.5.4): TYPE: _____ DIAMETER: _____				
TYPE OF BRACE: _____	LENGTH: _____ MAX. LOAD: _____				
ANGLE OF BRACE: _____	MAXIMUM DISTANCE BETWEEN BRACES: _____ FEET				
LEAST RADIUS OF GYRATION: _____	DETAILS: (INCLUDE DETAILS ON PLANS)				
L/R VALUE _____					
MAX HORIZONTAL LOAD: (TABLE 4-6.4.3.5.3) _____					
SEISMIC BRACE ATTACHMENTS  STRUCTURAL ATTACHMENT FITTING:  MAKE _____ MODEL _____  PIPE ATTACHMENT FITTING:  MAKE _____ MODEL _____					
SPRINKLER SYSTEM LOAD CALCULATION:					
DIA	TYPE	LENGTH	TOTAL	1/2 WEIGHT	TOTAL WEIGHT
TOTAL - 1/2 WEIGHT OF WATER FILLED PIPE					
WEIGHT OF FITTINGS - ADD 15%					
TOTAL WEIGHT OF PIPE AND FITTINGS					

APPENDIX (b)

AUTOMATIC FIRE SPRINKLER SYSTEM SEISMIC LOADING CALCULATIONS SWAY BRACE ASSEMBLIES		SHEET ____ OF ____ ASSIGNED LOAD TABLE METHOD TABLE 4-6.4.3.5.2	
PROJECT: ADDRESS:			
SPRINKLER CONTRACTOR: ADDRESS:		TELEPHONE: FAX: DESIGNER:	
BRACE IDENTIFICATION NO. (TO BE USED ON PLANS): _____			
LENGTH OF SWAY BRACE: _____		ORIENTATION OF CONNECTING SURFACE: _____ (TABLE 4-6.4.3.5.4)	
DIAMETER OF SWAY BRACE: _____		FASTENER (TABLE 4-6.4.3.5.4): TYPE: _____ DIAMETER: _____ LENGTH: _____ MAX. LOAD: _____	
TYPE OF BRACE: _____			
ANGLE OF BRACE: _____		DETAILS: (INCLUDE DETAILS ON PLANS)	
LEAST RADIUS OF GYRATION: _____			
L/R VALUE _____			
MAX HORIZONTAL LOAD: (TABLE 4-6.4.3.5.3) _____			
SEISMIC BRACE ATTACHMENTS STRUCTURAL ATTACHMENT FITTING: MAKE _____ MODEL _____ PIPE ATTACHMENT FITTING: MAKE _____ MODEL _____			
SPRINKLER SYSTEM LOAD CALCULATION:			
WEIGHT AS DETERMINED BY THE ASSIGNED LOAD TABLE			
	LATERAL BRACE	LONGITUDINAL BRACE	
DIAMETER OF MAIN			
SPACING			
WEIGHT			

APPENDIX (b)

AUTOMATIC FIRE SPRINKLER SYSTEM  SEISMIC LOADING CALCULATIONS SWAY BRACE ASSEMBLIES		SHEET <u>1</u> OF <u>2</u> PROJECT: ACME WAREHOUSE ADDRESS: 123 MAIN STREET ANY CITY, ANY STATE			
SPRINKLER CONTRACTOR: SMITH SPRINKLER COMPANY ADDRESS: 321 FIRST STREET ANY CITY, ANY STATE		TELEPHONE: (555) 555-1234 FAX: (555) 555-9876 DESIGNER: BILL			
BRACE IDENTIFICATION NO. (TO BE USED ON PLANS): <u>SB-1</u>		<input checked="" type="checkbox"/> LATERAL BRACE  <input type="checkbox"/> LONGITUDINAL BRACE			
LENGTH OF SWAY BRACE: <u>5'-4"</u> DIAMETER OF SWAY BRACE: <u>1"</u> TYPE OF BRACE: <u>SCH 40</u> ANGLE OF BRACE: <u>45° - 59°</u> LEAST RADIUS OF GYRATION: <u>0.42</u> L/R VALUE: <u>300</u> MAX HORIZONTAL LOAD: (TABLE 4-6.4.3.5.3) <u>1111 LBS</u>		ORIENTATION OF CONNECTING SURFACE: <u>E</u> (TABLE 4-6.4.3.5.4)  FASTENER (TABLE 4-5.4.3.5.4): TYPE: <u>BOLT</u> DIAMETER: <u>1/2"</u> LENGTH: <u>3"</u> MAX. LOAD: <u>630 LBS</u>  MAXIMUM DISTANCE BETWEEN BRACES: <u>20</u> FEET			
SEISMIC BRACE ATTACHMENTS  STRUCTURAL ATTACHMENT FITTING: MAKE <u>ACME</u> MODEL <u>123</u>  SWAY BRACE FITTING: MAKE <u>ACME</u> MODEL <u>321</u>		<div style="text-align: center;"> <p>ACME 123 1" SCH 40 ACME 321 45° 1/2" X 3" BOLT* 6" MIN 3" X 12" BEAM * WITH WASHER</p> </div>			
SPRINKLER SYSTEM LOAD CALCULATION:					
DIA	TYPE	LENGTH	TOTAL	1/2' WEIGHT	TOTAL WEIGHT
1	SCH 40	15' + 25' + 8' + 22'	70'	1.03/FT	72.1 LB
1-1/4	SCH 40	25' + 33' + 18'	76'	1.47/FT	111.7 LB
1-1/2	SCH 40	8' + 8' + 10' + 10'	36'	1.81/FT	65.2 LB
2	SCH 40	20'	20'	2.57/FT	51.4 LB
4	SCH 10	20'	20'	5.89/FT	117.8 LB
TOTAL - 1/2 WEIGHT OF WATER FILLED PIPE					418.2 LB
WEIGHT OF FITTINGS - ADD 15%					62.7 LB
TOTAL WEIGHT OF PIPE AND FITTINGS					480.9 LB

Example



APPENDIX (C)

**Office of the Fire Marshal**

Santa Clara County Fire Department

701 Miller Street  
San Jose, California 95110  
TEL (408) 993-4604 • FAX (408) 993-4695

**FIRE ALARM AND DETECTION SYSTEM  
SUBMITTALS & TESTING**

3/98

Plans submitted to the Office of the Fire Marshal for review shall include the following:

**A. General Information**

1. Appropriate codes and standards, including edition.
2. Type of system (central station, etc.) and identification of zones transmitted, if any.
3. Voice evacuation message/language(s), if involved.
4. Written sequence of operation or matrix table, to include reset procedures.
5. Special system features/operations, such as detector cross zoning or alarm verification.
6. Description of ancillary features and operations; e.g., fire damper operation, fan shut down, door hold-open devices, fire pump monitoring, special extinguishing systems, etc.
7. Addressable systems: Provide a list of device addresses as they will appear on the panel. Ensure programming is in compliance with Santa Clara County GSA Building Operations specifications.
8. Required placarding.

**B. Plan Submittals**

1. Completed and signed permit application form.
2. Scaled floor plans (not smaller than 1/8"=1'), including north reference. Show each floor or level, including roof mechanical equipment rooms, basements and tunnels when applicable. Floor plans shall show required exit ways. Include locations of partitions, pillars, columns, walls, etc., indicating which ones extend through concealed spaces.
3. Identify use of each room or area.
4. Completed title block with site address, County project number and installing contractor's business address and telephone number.
5. Basis for system installation—Building Code occupancy classification.
6. Symbol legend, complying with NFPA 170; to include quantities, manufacturer's name, model, CSFM listing number, etc.
7. Location of all components (to include sprinkler system test valve), control panel and exterior mounted devices, etc.; include HVAC system shutdowns where required (unit(s) serving rooms or areas greater than 2,000 cfm).
8. Mounting heights of manual fire alarm boxes and visual notification appliances.
9. "Fire Alarm System Submittal Cover Sheet (copy attached).

**C. Single Line (Riser) Diagram**

1. Conductor information, including size, stranding, insulation type, etc.
2. Conduit fill calculations or NEC reference.
3. Quantity of indicating devices on the furthest circuit and their current consumption.

APPENDIX (C)

Fire Alarm and Detection System Submittals  
March 17, 1998

Page 2

4. Length of the further circuit and resistance of wire. Show connection to power source(s).
5. Location of end-of-line (EOL) devices.
6. Auxiliary power supplies and circuits served.

D. Point-to-Point Wiring Diagram

1. Show interconnection of devices and controls.
2. Primary power supply details to the control panel.
3. Connections to auxiliary power supplies.

**ATTACHMENT TO DRAWINGS**

Battery and Voltage Drop Calculations

1. Standby power consumption of all current-drawing devices.
2. Alarm power consumption of all current-drawing devices. Include operating signals, lights, relays, etc. Omit power consumption for door holders, etc.
3. Formula format for battery calculations.
4. Formula format for voltage drop calculations.

Device Submittals

- ▶ Manufacturer cut sheets for all devices; individual California State Fire Marshal Listing
- Service sheets with appropriate expiration date.

**TESTING PROCEDURES**

Testing shall be in conformance with 1997 UFC Standard 10-2, NFPA Standard 72, and in accordance with manufacturer recommendations. Contractor shall provide a dBA meter, communications radios and sufficient staff during acceptance testing.

**PERMIT APPLICATION AND INSPECTIONS**

At the time of submittal, the contractor shall provide:

1. A minimum of four (4) complete sets of shop drawings, with attachments listed above.
2. A completed permit application form from this office.
3. Manufacturer recommended testing sequence information.

The approved permit application entitles the applicant to:

- ▶ One inspection of the rough wiring installation prior to cover;
- ▶ One FINAL inspection, at which time all initiating, audible and visual devices will be tested;
- ▶ One re-inspection—inspections required beyond those listed are subject to additional fees, at the discretion of this office;
- ▶ One 24- or 60-hour standby battery test, immediately followed by a 5-minute ring-out test (Note: Requires consecutive two-day appointment).

*It is the installer's responsibility to perform sufficient pre-inspection testing to ensure operational integrity and reliability of the system in order to avoid delays at the time of final inspection.*

Scheduling of inspections may be accomplished a minimum of 48 hours in advance by calling the Office of the Fire Marshal at 408-993-4604, prior to 3:30 p.m. Please note that two (2) consecutive days are required for device/battery testing.

**PERMIT NUMBER WILL BE REQUIRED IN ORDER TO SCHEDULE INSPECTIONS**

APPENDIX (c)

## FIRE ALARM & DETECTION SYSTEM TESTING PROTOCOL (Fire Service Personnel)

### SUGGESTED INSPECTION AND TEST GUIDELINES

1. Visually observe the fire alarm control panel for any lamps, meters or instructions that indicate the system is operating normal or abnormal.
2. Upon your determination that the fire alarm system appears to be normal, **notify Dispatch before proceeding with your test.** If controls are not on the surface or face of the panel, open cabinet door to gain access to controls.
3. Fire alarm control panel should have the following two controls:
  - A. Trouble silence switch, transfer to lamp. This will silence the trouble bell or buzzer only. If the fire alarm panel has a ring-back feature, operation of this switch when the system is normal should cause trouble bell or buzzer to sound.
  - B. Reset switch for restoring system to normal, when the operated signal initiating device has been restored to normal. Additional controls that may or may not be provided: Alarm or bell silence switch, test switch, door control, air handling or fire department connection disconnect switch, pilot or power on lamp. Special notes:
    - (1) Prior to testing, establish that there is or is not a means of silencing the audible devices.
    - (2) Determine whether the air-handling system is connected to the fire alarm system. (In some hospitals, this is common and one could turn off the air in operating rooms, etc.)
    - (3) Check for panel markings: (a) Zone or circuit lamp ID, (b) Zone map, numbered to corresponding circuit lamps, etc.
    - (4) Additional verification that system is operating normally: Operate the trouble silence switch. Trouble silence lamp should come on and if one disconnects the 110-AC power supply for testing trouble operation. Turn AC power back on when satisfied that batteries indicate and hold a trouble signal.
    - (5) Final observation prior to initiating an alarm condition—check that special keys, tools, or break-glass parts are available to restore tested devices back to normal.
    - (6) Proceed to operate a manual pull station, products of combustion detectors, heat detectors, or sprinkler system inspector's test valve to initiate alarm condition. If the inspection is an acceptance test for a new installation, require that all devices be tested.
    - (7) Upon determination that all items being tested have operated satisfactorily or as designed, restore initiating devices to normal and reset fire alarm control panel. During this period of time, the audible alarm devices may be silenced. Annunciator or zone lamps can be checked by testing devices in other building lines.
    - (8) Check for proper support, box and fitting covers, etc. All exterior wire and conduit should be water tight. Underground runs should be approved materials for that type of application.



APPENDIX (C)

## FIRE ALARM INSPECTION CHECK LIST

Date: \_\_\_\_\_ Project #: \_\_\_\_\_

Permit #: \_\_\_\_\_

Address: \_\_\_\_\_

Facility Name: \_\_\_\_\_

Contractor: \_\_\_\_\_

24-HR BATTERY TEST: Start Date/Time: \_\_\_\_/\_\_\_\_/\_\_\_\_ By \_\_\_\_

End Date/Time: \_\_\_\_/\_\_\_\_/\_\_\_\_ By \_\_\_\_

Comments: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Control Panel Test

- ☐ Panel in normal standby condition: Power indicator on, no trouble or alarm indicators displayed.
- ☐ Operate lamp test switch, if applicable. All lamps on.
- ☐ Contractor trips main breaker to disconnect AC power. Indicator light goes out.
- ☐ Check operation from standby power source. Visual trouble indicator on. Audible trouble indicator sounds.
- ☐ While on standby power, operate trouble silence switch. Audible trouble indicator must silence. Visual trouble indicator must remain on.
- ☐ Restore normal operating power. Power indicator on. Audible and visual trouble indicators off.
- ☐ Contractor initiates an alarm from any device in the system. Alarm devices shall sound an acceptable volume, audible throughout. Zone and panel indicators are on.  
**Per NFPA 72, a metered "DBA" test is required.**
- ☐ Operate alarm silence switch. All alarm devices silenced.
- ☐ Zone indicator remains on.



## APPENDIX (C)

- ☐ Trouble indicator on.
- ☐ Signal silence lamp and/or alarm acknowledge lamp on.
- ☐ Reset device used to initiate alarm and operate system reset switch. (Depress for 5 seconds, then release.)
- ☐ System resets.
- ☐ Alarm indicators out.
- ☐ Trouble indicators out/off.
- ☐ Power indicators on.

Battery Backup Systems Only

- ☐ Contractor trips main AC breaker again. Visual and audible indicators function. System to remain on battery for either 24- or 60-hour period (see NFPA 72).
- ☐ Contractor trips an alarm on system. Alarm devices sound at volume equal to previous test. System shall remain in alarm for minimum of 5 minutes to check capacity of battery system. (DBA meter required.)
- ☐ Reset system and restore AC power. System returns to normal standby condition.

Multi-Zone Systems Only

- ☐ Contractor trips alarm on system. Operate signal silence switch. Alarm signals silence.
- ☐ Contractor trips alarm from any other zone in system. Alarm signals resound.
- ☐ Reset system.
- ☐ System returns to normal standby condition, as in previous test.

All Systems

- ☐ Operate drill switch.
- ☐ Alarm shall sound.

Manual Pull Stations on Class "B" Systems

- ☐ Contractor locates end-of-line (EOL) station and trips it. System must go into alarm condition.
- ☐ Reset station and system. System in normal standby condition.
- ☐ Contractor removes same station from wall. Two wires are connected to terminal block. EOL device also connected to terminal block.
- ☐ Contractor removes EOL device. Trouble alarm must sound and zone trouble indicator on.
- ☐ Reconnect EOL device, re-install station and reset system. System in normal standby condition.
- ☐ Contractor removes any other station from wall—in same zone. Four wires connected to terminal block.
- ☐ Contractor trips station. All alarm signals must sound.
- ☐ Reset system and remove one wire from terminal. Trouble alarm shall sound.
- ☐ Reconnect wire, re-install station and reset system.
- ☐ System in normal standby condition.

**NOTE:** All pull stations in the system should be checked in this manner to ensure correct system wiring at all points.

**Office of the Fire Marshal**

Santa Clara County Fire Department

701 Miller Street  
San Jose, California 95110  
TEL (408) 993-4604

FAX (408) 993-4695

APPENDIX (d)

**HOOD & DUCT  
FIRE PROTECTION SYSTEM SUBMITTALS**

August 2002

Installation of pre-engineered fire protection systems for cooking appliances shall comply with National Fire Protection Association (NFPA) Standards 17, 17-A and 96; California Mechanical, Fire and Building Codes; state and local requirements. Note that the Health Department must also review and approve the plans. A performance test must be made by the Health Department before this office can sign off the final for the project.

Minimum requirements for plan submittal:

**1. PLANS**

- a. Four (4) sets of shop drawings minimum.
- b. Completed permit application form.
- c. Manufacturers' listings, specifications and cut sheets.

**2. SHOP (PLAN) DRAWINGS**

- a. Drawing scale (1/8" or 1/4") – Job address & location information (floor #, etc.), including County project number.
- b. Location, type and size of equipment. All equipment must be 6" inside hood opening.
- c. Manufacturer, type and size of the fire protection system.
- d. Piping layout—including type, size and length.
- e. Location of nozzles.
- f. Parts inventory—to include the description, part number, "flow point" index, and detection link temperature rating.
- g. Location of detection links and devices.
- h. Location of auxiliary devices, such as gas valves, electrical shut-down relays, manual release mechanisms, etc.
- i. Location of exits; in particular, in relation to manual pull location.

**3. PERMITS, INSPECTIONS AND TESTS**

- a. The Santa Clara County Fire Marshal's Office attempts a fifteen (15) working day turnaround time on plan reviews. In order to facilitate a timely review, all information requested above must be submitted. Should you have any questions, please contact our office at 408-993-4604.
- b. Once complete sets of plans have been reviewed and accepted, two (2) stamped copies, along with an installation permit, will be returned to the applicant. This office and the County of Santa Clara will retain the remaining two copies.
- c. The permit entitles the applicant to one inspection and one re-inspection. The installing contractor shall ensure ALL work has been completed prior to scheduling inspection appointments.
- d. Inspection appointments shall be scheduled a minimum of 48 hours in advance by contacting this office between 8:00 am and 4:30 pm, at 408-993-4604. The permit number will be required to schedule inspections.
- e. Required tests shall be performed in accordance with recognized standards and the manufacturer's requirements. All tests shall be performed prior to a request for building final.

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**APPENDIX (e)**

<b>STANDARD DETAILS &amp; SPECIFICATIONS</b>	<b>SD&amp;S No.</b>	<b>W-2</b>
	Revised Date:	09/25/03
	Effective Date:	01/17/97
	Approved By:	DJM
	Page:	1 of 3

**SUBJECT:** Private Hydrants -  
For Other Than Single Family Dwellings

**SCOPE**

The Fire Chief is authorized to require the installation of fire protection water supplies and fire hydrants in accordance with the provisions of the California Fire Code. The information contained herein shall serve as a guideline for installation of such equipment. This specification is not applicable for installations of public water mains and fire hydrants.

**DEFINITIONS****Fire Flow:**

The amount of water required for fire department use for fire suppression operations.

**Piping:**

Any piping approved for use by nationally recognized standards or this office.

**Velocity Factor:**

The speed of water in the pipe in feet per second.

**Wharf Hydrant:**

A hydrant with one 2-1/2 inch outlet.

**REQUIREMENTS**

The installation and design of the system shall comply with National Fire Protection Association (NFPA) Standards 24 and 13, and American Water Works Association (AWWA) Manual M-17.

**Hydrant Type\***

All hydrants shall be a "wet barrel" type, with outlet sizes and configurations for the various municipalities as follows:

**Jurisdiction**

South County – Unincorporated:

Palo Alto City:

Morgan Hill City:

All Other Jurisdictions:

**Hydrant Type**

Two 2-1/2" outlets and one 4-1/2 inch outlet

Two 2-1/2" outlets and one 4-1/2 inch outlet

Two 2-1/2" outlets and one 4-1/2 inch outlet

Two 2-1/2" outlets and one 4-inch outlet

\*Wharf hydrants may not be used for installations under this Standard.

**Hydrant Supply Piping:**

Supply piping shall be a minimum size of 6 inches for required flow up to 1000 gpm and shall be 8 inches or greater for flows in excess of 1000 gpm. Contact this office for specific sizing requirements of mains and fire service connections.



OFFICE OF THE FIRE MARSHAL, SANTA CLARA COUNTY

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**APPENDIX (e)****SD&S No. W-2**

Page 2 of 3

**Private Hydrants For Other Than Single Family Dwellings**

Riser and riser elbow shall be ferrous metal. Buried horizontal piping runs may be of an approved plastic pipe.

Concrete thrust blocks sized in accordance with national standards shall be provided at all changes in pipe direction.

**Hydrant Details:**

- Hydrants shall be placed at locations approved by this office. In most cases, hydrants shall be located adjacent to roadways such that the centerline of the hydrant is at least 2 feet but not more than 8 feet from the face of the curb or roadway surface.
- Hydrants shall be installed such that the center of the largest hose outlet is not less than 18 inches nor more than 30 inches above final grade.
- When required by this office, fire hydrants shall be protected by approved bollards, installed per our Standard Details & Specifications No. **B-1**.
- Fire hydrants shall be painted in accordance with our Standard Details & Specifications No. **W-3**.
- Threads shall be National Standard Thread.
- A minimum three-foot (3') clear space shall be maintained around the circumference of fire hydrants and similar fire appliances, such as fire department connections (FDC) and post indicator valves (PIV).

**Fire Department Connections:**

A fire department inlet connection shall be provided for all private hydrant system installations. The connection shall provide a minimum of four, 2-1/2 inch threaded inlets, served by a minimum 6-inch riser, located at the public way or as approved by this office.

**Valves:**

Control valves shall be provided for hydrant installations. An indicating type control valve shall be provided between the main and the hydrants. It shall be placed at location(s) approved by this office; however, in no case shall the valve be located less than 6 feet from the centerline of the hydrant.

**Required Plans Submittal:**

Show drawings reflecting compliance with National Fire Protection Association Standard #24 shall be prepared and submitted to this office for review. The shop drawings shall be drawn to scale and contain the following information:

1. Name of project, County project number, and site address.
2. Point of compass.
3. Water flow information, listing source of information.
4. Site plan, showing relation to building being served and property lines.
5. Size, location and type of all water supplies (detail of connection to public water main).
6. Size, type, and location of all piping—including the class and depth of bury. Provide trench details.

**OFFICE OF THE FIRE MARSHAL, SANTA CLARA COUNTY**

701 Miller • San Jose CA 95110 • Phone: 408.993.4604

**APPENDIX (e)****SD&S No. W-2**

Page 3 of 3

**Private Hydrants For Other Than Single Family Dwellings**

7. Size, type, and location of all control valves. Indicate if located in pit or if operation is by post indicator or key wrench through a curb box.
8. Size, type, and location of all fire hydrants.
9. Size, type, and location of thrust blocks or anchor points. Thrust block calculations shall be included.
10. Type of joint restraint(s), to include method of corrosion protection.
11. Location of fire department connections, including detail of connections.
12. Manufacturer's specification sheets, listing formation and installation details for all equipment, including hydrants, tanks and valves.

**Hydraulic Calculations:**

Hydraulic calculations may be required to verify required fire flow at hydrants prior to installation. If required by this office, hydraulic calculations shall be part of the plans submittal. Maximum velocity factor shall be 15 feet per second for hydraulic calculations.

**Permits:**

Permits for installation are required. Contact this office for details regarding permit applications and possible fees.

**Installation Requirements:**

Installation of fire service piping shall be performed only by individuals who are trained and licensed to perform such work. Poor workmanship will not be accepted for approval.

All materials shall be new and in good physical condition.

**Installation Inspection:**

All underground piping and valves shall be inspected and approved by this office prior to backfill.

Hydrostatic, flow and flush tests will be required prior to final acceptance of the installation.

**Other Installation Reference Guides:**

- National Fire Protection Association (NFPA) 24, "Installation of Private Fire Service Mains and their Appurtenances."
- NFPA 13, "Installation of Sprinkler Systems."
- American Water Works Association (AWWA) Manual M-17.

:jsh

**OFFICE OF THE FIRE MARSHAL, SANTA CLARA COUNTY**

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Appendix (g)

<b>STANDARD DETAILS &amp; SPECIFICATIONS</b>	<b>SD&amp;S No.</b>	<b>SP-2</b>
	Revised Date	10/08/01
	Effective Date	03/05/99
	Approved By	DJM
	Page	1 of 2
<b>SUBJECT:</b> Fire Service Installations—Hydrant, FDC		

**SCOPE**

Applies to the installation of underground fire service supply piping, fire hydrants and fire department connections (FDC).

**REQUIREMENTS**

Fire service underground supply piping shall be installed in accordance with National Fire Protection Association Standards (NFPA) 24 and 13, American Water Works Association (AWWA) Manual M-17, and this standard.

**Underground Supply Piping**

1. Fire service piping shall not be installed under buildings. When portions of the piping must penetrate building foundations or footings, it shall be installed per NFPA 24 and protected by a sleeved penetration that provides a minimum two-inch (2") annular clear space. Underground fire service piping shall not be encased in concrete.
2. Fire service piping shall not cross property lines.
3. When making an addition to an existing structure, resulting in an additional fire sprinkler system riser being provided, it shall be supplied from the existing fire service main and FDC. (See "Post Indicator Valves" below for valve arrangements.)
4. Prior to connection to the fire sprinkler system, all underground fire service piping shall be subjected to a hydrostatic test at 200 psi for a period of 2 hours. After completion of the test, the piping shall be flushed as outlined in NFPA 24. Both test and flush shall be witnessed and approved by this office.

**Post Indicator Valves**

5. New fire sprinkler systems shall be provided with a post indicator valve (PIV) for system control. Exception: Approved backflow prevention assemblies utilizing outside stem and yoke (OS&Y) valves.
6. One-story buildings having multiple system risers; i.e., large warehouses or industrial buildings, shall have a single main supply PIV installed at the street, while the other risers may have exterior wall mounted PIV's or OS&Y control valves.
7. Main system PIV's (or backflow prevention assemblies controlling fire sprinkler systems) shall be installed on the street address side of the building, not more than five feet (5') behind the back edge of the sidewalk (when a sidewalk is provided running parallel to the street and is within ten feet (10') of the street/curb line). In no case shall the PIV or control valve assembly be more than 20 feet from the street/curb line.
8. For buildings three (3) or more stories in height, the PIV or control valve assembly shall be installed at the street for main system control, with individual floor control valves provided within the building. They shall be located in a protected stairway enclosure.

**OFFICE OF THE FIRE MARSHAL, SANTA CLARA COUNTY**

701 Miller Street • San Jose CA 95110 • Phone: 408.993.4604

**SD&S No. SP-2**

Page 2 of 2

**Fire Service Installations—Hydrant, FDC****Fire Department Connections**

9. The FDC shall be installed on the street address side of the building, within ten feet (10') of the main PIV (unless otherwise approved by the Chief due to practical difficulties). FDC's shall be located at the street and be equipped with a minimum of two (2), two-and-one-half inch (2-1/2") National Standard Threaded (NST) inlet couplings. Exception: FDC's supplying private, on-site fire hydrants shall have a minimum four- (4) way inlet coupling.
10. Orientation of the FDC shall be such that hose lines may be readily and conveniently attached to the inlets without interference.
11. FDC's shall be painted in accordance with our **SD&S No. W-3**. If there are questions, please contact this office.

**Fire Hydrants**

12. Hydrants shall be located adjacent to roadways such that the centerline of the hydrant is at least two feet (2'), but not more than eight feet (8') from the face of the curb or roadway surface.
13. The hydrant street control valve shall be located a minimum of six feet (6') from the centerline of the hydrant.
14. Fire hydrants shall be installed such that the center of the largest hose outlet is not less than 18 inches, nor more than 30 inches, above the final grade.
15. Fire hydrants shall be painted in accordance with our **SD&S No. W-3**. If there are questions, please contact this office.

**Bollard Protection**

16. When required by this office, fire hydrants or other fire service appliances shall be protected by approved bollards, installed per our **SD&S No. B-1**.

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OFFICE OF THE FIRE MARSHAL, SANTA CLARA COUNTY  
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Appendix (h)

<b>STANDARD DETAILS &amp; SPECIFICATIONS</b>	<b>SD&amp;S No.</b> SI-7
<b>SUBJECT:</b> Construction Site Fire Safety	Rev. Date:
	Eff. Date: 04/15/03
	Approved By: DJM
	Page 1 of 7

### SCOPE

This standard is intended to prescribe minimum safeguards for new building construction and significant building alteration projects in order to provide a reasonable degree of safety to life and property from fire. This standard is based on the provisions for fire safety during building construction as set forth in the California Fire Code Article 87 and National Fire Protection Association Standard #1. This standard shall not be construed to be in lieu of other applicable State or Federal laws and regulations related to construction site safety. The general contractor (or other designee of the building owner) will be responsible for compliance with the provisions of this standard.

### REQUIREMENTS

#### I. Fire Protection Plan

A written Fire Protection Plan shall be developed for significant or complex construction projects at the discretion of this office. The plan shall be approved by this office prior to proceeding past foundation work for new buildings or commencement of demolition work in alteration projects. The written plan shall be consistent with the fire safety precautions as specified in this standard. The general contractor is responsible for carrying out the provisions of the Fire Protection Plan and communicating it to all subcontractors. The Fire Protection Plan shall include:

- A. Procedures for reporting emergencies to the fire department.
- B. Procedures for emergency notification, evacuation and/or relocation of all persons in the building under construction and on the site.
- C. Procedures for hot work operations, management of hazardous materials and removal of combustible debris and maintenance of emergency access roads.
- D. Floor plans identifying the locations of exits, exit stairs, exit routes and portable fire extinguishers.
- E. Site plans identifying the designated exterior assembly areas for each evacuation route.
- F. Site plans identifying required fire apparatus access roadways and on-site fire hydrants.
- G. The name and contact phone number of the person(s) responsible for compliance with the fire protection plan.

**OFFICE OF THE FIRE MARSHAL, SANTA CLARA COUNTY**

2310 N. First Street • San Jose CA 95131 • Phone: 408.993.4604



## II. General Safety Requirements

- A. Fire Department Access Roadways: All construction sites shall be accessible by fire department apparatus by means of roadways having an all-weather driving service of not less than 20 feet of unobstructed width. The roads shall have the ability to withstand the live loads of fire apparatus, and have a minimum 15 feet of vertical clearance. Dead-end fire access roads in excess of 150 feet in length shall be provided with approved turnarounds.

When approved by the Chief, temporary access roadways may be utilized until such time that the permanent roadways are installed. As a minimum, the roadway shall consist of a compacted sub-base and six inches (6") of road base material (Class II aggregate base rock), both compacted to a minimum of 95%. The perimeter edges of the roadway shall be contained and delineated by curb and gutter or other approved method. The use of geotextile reinforcing fabric underlayment or soils lime-treatment may be required if so determined by the project civil engineer. Provisions for surface drainage also shall be provided where necessary. The integrity of the roadway shall be maintained at all times.

- B. Fire Hydrants: Where underground water mains and hydrants are required for the building(s) under construction, they shall be installed, completed, and in service prior to combustible construction materials accumulating on site.
- C. Telephone Service: Provisions shall be provided at the construction site for emergency notification of the fire department via telephone. The street address of the construction site shall be posted adjacent to the telephone, along with the number for the public safety answering point.
- D. Premises Identification: The address number(s) of the property or project location shall be plainly visible and legible from the street or road fronting the property at the fire apparatus access point or as otherwise approved.
- E. Combustible Debris: Wood, cardboard, packing material, form lumber and similar combustible debris shall not be accumulated within buildings. Such debris, rubbish and waste material shall be removed from buildings on a daily basis.
- F. Oily Rags: Oily rags and similar material shall be stored in metal or other approved containers equipped with tight-fitting covers.
- G. Temporary Heating Equipment: Temporary heaters, such as those that are liquid petroleum gas (LP-Gas) fueled, shall be listed and shall be installed, used, and maintained in accordance with the manufacturer's instructions (see LP-Gas storage and use requirements below). Heating devices shall be secured properly and kept clear from combustible materials. Refueling operations shall be conducted in an approved manner.



OFFICE OF THE FIRE MARSHAL, SANTA CLARA COUNTY

2310 N. First Street • San Jose CA 95131 • Phone: 408.993.4604

**SD&S No. SI-7**

Construction Site Fire Safety

Page 3 of 7

- H. Smoking: Smoking is prohibited anywhere inside or on the roof of new buildings under construction or in the project work area of buildings undergoing alteration. A suitable number of "NO SMOKING" signs shall be posted to ensure smoking is controlled.
- I. Vehicle Parking: All vehicles shall be parked a minimum of 20 feet from new buildings under construction.  
*Exceptions:* 1. *Vehicles temporarily parked for loading/unloading or other construction-related operations. Such vehicles shall not be left unattended at any time.*  
2. *Private vehicles may be parked in parking garages of Type I construction if the automatic fire sprinkler system is in service and vertical openings are protected.*
- J. Combustible Material Storage: Combustible construction materials shall be stored a minimum of 20 feet from buildings under construction or undergoing remodel.  
*Exceptions:* 1. *Materials staged for installation on a floor level.*  
2. *When approved by this office, materials may be stored in parking garages of Type I construction if the automatic fire sprinkler system is in service and vertical openings are protected.*

**III. Fire Protection Systems**

- A. Fire Sprinkler Systems: Where automatic fire sprinkler systems are required to be installed in new buildings, the system shall be placed in service as soon possible. Immediately upon the completion of sprinkler pipe installation on each floor level, the piping shall be hydrostatically tested and inspected. After inspection approval from this office, each floor level of sprinkler piping shall be connected to the system supply riser and placed into service. For system activation notification, an exterior alarm bell may be installed and connected to the sprinkler water flow device prior to installation of the monitoring system.

For buildings equipped with fire sprinkler systems that are undergoing alterations, the sprinkler system(s) shall remain in service at all times except when system modifications are necessary. Fire sprinkler systems undergoing modifications shall be returned to service at the end of each workday unless otherwise approved by this office. The general contractor or his/her designee shall check the sprinkler control valve(s) at the end of each workday to confirm the system has been restored to service.

- B. Standpipes: Where standpipes are required, the standpipes shall be installed when the progress of construction is not more than 35 feet in height above the lowest level of the fire department access. Standpipes shall be provided with fire department hose connections and outlets at accessible locations adjacent to

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usable stairs. The standpipe system shall be extended as construction progresses to within one floor of the highest point of construction having secured decking or flooring. Each floor shall be provided with a 2 1/2-inch valve outlet for fire department use. Where construction height requires installation of a Class III standpipe, fire pumps and water main connections shall be provided to serve the standpipe.

- C. Fire Extinguishers: Portable fire extinguishers shall be provided and shall be mounted on a wall or post at each usable stairway such that the travel distance to any extinguisher does not exceed 75 feet. Mounting height to the top of the extinguisher shall not exceed five feet (5'). Extinguishers shall have not less than a 2A10BC rating or as otherwise directed by this office. The general contractor shall ensure an adequate number of individuals are trained in the proper use of portable fire extinguishers.
- D. Fire Alarm Systems: Fire alarm systems shall be maintained operational at all times during building alterations. When an alteration requires modification to a portion of the fire alarm system, the portion of the system requiring work shall be isolated and the remainder of the system shall be kept in service whenever practical. When it is necessary to shut down an entire fire alarm system a fire watch or other mitigation approved by this office shall be implemented by the general contractor until the system is returned to full service.

#### IV. Exiting Requirements

- A. Minimum Number of Exits: All new buildings under construction shall have a least one unobstructed exit. Exits shall be identified on the Fire Protection Plan.
- B. Multi-Story Buildings: For new multi-story buildings, each level above the first story shall be provided with at least two usable exit stairs after the floor decking is installed. The stairways shall be continuous and discharge to grade level. Stairways serving more than two floor levels shall be enclosed (with openings adequately protected) after exterior walls/windows are in place. Exit stairs in new and existing, occupied buildings, shall be lighted and maintained clear of debris and construction materials at all times.  
*Exception: For new multi-story buildings, one of the required exit stairs may be obstructed on not more than two (2) contiguous floor levels for the purposes of stairway construction; i.e., installation of gypsum board, painting, flooring, etc.*
- C. Assembly Points: Designated exterior assembly points shall be established for all construction personnel to relocate to upon evacuation. The assembly points shall also be identified in the Fire Protection Plan.



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## V. Area Separation Walls

When area separation walls are required, the wall construction shall be completed—with all openings protected—immediately after the building is sufficiently weather-protected at the location of the wall(s).

## VI. Special Operations Requirements

- A. Hot Work: Hot work includes any work involving operations capable of initiating fires or explosions, including cutting, welding, brazing, soldering, grinding, thermal spraying, thawing pipe, torch applied roofing, or any other similar activity. The use of hot work equipment shall be in accordance with the following guidelines, including a pre-site inspection, fire watch and post inspection procedures.
1. Pre-site Inspection: An inspection of the hot work site shall be conducted by the General Contractor or his/her designee prior to hot work operations to ensure:
    - (a) the hot work site is clear of combustibles or that combustibles are protected;
    - (b) exposed construction is of noncombustible materials or that combustible materials are protected;
    - (c) openings are protected;
    - (d) there are no exposed combustibles on the opposite side of partitions, walls, ceilings, floors, etc.;
    - (e) fire extinguishers are available, fully charged and operable; and
    - (f) fire watch personnel are assigned, equipped and trained.
  2. Fire Watch: The sole duty of fire watch personnel shall be to watch for the occurrence of fire during and after hot work operations. Individuals designated to fire watch duty shall have fire extinguishing equipment readily available and shall be trained in the use of such equipment. Personnel assigned to fire watch shall be responsible for extinguishing spot fires and communicating an alarm. Hot work conducted in areas with vertical and horizontal fire exposures that cannot be observed by a single individual shall have additional personnel assigned to fire watches to ensure that all exposed areas are monitored.
  3. Post Inspection: The fire watch shall be maintained a minimum of 30 minutes after the conclusion of the work to look out for leftover sparks, slag or smoldering combustibles.
- B. Asphalt and Tar Kettles: Asphalt kettles shall not be located within 20 feet of any combustible material, combustible building surface or building opening. With the exception of thermostatically controlled kettles, an attendant shall be within 100 feet



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of a kettle when the heat source is operating. Ladders or similar obstacles shall not form a part of the route between the attendance and the kettle. Kettles shall be equipped with tight-fitting covers. A minimum 20-B:C rated portable fire extinguisher shall be located within 30 feet of each asphalt kettle when the heat source is operating. Minimum 20-B:C rated portable fire extinguishers also shall be located on roofs during asphalt coating operations.

- C. Motor Equipment: Motorized equipment including internal-combustion-powered construction equipment shall be used in accordance with the following:
1. Equipment shall be located so that exhausts do not discharge against combustible materials.
  2. When possible, exhausts should be piped to the outside of the building.
  3. Equipment shall not be refueled while in operation.
  4. Fuel for equipment shall be stored in an approved area outside of the building.

## VII. Hazardous Materials

- A. Liquid Petroleum Gas (LP-Gas) - Storage and use shall comply with the following:

1. Propane containers may be used in buildings under construction or undergoing major renovation as a fuel source for temporary heating for curing concrete, drying plaster and similar applications in accordance with the following:
  - (a) Heating elements (other than integral heater-container units) shall be located at least six feet (6') from any LP-Gas container.
  - (b) Integral heater container units specifically designed for the attachment of the heater to the container, or to a supporting standard attached to the container, may be used provided they are designed and installed so as to prevent direct or radiant heat application to the LP-Gas container.
  - (c) Blower and radiant type units shall not be directed toward any LP-Gas container within 20 feet.
  - (d) Heat producing equipment shall be installed with clearance to the combustibles in accordance with the manufacturer's installation instructions.
  - (e) Cylinders shall comply with DOT cylinder specifications and shall be secured in an upright position.
  - (f) Regulators shall be approved for use with LP-Gas. Fittings shall be designed for at least 250 psig service pressure.
  - (g) Hose shall be designed for a working pressure of at least 350 psig (unless limited to 5 psig) and shall be a maximum of six feet (6') in length.
  - (h) Portable heaters shall be equipped with an approved automatic device to shut off the flow of gas to the main burner and to the pilot in the event of flame extinguishment or combustion failure. Portable heaters with an input of more than 50,000 Btu/hr shall be equipped with either a pilot that must be "proved" before the main burner can be turned on, or provided with an approved electronic ignition system.



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2. In addition to the above, for LP-Gas storage/use in buildings undergoing alteration and that are fully or partially occupied, the following shall also apply:
  - (a) Specific approval must be obtained from the fire department prior to bringing LP-Gas containers on-site.
  - (b) The maximum water capacity of individual containers shall be five-gallon water capacity and the number of containers in the building shall not exceed the number of workers assigned to using the LP-Gas.
  - (c) Containers having a water capacity greater than 2 1/2 pounds [one quart] shall not be left unattended.

**B. Storing, Using and Dispensing of Flammable and Combustible Liquids**

1. Storage areas for flammable and combustible liquids shall be kept free of weeds and extraneous combustible material. Open flames and smoking are prohibited in flammable or combustible liquid storage areas.
2. Tanks and containers shall be marked with the name of the product and "FLAMMABLE – KEEP FIRE AND FLAME AWAY." Tanks (containers in excess of 60 gallons) shall also be labeled, "KEEP 50 FEET FROM BUILDINGS."
3. Metal containers for Class I or II liquids shall be in accordance with DOT requirements or shall be of an approved design. Discharge devices shall not cause an internal pressure on the container. Individual containers shall not be interconnected and shall be kept closed when not in use.
4. Secondary containment or a means of spill control, drainage control, and dike control is required for large containers (such as 55 gallon drums) and tanks as approved by this office.
5. Plans for the installation/use of any aboveground storage tank (containers greater than 60 gallons) shall be submitted to this office for review and permit prior to the proposed tank arriving at the site.

**C. Compressed Gases**

1. Gas cylinders shall be marked with the name of the contents.
2. Gas cylinders shall be stored upright and secured to prevent falling.
3. When not in use, valve protective caps shall be in place.
4. Gas cylinders shall be protected against physical damage.
5. When stored, gas cylinders shall be separated from each other based on their hazard classes.
6. Combustible materials shall be kept a minimum of 10 feet from gas containers.
7. Gas cylinders shall not be placed near elevators, unprotected platform edges or other areas where they would drop more than two feet (2').
8. Gas cylinders shall not be placed in areas where they may be damaged by falling objects.
9. Ropes, chains or slings shall not be used to suspend gas cylinders unless the cylinder was manufactured with appropriate lifting attachments.

(Ref: CFC Articles 87 & 13 – also 49, 79 and 11)



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Appendix C

<b>STANDARD DETAILS &amp; SPECIFICATIONS</b>  <b>SUBJECT:</b> Fire Lane Marking	<b>SD&amp;S No.</b> A-6
	Rev. Date: 08/19/02
	Eff. Date: 12/16/96
	Approved By: DJM
	Page 1 of 2

**SCOPE**

The Office of the Fire Marshal is authorized to direct installation of approved signs or other approved notices for the identification of fire lanes. The purpose is to prevent obstruction of required emergency vehicle access.

**DEFINITIONS**

**Driveway:** A vehicular access roadway less than 20 feet in width and *serving no more than one single family dwelling* (unincorporated only) OR in other areas: *serving no more than two single family dwellings*. Contact this office for clarification.

**Fire Lane:** A vehicular access roadway or driveway designated officially by this office as a means of fire department emergency access.

**Roadway:** A vehicular access roadway greater than or equal to 20 feet in width.

**REQUIREMENTS****Fire Department Approval:**

Roadways, driveways and access ways shall not be marked as fire lanes without first obtaining approval from this office. Fire lanes shall be identified by red curb marking, signage or roadway surface marking as specified below. Detailed plans showing the location of the lanes are usually required.

**Red Curb Marking:**

Curb top and side shall be painted red, and the words, "FIRE LANE" shall be stenciled on the top and side of all red curbs at a maximum interval of 50 feet. Letters shall be three inches (3") in height, 3/4-inch in stroke.

Alternatively, if the roadway has no curbing, a 12-inch wide red stripe with the words "FIRE LANE" in white may be painted along with and parallel to the edge of the roadway. Lettering shall be 8-inches high with a 3/4-inch stroke.

**Signage:**

1. Sign shall be of metal construction, measuring 12 inches wide and 18 inches high, and of a reflective type. Plastic or wooden signs are not acceptable.
2. Sign shall read: "NO STOPPING – FIRE LANE 22500.1 CVC." Lettering shall be not less than one-inch in height, clearly visible from a vehicle.

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**SD&S No. A-6**

## Fire Lane Marking

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3. The sign shall be in visible locations and mounted on a galvanized metal pole at a height of 80 inches. Signs shall be maintained unobstructed by foliage, etc.
4. Distance between signs posted along the fire lane shall not exceed 125 feet. In accordance with County of Santa Clara Ordinance B12-119, not less than two signs shall be posted in each block. If traffic flows in two directions, signs must be posted so as to be readable from either direction.

**Roadway Surface Marking:**

Outlining or painting the fire lane area in red with letters "FIRE LANE" in white, at intervals of not more than 50 feet or as otherwise directed by this office. Size of lettering shall be 24 inches in height, three inches (3") in stroke. Message shall read "up"; i.e., the first word should be nearest the driver.

**Notification of Local Law Enforcement Agency:**

Upon declaration by this office that a vehicular access is a required "FIRE LANE," the owner of the property shall notify their local law enforcement agency of the fire lane location and request periodic patrol of such lanes.

**Enforcement of Fire Lanes:**

The enforcement of fire lanes is the responsibility of the local law enforcement agency as specified under California Vehicle Code (CVC) Section 22500.1.

Roadways, fire lanes and driveways on property owned by the County of Santa Clara are posted in compliance with CVC Section 21113.(a) and are subject to enforcement by both the California Vehicle Code and County of Santa Clara Ordinance (B12-119, B12-120, B12-164).

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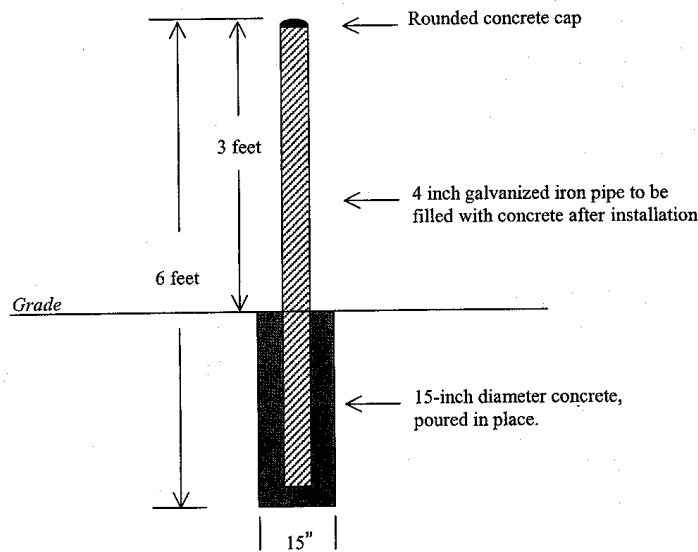
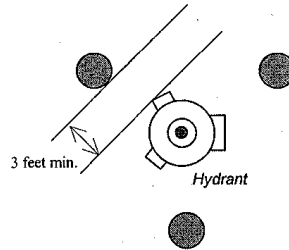


Appendix (g)

<b>STANDARD DETAILS &amp; SPECIFICATIONS</b>  <b>SUBJECT:</b> Bollards for Private Fire Hydrants	<b>SD&amp;S No.</b> B - 1
	<b>Revised Date</b> 11/07/97
	<b>Effective Date</b> 09/04/96
	<b>Approved By</b> DJM
	<b>Page</b> 1 of 1

**Bollard Placement**

- Bollards shall be 3 feet minimum from the face of the fire hydrant.
- Bollard placement shall not obstruct hose connections or attachments.



**Note:** Installation of bollards at public hydrants requires approval from the public water company.

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**END OF SECTION 01 33 20**

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**SECTION 01 42 13**  
**ABBREVIATIONS AND ACRONYMS**

**ABBREVIATIONS:** In addition to abbreviations indicated on the Drawings, references in the Project Manual to codes, regulations, trade associations, technical societies, recognized authorities, and other institutions may include the following organizations, which are sometimes referred to only by corresponding abbreviation. Not all abbreviations are listed and not all listed abbreviations are used. Unless otherwise specifically defined in the Contract Documents, when the following abbreviations are used, the intent and meaning will be interpreted as follows:

AA	<a href="#">Aluminum Association</a>
AABC	<a href="#">Associated Air Balance Council</a>
AAMA	<a href="#">Architectural Aluminum Manufacturers Association</a>
AAN	American Association of Nurserymen
AATC	American Association of Textile Chemists
ACI	<a href="#">American Concrete Institute</a>
ACIL	American Council of Independent Laboratories
ACPA	American Concrete Pipe Association
ADA	<a href="#">Americans with Disabilities Act</a>
ADC	Air Diffusion Council
AFBMA	Anti-Friction Bearing Manufacturers Association
AFPA	American Forest and Paper Association
ATIS	<a href="#">Alliance For Telecommunication Industry Solutions</a>
AGA	American Gas Association
AGMA	<a href="#">American Gear Manufacturers Association</a>
AHA	American Hardboard Association
AHMA	Association of Home Appliance Manufacturers
AI	Asphalt Institute
AIA	<a href="#">American Institute of Architects</a>
A.I.A.	American Insurance Association
AIHA	American Industrial Hygiene Association
AISC	<a href="#">American Institute of Steel Construction</a>
AISI	<a href="#">American Iron and Steel Institute</a>
AITC	American Institute of Timber Construction
ALCA	Associated Landscape Contractors of America
ALI	Associated Laboratories, Inc.
ALSC	American Lumber Standards Committee
AMCA	Air Movement and Control Association
ANSI	<a href="#">American National Standards Institute</a>
AOAC	Association of Official Analytical Chemists
AOSA	Association of Official Seed Analysts
APA	American Plywood Association
API	American Petroleum Institute
APRI	Air Conditioning and Refrigeration Institute
ARMA	Asphalt Roofing Manufacturers Association
ASA	Acoustical Society of America
ASC	Adhesive and Sealant Council
APWA	<a href="#">American Public Works Association</a>
ASCE	<a href="#">American Society of Civil Engineers</a>

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ASHRAE	<a href="#"><u>American Society of Heating, Refrigeration and Air Conditioning Engineers</u></a>
ASME	<a href="#"><u>American Society of Mechanical Engineers</u></a>
ASPA	American Sod Producers Association
ASPE	American Society of Plumbing Engineers
ASSE	American Society of Sanitary Engineering
ASSHTO	<a href="#"><u>American Association of State Highway and Transportation Officials</u></a>
ASTM	<a href="#"><u>American Society for Testing and Materials</u></a>
AWCMA	American Window Covering Manufacturers Association
AWG	<a href="#"><u>American Wire Gage</u></a>
AWI	<a href="#"><u>Architectural Woodwork Institute</u></a>
AWPA	<a href="#"><u>American Wood-Preservers' Association</u></a>
AWPI	<a href="#"><u>American Wood-Preservers Institute</u></a>
AWS	<a href="#"><u>American Welding Society</u></a>
AWWA	<a href="#"><u>American Water Works Association</u></a>
BHMA	<a href="#"><u>Builders' Hardware Manufacturers Association</u></a>
BIA	<a href="#"><u>Brick Industry Association</u></a>
BIFMA	<a href="#"><u>Business and Institutional Furniture</u></a>
CAGI	<a href="#"><u>Compressed Air and Gas Institute</u></a>
CalTrans	<a href="#"><u>State of California, Department of Transportation</u></a>
CAUS	<a href="#"><u>Color Association of the United States</u></a>
CBC	<a href="#"><u>California Building Code</u></a>
CBM	Certified Ballast Manufacturers Association
CCC	<a href="#"><u>Carpet Cushion Council</u></a>
CCR	<a href="#"><u>California Code of Regulations</u></a>
CDA	<a href="#"><u>Copper Development Association</u></a>
CFFA	Chemical Fabrics & Film Association, Inc.
CFR	<a href="#"><u>Code of Federal Regulations</u></a>
CGA	<a href="#"><u>Compressed Gas Association</u></a>
CISCA	<a href="#"><u>Ceiling and Interior Systems Construction Association</u></a>
CISPI	<a href="#"><u>Cast Iron Soil Pipe Institute</u></a>
CLFMI	<a href="#"><u>Chain Link Fence Manufacturers Institute</u></a>
CPA	<a href="#"><u>Composite Panel Association</u></a>
CRI	<a href="#"><u>Carpet and Rug Institute</u></a>
CRSI	<a href="#"><u>Concrete Reinforcing Steel Institute</u></a>
CRA	<a href="#"><u>California Redwood Association</u></a>
CSI	<a href="#"><u>Construction Specifications Institute</u></a>
CSS	<a href="#"><u>State of California Standard Specifications</u></a>
CTI	<a href="#"><u>Ceramic Tile Institute of America</u></a>
DIPRA	<a href="#"><u>Ductile Iron Pipe Research Association</u></a>
DFEH	<a href="#"><u>California Department of Fair Employment and Housing</u></a>
DHI	<a href="#"><u>Door and Hardware Institute</u></a>
DLPA	Decorative Laminate Products Association
EIA	<a href="#"><u>Electronic Industries Alliance</u></a>
EIMA	Exterior Insulation Manufacturers Association
EJMA	<a href="#"><u>Expansion Joint Manufacturers Association</u></a>
EPA	<a href="#"><u>Environmental Protection Agency</u></a>
ETL	ETL Testing Laboratories, Inc.
FCI	<a href="#"><u>Fluid Controls Institute</u></a>

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FM	<a href="#">Factory Mutual</a>
FS	<a href="#">Federal Specification of General Services Administration</a>
FTI	Facing Tile Institute
GANA	<a href="#">Glass Association of North America</a>
GA	<a href="#">Gypsum Association</a>
HEI	<a href="#">Heat Exchange Institute</a>
HI	<a href="#">Hydronics Institute</a>
H.I.	<a href="#">Hydraulic Institute</a>
HMA	<a href="#">Hardwood Manufacturers Association</a>
HPMA	<a href="#">Hardwood Plywood Manufacturers Association</a>
IAMPO	<a href="#">International Assoc of Mechanical and Plumbing Officials</a>
IBD	Institute of Business Designers
ICBO	<a href="#">International Conference of Building Officials</a>
ICEA	<a href="#">Insulated Cable Engineers Association</a>
IEC	<a href="#">International Electrotechnical Commission</a>
IEEE	<a href="#">Institute of Electrical and Electronic Engineers</a>
IESNA	<a href="#">Illuminating Engineering Society of North America</a>
IGCC	<a href="#">Insulating Glass Certification Council</a>
IMSA	<a href="#">International Municipal Signal Association</a>
IRI	<a href="#">Industrial Risk Insurers</a>
ISA	<a href="#">Instrument Society of America</a>
LIA	<a href="#">Lead Industries Association, Inc.</a>
LPI	<a href="#">Lightning Protection Institute</a>
MBMA	<a href="#">Metal Building Manufacturer's Association</a>
MCAA	<a href="#">Mechanical Contractors Association of America</a>
MIA	<a href="#">Marble Institute of America</a>
MIL	Military Specification of U.S. Department of Defense
MSS	<a href="#">Manufacturers Standardization Society of the Valve and Fittings Industry</a>
NAAMM	<a href="#">National Association of Architectural Metal Manufacturers</a>
NAIMA	<a href="#">North American Insulation Manufacturers Association</a>
NAPA	<a href="#">National Asphalt Pavement Association</a>
NAPF	National Association of Plastic Fabricators
NBGQA	<a href="#">National Building Granite Quarries Association</a>
NCMA	<a href="#">National Concrete Masonry Association</a>
NCPI	<a href="#">National Clay Pipe Institute</a>
NCRPM	<a href="#">National Council on Radiation Protection</a>
NCSPA	<a href="#">National Corrugated Steel Pipe Association</a>
NEC	<a href="#">National Electrical Code</a>
NECA	<a href="#">National Electrical Contractors Association</a>
NEII	<a href="#">National Elevator Industry, Inc.</a>
NEMA	<a href="#">National Electrical Manufacturers Association</a>
NETA	<a href="#">International Electrical Testing Association</a>
NFPA	<a href="#">National Fire Protection Association</a>
NHLA	<a href="#">National Hardwood Lumber Association</a>
NLGA	<a href="#">National Lumber Grades Authority</a>
NPCA	<a href="#">National Paint and Coatings Association</a>
NRCA	<a href="#">National Roofing Contractors Association</a>
NWWDA	<a href="#">National Wood Window and Door Association</a>
NSF	<a href="#">National Sanitation Foundation</a>

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NTMA	<a href="#">National Terrazzo and Mosaic Association</a>
NUSIG	National Uniform Seismic Installation Guidelines
OSHA	<a href="#">Occupational Safety and Health Administration</a>
PCA	<a href="#">Portland Cement Association</a>
PCI	<a href="#">Precast Concrete Institute</a>
PDI	<a href="#">Plumbing and Drainage Institute</a>
PEI	<a href="#">Porcelain Enamel Institute</a>
RFCI	<a href="#">Resilient Floor Covering Institute</a>
RIS	<a href="#">Redwood Inspection Service [Grading Rules]</a>
RMA	<a href="#">Rubber Manufacturers Association</a>
SDI	<a href="#">Steel Deck Institute</a>
S.D.I.	<a href="#">Steel Door Institute</a>
SGCC	<a href="#">Safety Glazing Certification Council</a>
SIGMA	Sealed Insulating Glass Manufacturers Association
SJI	<a href="#">Steel Joist Institute</a>
SMA	<a href="#">Screen Manufacturers Association</a>
SMACNA	<a href="#">Sheet Metal and Air Conditioning Contractor's National Association, Inc.</a>
SAE	<a href="#">Society of Automotive Engineers</a>
SPRI	<a href="#">Single Ply Roofing Institute</a>
SSMA	<a href="#">Steel Stud Manufacturers Association</a>
SSPC	<a href="#">Steel Structures Painting Council</a>
SSPMA	Sump and Sewage Pump Manufacturers Association
STI	<a href="#">Steel Tank Institute</a>
SWI	<a href="#">Steel Window Institute</a>
SWPA	<a href="#">Submersible Wastewater Pump Association</a>
TCA	<a href="#">Tile Council of America</a>
TCIA	<a href="#">Tree Care Industry Association</a>
TPI	<a href="#">Truss Plate Institute</a>
UBC	<a href="#">Uniform Building Code</a>
UFAC	<a href="#">Upholstered Furniture Action Council</a>
UMC	<a href="#">Uniform Mechanical Code</a>
UPC	<a href="#">Uniform Plumbing Code</a>
UL	<a href="#">Underwriters' Laboratories, Inc.</a>
UNI	<a href="#">Uni-Bel PVC Pipe Association</a>
USC	<a href="#">United States Code</a>
USP	<a href="#">U.S. Pharmacopoeial Convention</a>
USEPA	<a href="#">United States Environmental Protection Agency</a>
WA	<a href="#">Wallcovering Association</a>
WCLIB	<a href="#">West Coast Lumber Inspection Bureau</a>
WDMA	<a href="#">Window and Door Manufacturers Association</a>
WIC	<a href="#">Woodwork Institute of California</a>
WLPDIA	Western Lath, Plaster, Drywall Industries Association
WRI	<a href="#">Wire Reinforcement Institute</a>
WSC	<a href="#">Water Systems Council</a>
WSFI	Wood and Synthetic Flooring Institute
WWPA	<a href="#">Western Wood Products Association</a>

**END OF SECTION 01 42 13**

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**SECTION 01 43 00  
QUALITY ASSURANCE**

**PART 1 - GENERAL**

**1.01 SUMMARY**

.A This Section includes:

- .1 [Part 1 – General](#)
  - .a [1.01 – Summary](#)
  - .b [1.02 – Related Sections \(NOT USED\)](#)
  - .c [1.03 – Definitions \(Not Used\)](#)
  - .d [1.04 - Qualifications](#)
  - .e [1.05 - Testing Equipment](#)
  - .f [1.06 - Inspection and Testing Personnel and Facilities](#)
  - .g [1.07 - Laboratory Reports](#)
  - .h [1.08 - Laboratory Responsibilities](#)
  - .i [1.09 - Contractor's Responsibilities](#)
- .2 [Part 2 – Products \(Not Used\)](#)
- .3 [Part 3 – Execution \(Not Used\)](#)
- .4 [Part 4 – Forms \(Not Used\)](#)

**1.02 RELATED SECTIONS (NOT USED)**

**1.03 DEFINITIONS (Not Used)**

**1.04 QUALIFICATIONS**

- .A Testing and inspection agency must have a minimum five (5) years continuing experience preceding the date of these Contract Documents.
- .B Testing and inspection agency must and be provided by and paid for by Contractor, and must be qualified in accordance [Section 01 45 00, "Contractor's Quality Control \(QC\) System."](#)

**1.05 TESTING EQUIPMENT**

- .A Testing equipment must be calibrated at intervals with devices of an accuracy traceable to either National Bureau of Standards or accepted values of natural physical constants.

**1.06 INSPECTION AND TESTING PERSONNEL AND FACILITIES**

- .A Testing and Inspection Agency
  - .1 Contractor must employ and pay for the services of an independent testing and inspection agency to perform the tests and inspections required in this Section except where noted otherwise.
  - .2 Employment of the testing and inspection agency shall in no way relieve the Contractor's obligation to perform the Work as required in the Contract Documents.
  - .3 The Testing and Inspection Agency is a member of the Contractor's QC organization.
- .B Limitations of authority of the Testing and Inspection Agency

- .1 Testing and Inspection Agency is not authorized to
  - .a release, revoke, alter, or enlarge on the requirements of the Contract Documents;
  - .b Approve or accept any portion of the Work, or
  - .c Perform any duties of the Contractor.
- .C All Work must conform to the requirements of all applicable laws, codes, ordinances, and regulations.
- .D Testing and Inspection Agency must perform tests and inspections as required by the Contract Documents.
- .E Testing and Inspection Agency must prepare, cure, store, and transport Project samples to the Laboratory.

#### 1.07 LABORATORY REPORTS

- .A Within two (2) workdays after each inspection and test, submit five (5) copies of Laboratory report that includes the following:
  - .1 date issued;
  - .2 Project title and number;
  - .3 name of inspector from Testing and Inspection Agency;
  - .4 date and time of sampling or inspection;
  - .5 identification of product and Project Manual section;
  - .6 location in the Project;
  - .7 type of inspection or test;
  - .8 date of test;
  - .9 results of tests;
  - .10 conformance with Contract Documents;
  - .11 whether original test or re-test; and
  - .12 State/local permit number
- .B Reports must be distributed to the following:
  - .1 Owner's Design Consultant: (one (1) copy; and
  - .2 Owner: (two (2) copies)

#### 1.08 LABORATORY RESPONSIBILITIES

- .A Provide qualified personnel at site.
- .B Cooperate with Quality Control Manager in performance of services.
- .C Perform specified inspecting, sampling, and testing of Products in accordance with specified standards.
- .D Ascertain compliance of materials and mixes with requirements of Contract Documents.
- .E Promptly notify Owner and Contractor of observed irregularities or non-conformance of Work or Products.
- .F Perform additional inspection and testing required by Quality Control Manager.
- .G Attend Preconstruction Meeting and progress meetings when requested.

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**1.09 CONTRACTOR'S RESPONSIBILITIES**

- .H Provide all Testing and Inspection Services required by the Contract Documents and additional tests as required by the Quality Control Manager.
- .I Provide access to Work, including off-site manufacturer or fabricator's operations.
- .J Provide required quantities of material samples to be tested.
- .K Samples will be selected and taken by representative of Testing and Inspection Agency.
- .L Furnish copies of product data and test reports as required.
- .M Furnish incidental labor and facilities:
  - .1 to provide access to work to be tested;
  - .2 to obtain and handle samples at the Project Site, or at the source of the Product to be tested or inspected;
  - .3 to facilitate inspections and tests, and;
  - .4 for storage and curing of test samples at the Project Site.
- .N Include in the weekly Short Interval Schedule (SIS) submission (if required by this contract) activities that identify upcoming testing and inspection requirements.
- .O Notify County staff, in writing, of the planned performance of tests by the Testing Lab, twenty-four (24) hours in advance.
- .P Do not cover corrected Work until said Work has been re-tested and or re-inspected.
- .Q Contractor must pay costs for all Testing and Inspection required by the Contract Documents.

**PART 2 - PRODUCTS** (Not used)

**PART 3 - EXECUTION** (Not Used)

**PART 4 - FORMS** (Not Used)

**END OF SECTION 01 43 00**



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**SECTION 01 43 00.10**  
**QUALITY ASSURANCE FOR PROJECTS THAT**  
**REQUIRE INDEPENDENT INSPECTION TO SATISFY CBC 1701.5**

**PART 1 - GENERAL**

**1.01 SUMMARY**

.A This Section includes:

- .1 [Part 1 – General](#)
  - .a [1.01 – Summary](#)
  - .b [1.02 – Related Sections \(NOT USED\)](#)
  - .c [1.03 – Definitions \(Not Used\)](#)
  - .d [1.04 - Qualifications](#)
  - .e [1.05 - Testing Equipment](#)
  - .f [1.06 - Inspection and Testing Personnel and Facilities](#)
  - .g [1.07 - Laboratory Reports](#)
  - .h [1.08 - Laboratory Responsibilities](#)
  - .i [1.09 - Contractor's Responsibilities](#)
- .2 [Part 2 – Products \(Not Used\)](#)
- .3 [Part 3 – Execution \(Not Used\)](#)
- .4 [Part 4 – Forms \(Not Used\)](#)

**1.02 RELATED SECTIONS (NOT USED)**

**1.03 DEFINITIONS (Not Used)**

**1.04 QUALIFICATIONS**

- .A Testing and inspection agency must have a minimum five (5) years continuing experience preceding the date of these Contract Documents.
- .B Testing and inspection agency must and be qualified in accordance [Section 01 45 00, "Contractor's Quality Control \(QC\) System."](#)

**1.05 TESTING EQUIPMENT**

- .A Testing equipment must be calibrated at intervals with devices of an accuracy traceable to either National Bureau of Standards or accepted values of natural physical constants.

**1.06 INSPECTION AND TESTING PERSONNEL AND FACILITIES**

- .A Testing and Inspection Agency
  - .1 Contractor must employ and pay for the services of an independent testing and inspection agency to perform the tests and inspections required herein except where noted otherwise.
  - .2 Employment of the testing and inspection agency shall in no way relieve Contractor's obligation to perform the Work as required in the Contract Documents.
  - .3 The Testing and Inspection Agency is a member of Contractor's QC organization.
  - .4 Owner has also contracted with a Testing and Inspection Agency to perform those tests and inspections required pursuant to CBC Section 1701.5. The performance of Owner's Testing and

Inspection Agency is independent of the performance of Contractor's Testing and Inspection Agency.

- .5 All references to "Testing and Inspection Agency" shall be construed to be Contractor's Testing and Inspection Agency, unless otherwise specifically noted.
- .B Limitations of authority of the Testing and Inspection Agency
  - .1 Testing and Inspection Agency is not authorized to
    - .a release, revoke, alter, or enlarge on the requirements of the Contract Documents;
    - .b Approve or accept any portion of the Work, or;
    - .c Perform any duties of Contractor.
- .C All Work must conform to the requirements of all applicable laws, codes, ordinances, and regulations.
- .D Testing and Inspection Agency must perform tests and inspections as required by the Contract Documents.
- .E Testing and Inspection Agency must prepare, cure, store, and transport Project samples to the Laboratory.

#### 1.07 LABORATORY REPORTS

- .A Within two (2) workdays after each inspection and test, submit five (5) copies of Laboratory report that include:
  - .1 date issued;
  - .2 Project title and number;
  - .3 name of inspector from Testing and Inspection Agency;
  - .4 date and time of sampling or inspection;
  - .5 identification of product and Project Manual section;
  - .6 location in the Project;
  - .7 type of inspection or test;
  - .8 date of test;
  - .9 results of tests;
  - .10 conformance with Contract Documents;
  - .11 whether original test or re-test; and
  - .12 State/local permit number
- .B Reports must be distributed to the following:
  - .1 Owner's Design Consultant (two (2) copies);
  - .2 Construction Manager (one (1) copy);
  - .3 General Contractor (two (2) copies);
  - .4 Owner's Project Manager (one (1) copy); and
  - .5 additional Owner's Consultant(s) (two (2) copies)

#### 1.08 LABORATORY RESPONSIBILITIES

- .A Provide qualified personnel at site.
- .B Cooperate with Quality Control Manager in performance of services.
- .C Perform specified inspecting, sampling, and testing of Products in accordance with specified standards.
- .D Ascertain compliance of materials and mixes with requirements of Contract Documents.
- .E Promptly notify Owner and Contractor of observed irregularities or non-conformance of Work or Products.
- .F Perform additional inspection and testing required by Quality Control Manager.
- .G Attend Preconstruction Meeting and progress meetings when requested.

#### 1.09 CONTRACTOR'S RESPONSIBILITIES

- .A Provide all Testing and Inspection Services required by the Contract Documents and additional tests as required by the Quality Control Manager needed to ensure the quality of the Work.
- .B Provide access to Work, including off-Site manufacturer or fabricator's operations.
- .C Provide required quantities of material samples to be tested.
- .D Samples will be selected and taken by representative of Testing and Inspection Agency.
- .E Furnish copies of product data and test reports as required.
- .F Furnish incidental labor and facilities:
  - .1 to provide access to work to be tested;
  - .2 to obtain and handle samples at the Project Site, or at the source of the Product to be tested or inspected;
  - .3 to facilitate inspections and tests, and
  - .4 for storage and curing of test samples at the Project Site.
- .G Include in the weekly Short Interval Schedule (SIS) submission (if required by this contract) activities that identify upcoming testing and inspection requirements.
- .H Notify County staff, in writing, of the planned performance of tests by the Testing Lab, twenty-four (24) hours in advance.
- .I Do not cover corrected Work until said Work has been re-tested and or re-inspected.
- .J Contractor must pay costs for all Testing and Inspection required by the Contract Documents.

#### 1.10 PROCEDURES

- .A Performance of tests and inspections by Owner's Testing and Inspection Agency (in order to comply with CQC Section 01 45 00) shall follow the following procedures:

(1) Contractor's CQC Manager (CQCM) shall inspect the Work to verify compliance with the Contract Documents. The conduct of such an inspection shall be noted in the CQC Daily report, along with the "results" of the inspection.

(2) If the CQC Manager is satisfied that the appropriate Work is complete, the CQCM shall submit a request to the OAR, or his designee, on a form agreed upon at the pre-construction conference, to review the Work for which the Contractor is seeking Owner's Testing Agency Inspection/Testing. Owner's Authorized Representative, or his/her designee, will review the Work within one (1) full working day after receipt of the CQCM's request. The OAR/Designee

must concur with the satisfactory completion of the Work before the next step occurs. Contractor must note that any "acceptance" of Work by the Owner does not supersede Contractor's obligations under Section 01 45 00 of the contract documents. If, in the opinion of the OAR/Designee, the Work is not completed to allow for an inspection by Owner's Testing Agency, to the extent practicable, deficiencies will be noted on the CQCM's Inspection Request form, and this form returned to the CQCM.

An example would be for Inspection services prior to the pouring of structural concrete. The CQCM would inspect the placement of reinforcing steel, formwork, etc. If the Work is complete to his satisfaction, the CQCM would submit a request to the OAR (or designee) for review of the Work. If the OAR (or Designee) accepts the Work, a request would be made for Owner's Testing Agency to inspect the Work.

(3) Upon acceptance of the Work by the OAR (or Designee), the OAR will submit a request to Owner's Testing Agency to inspect the Work. The OAR will execute such a request the same day after acceptance of the Work, as long as acceptance occurs before 3 PM. At the discretion of the OAR, or designee, a request for inspection may be made to Owner's Testing Agency, even if the Work is not satisfactorily complete at the time of OAR/Designee review, if the OAR/Designee concludes that any deficiencies in the Work can be completed in time for Owner's Testing Agency inspection. Owner's Testing Agency will perform testing/inspection of the Work the work day after such a request has been made, as long as the request is submitted prior to 3 PM. Contractor shall allow such time as is necessary to comply with this requirement.

**PART 2 - PRODUCTS** (Not used)

**PART 3 - EXECUTION** (Not Used)

**PART 4 - FORMS** (Not Used)

**END OF SECTION 01 43 00.1**

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**SECTION 01 45 00**  
**QUALITY CONTROL****PART 1 - GENERAL****1.01 SUMMARY**

.A This Section includes:

- .1 Part 1 – General
  - .a 1.01 – Summary
  - .b 1.02 – Related Documents and Sections (NOT USED)
  - .c 1.03 - Definitions
  - .d 1.04 - References
  - .e 1.05 - Contractor's Quality Control (QC) System
  - .f 1.06 - QC System Requirements
  - .g 1.07 - QC System
  - .h 1.08 - QC Organization
  - .i 1.09 - QC Plan
  - .j 1.10 - Testing
  - .k 1.11 - QC Documentation
  - .l 1.12 - Certifications
  - .m 1.13 – Inspections for Substantial Completion
  - .n 1.14 – Not used.
  - .o 1.15 - Notification of Non-Compliance
- .2 Part 2 – Products (Not Used)
- .3 Part 3 – Execution (Not Used)
- .4 Part 4 – Forms and Tables
  - .a QC Specialist Table – Form F-1
  - .b Sample QC Appointment Letter – F-2
  - .c Sample Alternate QC Appointment Letter F-3
  - .d Sample Test Plan and Log – F-4
  - .e Sample Rework Items list – F-5.

**1.02 RELATED DOCUMENTS AND SECTIONS (NOT USED)****1.03 DEFINITIONS**

.A The following definitions as used in this Section mean:

- .1 **Alternate QC Manager** – The Owner-accepted alternate QC Manager that performs the duties, responsibilities, and functions of the QC Manager when the QC Manager is absent from the Project Site.
- .2 **Contractor's QC Manager's Daily Report** – See Document 00 72 00 3.12.F (General Conditions, Documents and Samples at the Project Site) and Section 01 32 00 (Construction Progress Documentation, Project Reports) for minimum requirements and format of report.
- .3 **Corrective Action Plan** – A written document submitted by the QC Manager to Owner stating Contractor's plan to correct an item of Work that fails to conform to the requirements of the

Contract Documents. Four (4) copies of the Corrective Action Plans must be submitted with the Report of Test Results, inspection report, or Owner's non-conformance notice, no later than 10 a.m. the third workday after each failed test, inspection, or receipt by Contractor of a non-conformance notice from Owner.

- .4 **QC Manager** – Contractor's employee, or employee of "independent" third party contractor not associated with the "production" aspect of the Work, such as a Testing Lab, accepted by Owner and responsible for managing Contractor's QC System. **Contractor's Project superintendent may function as the QC Manager in addition to the Superintendent's other duties on this Project.**
- .5 **QC Plan** – Contractor's written plan identifying all QC personnel, procedures, inspections, tests, instructions, reports, records, and schedules.
- .6 **QC Program** – Contractor's Quality Management requirements for all on-site and off-site Work, including documentation, administration, and coordination of Contractor's management, production and QC personnel.
- .7 **QC Specialist** – The Quality specialist at the Project Site, in addition to other specialized testing and inspection personnel, responsible for Quality Management of a specific or specialized area of Work.
- .8 **QC Specialist's Daily QC Report** - A written document, in the same format as the QC Manager's Daily QC Report, prepared and signed by the QC Specialist for each day the Work is performed in his/her area of responsibility.
- .9 **QC System** - The means by which Contractor ensures Quality.
- .10 **Quality** - Conformance to the requirements established by the Contract Documents
- .11 **Quality Control (QC)** - Contractor's system in place during execution of the Work, to manage and control its own, and its Suppliers' and Subcontractors' activities to comply with the requirements of the Contract Documents. Contractor's Quality Control is referenced as "CQC".
- .12 **Quality Level** - The degree of excellence, basic nature, character, or kind of performance of a particular type of Work set forth in the Contract Documents.
- .13 **Quality Management** - Quality Control and assurance activities instituted to achieve the Quality Levels established by the Contract Documents.
- .14 **Rework Items List** - A written list of Work that does not comply with the requirements of the Contract Documents, maintained by the QC Manager, identifying the items of Work requiring correction, the date the item was originally discovered, the anticipated date for correction of the item, and the actual date of correction. The Rework Items List may contain items on the "Punch List".
- .15 **Subcontractor's Daily Report (Not Used)**
- .16 **Submittal Log** - A written list in a format furnished by or accepted by Owner, indicating the status of all Submittals required by the Contract Documents, grouped by Definable Feature of Work (DFOW), and prepared and maintained by the QC Manager. (See Section 01 32 00, Construction Progress Documentation (Submittal Log), and Section 01 33 10, Submittal Log, for additional requirements).
- .17 **Testing Plan and Log** – A written document, prepared and maintained by the QC Manager, indicating all tests required by the Contract Documents, the entity responsible for performing the test, the date each test was conducted, the date test results were submitted to Owner, remarks, and containing the QC Managers certification that an accredited testing Laboratory was used.

## 1.04 REFERENCES

- .A The publications listed below are part of the requirements of the Contract Documents to the extent referenced:
- .1 ASTM A 880(current edition) Criteria for Use in Evaluation of Testing Laboratories and Organization for Examination and Inspection of Steel, Stainless Steel, and Related Alloys
  - .2 ASTM C 1077(current edition) Laboratories Testing Concrete and Concrete Aggregates for Use in Construction and Criteria for Laboratory Evaluation
  - .3 ASTM D 3666(current edition) Minimum Requirements for Agencies Testing and Inspecting Road and Paving Materials
  - .4 ASTM D 3740(current edition) Minimum Requirements for Agencies Engaged in the Testing and/or Inspection of Soil and Rock as Used in Engineering Design and Construction
  - .5 ASTM E 329(current edition) Agencies Engaged in the Testing and/or Inspection of Materials Used in Construction
  - .6 ASTM E 543(current edition) Agencies Performing Nondestructive Testing.

### 1.05 CONTRACTOR'S QUALITY CONTROL (QC) SYSTEM

- .A Contractor's QC System is the means by which Contractor ensures Quality.
- .B Contractor must establish and maintain a QC System, performing sufficient inspections and tests of all items of Work, including Work of its Subcontractors and Suppliers, to ensure conformance with the requirements of the Contract Documents. Contractor's Quality Control measures must be adequate to cover all construction operations and must be correlated with the Official Progress Schedule.
- .C Contractor's QC System must include the inspections and tests required by the Contract Documents in addition to Contractor's own inspections and tests necessary to control Quality. Contractor must maintain and submit to Owner adequate records of all inspections and tests, and must submit all test results on forms furnished or accepted by Owner.
- .D Contractor must closely inspect all materials upon delivery, and all Work in progress for compliance with the requirements of the Contract Documents. Contractor must promptly reject and return all defective materials and rework any substandard Work without waiting for rejection by Owner.
- .E Contractor must submit, and Owner must accept, Contractor's Quality Control Plan (QC Plan) before starting any Work at the Project Site. Work will be permitted to start only after Owner reviews and accepts Contractor's QC Plan. The QC Plan must identify all QC personnel, procedures, inspections, tests, instructions, reports, records, schedules, etc., per Part 1.09 (QC Plan) of this Section 01 45 00.

### 1.06 QC SYSTEM REQUIREMENTS

- .A The QC System, as defined herein, establishes specific minimum staffing, documentation, reporting, and procedural requirements that Contractor must implement and maintain throughout the Contract Time.
- .B The following points are fundamental to the QC System:
- .1 Owner is not responsible for controlling the Quality of Contractor's Work.
  - .2 Contractor is responsible for implementing and maintaining specific minimum processes and measures for controlling the Quality of the Work.
  - .3 The requirements of the Contract Documents establish the Quality Level.
  - .4 Owner has the right to inspect the Work; Contractor has the obligation to inspect the Work.
  - .5 Owner will review Contractor's QC System for compliance with the requirements of the Contract Documents.

- .6 The objective of Contractor's QC System is to prevent deficiencies in the Work.
- .7 Contractor must staff the Project with a QC Manager who is responsible for managing Contractor's QC System.
- .8 Contractor may be required to employ QC Specialists (specialized inspectors) to assist the QC Manager. Contractor may obtain QC Specialists from outside testing and inspection firms. Their qualifications and duties are detailed in Part 1.08 (QC Organization) of this Section 01 45 00 and Table F-1 (QC Specialist Table).
- .9 Contractor must develop and submit five (5) copies of a QC Plan that complies with the requirements of Part 1.09 (QC Plan) of this Section 01 45 00. The QC Plan must be submitted to, and be accepted by, Owner before Contractor performs any Work on the Project Site, except for mobilization, installation of temporary fencing, surveying and installation of trailers.

### 1.07 QC SYSTEM

- .A Contractor must establish and maintain a QC System as described herein. At a minimum, the QC System must consist of
  - .1 QC Organization;
  - .2 QC Plan;
  - .3 Testing;
  - .4 QC Documentation;
  - .5 QC Manager's Certifications; and
  - .6 Completion Inspections.
- .B The QC System must cover on-site and off-site Work and must be correlated with the Official Progress Schedule.
- .C No on-site Work or testing shall be performed unless the QC Manager or Alternate QC Manager is at the Work site.
- .D Owner reserves the right to require changes in the QC Plan and operations as necessary, including removal of personnel, to ensure the specified Quality of Work. Owner reserves the right to interview any member of Contractor's QC organization at any time to verify member's submitted qualifications.
- .E Contractor must notify Owner in writing of any proposed change to the QC Plan, including changes to QC Organization or personnel, a minimum of seven (7) Days prior to a proposed change. Proposed changes are subject to acceptance by Owner.

### 1.08 QC ORGANIZATION

- .A QC Manager
  - .1 Contractor shall provide a QC Manager at the Work site to implement and manage the QC program. **Contractor's Project superintendent may function as the QC Manager in addition to the superintendent's other duties on this Project.**
  - .2 Duties:
    - .a Be on the Work site at all times during performance of Work, with complete authority to take any action necessary to ensure conformance with the requirements of the Contract Documents. In the event of the QC Manager's absence, the Alternate QC Manager must be present and have the same authority as the QC Manager.



- .b Immediately stop any work that does not comply with requirements of the Contract Documents, and direct removal and replacement of any defective Work.
- .c Conduct daily inspections of Work performed to ensure compliance with requirements of the Contract Documents.
- .d Certify that all Work performed, on and off the construction site, conforms to requirements of the Contract Documents, on a daily basis. Certify that all materials and equipment delivered or installed in the Work comply with the requirements of the Contract Documents, on a daily basis. Report any deficiencies and corrective action planned and taken.
- .e Ensure that Contractor's QC Organization is adequately staffed with qualified personnel to perform all required inspections and tests.
- .f Supervise and coordinate the inspections and tests made by the QC Organization, including the tests and inspections of the Work of Subcontractors and Suppliers.
- .g Review all applicable reference documents identified in the individual specification Sections, such as ASTM, ACI references, etc. The QC Manager is responsible for accessing and providing copies of all such documents and standards identified in the Sections.
- .h Ensure that all required tests are performed and results are reported. Indicate whether test results do or do not conform to requirements of the Contract Documents. Submit Corrective Action Plan(s) for nonconforming items.
- .i Manage All Permits, Special Inspections, and Deferred Submittals
  - .1 Process deferred submittals and special permits (e.g., Bay Area Air Quality Management District; County Hazardous Materials Compliance Division, et al.).
  - .2 Manage the process of obtaining Building Department and Fire Marshal permits to construct for all deferred submittals.
  - .3 Compile and maintain a list of all deferred submittals/permits and their status.
  - .4 Manage the process of obtaining all permits to construct "off site" Work (e.g., within city jurisdiction).
  - .5 Obtain sign-off/approval of all permits by Authorities Having Jurisdiction (AHJ) (e.g., County Fire Marshal, County Building Department, State Elevator Inspector, et al.)
  - .6 Submit all approved permits to Owner as part of Milestone Completion close-out documentation.
- .j Recommend removal of any person from the Project who consistently fails to perform Work properly.
- .k Report to Contractor's senior management the identity of any Subcontractor or Supplier whose Work consistently fails to meet the requirements of the Contract Documents.
- .l Certify each payment invoice.
- .m Certify completion prior to requesting Substantial Completion inspection.
- .n Certify completion prior to requesting Final Inspection.
- .o At the Work site, perform daily maintenance and updating of the following:
  - .1 Submittal Log.
  - .2 Testing Plan and Log.
  - .3 Rework Items List.

- .4 As-built Drawings and Project Manual, marked to show any deviations made from the requirements of the Contract Documents and to indicate the actual materials and equipment incorporated in to the Work.
  - .5 Records Binder containing all Quality Control records.
  - .p Attend all key Project Meetings including Preconstruction Conference, Schedule Orientation Meeting, Progress Meetings, Commissioning Meetings, Demonstration and Training Meetings, and Closeout Conference.
- .B Alternate QC Manager Duties and Qualifications
- .1 Designate an Alternate QC Manager to serve at the Project Site in the absence of the designated QC Manager.
  - .2 The designated QC Manager must not be absent from the Project Site for more two (2) consecutive weeks at a time.
- .C QC Specialist(s) Duties and Qualifications (When applicable.)
- .1 Provide **separate** QC Specialist(s) at the Project Site for the area of responsibilities specified below QC Specialist Table 01 45 00 F-1. **No work defined in Table 01 45 00 F-1 may be performed without the appropriate qualified QC specialist on site. All required QC Specialist certifications (ICBO, AWS, etc.) must be current through the duration of the Work of this Project.**
  - .2 The QC Specialist(s) will assist and report directly to the QC Manager and must have no Project duties other than assigned Quality Control duties.
  - .3 QC Specialist(s) may not perform CBC Chapter 17 inspections which shall be performed by Owner's consultant(s).
  - .4 The QC Specialist(s) must be physically present at the construction site in the assigned area of responsibility, at the frequency specified below in the QC Specialist Table 01 45 00 F-1, and prepare required documentation.
  - .5 The QC Specialist(s) must submit four (4) copies of a certified and dated QC Specialist's Daily QC Report, for each day the Work is performed in his/her area of responsibility, in the same format as the QC Manager's Daily QC Report (see Part 3.09 (Project Reports) of Section 01 32 00 Construction Progress Reports). QC Specialist's Daily QC Report must be submitted to Owner on the next workday.
  - .6 The QC Specialist(s) position(s) is in addition to other specialized testing and inspection personnel to be provided by Contractor, as identified in the Contract Documents, such as manufacturer's representatives, Testing Laboratory personnel, etc.

## 1.09 QC PLAN

### .A Requirements

- .1 Within fourteen (14) Days of the official Contract start date stated in the Notice to Proceed, submit five (5) copies of the QC Plan covering both on-site and off-site Work, for Owner's approval. The QC Plan must be bound in a 3-ring binder, the pages must be numbered sequentially, and the following information must be included:
  - .a Table of Contents listing the major sections identified with tabs in the following order:
    - .1 NAMES, QUALIFICATIONS (Resumes), REFERENCES AND APPOINTMENT LETTERS FOR QC PERSONNEL, including QC Manager and Special Inspectors (if any) identified in Table F-1

- .2 TESTING LABORATORY INFORMATION (Note to spec writer: edit this out if not required)
- .3 TESTING PLAN AND LOG
- .4 QUALIFICATIONS OF TESTING AND BALANCING FIRM, PURSUANT TO SECTION 15XXX (NOTE TO PM: EDIT OUT IF NOT DOING AIR/WATER BALANCING)
- .5 REWORK TRACKING PLAN.
- .b Names and qualifications, in resume format, for each person in the QC organization.
- .c List of subcontracted organizations such as testing firms, architects and engineers that will be employed by Contractor, and a description of the services each will provide.
- .d Testing Plan and Log in the format furnished (Form F-4) or a format accepted by Owner. The Test log shall be continuously updated, pursuant to paragraph 1.10 of this Section. The Test log submitted as part of the CQC Plan shall identify the following:
  - .1 All tests required by the Contract Documents, applicable Codes, and other tests deemed necessary by Contractor;
  - .2 The reference specification section, or Code section, requiring the test; and
  - .3 The frequency of the test.
- .e Testing Laboratory accreditation and capability information required by Part 1.10 (Testing) of this Section 01 45 00.
- .f Rework Tracking Plan and Rework Items List in the format furnished, Form 01 45 00 F-5 or accepted by the Owner, to identify record, track and complete Rework items.
- .2 After incorporating any Owner comments in the Draft CQC Plan, submit five (5) copies of a final draft of the QC Plan covering both on-site and off-site Work for Owner's acceptance. **No work may proceed on site without Owner's acceptance of the QC Plan.**

## 1.10 TESTING

- .A Contractor must perform all sampling and testing required by the Contract Documents and set forth in the Testing Plan and Log.
  - .1 Contractor shall update the test log as follows:
    - .a After Owner-acceptance of the Baseline Schedule, the Contractor/QC Manager shall identify the Schedule activity ID number for each test; and
    - .b After each test is completed, Contractor/QC Manager shall update the log.
- .B Construction Materials Testing Laboratory Requirements (Note to spec writer: ensure a test lab is a requirement of this contract, so edit this section, and the CQC Plan section)
  - .1 Provide and pay for an independent construction materials testing Laboratory (or laboratories, as necessary) accredited by one of the laboratory accreditation authorities listed in below to perform sampling and testing required by the Contract Documents. The Laboratory's scope of accreditation must include the ASTM standards that apply to the specific testing fields listed below. This requirement applies to the specific Laboratory performing the actual testing, not just the "Corporate Office".
  - .2 For testing laboratories that have obtained accreditation by an acceptable laboratory accreditation authority listed below, as part of the CQC Plan Contractor must submit to Owner copies of the Certificate of Accreditation and Scope of Accreditation. The scope of the Laboratory's accreditation must include the test methods required by the Contract Documents.

- 
- .3 Testing laboratories that have not yet obtained accreditation by an acceptable laboratory accreditation authority listed below must:
    - .a As part of the CQC Plan submittal submit for Owner's acceptance an acknowledgment letter from one of the acceptable laboratory accreditation authorities stating that the application for accreditation has been received and the accreditation process has started.
    - .b As part of the CQC Plan submittal submit for Owner's acceptance, certified statements, signed by an official of the laboratory, attesting that the proposed laboratory meets or conforms to the ASTM standards appropriate to the testing field as listed below.
  - .4 Acceptable Laboratory Accreditation Authorities are:
    - .a National Voluntary Laboratory Accreditation Program (NVLAP) administered by the National Institute of Standards and Technology
    - .b American Association of State Highway and Transportation Officials (AASHTO)
    - .c ICBO Evaluation Service, Inc. (ICBO ES)
    - .d American Association for Laboratory Accreditation (ASLA) program.
  - .5 The ASTM Standards for specific testing fields are as follows:
    - .a Construction materials: ASTM E 329
    - .b Concrete and concrete aggregates: ASTM C 1077
    - .c Steel, stainless steel, and related alloys: ASTM A 880
    - .d Nondestructive testing (NDT): ASTM E 543.
  - .6 Include the above accreditation and capability information in the QC Plan.
- .C Capability Verification by Owner
- .1 Owner has the right to verify the adequacy of the proposed laboratory's personnel, equipment, procedures, techniques, and other items pertinent to testing with the requirements of the Contract Documents.
- .D Reports of Test Results
- .1 Action by testing individual or organization:
    - .a Submit actual test results.
    - .b Cite applicable requirements of the Contract Documents and the tests or analytical procedures that were used.
    - .c State whether the item tested or analyzed conforms or fails to conform to specified requirements.
    - .d Conspicuously stamp the cover sheet for each report in large red letters "CONFORMS" or "DOES NOT CONFORM" to the requirements of the Contract Documents, whichever is applicable.
    - .e A testing Laboratory representative, licensed as a Professional Engineer in the State of California and authorized to sign certified test reports, must sign all Reports of Test Results.
    - .f Submit test results directly to Owner and Contractor by 10 a.m. of the second workday after performing each test.
    - .g Update the Test Log. The updated log must reflect:
      - .1 The person or entity responsible for performing each test;

- .2 The date each test was conducted;
  - .3 The date the test results were submitted to Owner; and
  - .4 All pertinent remarks concerning the test or test results.
- .E Action by QC Manager
- .1 As tests are performed, record the results on the "Testing Plan and Log".
  - .2 If an item fails to conform, notify Owner's Project Inspector immediately and submit a Corrective Action Plan for the item with a copy of the Report of Test Results.
  - .3 Submit Corrective Action Plan by 10 a.m. of the third workday after each failed test.
  - .4 Submit an updated copy of the "Testing Plan and Log" at each QC Meeting and each progress meeting.

### 1.11 QC DOCUMENTATION

- .A This section lists and describes the special QC Documentation required to show that materials, equipment, workmanship, fabrication, construction and operations comply with the requirements of the Contract Documents.
- .B Before beginning Work, Contractor must obtain a set of required report forms from Owner's Project Manager.
- .C QC Records Binders: Establish and maintain the following in a series of 3- ring binders. Binders must be divided and tabbed as indicated below. These binders must be readily available to Owner during all Normal Hours Of Work. **Items with \*\* must be submitted to Owner prior to the County Board of Supervisors' acceptance of the Project.**
- .1 QC Plan
  - .2 Testing Plan and Log and all updates\*\*
  - .3 QC Meeting Minutes
  - .4 QC Specialist's Daily Reports\*\*
  - .5 All reports of test results\*\*
  - .6 All summaries of test results\*\*
  - .7 Any interim Milestone inspections, arranged by Milestone number from the Official Progress Schedule.
  - .8 Copies of all Rework Items Lists.
  - .9 Copies of all Deficiency Lists (Punch Lists) issued by QC Staff, Contractor, or Subcontractors, and all Deficiency Lists issued by Owner.
- .D "As-built" Drawings and "As-built" Project Manual
- .1 In addition to the requirements of Part 3.12 (Documents and Samples at the Project Site) of Document 00 72 00 , the QC Manager must ensure that As-built Documents are kept current on a daily basis and marked to show deviations from the requirements of the Contract Documents.
  - .2 Ensure each deviation has been identified with the appropriate modifying documentation (e.g., Change Order #, Field Modification #, Request for Information #, etc.).
  - .3 The QC Manager (or assigned QC Specialist) must initial each deviation and each revision.
  - .4 Upon completion of the Work, the QC Manager must certify the accuracy of the Record Documents.

## 1.12 CERTIFICATIONS

**.A Submittal Certification** (See Section 01 33 10 (Submittal Log), Part 1.06.B (Submittal Requirements).)

- .1 Except for the QC Manager and Alternate QC Manager Appointment letters which may be certified by the Contractor's Authorized Representative, the QC Manager must stamp and sign each sheet of each Product Data Submittal, identified in Sections 01 33 00 (Submittal Procedures) and 01 33 10 (Submittal Log) as requiring CQC Certification, with the following QC certifying statement (except that data submitted in bound volume or on one sheet printed on two sides may be stamped on the front of the first sheet only):

*"The (equipment) (material) (article) shown and marked in this Submittal is that proposed to be incorporated with Project Name (\_\_\_\_\_), Contract Number (\_\_\_\_\_), Project Manual Section (\_\_\_\_\_), has been checked and complies in all respects, except as specifically noted in writing on the Submittal **and** accompanying transmittal, with the requirements of the Contract Documents, is a Complete Submittal, has been coordinated with all other accepted Submittals, and can be properly installed in the allocated spaces.*

*Certified by QC Manager \_\_\_\_\_, Date \_\_\_\_\_ "*  
*(Signature)*

**.B Invoice Certification**

- .1 Furnish the following certification with each payment request, signed by the QC Manager:

*"The Work for which payment is requested, including Materials On Hand, is in compliance with the requirements of the Contract Documents. Record Documents ('as-built' Drawings and Project Manual) are current, accurate, and correctly show Work installed as of the date of the payment request.*

*Certified by QC Manager \_\_\_\_\_, Date \_\_\_\_\_ "*  
*(Signature)*

**.C QC Specialist's Certification**

- .1 QC Specialist's Daily QC Report Certification: Each QC Specialist's Daily QC Report must contain the following statement signed by the QC Specialist:

*"On behalf of Contractor, / certify that this report is complete and correct, that equipment and material used, and Work performed during this reporting period are in compliance with the requirements of the Contract Documents to the best of my knowledge, except as noted in this Report.*

*Certified by QC Specialist \_\_\_\_\_, Date \_\_\_\_\_ "*

**.D QC Specialist Final Report**

- .1 If performing "Special Inspection" as defined in California Building Code Chapter 17, each QC Specialist shall submit a final, signed report stating that the Work requiring Special Inspection was, to the best of the Inspector's knowledge, in conformance to the approved plans and specifications and the applicable workmanship provisions of the Code.

**.E Pre-functional Checklist Certification (Note to PM: Ensure you are doing building commissioning to use these two paragraphs!)** (See Section 01 91 00 (Commissioning).) The QC Manager must furnish the following Certification to Owner upon completion of Pre-functional Testing of all systems and equipment identified to be commissioned in Section 01 91 00:

*"On behalf of Contractor, / certify that all Pre-functional tests have been performed on the Systems and equipment identified to be commissioned in Section 01 91 00, Pre-functional Checklists have been completed, and that the Systems and equipment are fully operational and are ready for Functional Performance testing."*

Certified by QC Manager \_\_\_\_\_, Date \_\_\_\_\_"  
(Signature)

**.F Functional Performance Testing Certification (See Section 01 91 00 (Commissioning).)**

The QC Manager or, if the Commissioning Coordinator is a requirement of this contract, then the CC must furnish the following Certification to Owner upon completion of Functional Performance Testing of all systems and equipment identified to be commissioned in Section 01 91 00:

*"On behalf of Contractor, / certify that the that all Functional tests have been performed on the Systems and equipment identified to be commissioned in Section 01 91 00. Functional Performance checklists have been completed, and that the Systems and equipment are fully operational and meet the requirements of the Contract Documents."*

Certified by QC Manager of CC \_\_\_\_\_, Date \_\_\_\_\_"  
(Signature)

**.G Request for Preliminary Final Inspection**

- .1 When the QC Manager believes the Work is complete, or, if applicable, the Work of an Intermediate Milestone, including cleaning of the Work, the QC Manager must submit to Owner three (3) copies of a written certification that the required Work is complete and request a Preliminary Final Inspection by Owner.

- .2 For Intermediate Milestones. Prior to requesting the Preliminary Final Inspection, the QC Manager must furnish the following Milestone Completion Certification to Owner:

*"To the best of my knowledge,[the Work of Milestone (#) has been completed, inspected, tested and is in full compliance with the requirements of the Contract Documents. All items in the Rework list have been completed and/or approved as satisfactory by the County Quality Assurance Inspector."*

Certified by QC Manager \_\_\_\_\_, Date \_\_\_\_\_"  
(Signature)

- .3 For the Entire Work. Prior to requesting the Preliminary Final Inspection, the QC Manager must furnish the following Completion Certification to Owner:

*"To the best of my knowledge, the Work has been completed, inspected, tested and is in full compliance with the requirements of the Contract Documents. All items in the Rework list have been completed and/or approved as satisfactory by the County Quality Assurance Inspector."*

Certified by QC Manager \_\_\_\_\_, Date \_\_\_\_\_"  
(Signature)

**.H Request for Final Inspection.**

- .1 For Intermediate Milestones. Prior to requesting the Final Inspection of an intermediate Milestone, the QC Manager must furnish the following Milestone Completion Certification to Owner:



*"The Work of Milestone (#) has been completed, inspected, tested and is in full compliance with the requirements of the Contract Documents. All Punch List items identified during the Preliminary Final Inspection have been completed.*

Certified by QC Manager \_\_\_\_\_, Date \_\_\_\_\_"  
(Signature)

- .2 For Substantial Completion of the Work. Prior to requesting the Final Inspection for Substantial Completion of the Work, the QC Manager must furnish the following Substantial Completion Certification to Owner:

*"The Work has been completed, inspected, tested and is in full compliance with the requirements of the Contract Documents. Punch List items identified during the Preliminary Final Inspection are substantially complete and will be finally complete within [TBD] days.*

Certified by QC Manager \_\_\_\_\_, Date \_\_\_\_\_"  
(Signature)

**.I Request for Owner's Notice of Substantial Completion**

- .1 Prior to Owner's Representative (OAR) issuing the Owner's Notice of Substantial Completion, the QC Manager must furnish the following Substantial Completion Certification to Owner. This certification is in addition to any intermediate Milestone Completion certifications:

*"The entire Work has been completed, inspected, tested and is in full compliance with the requirements of the Contract Documents. All Punch List items have been substantially completed; punch list items will be finally complete within [TBD] days. All items on the rework list have been completed.*

*"All Substantial Completion submittals required by the Contract Documents have been submitted to and accepted by Owner's Authorized Representative."*

Certified by QC Manager \_\_\_\_\_, Date \_\_\_\_\_"  
(Signature)

**.J As-built Document Certification**

- .1 Accompanying submission of the final As-built Documents, and prior to requesting Substantial Completion, the QC Manager must furnish the following Certification to Owner:

*"The attached As-Builts ('As-Built' Drawings and Project Manual) for (Contract Name and Number) were prepared in accordance with the requirements of the Contract Documents, are accurate and complete, and may be relied on by the Owner to locate installed Work.*

Certified by QC Manager \_\_\_\_\_, Date \_\_\_\_\_"  
(Signature)

**1.13 INSPECTION FOR SUBSTANTIAL COMPLETION**

- .A Contractor's Continuing Quality Control Responsibility. Reference Document 00 72 00 (General Conditions), Article 3, Parts 3.01 – 3.06; Article 9, Part 9.07; Article 12; and Article 13, Part 13.11.
- .1 The term "Inspection" used in this Paragraph 1.15 refers to inspection by Owner for the purpose of Owner's determination of Substantial Completion of the Work. The fact of Owner's inspections shall not be construed by Contractor as relieving Contractor of any of the requirements of this



Section 01 45 00, including without limitation, Contractor's responsibilities under Contractor's QC program described in paragraphs 1.05 and 1.06 of this Document 01 45 00.

- .2 Neither Owner's inspections, nor the inspections of other state, local, or regulatory authorities with jurisdiction, necessary for determining Substantial Completion, nor the failure to include any item on a Punch List, shall relieve Contractor of its obligations to perform the Work in accordance with the Contract Documents, which obligation remains regardless of any tests, inspections, approvals or punch lists required or performed or granted as part of the Owner inspections described herein or any other inspections necessary to achieve Substantial Completion. Rather, Contractor is and will remain responsible for (1) the quality of the Work; (2) performing necessary inspections to control the quality of the Work; (3) identifying deficiencies in the Work as related to the scope and standards established in the Contract Documents; and (4) taking all actions necessary to correct deficiencies and complete the Work in the time established in the Contract Documents.
- .B Contractor's Request for Preliminary Final Inspection. When Contractor, acting through the QC Manager, believes the Work is complete and ready for Preliminary Final Inspection, the QC Manager must submit to the Owner three (3) copies of a written certification that the Work is complete and request a Preliminary Final Inspection of the Work by the Owner. The required certification by Contractor's QC Manager and related terms and conditions is included in Paragraph 1.14 above and is repeated here for convenience:.

*"To the best of my knowledge, the Work has been completed, inspected, tested and is in full compliance with the requirements of the Contract Documents. All items in the Rework list have been completed and/or approved as satisfactory by the County Quality Assurance Inspector."*

Certified by QC Manager \_\_\_\_\_, Date \_\_\_\_\_ "

(Signature)

- .C Owner's Preliminary Final Inspection. Within seven (7) Days of receipt of QC Manager's certification that the Work is complete, Owner's Authorized Representative, and/or Project Manager, Project Inspector, Architect of Record, and other staff, will make a Preliminary Final Inspection with the QC Manager and the Project Superintendent. If Owner's Project Manager determines that, based on the results of the Preliminary Final Inspection, the Incomplete/Deficient work identified is greater in substance and/or volume than can be appropriately declared as Punch List, then the Work is not complete enough for the Preliminary Final Inspection. Contractor will be so notified in writing. Contractor must complete the Work and re-initiate procedures for another Preliminary Final Inspection. Any costs to Owner for more than two (2) Preliminary Final Inspections may be charged to Contractor.
- .D Owner's Punch List. If the results of the Preliminary Final Inspection are satisfactory to Owner's Project Manager, Owner's Representative will review the Work and, in conjunction with the QC Manager, prepare a list of deficiencies in the completed Work (Punch List.) and issue the List to Contractor. Neither Owner's preparation of the Punch List, nor any omission from the Punch List of items of incomplete Work, shall be construed as relieving Contractor from completing all the Work required of the Contract Documents.
- .E Contractor's Request for Final Inspection. After Contractor completes the Work of the Punch List, Contractor, acting through the QC Manager, must certify that the entire Work, including Punch List, is complete. If minor items on the Punch List remain incomplete at the time of the certification, then Contractor must provide a promised date for completion of such items. Contractor's QC Manager shall furnish the following Substantial Completion Certification to Owner:

*"The Work has been completed, inspected, tested and is in full compliance with the requirements of the Contract Documents. Punch List items identified during the Preliminary Final Inspection are substantially complete and will be finally complete within [TBD] days.*

Certified by QC Manager \_\_\_\_\_, Date \_\_\_\_\_"  
(Signature)

- .F Owner's Final Inspection. Upon delivery of such certification to Owner's Representative, a Final Inspection will occur within ten (10) calendar days of the QC Manager's certification, if Owner's Representative agrees with the Contractor's certification. If Owner's Representative determines the Work is still deficient, Contractor will again be furnished with a Punch List identifying the observed deficiencies in the Work. After all deficiencies (Punch List items) have been corrected, Contractor/QC Manager must initiate procedures for another Final Inspection. If Contractor requests more than two (2) Final Inspections, any costs to Owner for additional Final Inspections may be changed to the Contractor.
- .G Owner's Letter of Substantial Completion. If Owner's Representative determines that the items on the Punch List have been satisfactorily corrected, Owner's Representative will send a letter to the Contractor acknowledging Milestone Completion or Substantial Completion as may be appropriate. The letter will identify the actual date of Milestone Completion or Substantial Completion as appropriate.

#### 1.14 Not Used.

#### 1.15 NOTIFICATION OF NONCOMPLIANCE

- .A If Owner notifies Contractor of any observed noncompliance with the requirements of the Contract Documents, Contractor must take immediate corrective action upon receipt of such notice. Such notice, when delivered to Contractor at the Project Site, is sufficient for the purpose of notification.
- .B If Contractor fails or refuses to promptly comply with any notice of noncompliance, Owner may, in addition to other remedies provided by law and/or the Contract Documents, issue an Order to the Contractor to suspend part or all of the Work until Contractor has taken satisfactory corrective action. No part of the cost or time expended by Contractor or its Subcontractors due to such Order to suspend Work shall be made the subject of a Dispute or Claim against Owner for extension of the Contract Time, Contract Sum, or for excess costs or damages of any kind.

#### PART 2 - PRODUCTS (NOT USED)

#### PART 3 - EXECUTION (NOT USED)

#### PART 4 - FORMS

#### QC SPECIALIST TABLE 01 45 00 F-1

Note to the spec writer: this table must be edited to suit the needs of the project!!

QC Specialist - Qualifications & Experience	Areas of Responsibility	Physical Present At Construction Site
Concrete Inspector: ICBO Certification Reinforced Concrete Certification ACI Certification	Sections: 02751,03200, 03300, 03310, 03331, 03450	All placement of Concrete Work. Inspection of rebar placement and embedded items before placement of concrete. For section 03450, if concrete sections are cast off-site, make at least two visits to pre-cast yard to assure quality of units.

<b>CMU Masonry Inspector:</b> ICBO – Certification CBC Chapter 17 Requirements	Section: 04200	Continuous inspection during placement of CMU Masonry work and grouting operations. At all times comply with CBC 1701.
<b>Welding Inspector:</b> ICBO – Certification AWS – Certification	Sections: 05110, 5120, 5210, 5310, 5400	Continuous Inspection during all on-site structural erection and structural welding operations as defined in CBC Chapter 17. Inspect all high-strength bolts. Performance of ultrasonic testing as required per specification sections.
<b>Roofing / Waterproofing Inspector:</b> Minimum 5 years verifiable experience as a roofing & waterproofing inspector /consultant experience with materials specified for the TBD.	Section: 07115, 07116, 07145, 07180, 7210, 07220, 07262, 07264, 07270, 07533, 07620, 07900,	Continuous Inspection of all placements of waterproofing / roofing materials.

**SAMPLE QC MANAGER APPOINTMENT LETTER 01 45 00 F-2**

Project: TBD

Contract No.: \_\_\_\_\_

Subject: Contractor Quality Control Program

Re: Appointment as QC Manager

Dear \_\_\_\_\_ :

You are hereby appointed as QC Manager for the Contractor Quality Control program for the above referenced contract.

Your responsibilities are set forth in the Contract Documents and in Specification Section 01 45 00. A summary of those responsibilities is attached to this letter.

You will report directly to an officer of this firm; you will act independently of the “production organization.” You have complete authority to immediately stop work that does not comply with Contract requirements, and direct removal and replacement of any defective work.

If any person or sub-contractor working on this project consistently fails to perform work properly, in accordance with the contract documents, you will recommend actions to immediately remove them from the project.

Your role as QC Manager is very important to ensure quality work for this firm and the County of Santa Clara on this project. Please keep me advised on how the project progresses.

Sincerely,

(Signature)

Company Officer of Contractor

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**SAMPLE ALTERNATE QC MANAGER APPOINTMENT LETTER 01 45 00 F-3**

Project: Morgan Hill Courthouse and Justice Agencies Building  
Project No. 263-C0050

Contract No.: \_\_\_\_\_

Subject: Contractor Quality Control Program

Re: Appointment as QC Manager

Dear \_\_\_\_\_:

You are hereby appointed as Alternate QC Manager for the Contractor Quality Control program for the above referenced contract. Mr/Ms/Mrs \_\_\_\_\_ has been appointed QC Manager. In the event of his/her absence, you shall be present and have the same authority as the QC Manager.

Your responsibilities are set forth in the Contract Documents and in Specification Section 01 45 00. A summary of those responsibilities is attached to this letter.

You will report directly to an officer of this firm; you will act independently of the "production organization." You have complete authority to immediately stop work that does not comply with Contract requirements, and direct removal and replacement of any defective work.

If any person or sub-contractor working on this project consistently fails to perform work properly, in accordance with the contract documents, you will recommend actions to immediately remove them from the project.

Your role as Alternate QC Manager is very important to ensure quality work for this firm and the County of Santa Clara on this project.

Sincerely,

\_\_\_\_\_  
(Signature)  
Company Officer of Contractor

**SAMPLE TESTING PLAN AND LOG – FORM 01 45 00 F-4**

PROJECT NUMBER: 263-C000050			PROJECT TITLE AND LOCATION: Morgan Hill Courthouse and Justice Agencies Building 301 Diana Avenue and 17275 Butterfield Rd., Morgan Hill, CA.95037						CONTRACTOR:		
SPECIFICATION SECTION AND PARAGRAPH NUMBER	SCHEDULE ACTIVITY ID	TEST REQUIRED	ACCREDITED/ APPROVED LAB		SAMPLED BY	TESTED BY	LOCATION OF TEST		DATE COMPLETED	DATE FORWARDED TO OWNER	REMARKS
			YES	NO			ON SITE	OFF SITE			

SHEET \_\_\_\_\_ OF \_\_\_\_\_

**SAMPLE REWORK ITEMS LIST – FORM 01 45 00 F-5**

Project Name: Morgan Hill Courthouse and Justice Agencies Building

Project No.: 263-C000050

Contractor: \_\_\_\_\_

Number	Date Identified	Description	Contract Requirement (spec section and Par No., Drawing No. and Detail No. etc.)	Action Taken By QC Manager	Resolution	Date Completed

Sheet \_\_\_\_\_ of \_\_\_\_\_

**END OF SECTION 01 45 00**

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**SECTION 01 50 00  
TEMPORARY FACILITIES AND CONTROLS**

**PART 1 - GENERAL****1.01 SUMMARY**

.A This Section includes:

- .1 [Part 1 – General](#)
  - .a [1.01 – Summary](#)
  - .b [1.02 – Related Documents, Codes, and Standards \(NOT USED\)](#)
  - .c [1.03 - Definitions](#)
  - .d [1.04 - Utilities](#)
  - .e [1.05 – WASTE DISPOSAL](#)
  - .f [1.06 - Temporary Construction Facilities](#)
  - .g [1.07 -Temporary Controls](#)
  - .h [1.08 - Fire Protection](#)
  - .i [1.09 - Submittals](#)
- .2 [Part 2 – Products \(Not Used\)](#)
- .3 [Part 3 – Execution \(Not Used\)](#)
- .4 Part 4 – Forms - (Not Used)

**1.02 RELATED DOCUMENTS, CODES AND STANDARDS (NOT USED)****1.03 DEFINITIONS**

- .A **Critical Lift** – A Critical Lift is a non-routine lift requiring detailed planning and additional or unusual safety precautions. Critical Lifts include lifts which require the load to be lifted, swing, or placed out of the view of the operator; lifts made with more than one crane; lifts involving non-routine or technically difficult rigging arrangement; or any lift which the lift or crane operator believes should be considered critical.
- .B **Hot Work** - Hot work includes any operations capable of initiating fires or explosions, including cutting, welding, brazing, soldering, grinding, thermal spraying, thawing pipe, torch applied roofing, or any other similar activity.
- .C **Fire Marshal** – Office of the Fire Marshal, Santa Clara County
- .D **SD&S No. SI-7** – Fire Marshal Standard Details & Specifications (SD&S) Number SI-7 (Construction Site Fire Safety)
- .E **Temporary Fencing** - Temporary fencing Provided and Installed by Contractor as needed by Contractor to protect equipment, field office, stored items, Project Site, and Work until final Demobilization.
- .F **Temporary Measures** – Temporary Facilities and Controls

**1.04 UTILITIES**

- 
- .A The County will pay for all utilities consumed during the Project.
  - .B Electricity
    - .1 Electrical service including metering devices needed by Contractor to perform the Work must be provided and paid for by Contractor.
    - .2 Arrange with utility company to provide service required for temporary power and lighting, and pay all costs for service and for power used.
    - .3 Install circuit and branch wiring with area distribution boxes located so that power and lighting is available throughout the construction by the use of construction-type power cords.
    - .4 Provide adequate artificial lighting for all areas of Work in accordance with industry safety standards including OSHA requirements when natural light is not adequate for Work and for areas accessible to the public.
    - .5 If additional temporary utility poles or electric extensions are deemed necessary by Contractor to perform Contract Work, Contractor must submit four (4) copies of a plan showing the proposed temporary utility poles or electric extensions prior to installation. Contractor must pay for all additional temporary utility poles or electric extensions installed.
  - .C Water Service
    - .1 Contractor must make arrangements and pay for all temporary water and water metering devices required for construction purposes including landscape irrigation.
    - .2 Contractor must provide potable water for Contractor's employees and the employees and representatives of the Owner.
  - .D Sanitary Facilities
    - .1 Contractor must Provide and pay for an appropriate number of sanitary facilities, in compliance with all laws and regulations, for use by Contractor and Owner's personnel.
    - .2 Regular service of the sanitary facilities must be maintained by Contractor to keep a clean, healthy, and hygienically acceptable work environment.
    - .3 Contractor must not use Owner's sanitary facilities without prior written Approval of Owner's Project Manager.

#### 1.05 WASTE DISPOSAL

- .1 Unless otherwise specifically stated in the Contract Documents, Contractor must Provide and pay for all Waste Disposal.
- .2 Wastes must be properly handled, and stored in covered containers, and removed from the Project Site at least once each week.
- .3 Wood, cardboard, packing material, form lumber and similar combustible debris shall not be accumulated within buildings. Such debris, rubbish and waste material must be removed from buildings on a daily basis. (See SD&S No. SI-7)

#### 1.06 TEMPORARY CONSTRUCTION FACILITIES

- .A Contractor's Field Office
  - .1 Contractor must locate field office so as not to disrupt Owner Operations
  - .2 Contractor must submit proposed location of Field Office to Owner, for Owner Acceptance
- .B Advertising



- 
- .1 Advertising is not permitted.
  - .C Temporary Fencing
    - .1 Contractor must Install Temporary Fencing to protect equipment and stored items.
    - .2 Contractor must Provide and pay for Temporary Fencing to protect Project Site and Work areas as needed until final demobilization.
  - .D Storage Areas and Sheds
    - .1 Prior to mobilizing to the Project Site, Contractor must submit the intended location of Contractor's storage sheds and storage areas for Owner review and acceptance.
    - .2 Contractor must confine its apparatus, storage of materials, and construction operations to areas Approved by Owner's Project Manager.
    - .3 Contractor must not unreasonably encumber the premises and roads with its materials and equipment.
    - .4 The Contractor must not store bulk quantities of fuel, oils, solvents or any other hazardous materials in storage tanks on-site.
  - .E Equipment Maintenance and Repair
    - .1 Contractor must perform equipment maintenance activities in a designated area that is prepared to protect the ground surface from spills.
    - .2 Contractor must collect, contain and properly dispose of all waste material (including waste oil, coolant, grease, and equipment parts) generated from these activities on a daily basis.
    - .3 Equipment service trucks must provide fuels and lubricants for construction equipment. Contractor must not store bulk quantities of fuel or oil in on-site storage tanks.
  - .F Vehicular Access
    - .1 All vehicles must be operated in a safe manner.
    - .2 Contractor's equipment must enter and leave the Project area via access routes designated by Owner, and move in the direction of public traffic at all times. All movements on or across public traveled ways must not endanger public traffic.
  - .G Parking
    - .1 Parking for personal vehicles of Contractor's personnel must be limited to designated areas specified or Approved by Owner's Project Manager.
    - .2 Personal vehicles must not be parked in the Work area.
    - .3 Parking of construction equipment must be limited to designated areas specified or Approved by Owner.
  - .H Progress Cleaning
    - .1 Contractor must maintain the Project Site in a clean and orderly condition at all times.
    - .2 Contractor must maintain all Project areas free of waste materials, debris, dust, mud and rubbish caused by Contractor's operations.
    - .3 Work and storage areas must be kept clean and free of rubbish on a daily basis.
    - .4 Contractor must immediately remove any spillage resulting from hauling operations along or across any public traveled way.

- 
- .5 Contractor must perform daily inspection of Project Site, Work areas, and public traveled ways to enforce the above requirements.
  - .I Concrete Washout Areas
    - .1 Concrete washout must be limited to designated areas specified or Approved by Owner.
  - .J Temporary Living Facilities
    - .1 Contractor's employees, or others subject to the Contractor's control, are not permitted to reside on the Project Site in temporary living facilities.
  - .K On-site Fabrication areas
    - .1 On-site Fabrication must be limited to designated areas specified or Approved by Owner.
  - .L Hoists, Temporary Elevators and Man-lifts
    - .1 Provide facilities for hoisting materials and employees.
    - .2 Do not permit employees to ride hoists that comply only with requirements for hoisting materials.
    - .3 Selection of type, size and number of facilities is the Contractor's option.
    - .4 Provide properly trained operating personnel for equipment.
    - .5 Truck cranes and similar devices used for hoisting are considered equipment and not Temporary Construction Facilities.
  - .M Crane Lift
    - .1 Person-in-Charge
      - .a Contractor's General Superintendent (Superintendent) serves as the Person-in-Charge for crane lift activities.
      - .b The Person-in-Charge has overall responsibility for all crane lifts on the Project, and is specifically responsible for
        - .1 Verifying that the crane certification and inspection records are up to date before allowing the crane on the Project site.
        - .2 Organizing a pre-lift meeting and ensuring all the appropriate people are present.
        - .3 Establishing a Lift Plan, submitting it for review by Owner and the County Fire Marshal and ensuring it is followed.
        - .4 Providing a well-prepared working area for the crane before it arrives on the job.
    - .2 Lift Plan
      - .a For every Critical Lift, a Lift Plan must be prepared by Contractor, and submitted to the Owner for Acceptance.
      - .b The Person-in-Charge will review and sign the Lift Plan.
      - .c The Lift Plan will include:
        - .1 A list of items to be moved, including a description of each item's weight, dimensions, center of gravity and presence of hazardous or toxic materials.
        - .2 A list and description of the type and rated capacity of operating equipment that are needed to perform the move, including the manufacturer's maximum load limits for the entire range of the lift as listed in the load charts.

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- .3 A letter designating the crane operator, lift supervisor and rigger, and listing the qualifications of each.
  - .4 A list of environmental conditions under which lift operations are to be stopped.
  - .5 Step-by-step operating procedures that include applicable rigging precautions and safety measures.
  - .6 A sketch showing:
    - .a position of the crane(s),
    - .b location of both underground and overhead utilities,
    - .c location of any public streets which will be impacted by the lift and the location of flaggers, if needed;
    - .d location of any private streets, and an indication of the area to which access will be restricted or eliminated during the lift; and
    - .e location of all outriggers and the size/thickness of any outrigger pads and/or cribbing to be used.
  - .d Three copies of the Lift Plan will be submitted to the Owner no less than ten (10) days prior to the planned lift.
  - .3 Crane Operators
    - .a Crane operators must be qualified in the safe operation of cranes or hoisting apparatus.
    - .b Documentation must be submitted to Owner verifying qualifications of the operators.
  - .4 Pre-Lift Meeting
    - .a For every Critical Lift, a pre-lift meeting will be conducted at the site at least one (1) day prior to the planned lift.
    - .b All personnel involved in the lift will be present and the role of each participant will be reviewed.
    - .c Topics covered at the meeting will include, but will not be limited to site conditions, lift requirements, lift procedures and signals, potential hazards (including obstructions, utilities and traffic concerns).
  - .N Helicopter Lift
    - .1 Timing
      - .a Helicopter lifts must be performed on a weekend.
      - .b Owner must approve the timing of the helicopter lift.
      - .c The building must be unoccupied during the lift operation.
    - .2 Person-in-Charge
      - .a Contractor's General Superintendent (Superintendent) serves as the Person-in-Charge for helicopter lift activities.
      - .b The Person-in-Charge has overall responsibility for all helicopter lifts on the Project, and is specifically responsible for
        - .1 Verifying that FAA approval has been received for the helicopter lift, pursuant to FAA requirements in CFR 14 Part 133.

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- .2 Organizing a pre-lift meeting and ensuring all the appropriate individuals are present.
  - .3 Establishing a Lift Plan, submitting it for review by Owner and the County Fire Marshal and ensuring it is followed.
  - .3 Lift Plan
    - .a A Lift Plan must be prepared by the Contractor, and submitted to the Owner for Acceptance, for every Critical Lift.
    - .b The Person-in-Charge will review and sign the Lift Plan.
    - .c The Lift Plan will include:
      - .1 A copy of the Rotorcraft External-Load Operator Certificate issued by the FAA under CFR 14 Part 133.17.
      - .2 A copy of the document issued by the FAA's San Jose Flight Standards District Office approving the proposed helicopter lift.
      - .3 A list of items to be moved, including a description of each item's weight, dimensions, center of gravity and presence of hazardous or toxic materials.
      - .4 A letter designating the lift supervisor and rigger, and listing the qualifications of each.
      - .5 A list of environmental conditions under which lift operations are to be stopped.
      - .6 Step-by-step operating procedures that include applicable rigging precautions and safety measures.
      - .7 A sketch showing:
        - .a location of equipment prior to lift,
        - .b location of both overhead utilities,
        - .c location of any public streets which will be impacted by the lift and the location of flaggers, if needed;
        - .d location of any private streets, and an indication of the area to which access will be restricted or eliminated during the lift.
    - .d Three copies of the Lift Plan will be submitted to the Owner no less than ten (10) days prior to the planned lift.
  - .4 Pre-Lift Meeting
    - .a For every Critical Lift, a pre-lift meeting will be conducted at the site at least one (1) day prior to the planned lift.
    - .b All personnel involved in the lift will be present and the role of each participant will be reviewed.
    - .c Topics covered at the meeting will include, but will not be limited to site conditions, lift requirements, lift procedures and signals, potential hazards (including obstructions, utilities and traffic concerns).
  - .O Scaffolding
    - .1 Furnish, erect and maintain all required scaffolding for the Work of this Project.
    - .2 Scaffolding and accessories must conform to all regulations governing such equipment.
    - .3 Maintain scaffolding in conformance with all applicable safety requirements.

- .4 Provide calculations, demonstrating the structural stability of the scaffolding, signed and stamped by a Professional Engineer, for all scaffolding exceeding one story in height.
- .5 Immediately upon completion of use, remove all scaffolding and accessories from the Job Site.
- .6 At Contractor's option, individual Subcontractors may provide scaffolding for their Work; however, all scaffolding remains the responsibility of Contractor.

.P Temporary Enclosures

- .1 Provide temporary weather-tight enclosure of exterior walls for successive areas of building as work progresses, as necessary to provide acceptable working conditions, to provide weather protection for materials, allow for effective temporary heating, and to prevent entry of unauthorized persons.
- .2 Provide temporary exterior doors with self-closing hardware and padlocks.
- .3 Temporary Enclosures must be removable as necessary for Work and for handling of materials.

### 1.07 TEMPORARY CONTROLS

.A Temporary Barriers

- .1 Contractor must Provide and maintain temporary barriers as needed to prevent unauthorized entry to Work areas.
- .2 Contractor must Provide and maintain temporary barriers as needed to protect existing facilities and adjacent properties from damage.
- .3 Contractor must Provide and maintain temporary barriers as needed to protect outdoor child care area from dust or spray from Work in adjacent areas.
- .4 Contractor must Provide adequate measures to protect third party vehicular traffic from damage.
- .5 Contractor must Provide adequate measures to protect third party foot traffic from injury.
- .6 Install Temporary Barriers in a neat and reasonable uniform appearance, structurally adequate for required purposes.
- .7 Maintain Temporary Barriers during entire Construction Time.
- .8 Relocate Temporary Barriers as required by progress of Construction.
- .9 Contractor must remove Temporary Barriers when no longer needed, or at completion.

.B Protection of Work

- .1 Contractor must protect installed Work and Provide special protection where needed or required by the Contract Documents.
- .2 Contractor must Provide suitable drainage to protect the Project Site and the Work.
- .3 Contractor must erect such temporary structures as are necessary to protect the Work, materials, and equipment from damage.
- .4 Contractor must maintain staking, flagging, Temporary Fencing, and barrier fencing throughout the Contract Time as required for protecting the Work.

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.C Protection of Existing Property

- .1 Contractor must protect all existing utilities, facilities, landscape, fencing, equipment, furniture and all other existing structures and improvements within the Project area not specifically scheduled for demolition.
- .2 To the extent permitted by law, any damage caused by Contractor to existing utilities, facilities, equipment, furniture, fencing, and all other existing structures and improvements must be fully and immediately restored at Contractor's expense.

.D Protection of Pedestrians

- .1 Contractor must pave pedestrian openings through false work or Provide full width continuous wood walks, and keep all walkways clear.
- .2 Contractor must protect pedestrians from falling objects and water runoff.
- .3 Overhead protection for pedestrians must extend not less than four (4) feet beyond the edge of a structure.
- .4 Front and rear entrances must be maintained for unimpeded pedestrian use throughout Work. Contractor must submit design of temporary protective structure to Owner for review by Fire Marshal at least ten (10) days prior to beginning Work in these areas. Exit signs must be maintained in temporary structures. Lighting must be provided; however, Contractor may use temporary construction lights to meet this requirement.

.E Egress Signage

- .1 Contractor must Provide and post temporary signs indicating egress paths during the entire period of Work.
- .2 Egress paths must reflect egress routes identified on Drawing {INSERT}.
- .3 If Work is phased, egress signs must be appropriate to the phase of Work.

.F Security

- .1 The security of the Project Site, Work area, and stored materials is Contractor's responsibility during the entire Contract Time.
- .2 Owner is not responsible for damage to or loss of Contractor's materials and equipment left at the Project Site.
- .3 Contractor must repair, replace, or restore all existing facilities, equipment, furniture, and new Work damaged, destroyed, lost, stolen, or defaced due to vandalism or theft.

.G Traffic Control:

- .1 Contractor must not stage vehicles or equipment on railroad tracks, private property, or on any public street unless expressly authorized in advance by the local jurisdiction or private property owners.
- .2 Contractor must keep all surface areas (i.e., site roads, off-site streets, and parking areas) clear of dirt, mud, and debris and must clean such surfaces as needed, or as Directed by Owner's Project Manager.
- .3 Locate temporary roads, drives, walks and parking facilities to provide uninterrupted access to construction offices, Work and storage areas, and other areas as required for efficient execution of the Work.
- .4 Keep fire hydrants and water control valves free from obstruction and accessible for use.
- .5 Provide flagmen for traffic control as needed or required.

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- .6 At completion of the Work, permanent roads and entranceways must be left in at least equal condition to that existing at the start of the Work, except as may be otherwise required by the Contract Documents.
- .H Noise Control
- .1 Unless Owner's Authorized Representative grants a waiver in writing, Contractor must comply with all local noise ordinances, and must limit the Normal Hours of Work accordingly. (See [Document 00 72 00.4.09, "Sound Control"](#))
- .2 {**OPTIONAL?** See Sections 02070.1.03 and 1.04 for specific requirements related to approved weekend work for demolition in Child Care area}
- .I Dust Control
- .1 Contractor must minimize dust nuisances resulting from performance of the Work, both inside and outside the Project limits, by applying either water or dust palliative, or both.
- .2 [**OPTIONAL?** See Section 107.A.3 for special requirements relating to Child Care play area.]
- .J Surface Water Control
- .1 Contractor must
- .a Construct whatever temporary facilities are necessary to provide prevention, control and abatement of water pollution. (See Section 01 57 00 "Storm Water Pollution Prevention Plan" )
- .b Control surface drainage water to prevent damage to the Work, Project Site or adjoining properties.
- .c Provide whatever temporary measures are needed or required including but not limited to berms, dikes, ditches, and drains to direct surface drainage away from excavations, trenches, pits, tunnels and other Work areas.
- .d Provide, operate and maintain equipment of adequate capacity to control surface water.
- .e Dispose of drainage water in a manner to prevent flooding, erosion, or other damage to any portion of the Work, Project Site or to adjoining areas.
- .f Plan and execute earthwork operations by methods which control surface drainage.
- .g Expose minimum amount of bare soil at any given time.
- .h Inspect earthwork daily for evidence of erosion and apply erosion control measures as needed or required.
- .2 Contractor must obtain and pay for any discharge permits required.
- .K Trenching and Excavation
- .1 Before any excavation, Contractor must, pursuant to California Government Code [§4216](#) and [Cal/OSHA 8CCR1540](#), outline the excavation in white paint (preferably chalk or water base), provide two (2) workdays notice to Underground Service Alert (1-800-227-2600), obtain a locator number, and follow all necessary procedures to avoid underground facility damage.
- .2 Contractor must meet all regulatory requirements and Provide adequate temporary protection before, during, and after all Trenching and Excavation activities.
- .L Pesticide Use
- .1 Contractor must comply with [Division B28](#) of the Santa Clara County Ordinance Code relating to integrated pest management and pesticide use.

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.M Compliance with Owner's Policies, Ordinances, and Regulations

- .1 Contractor must comply with Owner's Policies, Ordinances, and Regulations regarding signs, advertising, barricades, danger signals, pesticide use, fires, smoking, security, noise, or other policies or regulations, and must require all persons employed on the Work to comply with all building or institutional regulations, and vehicle, street and highway codes while on the premises and roads relating to the Project Site.

.N Temporary Heat and Ventilation

- .1 Provide temporary heat and ventilation in interior spaces prior to and when work is being performed. This requirement will be in effect during all phases of the Work, except for a period of seven (7) consecutive calendar Days, commencing with cessation of air handling operations in building in preparation for removal of existing rooftop air handling and exhaust fan equipment and resumption of all air handling operations in building, following completion of placement and connection of new rooftop air handling and exhaust fan equipment.
- .2 Maintain adequate environmental conditions to facilitate progress of the Work.
- .3 Meet specified minimum conditions for the installation of materials.
- .4 Protect materials and finishes from damage due to temperature or humidity.
- .5 Provide adequate forced ventilation of enclosed areas for curing of installed materials, to disperse humidity, and to prevent hazardous accumulations of dust, fumes, vapors or gases.
- .6 Portable heaters must be standard approved units complete with controls and meet the requirements of Section 01 50 00.1.08.Q, "Temporary Heating Equipment".
- .7 Pay all costs of installation, maintenance, operation and removal, and for fuel consumed.

**1.08 FIRE PROTECTION** (See SD&S No. SI-7)

- .A Prior to performing any Work at the Project Site, Contractor must establish at the Project Site, methods, procedures, and equipment for emergency notification to the fire department via telephone. The street address of the construction site must be posted adjacent to the telephone, along with the public safety emergency telephone number(s).

.B Fire Department Access Roadways

- .1 The Project Site must be accessible by fire department apparatus by means of roadways having an all-weather driving surface of not less than twenty feet (20') of unobstructed width.
- .2 The Fire Department Access Roadway must have the ability to withstand the live loads of fire apparatus, and have a minimum fifteen feet (15') of vertical clearance.
- .3 Dead-end Fire Department Access Roadway in excess of one hundred fifty feet (150') in length must be Provided with turnarounds approved by the Fire Marshal.
- .4 If permanent Fire Department Access Roadways are not available during any part of the Contract Time, Contractor must Provide temporary Fire Department Access Roadways complying with the following requirements:
  - .a The roadway must be approved by the Fire Marshal
  - .b As a minimum, the roadway must consist of a compacted sub-base and six inches (6") of road base material (Class II aggregate base rock), both compacted to a minimum of ninety-five percent (95%).
  - .c The perimeter edges of the roadway must be contained and delineated by curb and gutter or other method approved by the Fire Marshal.



- .d Surface drainage must be Provided.
- .e The integrity of the roadway must be maintained at all times.
- .f Contractor must include activities in Contractor's Progress Schedules for Fire Marshal approval and construction of the temporary Fire Department Access Roadway.

.C Fire Alarm Systems

- .1 Fire alarm systems must be maintained operational at all times during building alterations.
- .2 When an alteration requires modification to a portion of the fire alarm system, the portion of the system requiring Work must be isolated and the remainder of the system must be kept in service whenever practical.
- .3 When it is necessary to shut down an entire fire alarm system, Contractor must provide a fire watch or other mitigation approved by the Fire Marshal. The mitigation measures must remain active until the system is returned to full service.

.D Area Separation Walls

- .1 When area separation walls are required, the wall construction must be completed, with all openings protected, immediately after the building is sufficiently weather-protected at the location of the wall(s).
- .2 Contractor's Progress Schedule must include specific activities showing the installation of area separation walls.

.E Fire Extinguishers

- .1 Portable fire extinguishers must be Provided and must be mounted on a wall or post at each usable stairway such that the travel distance to any extinguisher does not exceed seventy-five feet (75').
- .2 Mounting height to the top of the extinguisher must not exceed five feet (5').
- .3 Extinguishers must have not less than a 2A1 OBC rating or as otherwise directed by the Fire Marshal.
- .4 Contractor must ensure an adequate number of individuals are trained in the proper use of portable fire extinguishers.

.F Standpipes

- .1 Where standpipes are required, the standpipes must be installed when the progress of construction is not more than thirty-five feet (35') in height above the lowest level of the fire department access.
- .2 The standpipe system must be extended as construction progresses to within one floor of the highest point of construction having secured decking or flooring.
- .3 Contractor's Progress Schedule must include specific activities showing the installation of standpipes.

.G Exiting Requirements

- .1 All new buildings under construction must have a least one unobstructed exit.
- .2 For new multi-story buildings, each level above the first story must be Provided with at least two usable exit stairs after the floor decking is installed. The stairways must be continuous and discharge to grade level.

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- .3 Stairways serving more than two (2) floor levels must be enclosed (with openings adequately protected) after exterior walls/windows are in place.
  - .4 Exit stairs in new and existing, occupied buildings, must be lighted and maintained clear of debris and construction materials at all times. (Exception: For new multi-story buildings, one of the required exit stairs may be obstructed on not more than two (2) contiguous floor levels for the purposes of stairway construction; i.e., installation of gypsum board, painting, flooring, etc.)
  - .5 Designated exterior assembly points must be established for all construction personnel to relocate to upon evacuation.
  - .6 Contractor's Progress Schedule must include specific activities showing the installation of exit stairs including all sequencing restrictions identified in the requirements of the Contract Documents.
- .H Oily Rags
- .1 Oily rags and similar material must be stored in metal or other approved containers equipped with tight-fitting covers.
- .I Smoking
- .1 Smoking is prohibited anywhere inside or on the roof of new buildings under construction or in the Work area of buildings undergoing alteration.
  - .2 A suitable number of "NO SMOKING" signs must be posted to ensure smoking is controlled.
- .J Asphalt and Tar Kettles
- .1 Asphalt kettles must not be located within twenty feet (20') of any combustible material, combustible building surface or building opening.
  - .2 With the exception of thermostatically controlled kettles, an attendant must be within one hundred feet (100') of a kettle when the heat source is operating.
  - .3 Ladders or similar obstacles must not form a part of the route between the attendance and the kettle.
  - .4 Kettles must be equipped with tight-fitting covers.
  - .5 A minimum 20-B:C rated portable fire extinguisher must be located within thirty feet (30') of each asphalt kettle when the heat source is operating.
  - .6 Minimum 20-B:C rated portable fire extinguishers also must be located on roofs during asphalt coating operations.
- .K Compressed Gases
- .1 Gas cylinders must be marked with the name of the contents.
  - .2 Gas cylinders must be stored upright and secured to prevent falling.
  - .3 When not in use, gas cylinder valve protective caps must be in place.
  - .4 Gas cylinders must be protected against physical damage.
  - .5 When stored, gas cylinders must be separated from each other based on their hazard classes.
  - .6 Combustible materials must be kept a minimum of ten feet (10') from gas containers.
  - .7 Gas cylinders must not be placed near elevators, unprotected platform edges or other areas where they would drop more than two feet (2').

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- .8 Gas cylinders must not be placed in areas where they may be damaged by falling objects.
  - .9 Ropes, chains or slings must not be used to suspend gas cylinders unless the cylinder was manufactured with appropriate lifting attachments.
  - .L Liquid Petroleum Gas Storage and Use
    - .1 Liquid petroleum gas (LP-Gas) storage and use must comply with the following:
      - .a If not prohibited by other sections of the Contract Documents, propane containers may be used in buildings under construction or undergoing major renovation as a fuel source for temporary heating for curing concrete, drying plaster and similar applications in accordance with the following:
        - .1 Heating elements (other than integral heater-container units) must be located at least six feet (6') from any LP-Gas container.
        - .2 Integral heater container units specifically designed for the attachment of the heater to the container, or to a supporting standard attached to the container, may be used provided they are designed and installed so as to prevent direct or radiant heat application to the LP-Gas container.
        - .3 Blower and radiant type units must not be directed toward any LP-Gas container within twenty feet (20').
        - .4 Heat producing equipment must be installed with clearance to the combustibles in accordance with the manufacturer's installation instructions.
        - .5 Cylinders must comply with DOT cylinder specifications and be secured in an upright position.
        - .6 Regulators must be approved for use with LP-Gas. Fittings must be designed for at least 250-psig service pressure.
        - .7 Hoses must be designed for a working pressure of at least 350 psig (unless limited to 5 psig) and shall be a maximum of 6 feet in length.
        - .8 Portable heaters must be equipped with an approved automatic device to shut off the flow of gas to the main burner and to the pilot in the event of flame extinguishment or combustion failure.
        - .9 Portable heaters with an input of more than 50,000 Btu/hr must be equipped with either a pilot that must be "proved" before the main burner can be turned on, or provided with an approved electronic ignition system.
      - .b In addition to the above, for LP-Gas storage/use in buildings undergoing alteration and that are fully or partially occupied, the following shall also apply:
        - .1 Specific approval must be obtained from the Fire Marshal prior to bringing LP-Gas containers onto the Project Site.
        - .2 The maximum water capacity of individual containers shall be five (5)-gallon water capacity and the number of containers in the building shall not exceed the number of workers assigned to using the LP-Gas.
        - .3 Containers having a water capacity greater than two and one-half pounds (2 1/2 lb.) (1 quart) must not be left unattended.
  - .M Hot Work
    - .1 The uses of Hot Work equipment must be in accordance with the following guidelines, including a pre-site inspection, fire watch and post inspection procedures.

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- .a Pre-site Inspection: An inspection of the Hot Work site must be conducted by the Contractor or his/her designee prior to Hot Work operations to ensure:
    - .1 The Hot Work site is clear of combustibles or that combustibles are protected;
    - .2 Exposed construction is of noncombustible materials or that combustible materials are protected;
    - .3 Openings are protected;
    - .4 There are no exposed combustibles on the opposite side of partitions, walls, ceilings, floors, etc.;
    - .5 Fire extinguishers are available, fully charged and operable; and
    - .6 Fire watch personnel are assigned, equipped and trained.
  - .b Fire Watch: The sole duty of fire watch personnel must be to watch for the occurrence of fire during and after Hot Work operations.
    - .1 Individuals designated to fire watch duty must have fire-extinguishing equipment readily available and be trained in the use of such equipment.
    - .2 Personnel assigned to fire watch must be responsible for extinguishing spot fires and communicating an alarm.
    - .3 Hot Work conducted in areas with vertical and horizontal fire exposures that cannot be observed by a single individual must have additional personnel assigned to fire watches to ensure that all exposed areas are monitored.
  - .c Post Inspection: The fire watch must be maintained a minimum of thirty (30) minutes after the conclusion of the Work to look out for leftover sparks, slag or smoldering combustibles.
- .N Combustion Powered Equipment
- .1 Combustion powered equipment must be used in accordance with the following:
    - .a Equipment must be located so that exhausts do not discharge against combustible materials.
    - .b When possible, exhausts must be piped to the outside of the building.
    - .c Equipment must not be refueled while in operation.
    - .d Fuel for equipment must be stored in an approved area outside of the building.
- .O Temporary Heating Equipment (See Santa Clara Fire Marshall SD&S No. SI-7)
- .1 Temporary heaters, such as those that are liquid petroleum gas (LP-Gas) fueled, shall be listed and must be installed, used, and maintained in accordance with the manufacturer's instructions.
  - .2 Temporary heating devices must be secured properly and kept clear from combustible materials.
  - .3 Refueling operations must be conducted in an approved manner.
- .P Combustible Material Storage
- .1 Combustible construction materials must be stored a minimum of twenty feet (20') from buildings under construction or undergoing remodel, except:
    - .a Materials staged for installation on a floor level.

- .b When specifically approved by the Fire Marshal, materials may be stored in parking garages of Type I construction if the automatic fire sprinkler system is in service and vertical openings are protected.

.Q Flammable and Combustible Liquids

- .1 Storage areas for flammable and combustible liquids must be kept free of weeds and extraneous combustible material. Open flames and smoking are prohibited in flammable or combustible liquid storage areas.
- .2 Tanks and containers must be marked with the name of the product and "FLAMMABLE KEEP FIRE AND FLAME AWAY." Tanks (containers in excess of sixty (60) gallons) shall also be labeled, "KEEP 50 FEET FROM BUILDINGS."
- .3 Metal containers for Class I or II liquids must be in accordance with DOT requirements or must be of an approved design. Discharge devices must not cause an internal pressure on the container. Individual containers must not be interconnected and must be kept closed when not in use.
- .4 Secondary containment or a means of spill control, drainage control, and dike control is required for large containers (such as fifty-five (55) gallon drums) and tanks as approved by the Fire Marshal.
- .5 Plans for the installation/use of any aboveground storage tank (containers greater than sixty (60) gallons) must be submitted to the Owner and Fire Marshal for review and permit prior to procuring proposed tank.

.R Burning on the Project Site is prohibited.

## 1.09 SUBMITTALS

.A Contractor must submit the following items to Owner for review and acceptance prior to mobilization:

- .1 Three (3) copies of a site map identifying the locations of:
  - .a Storage sheds and storage areas (See [Section 01 50 00.1.06.D](#))
  - .b Project Site access and egress points (See [Document 00 72 00.8.03.C](#))
  - .c Fabrication areas (See. [Section 01 50 00.1.06.K](#))
  - .d Equipment maintenance area (See [Section 01 50 00.1.06.E](#))
  - .e Parking area for personal vehicles (See [Section 01 50 00.1.06.G](#))
  - .f Parking and maintenance area(s) for construction equipment (See [Section 01 50 00.1.06.G](#))
  - .g Temporary utility poles or electric extensions (See. [Section 01 50 00.1.05.A.5](#))
  - .h Concrete washout area(s) (See. [Section 01 50 00.1.06.I](#))
  - .i Temporary and/or Construction Fencing location(s) (See [Document 00 72 00.8.03.E](#), [Section 01 50 00.1.06.C](#), and [Section 01 56 00](#))
- .2 Submit three (3) copies of a written description of what types of materials will be used as temporary barriers and protection and how they will be utilized. (See [Section 01 50 00.1.07, "Temporary Controls"](#))
- .3 Submit three (3) copies of a letter designating an authorized representative for Contractor who will have the authority to represent and act for Contractor at the Project Site. (See [Document 00 72 00.TBD.A.](#)) Include the telephone and/or pager numbers at which the Contractor's Authorized Representative can be reached at all times. (See [Document 00 72 00.3TBD](#))

**PART 2 - PRODUCTS** (Not Used)

**PART 3 - EXECUTION** (Not Used)

**PART 4 - FORMS**

**END OF SECTION 01 50 00**

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**SECTION 01 51 16  
TEMPORARY FIRE PROTECTION  
(WHEN APPLICABLE)**

**PART 1 - GENERAL**

**1.01 SUMMARY**

.A This Section includes:

- .1 [Part 1 – General](#)
  - .a [1.01 – Summary](#)
  - .b [1.02 – Related Sections And Standards \(NOT USED\)](#)
  - .c [1.03 - Definitions](#)
  - .d [1.04 - Fire Protection Plan Requirements](#)
  - .e [1.05 - Implementation](#)
  - .f [1.06 - Submission](#)
- .2 [Part 2 – Products \(Not Used\)](#)
- .3 [Part 3 – Execution \(Not Used\)](#)
- .4 [Part 4 – Forms \(Not Used\)](#)

**1.02 RELATED SECTIONS AND STANDARDS (NOT USED)**

**1.03 DEFINITIONS**

- .A **Hot Work** - Hot work includes any operations capable of initiating fires or explosions, including cutting, welding, brazing, soldering, grinding, thermal spraying, thawing pipe, torch applied roofing, or any other similar activity.
- .B **Fire Marshal** – Office of the Fire Marshal, Santa Clara County.
- .C **SD&S No. SI-7** – Fire Marshal Standard Details & Specifications Number SI-7 (Construction Site Fire Safety).

**1.04 FIRE PROTECTION PLAN REQUIREMENTS**

- .A Contractor must prepare and submit a written fire protection plan. Submission of the fire protection plan may be phased; see 1.06 below.
- .B The written fire protection plan must meet the requirements of the Contract Documents and be consistent with the fire safety precautions specified in SD&S No. SI-7.
- .C At a minimum, the fire protection plan must include:
  - .1 The name and contact phone number of the person(s) responsible for compliance with the fire protection plan.
  - .2 Procedures for:
    - .a reporting emergencies to the fire department;
    - .b emergency notification, evacuation and/or relocation of all persons in the building under construction and on the Project Site;
    - .c Hot Work operations;
    - .d management of hazardous materials;

- .e removal of combustible debris; and
- .f maintenance of emergency access roads.
- .3 Floor plans identifying the locations of:
  - .a exits;
  - .b exit stairs;
  - .c exit routes; and
  - .d portable fire extinguishers.
- .4 Site plans identifying:
  - .a designated exterior assembly areas for each evacuation route;
  - .b fire apparatus access roadways; and
  - .c On-Site fire hydrants.

**1.05 IMPLEMENTATION**

- .A Contractor is responsible for implementation of the requirements and provisions of the approved fire protection plan.
- .B Contractor is responsible for communicating the requirements of the fire protection plan to all Subcontractors and other personnel working at the Project Site.

**1.06 SUBMISSION**

- .A Submit six (6) copies of a fire protection plan.
- .B Submission of the fire protection plan may be phased. Fire Marshal must approve the fire protection plan for items 1.04 .C .1 and .2; and .4 .b and c; prior to Contractor performing Work at the Project Site. 1.04 .3 and .4 .a must be submitted and approved prior to construction of the building beyond foundation work. Fire Marshal review time is fifteen (15) working days.

**PART 2 - PRODUCTS** (Not Used)

**PART 3 - EXECUTION** (Not Used)

**PART 4 - FORMS** (Not Used)

**END OF SECTION 01 51 16**



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**SECTION 01 56 00**  
**TEMPORARY BARRIERS AND ENCLOSURES**

**PART 1 - GENERAL****1.01 SUMMARY**

- .A This Section includes:
  - .1 [Part 1 – General](#)
    - .a [1.01 – Summary](#)
    - .b [1.02 – Related Sections](#) (NOT USED)
    - .c [1.03 - Definitions](#)
    - .d [1.04 - Construction Fencing](#)
  - .2 [Part 2 – Products](#) (Not Used)
  - .3 [Part 3 – Execution](#)
    - .a [3.01 Construction](#)
  - .4 [Part 4 – Forms](#) (Not Used)

**1.02 RELATED SECTIONS** (NOT USED)**1.03 DEFINITIONS**

- .A **Temporary Fencing** - Temporary fencing Provided and Installed by Contractor as required by other Sections of the Contract Documents.
- .B **Construction Fencing** - Temporary fencing to be Provided and Installed by Contractor for the duration of construction as required by this Section.

**1.04 CONSTRUCTION FENCING**

- .A Prior to start of Work at the Project Site, install Site enclosure fence with suitable locked entrance gates.
- .B Locate as shown on Drawings or as Approved by Owner's Project Manager.
- .C Locate vehicular entrance gates in suitable relation to construction facilities and to avoid interference with traffic on public thoroughfares.
- .D Locate pedestrian entrance gates as required to provide controlled personnel entry, in suitable relation to construction parking facilities. Provide Owner with key to gate.
- .E Fencing Materials:
  - .1 No. 11 gauge, 2-inch mesh, 72-inch high galvanized chain link fabric with extension arms and 3b strands of galvanized barbed wire.
  - .2 Galvanized steel posts; 1-1/2 inch O.D. line posts and 2 inch O.D. corner posts.

**PART 2 - PRODUCTS** (Not Used)**PART 3 - EXECUTION****3.01 CONSTRUCTION**

- .A Construct open-mesh fence in accordance with industry standards.

**FORMS** (Not Used)

**END OF SECTION 01 56 00**

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**SECTION 01 57 00**  
**STORM WATER POLLUTION PREVENTION (SWPP)**

**PART 1 - GENERAL****1.01 SUMMARY**

.A This Section includes:

- .1 [Part 1 – General](#)
  - .a [1.01 – Summary](#)
  - .b [1.02 – Related Documents and Sections \(NOT USED\)](#)
  - .c [1.03 - Definitions](#)
  - .d [1.04 - SWPPP Requirements](#)
  - .e [1.05 - Submittals](#)
- .2 [Part 2 – Products \(Not Used\)](#)
- .3 [Part 3 – Execution \(Not Used\)](#)
- .4 [Part 4 – Forms](#)

**1.02 RELATED DOCUMENTS AND SECTIONS (NOT USED)****1.03 DEFINITIONS**

.A **SWPPP** - Storm Water Pollution Prevention Plan

**1.04 SWPP REQUIREMENTS**

- .A The Federal Clean Water Act provides that discharge of pollutants to waters of the U.S. from any point source is illegal.
- .B Construction activities are often sources of pollutants to water. Uncovered construction materials can leach on to the ground and be washed in to storm drains during rains. Construction vehicles can spill or leak oil which can also be washed in to storm drains. Contaminants from vehicle washing activities are also a point source of water pollution. And sediment erosion from grading can wash in to storm drains.
- .C Contractor shall take all necessary precautions to prevent storm water contamination. Precautions include, but are not limited to:
  - .1 capturing and filtering or properly disposing of all water from vehicle washing activities;
  - .2 establishing a proper on-site vehicle washing area and washing the dirt off all construction vehicles before they are driven on public roads;
  - .3 covering trash, food waste and compactor enclosures so that contaminants are not washed in to the storm drains;
  - .4 Providing filtering berms around all storm drains in the vicinity of construction;
  - .5 Providing silt fences around all construction grading activities;
  - .6 Providing appropriate covers, drains and storage precautions for outdoor material storage areas, loading docks and fueling areas;
  - .7 maintaining a spill prevention and action plan for spills of hazardous materials;
  - .8 Installing burlap bags filled with drain rock around storm drains to route sediment and other debris away from the drains;
  - .9 suspending earthmoving or other dust-producing activities during periods of high winds;

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- .10 watering all exposed or disturbed soil surfaces at least twice daily to control dust;
  - .11 watering or covering stockpiles of soil or other materials that can be blown by the wind;
  - .12 covering all trucks hauling soil, sand, and other loose materials and maintaining at least two feet (2') of freeboard; and
  - .13 sweeping all paved access roads, parking areas, staging areas and residential streets adjacent to the construction sites daily (with water sweepers).
- .D If this \_\_\_\_ is marked with an "x" Contractor must prepare, maintain and implement, for the entire construction period, a site-specific Storm Water Pollution Prevention Plan (SWPPP) which addresses measures to minimize and control construction and post-construction storm water runoff.
- .1 The SWPPP must comply with the Federal Clean Water Act and the California Regional Water Quality Control Board National Pollution Discharge Elimination System permit.
  - .2 The SWPPP must be prepared and signed by a Qualified SWPPP Developer (QSD).
    - .a The qualifications of a QSD are defined in the California Regional Water Quality Control Board General Order 2009-009-DWQ.
  - .3 The SWPPP must be submitted to, and accepted by, Owner prior to commencing any on-site construction work.
  - .4 Contractor must submit five (5) copies of the draft SWPPP to Owner for review. Owner must accept the SWPPP before Contractor starts any work on site which might cause storm-water contamination.
  - .5 Contractor must maintain the Owner-accepted SWPPP, along with any revisions, at the Project Site, and the SWPPP must be updated to reflect current site conditions.
  - .6 Owner will submit Notice of Intent and Notice of Termination forms to the State.

#### 1.05 SUBMITTALS

- .A Submit the Storm Water Pollution Prevention Plan (SWPPP) in accordance with Section 01 33 00, "Submittal Procedures."

**PART 2 - PRODUCTS** (Not Used)

**PART 3 - EXECUTION** (Not Used)

**PART 4 - FORMS`**

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**Appendix A: STORM WATER POLLUTION PREVENTION PLAN****1. Objectives**

Contractor shall develop and submit for Owner acceptance, a Site-specific Storm Water Pollution Prevention Plan (SWPPP). The SWPPP shall be developed and amended or revised, when necessary, to meet the following objectives:

- a. identify all pollutant sources including sources of sediment that may affect the quality of storm water discharge associated with construction activity (storm water discharges) from the construction site;
- b. identify non-storm water discharges;
- c. maintain Best Management Practices (BMPs) to reduce similar pollutants in storm water discharges and authorized non-storm water discharges from the Project Site during construction;
- d. identify a sampling and analysis strategy, and sampling schedule for discharges, from construction activity which discharge directly into water bodies listed on Attachment 3 of the Clean Water Act Section 303(d) [303(d)] Water Bodies listed for Sedimentation; and
- e. for all construction activity, identify a sampling and analysis strategy, and sampling schedule, for discharges that have been discovered through visual monitoring to be potentially contaminated by pollutants not visually detectable in the runoff.

**2. Implementation Schedule**

- a. The SWPPP must be accepted by Owner prior to the start of soil-disrupting activity in accordance with this Section and shall be implemented concurrently with commencement of soil-disturbing activities.

**3. Availability**

The SWPPP shall remain on the Project Site while the site is under construction during working hours, commencing with the initial construction activity and ending with termination of coverage under the General Permit.

**4. Required Changes**

Contractor shall amend the SWPPP whenever there is a change in construction or operations which may affect the discharge of pollutants to surface waters, ground waters, or a municipal separate storm sewer system (MS4). The SWPPP shall also be amended if Contractor violates any condition of the General Permit, or has not achieved the general objective of reducing or eliminating pollutants in storm water discharges. If Owner determines that the discharge is in violation of the General Permit, the SWPPP shall be amended and implemented in a timely manner, but in no case more than fourteen (14) calendar days after notification by Owner. All amendments should be dated and directly attached to the SWPPP.

**5. SWPPP Contents**

- a. Both the U.S. Environmental Protection Agency and the California Storm Water Quality Association (<http://www.casqa.org/>) have template SWPPP Plans on their web sites
- b. The SWPPP shall be site/project-specific and include: (a) Project information; and (b) pollutant source identification, combined with an itemization of those BMPs specifically chosen to control the pollutants listed.
- c. As a minimum, the SWPPP shall contain:
  - (1) A vicinity map locating the Project Site with respect to easily identifiable major roadways, geographic features, or landmarks. At a minimum, the map must show the

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Project Site perimeter, the geographic features surrounding the site, and the general topography.

- (2) Site map(s) which shows the construction Project in detail, including the existing and planned paved areas and buildings.
  - (a) At a minimum, the map must show the Project Site perimeter; existing and proposed buildings, lots, roadways, storm water collection and discharge points; general topography both before and after construction; and the anticipated discharge location(s) where the storm water from the construction site discharges to a municipal storm sewer system or other water body.
  - (b) The drainage patterns across the Project area must clearly be shown on the map, and the map must extend as far outside the site perimeter as necessary to illustrate the relevant drainage areas. Where relevant drainage areas are too large to depict on the map, map notes or inserts illustrating the upstream drainage areas are sufficient.
  - (c) Temporary on-site drainages to carry concentrated flow shall be selected to comply with local ordinances, to control erosion, to return flows to their natural drainage courses, and to prevent damage to downstream properties.
- (3) Information presented in the SWPP may be represented either by narrative or by graphics. Where possible, narrative descriptions should be plan notes. Narrative descriptions which do not lend themselves to plan notes can be contained in a separate document which must be referenced on the plan.
- (4) Pollutant Source and BMP Identification
  - (a) The SWPPP shall include a description of potential sources which are likely to add pollutant(s) to storm water discharges, or which may result in non-storm water discharges from the Project Site. Discharges originating from off-site which flow across or through areas disturbed by construction that may contain pollutants should be reported to the Owner.

The SWPP shall:

- (5) Show drainage patterns and slopes anticipated after major grading activities are completed. Runoff from off-site areas should be from flowing through areas that have been disturbed by construction unless appropriate conveyance systems are in place. The amount of anticipated storm water run-on must be considered to determine the appropriateness of the BMPs chosen. Show all calculations for anticipated storm water run-on, and describe all BMPs implemented to divert off-site.
- (6) Show the drainage patterns into each on-site storm water inlet point or receiving water. Show or describe the BMPs that will protect operational storm water inlets or receiving waters from contaminated discharges other than sediment discharge, such as, but not limited to: storm water with elevated pH levels from contact with soil amendments such as lime or gypsum; slurry from saw cutting of concrete or asphalt; washing of exposed aggregate concrete; concrete rinse water; building washing operations; equipment washing operations; minor street washing associated with street delineation; and/or sealing and paving activities occurring during rains.
- (7) Show existing site features that, as a result of known past usage, may contribute to storm water (e.g., toxic materials that are known to have been treated, stored, disposed, spilled, or leaked onto the construction site). Show or describe the BMPs implemented to minimize the exposure of storm water to contaminated soil or toxic materials.

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- (8) Show areas designated for the (a) storage of soil or waste; (b) vehicle storage and service areas; (c) construction material loading, unloading, and access areas; and (d) equipment storage, cleaning and maintenance areas.
  - (9) Describe the BMPs for control of discharges from waste handling and disposal areas and methods of on-site storage and disposal of construction materials and construction waste. Describe the BMPs designed to minimize or eliminate the exposure of storm water to construction materials, equipment, vehicles, waste storage areas, or service areas. The BMPs described shall be in compliance with Federal, State, and local laws, regulations, and ordinances.
  - (10) Show the locations of direct discharge from the construction site into a Section 303(d) listed water body. Show the designated sampling locations in the receiving waters, which represent the prevailing conditions of the water bodies upstream of the construction site discharge and immediately down-stream from the last point of discharge.
  - (11) Show the locations designated for sampling the discharges identified above. Samples shall be taken should visual monitoring indicate that there has been a breach, malfunction, leakage, or spill from a BMP which could result in the discharge in storm water of pollutants that would not be visually detectable, or if storm water comes into contact with soil amendments or other exposed materials or contamination and is allowed to be discharged. Describe the sampling procedure, location, and rationale for obtaining the uncontaminated sample of storm water.
  - (12) The SWPPP shall include a construction activity schedule which describes all major activities such as mass grading, paving, lot or parcel improvements at the site and the proposed time frame to conduct those activities.

d. Additional Information

- (1) The SWPPP shall include a narrative description of pollutant sources and BMPs that cannot be adequately communicated or identified on the site map. In addition, a narrative description of preconstruction control practices (if any) to reduce sediment and other pollutants in storm water discharges shall be included.
- (2) The SWPPP shall include an inventory of all materials used and activities performed during construction that have the potential contribute to the discharge of pollutants other than sediment in storm water. Describe the BMPs selected and the basis for their selection to eliminate or reduce be pollutants in the storm water discharges.
- (3) The SWPPP shall include the following information regarding the Project Site surface area: the size (in acres or square feet), the runoff coefficient before and after construction, and the percentage that is impervious (e.g., paved, roofed, etc.) before and after construction.
- (4) The SWPPP shall list the name and telephone number of the qualified person(s) who have been assigned responsibility for pre-storm, post-storm, and storm event BMP inspections; and the qualified person assigned responsibility to ensure full compliance with the permit and implementation of all elements of the SWPPP, including the preparation of the annual compliance evaluation and the elimination of all unauthorized discharges.

e. Erosion Control

- (1) At a minimum, Contractor must implement an effective way to retain soil and sediment control on all disturbed areas during the rainy season. These disturbed areas include tough graded roadway, slopes, and building pads. Until permanent vegetation is

established soil cover is the most cost-effective and expeditious method to protect soil particles from detachment and transport by rainfall. Temporary soil stabilization can be the single-most important factor in reducing erosion at construction sites. Contractor shall consider measures such as covering with mulch, temporary seeding, soil stabilizers, rolls or blankets, temporary vegetation, permanent seeding, and a variety of other methods.

- (2) The SWPP shall include a description of the erosion control practices including a time schedule, to be implemented during construction to minimize erosion on disturbed areas of a Project Site. The discharger must consider the full range of erosion control BMPs. Contractor must consider any additional site-specific and seasonal conditions when selecting and implementing appropriate BMPs. The above listed erosion control measures are examples of what should be considered and not exclusive of new or innovative approaches currently available or being developed.
- (3) Include an outline of the areas of vegetative soil cover or native vegetation on site which will remain undisturbed during the construction Project.
- (4) Include an outline of all areas of soil disturbance including cut or fill areas which will be stabilized during the rainy season by temporary or permanent erosion control measures, such as seeding, mulch or blankets, etc.
- (5) Include an outline of the areas of soil disturbance, cut, or fill which will be left exposed during any part of the rainy season, representing areas of potential soil erosion where sediment control BMPs are required to be used during construction.
- (6) Include a proposed schedule for the implementation of erosion control measures.

f. Sediment Control

- (1) The SWPPP shall include a description or illustration of BMPs which will be implemented to prevent a net increase of sediment load in storm water discharge relative to preconstruction levels. Sediment control BMPs are required at appropriate locations along the site perimeter and at all operational internal inlets to the storm drain system at all times during the rainy season. Sediment control practices may include filtration devices and barriers (such as fiber rolls, silt fence, straw bale barriers, and gravel inlet filters) and/or settling devices (such as sediment traps or basins). Effective filtration devices, barriers, and settling devices shall be selected, installed and maintained properly. A proposed schedule for deployment of sediment control BMPs shall be included in the SWPPP. These are the most basic measures to prevent sediment from leaving the Project Site.
- (2) During the non-rainy season, Contractor is responsible for ensuring that adequate sediment control materials are available to control sediment discharges at the downgrade perimeter and operational inlets in the event of a predicted storm. Contractor shall consider a full range of sediment controls, in addition to the controls listed above, such as straw bale dikes, earth dikes, brush barriers, drainage swales, check dams, subsurface drain, sandbag dikes, fiber rolls, or other controls. At a minimum, Contractor must implement an effective combination of erosion and sediment control on all disturbed areas during the rainy season.

If Contractor chooses to rely on sediment basins for treatment purposes, sediment basins shall, or a minimum, be designed and maintained as follows:

- Option 1: Pursuant to local ordinance for sediment basin design and maintenance, provided that the design efficiency is as protective or more protective of water quality than Option 2.

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OR

- Option 2: Sediment basin(s), as measured from the bottom of the basin to the principal outlet, shall have at least a capacity equivalent to 3,600 cubic feet of storage per acre draining into the sediment basin. The length of the basin shall be more than twice the width of the basin. The Length is determined by measuring the distance between the inlet and the outlet and the depth must not be less than three feet nor greater than five feet for safety reasons and for maximum efficiency.

g. Stabilization

- (1) All disturbed area of the construction site must be stabilized. Final stabilization for the purposes of submitting a NOT is satisfied when:

All soil disturbing activities are completed AND EITHER OF THE TWO FOLLOWING CRITERIA ARE MET:

- (a) A uniform cover with seventy percent (70%) coverage has been established  
OR:
- (b) Equivalent stabilization measures have been employed. These measures include the use of such BMPs as blankets, reinforced channel liners, soil cement, fiber matrices, geotextiles, or other erosion resistant soil coverings or treatments.
- (2) Where background native vegetation covers less than one hundred percent (100%) of the surface, such as in arid areas, the seventy percent (70%) coverage criteria is adjusted as follows: If the native vegetation covers fifty percent (50%) of the ground surface, seventy percent (70%) of fifty percent (50%) ( $.70 \times .50 = .35$ ) would require thirty-five percent (35%) total uniform surface coverage.

**END OF SECTION 01 57 00**



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**SECTION 01 60 00  
PRODUCT REQUIREMENTS**

**PART 1 - GENERAL**

**1.01 SUMMARY**

.A This Section includes:

- .1 [Part 1 – General](#)
  - .a [1.01 – Summary](#)
  - .b [1.02 – Related Documents and Sections \(NOT USED\)](#)
  - .c [1.03 - Definitions](#)
  - .d [1.04 - Product Delivery, Storage, and Handling](#)
  - .e [1.05 - Packaging](#)
- .2 [Part 2 – Products](#)
  - .a [2.01 - Unauthorized Products](#)
  - .b [2.02 - Product Availability](#)
  - .c [2.03 - Product Requirements](#)
- .3 [Part 3 – Execution \(Not Used\)](#)
- .4 [Part 4 – Forms \(Not Used\)](#)

**1.02 RELATED DOCUMENTS AND SECTIONS (NOT USED)**

**1.03 DEFINITIONS**

- .A **Products** - Items purchased for incorporating into the Work, whether purchased for the Project or taken from previously purchased stock.
  - .1 The term "Product" includes the terms "material," "equipment," "system," and terms of similar intent.
  - .2 Product means New Products including material, machinery, components, equipment, fixtures, and systems forming the Work.
    - .a Product does not include machinery and equipment used for preparation, fabrication, conveying and erection of the Work.
    - .b Products may also include existing materials or components required for reuse.
- .B **Named Products** - Products identified in the Contract Documents by Manufacturer's product name. Named Products may include Manufacturer's make or model number or other designation.
- .C **New Products** - Items that have not previously been incorporated into another project or facility, except that products consisting of recycled-content materials are allowed, unless explicitly stated otherwise. Products salvaged or recycled from other projects are not considered New Products.
- .D **Manufacturer's Warranty** - Written Warranty published by individual Manufacturer for a particular Product and specifically endorsed by Manufacturer to Owner.

**1.04 PRODUCT DELIVERY, STORAGE, AND HANDLING**

- .A Delivery

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- .1 Deliver Products using means and methods that will prevent damage, deterioration, and loss, including theft.
  - .2 Schedule delivery to minimize long-term storage at Project Site and to prevent overcrowding of Project or Work areas.
  - .3 Coordinate delivery with installation time to ensure minimum holding time for items that are flammable, hazardous, easily damaged, or sensitive to deterioration, theft, and other losses.
  - .4 Deliver products to Project Site in an undamaged condition in Manufacturer's original sealed container or other packaging system, complete with labels and instructions for handling, storing, unpacking, protecting, and installing.
  - .5 Inspect products on delivery to ensure compliance with the Contract Documents and to ensure that Products are undamaged and properly protected.
  - .6 Owner will not be responsible for accepting delivery of Contractor's materials.

**.B Storage**

- .1 Store Products using means and methods that will prevent damage, deterioration, and loss, including theft.
- .2 Comply with Manufacturer's written instructions for storage.
- .3 Store Products to allow for inspection and measurement of quantity or counting of units.
- .4 Store materials in a manner that will not endanger the Project Site or personnel.
- .5 Store Products that are subject to damage by the elements, under cover in a weather tight enclosure above ground, with ventilation adequate to prevent condensation.
- .6 Comply with product Manufacturer's written instructions for temperature, humidity, ventilation, and weather-protection requirements for storage.
- .7 Protect stored products from damage.
- .8 For exterior storage of fabricated products, place on sloped supports above ground.
  - .a Cover products subject to deterioration with impervious sheet covering and provide ventilation to avoid condensation.
  - .b Store loose granular materials on solid surfaces in well-drained area; prevent mixing with foreign matter.

**.C Handling**

- .1 Handle Products using means and methods that will prevent damage, deterioration, and loss, including theft.
- .2 Comply with Manufacturer's written instructions for handling.
- .3 Provide equipment and personnel to handle products by methods to prevent soiling or damage.
- .4 Contractor must have personnel on hand to accept delivery of all materials to the Project Site.

**1.05 PACKAGING**

- .A Provide reusable or recyclable packaging for items delivered to the Project Site such as construction materials, operations and maintenance materials, furniture, equipment and other large objects.
- .B For items over seventy-five (75) pounds or larger than one hundred twenty (120) cubic feet, polystyrene "peanuts" shall not be used with packaging.

- .C Use products with natural or recycled content.
  - .1 Plastic sheets or films will be allowed only if labeled with recycling symbol-indicating type of plastic.
  - .2 Reusable Packaging: Items such as blankets, skids and crates must be returned to the manufacturer or transportation company for future reuse as packaging materials.
  - .3 Recyclable Packaging: Items such as boxes, cardboard and paper that will be delivered to a recycling center after use.
- .D Properly dispose of packaging materials and clean surrounding areas of packaging debris immediately after unpacking of Products.

## PART 2 - PRODUCTS

### 2.01 UNAUTHORIZED PRODUCTS

- .A Products required for Work must not contain asbestos or polychlorinated biphenyls (PCB).
- .B If the Contract Documents name a Product, Provide the Named Product unless Owner's Authorized Representative, through the Substitution process, accepts an equal Product. (See [Section 01 25 00, "Substitution Procedures"](#))

### 2.02 PRODUCT AVAILABILITY

- .A Prior to Bid, Contractor must verify that Named Products, including sole source Products can be obtained, delivered, and installed within the Contract Times(s) stated in the Bid Documents.
- .B Owner does not warrant that Named Products including sole source Products are available within the Time Period(s) required by the Bid Documents. Contractor must verify availability of Named Products and sole source Products before submitting a Bid.
- .C By submitting a Bid, Contractor represents to Owner that Contractor has verified the availability of Named Products, the Named Products including sole source Products are currently available, and the Work or designated portion of the Work can be completed within the Contract Time(s).

### 2.03 PRODUCT REQUIREMENTS

- .A Provide Products that:
  - .1 comply with the requirements of the Contract Documents;
  - .2 have been accepted by the Owner for incorporation into the Work;
  - .3 are undamaged; and
  - .4 are new at time of installation, unless otherwise indicated in the Contract Documents.
- .B Provide products complete with:
  - .1 accessories;
  - .2 trim;
  - .3 finish;
  - .4 fasteners;
  - .5 gauges; and
  - .6 all other items needed for a complete installation.
- .C Standard Products
  - .1 If available, and unless custom products or nonstandard options are specified, Provide standard products of types that have been produced and used successfully in similar situations on other projects.

- .D Owner has the right to reject Products with Manufacturer's Warranties that are in conflict with requirements of the Contract Documents.
- .E Products required to be supplied in quantity must be interchangeable.

**PART 3 - EXECUTION** (Not Used)

**PART 4 - FORMS** (Not Used)

**END OF SECTION 01 60 00**

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**SECTION 01 64 00**  
**OWNER FURNISHED CONTRACTOR INSTALLED (OFCI) ITEMS**

**PART 1 - GENERAL****1.01 SUMMARY**

.A This Section includes:

- .1 [Part 1 – General](#)
  - .a [1.01 – Summary](#)
  - .b [1.02 – Related Documents And Sections](#) (NOT USED)
  - .c [1.03 - Definitions](#)
  - .d [1.04 - OFCI Manager](#)
  - .e [1.05 - Purchase Orders](#)
  - .f [1.06 - OFCI Delivery Schedule](#)
  - .g [1.07 - Shipment Delivery](#)
  - .h [1.08 - Equipment Receiving Log](#)
  - .i [1.09 - Storage<sup>+</sup>](#)
  - .j [1.10 - Inspection of Records](#)
  - .k [1.11 - Damaged Merchandise](#)
- .2 [Part 2 – Products](#) (NOT USED)
- .3 [Part 3 – Execution](#) (NOT USED)
- .4 [Part 4 – Forms](#)
  - .a [SAMPLE FORM 01 64 00-F1, “OFCI DELIVERY SCHEDULE”](#)

**1.02 RELATED DOCUMENTS AND SECTIONS** (NOT USED)**1.03 DEFINITIONS**

- .A **OFCI** – Owner Furnished Contractor Installed.
- .B **OFCI Manager** – Contractor's employee accepted by Owner and responsible for managing all OFCI items.
- .C **OFCI Delivery Schedule** – The OFCI Delivery Schedule prepared by Contractor and submitted to the Owner in the format indicated in [SAMPLE FORM 01 64 00-F1](#) at the end of Section 01 64 00.

**1.04 OFCI MANAGER**

- .A Prior to starting Work, submit a letter to Owner identifying on-Site individual that will act as Contractor's OFCI Manager.
  - .1 This OFCI Manager will be responsible for:
    - .a furnishing information to Owner's Project Manager on desired delivery dates;
    - .b proper receipt and reporting of all shipments received; and
    - .c proper storage and handling of OFCI items at all times.
  - .2 If the originally designated OFCI Manager is replaced, Contractor shall designate a new OFCI Manager and immediately submit written notification thereof to Owner.

**1.05 PURCHASE ORDERS**

- .A Owner will furnish copies of purchase orders covering OFCI items.
  - .1 The nature of the procurement actions involved prevents the furnishing of a complete set of purchase orders immediately after the start of construction.
  - .2 Purchase orders will be forwarded to Contractor at the time of issuance to the suppliers.
  - .3 Contractor must retain copies of Owner's purchase order(s) for Contractor's control records.
  - .4 Purchase Orders for items subject to "phased" delivery will be accompanied by appropriate delivery lists.

#### 1.06 OFCI DELIVERY SCHEDULE

- .A Develop an OFCI Delivery Schedule including description and required delivery dates (see sample Schedule at the end of this Section) for OFCI items and reference all related Activity Numbers from Contractor's Progress Schedule. Submit to Owner no later than twenty-eight (28) Days after the start date for the Work identified in the Notice to Proceed (NTP). Submit four (4) paper copies and corresponding electronic data files on Compact Disks (CDs). The CDs must be permanently labeled to indicate the contents of the CD and include the submittal number and data date.
- .B This OFCI Delivery Schedule must include each piece of OFCI equipment.
  - .1 For each item, complete the two dates required from the Contractor:
    - .a "Delivery No Earlier Than" date; and
    - .b "Delivery No Later Than" date.
- .C Contractor must add Purchase Order Number (PO #), date ordered information, and Activity Numbers from the Official Progress Schedule as the information is provided or becomes available.
- .D This OFCI Delivery Schedule must be coordinated with the Owner accepted Official Progress Schedule
- .E Each month, Contractor shall coordinate the OFCI Delivery Schedule with the Updated Official Progress Schedule.
  - .1 Review the equipment delivery schedule not less than once each month to determine whether the construction progress dictates any revisions.
    - .a Contractor shall notify Owner in writing of any changes found necessary.
    - .b If, at any time, a delivery date for and OFCI item is missed, Contractor shall notify Owner immediately.

#### 1.07 SHIPMENT DELIVERY

- .A Upon receipt of a shipment of OFCI item(s), Contractor's OFCI Manager must:
  - .1 Count the number of cartons to verify the quantity received corresponds with the freight bill.
    - .a Clearly note any discrepancies on the original freight bill or delivery ticket.
  - .2 Prior to signing for anything, carefully examine the merchandise for obvious damage.
    - .a If such damage is observed, refuse the shipment.
    - .b Upon refusal, notify the Owner, and give complete details.
  - .3 Open cartons or uncrate equipment to permit examination prior to departure of the carrier.
    - .a If the size of the shipment makes this impossible, release the driver and inspect the shipment for concealed damage not later than twenty four (24) hours after receipt.
    - .b If it is determined concealed damage does exist, contact Owner immediately.

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**1.08 EQUIPMENT RECEIVING LOG**

- .A Keep an "Equipment Receiving Log" updated at all times at the Job Site.
- .B The "Equipment Receiving Log" must be in a format furnished or Approved by Owner.

**1.09 STORAGE**

- .A Store all OFCI items in a secure area either on-Site or off-Site.
  - .1 The area must be lockable and secure from vandalism or theft.
  - .2 It must be weatherproof and waterproof with adequate ventilation.
  - .3 Provide protection and security of OFCI items.
- .B Provide Certificates of Insurance for all off-site storage areas in accordance with the requirements of the Contract Documents.

**1.10 INSPECTION OF RECORDS**

- .A Owner may inspect the Owner-furnished equipment records on a periodic basis during construction to assure that the data is maintained in an accurate and current condition.

**1.11 DAMAGED MERCHANDISE**

- .A Exterior or Visible Damage, Contractor shall do the following:
  - .1 If container received shows exterior or visible damage, Contractor make a notation to that effect on the delivery ticket and have it signed by the delivery carrier and by personnel responsible for receiving the merchandise, and .
  - .2 Refuse acceptance of damaged merchandise.
- .B Concealed Damage, Contractor shall do the following:
  - .1 If container received shows no evidence of damage, but upon examination of the contents thereof "concealed damage" is discovered, Contractor shall notify the Owner immediately and request an inspection.
- .C F.O.B. (Free on Board) Shipping Point, Contractor shall do the following:
  - .1 If the merchandise is damaged Contractor must:
    - .a Request an inspection by the delivery carrier's inspector. Do not destroy the original carton, box, etc.
    - .b Notify the Owner of damaged merchandise and request replacement shipment.
    - .c Submit the following to Owner, Attention: Owner's Project Manager:
      - .1 Inspection Report
      - .2 Bill of Lading
      - .3 Invoice
      - .4 Freight Bill or Delivery Ticket
    - .d Hold the damaged merchandise until instructions for its disposition are received from Owner.
  - .2 F.O.B. (Free on Board) Destination:
    - .a If the merchandise is damaged and the F.O.B. is "Destination," then the complete and total liability is assumed by the Vendor from the point it is placed in the hands of the common

carrier to the point of delivery. It is the Vendor's responsibility to file a claim with the carrier to recover the loss of merchandise damaged.

.b Contractor must:

- .1 Request an inspection by the delivery carrier's inspector. Do not destroy the original carton, box, etc.
- .2 Notify the Vendor of damaged merchandise and obtain authorization from Owner and replace shipment.
- .3 Hold damaged merchandise until instructions for disposition are received from the Vendor.
- .4 Send the following original documents to the Vendor to assist in filing claim with carrier, retaining a copy for Contractor's records:
  - .a Inspection Report
  - .b Bill of Lading
  - .c Freight Bill or Delivery Ticket

**1.12 Warrantees/Guarantees**

- .A Contractor must provide Guarantees/Warranties for all products and equipment that is purchased (and/or pre-purchased) by Owner and installed by Contractor.

**PART 2 - PRODUCTS** (Not Used)

**PART 3 - EXECUTION** (Not Used)

**PART 4 - FORMS** (see sample OFCI Delivery Schedule Sample Form 01 64 00)



## PART 5 -

OFCI DELIVERY SCHEDULE  
SAMPLE FORM 01 64 00-F1

<u>ORDERED</u>		<u>DESCRIPTION</u>	<u>DELIVERY</u>	
PO #	Date	<u>Include the Activity Number from Official Progress Schedule</u>	No Earlier Than	No Later Than
Note #1: Requires Field Measurements				

END OF SECTION 01 64 00

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**SECTION 01 71 23**  
**FIELD ENGINEERING****PART 1 - GENERAL****1.01 SUMMARY**

.A This Section includes:

- .1 [Part 1 – General](#)
  - .a [1.01 – Summary](#)
  - .b [1.02 – Related Documents And Sections \(NOT USED\)](#)
  - .c [1.03 - Definitions](#)
  - .d [1.04 - Field Layout](#)
  - .e [1.05 - Locations and Elevations in the Contract Drawings](#)
  - .f [1.06 - Survey and Site Work](#)
  - .g [1.07 - Underground Infrastructure, Utilities & Other Facilities](#)
  - .h [1.08 - Penetrations](#)
  - .i [1.09 - Quality Control](#)
  - .j [1.10 - Submittals](#)
- .2 [Part 2 – Products](#)
  - .a [2.01 - Equipment](#)
- .3 [Part 3 – Execution](#)
  - .a [3.01 - Survey](#)
- .4 [Part 4 – Forms \(Not Used\)](#)

**1.02 RELATED DOCUMENTS AND SECTIONS (NOT USED)****1.03 DEFINITIONS**

.A As used in this Section, the following definitions apply:

- .1 **Approximate Location of Subsurface Installations** – A strip of land not more than twenty-four inches (24”) on either side of the exterior surface of an Existing Subsurface Installation.
- .2 **Existing Subsurface Installation** - Any existing underground pipeline, conduit, duct, wire, or other structure.
- .3 **Rearranged** - Rearrangement includes relocation, removal, alteration or installation.

**1.04 FIELD LAYOUT**

- .A Contractor is responsible for all investigations, coordination, techniques and determinations as may be necessary to properly fit, Install and complete the Work.
- .B Data and information shown and indicated in the Contract Documents are as accurate as could be obtained but are not guaranteed.
- .C Contractor must, before beginning any Work, compare actual Project Site conditions with the requirements of the Contract Documents, and verify all existing conditions and dimensions.
- .D Verifications
  - .1 As a minimum, Contractor must perform the following verifications:

- 
- .a Field & Site Conditions
    - .1 Contractor must carefully examine and compare all the Contract Documents relating to the Work with actual field conditions, so that all Work will be accommodated in the spaces provided. The general arrangement and location of the elements of the various systems are shown on the Drawings or Specifications. Final locations, levels, etc., are governed by actual material sizes used, by conditions encountered, and by the sequence in which the Work is performed.
    - .2 Space conflicts and interferences must be resolved before any Work is installed.
    - .3 Existing elevations shown on Plans should be compared with actual benchmarks/monuments to verify survey results.
  - .2 Dimensions
    - .a Contractor, prior to performing any Work and as a part of the construction layout procedures, must check and verify all dimensions for accuracy, closing and clarity, and must immediately report any discrepancies to Owner for resolution before proceeding.
    - .b No measurements shall be scaled from Drawings. Only dimensions appearing on Drawings will be used.
    - .c Where manufacturer's diagrams, Shop Drawings, etc. give specific measurements of rough-in dimensions for materials or equipment and these dimensions are in conflict with dimensions indicated on Drawings, Contractor must immediately request clarifications from Owner.
    - .d In case of apparent error, discrepancy, omission, conflict, or obscurity in the Contract Documents, or discrepant conditions encountered at the Project Site or between Submittals, Contractor must immediately seek Owner's interpretation and/or clarification.
  - .E Contractor must Provide necessary lines, levels, locations, measurements and markers for all on the Work and be responsible for their accuracy.
  - .F On building structures, Contractor must lay out on forms, walls, floors, and columns, the exact location of partitions as a guide to all trades.

#### 1.05 LOCATIONS AND ELEVATIONS IN THE CONTRACT DRAWINGS

- .A Property lines, location lines, and elevations of components of the Work are shown on the Contract Drawings.
- .B Grade elevations shown for various parts of the Work are taken from a bench mark shown on the Contract Drawings, or if not shown, will be designated by the Owner in writing before starting Work.

#### 1.06 SURVEY AND SITE WORK

- .A Contractor must perform all survey and site Work necessary to locate and layout the construction in plan and elevation.
- .B Contractor must set all stakes and marks necessary to establish the lines and grades required for the Project, and perform all survey work to layout all Work including batter boards, roads, parking lots, site utilities, and control lines.
- .C Contractor must protect and maintain marks, lines, benchmarks, monuments, etc. which have previously been installed and/or are required for construction and inspection purposes. Monuments or stakes that are disturbed or destroyed due to Contractor's negligence or failure to pursue the Work diligently must be re-established at Contractor's expense.

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**1.07 UNDERGROUND INFRASTRUCTURE, UTILITIES & OTHER FACILITIES**

- .A Attention is directed to California Government Code [§4215](#) and [§4216](#) concerning protection of underground infrastructure in public contracts.
- .B Contractor must ascertain the exact location of **all** underground and concealed facilities in the Project Site prior to doing any work that may damage such facilities or interfere with their service. As a minimum, at least forty-eight (48) hours before any such work is planned, Contractor must have a locating service survey the area. When shown on the Drawings, the locations of Existing Subsurface Installations are the Approximate Location of Subsurface Installations, and the accuracy or completeness of this information is not guaranteed. There may be Existing Subsurface Installations not known to Owner or located differently than indicated in the Contract Documents.
- .C Contractor must protect from damage utilities and any other Existing Subsurface Installations that are to remain in place, be relocated, or otherwise rearranged.
- .D If Contractor discovers underground facilities not indicated in the Contract Documents, Contractor must immediately notify Owner in writing. Contractor must not disturb, disconnect or damage any existing facilities, unless specifically indicated in the Contract Documents to be relocated, removed, or otherwise revised. Should Contractor disturb, disconnect, or damage any existing facilities or utilities, Contractor will bear all expenses of whatever nature arising from such disturbance or the replacement or repair thereof.
- .E The right is reserved to the owners of facilities or their authorized agents, to enter the Project with Owner's approval to make such changes as are necessary to rearrange their facilities or to make necessary corrections or repairs to their properties. Contractor must cooperate with forces engaged in such work and must conduct operations in such a manner as to avoid any unnecessary delay or hindrance to the work being performed by such other forces.
- .F Contractor must obtain authorization from the utility involved and notify Owner at least seventy-two (72) hours in advance, when it is necessary to interrupt any existing utility service to make connections. Interruption in utility service must be of the shortest possible duration for the Work at hand and must be Approved in advance by Owner.
- .G Where rearrangement of facilities is necessary, Contractor must coordinate its Work with such rearrangement, and Contractor must make all arrangements with the owner of such facilities for such coordination.
- .H When ordered by Owner in writing, Contractor will rearrange any facility necessary to accomplish the Project and such work will be paid for as extra Work if it is not indicated in, or cannot reasonably be inferred from, the Contract Documents.
- .I If Contractor desires to rearrange any utility or facility for its convenience in order to facilitate its construction operations, and if such rearrangement is in addition to, or different from any rearrangements indicated in the Contract Documents, Contractor must make all necessary arrangements with Owner and the owners of such utility or facility for such rearrangement and bear all expenses in connection therewith.
- .J Where Owner determines that rearrangement of a utility or facility, the existence of which is not shown in the Contract Documents, is essential to accommodate the Project, Owner may rearrange such utility or facility by other forces.
- .K Per Government Code [§4215](#), Contractor will not be assessed Liquidated Damages for any delay in completing the Project when such delay is caused by the failure of a utility owner or the County to remove or relocate existing utilities that were the responsibility of the utility owner or County to remove or relocate.

**1.08 PENETRATIONS**

- .A Contractor is responsible for all penetrations through walls, floors, beams, joists and other structural and non-structural elements of the Work for passage of pipes, conduits, ducts or other devices.
- .B Contractor is responsible for coordinating all penetrations and securing Owner's approval for locations of all penetrations through structural floors, walls and supporting members.
- .C Contractor must schedule and coordinate the Work of all trades to locate all required penetrations. Contractor must hire an independent testing agency at Contractor's expense, to locate reinforcing bars or imbedded items within concrete or masonry walls, floors, columns or beams, and to perform such other tests as may be necessary or directed to attain required results.

#### 1.09 QUALITY CONTROL

- .A Surveys must be performed under the direction and with the review of a land surveyor licensed in the State of California.
- .B All survey documentation must be signed and stamped by the licensed Land Surveyor in responsible charge of the work.
- .C Contractor must review all information to ensure it is technically accurate and complies with the requirements of this Section before providing to Owner.

#### 1.10 SUBMITTALS

- .A Prior to performing any survey Work, submit four (4) copies of the qualifications of the California Licensed land surveyor.
- .B Prior to the County Board of Supervisors' Acceptance, Contractor must submit to Owner two (2) complete sets of Contractor's survey records with the same dimensions as the Record Documents (As-Builts).

### PART 2 - PRODUCTS

#### 2.01 EQUIPMENT

- .A Contractor must provide necessary survey equipment and materials to obtain the required locations and elevations to the precision specified.

### PART 3 - EXECUTION

#### 3.01 SURVEY

- .A Elevation surveys must be referenced to the County of Santa Clara datum, and must be performed to within one one-hundredth (0.01) of a foot (ft.), unless otherwise specified.  
  
Location surveys must be referenced to the baseline and survey control points shown on the Contract Drawings. Locations must be provided to within one one-hundredth (0.01) of a foot (ft.), unless otherwise specified.

### PART 4 - FORMS (Not Used)

**END OF SECTION 01 71 23**

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**SECTION 01 73 29  
CUTTING AND PATCHING****PART 1 - GENERAL****1.01 SUMMARY**

.A This Section includes:

- .1 [Part 1 – General](#)
  - .a [1.01 – Summary](#)
  - .b [1.02 – Related Documents And Sections](#) **(NOT USED)**
  - .c [1.03 - Definitions](#)
  - .d [1.04 - General](#)
  - .e [1.05 - Interface with work of Others](#)
  - .f [1.06 - Submittals](#)
  - .g [1.07 - Quality Control](#)
- .2 [Part 2 – Products](#)
  - .a [2.01 - Materials](#)
- .3 [Part 3 – Execution](#)
  - .a [3.01 - Examination](#)
  - .b [3.02 - Preparation](#)
  - .c [3.03 - Cutting](#)
  - .d [3.04 - Patching](#)
  - .e [3.05 - Performance](#)
- .4 [Part 4 – Forms \(Not Used\)](#)

**1.02 RELATED DOCUMENTS AND SECTIONS (NOT USED)****1.03 DEFINITIONS**

- .A **CUTTING-AND-PATCHING** - Includes, but is not necessarily limited to, demolition and repair of nominally completed and previously existing work in order to accommodate coordination of Work, installation of Work, uncovering Work for access or inspection, and to obtain samples for testing or similar purposes. It also includes integral cutting and patching during manufacturing, fabricating, erecting, and installing processes for individual items of the Work.
- .B **HOT WORK** - Hot work includes any operations capable of initiating fires or explosions, including cutting, welding, brazing, soldering, grinding, thermal spraying, thawing pipe, torch applied roofing, or any other similar activity.

**1.04 GENERAL**

- .A Contractor is responsible for all cutting, fitting, or patching required to complete the Work and to make its parts fit together properly.
- .B Contractor must rework and patch to match existing surfaces at removed or demolished items.
- .C Patching must achieve security, strength, and weather protection, and must preserve continuity of existing fire ratings.

- .D Patching must successfully duplicate undisturbed adjacent finishes, colors, textures, and profiles. Where there is disagreement as to whether duplication is successful or has been achieved to a reasonable degree, the Owner's judgment shall be final.

#### 1.05 INTERFACE WITH WORK OF OTHERS

- .A The Contractor is responsible for any and all cutting, fitting and patching required to join its Work with the work of others, except as otherwise specifically stated for in the Contract Documents.
- .B Contractor must not cut or otherwise alter the work of Owner or any separate contractor except with the written consent of Owner and such separate contractor.
- .C Contractor must include interface flags in their Progress Schedule indicating points of interface of its Work with the work of others.

#### 1.06 SUBMITTALS

- .A Comply with requirements of [Section 01 33 00, "Submittal Procedures."](#)
- .B Submit written request to Owner in advance of cutting or alteration that affects:
  - .1 Structural integrity of any element of Project.
  - .2 Integrity of weather exposed or moisture resistant element.
  - .3 Efficiency, maintenance, or safety of any operational element.
  - .4 Visual qualities of sight exposed elements.
  - .5 Work of Owner or separate contractor.
  - .6 Include in request:
    - .a Identification of Project.
    - .b Location and description of affected work.
    - .c Necessity for cutting or alteration.
    - .d Description of proposed Work and Products to be used.
    - .e Method for keeping existing utilities in service.
    - .f Alternatives to cutting and patching.
    - .g Date and time the Work will be executed.
    - .h Anticipated results in terms of variations from originally completed Work.
    - .i Where applicable include a description of circumstances which led to need for cutting and patching.
- .C Review by Owner or Design Professional prior to proceeding with proposed cutting-and-patching does not negate Owner's right later to require complete removal and replacement of Work found to be cut and patched in an unsatisfactory manner.
- .D Where cutting and patching involves addition of reinforcement to structural elements, obtain details and engineering calculations prepared by California Registered Structural Engineer indicating how reinforcement is to be integrated with the original structure.
- .E List utilities that will be disturbed or affected, including those that will be relocated and those that will be temporarily out of service. Indicate how long utility service will be disrupted.

#### 1.07 QUALITY CONTROL

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.A Requirements for Structural Work:

- .1 Do not cut and patch structural Work in manner resulting in reduction of load-carrying capacity or load/deflection ratio.
- .2 Obtain Owner's written acceptance of Submittal before proceeding with cutting and patching of structural steel, structural concrete, foundation construction, basement or retaining walls, curtain walls, pressurized piping, vessels, and equipment.

.B Operational and Safety Limitations:

- .1 Do not cut and patch operational elements or safety-related components in manner resulting in reduction of capacities to perform as intended or resulting in decreased operational life, increased maintenance, or decreased safety.
- .2 Obtain Owner's acceptance of Submittal before proceeding with cutting and patching primary operational systems and equipment; water, moisture, vapor, air, or smoke barriers; membranes and flashings; noise and vibration control elements and systems; control, communication, conveying, and electrical wiring systems; and similar categories.

## PART 2 - PRODUCTS

### 2.01 MATERIALS

- .A For replacement of Work removed, use only materials that comply with the pertinent requirements of the Contract Documents. (Those required and accepted for original installation.)
- .B For any proposed change in materials, Submit request for Substitution as described in [Section 01 33 00, "Substitution Procedures."](#)

## PART 3 - EXECUTION

### 3.01 EXAMINATION

- .A Examine existing conditions prior to commencing Work, including elements subject to damage or movement during fitting, cutting and patching.
- .B After uncovering existing Work, assess conditions affecting performance of work.

### 3.02 PREPARATION

- .A Provide temporary supports to ensure structural integrity of the Work.
- .B If Hot Work is involved, comply with the requirements of [Section 01 50 00.1.08.O, "Hot Work."](#)
- .C Provide devices and methods to protect other portions of Project from damage.
- .D Provide protection from elements for areas that may be exposed by uncovering work.
- .E Avoid interference with use of adjoining areas or interruption of free passage to adjoining areas.
- .F Except as otherwise indicated, proceed with cutting and patching at earliest feasible time in each instance, and perform work promptly.

### 3.03 CUTTING

- .A Cut by methods least likely to damage retained and adjoining Work.
- .B Review proposed procedure with original installer where possible, and comply with installer's recommendations.
- .C Uncover work to install improperly sequenced work.



- .D Remove and replace defective or non-conforming work.
- .E Remove samples of installed work for testing when requested.
- .F Provide openings in the Work for penetration of mechanical and electrical work.
- .G Employ original installer or fabricator where possible to perform cutting for:
  - .1 Weather exposed and moisture resistant elements; or
  - .2 Visually exposed surfaces.
- .H Cut rigid materials using masonry saw or core drill. Pneumatic tools not allowed without prior approval.
- .I Comply with requirements of The Civil Drawings, where cutting and patching requires excavating and backfilling.

### 3.04 PATCHING

- .A Execute patching to complement adjacent Work.
- .B Fit Products together to integrate with other Work.
- .C Avoid damage to other Work and provide appropriate surfaces to receive patching and finishing.
- .D Employ original installer where possible to perform patching for weather exposed and moisture resistant elements, and visually exposed surfaces.
- .E Restore patched areas with new Products in accordance with requirements of Contract Documents.
- .F Fit patches tight to pipes, sleeves, ducts, conduit, and other penetrations through surfaces.

### 3.05 PERFORMANCE

- .A Performing cutting or patching operations means acceptance of existing conditions by Contractor.
- .B To avoid marring existing finished surfaces, cut or drill from the exposed or finished side into concealed surfaces.
- .C By-pass utility services such as pipe or conduit, before cutting, where services are required to be removed, relocated or abandoned.
  - .1 Remove pipe or conduit in walls to be relocated, abandoned or removed.
  - .2 Cap, valve or plug, and seal the remaining portion of pipe or conduit to prevent entrance of moisture or other foreign matter after by-passing and removing.
- .D Where feasible, inspect and test patched areas to demonstrate integrity of installation.
- .E Remove and replace Work judged by Designer of Record to be visually unsatisfactory.
- .F Perform cutting, fitting and patching in a manner to prevent damage to Contractor's Work and work by others and to provide proper surfaces for the installation of materials, equipment, and repairs.
- .G Do not cut nor alter structural members without prior written acceptance of Owner.
- .H Adjust and fit Products to provide a neat installation.
- .I Refinish cut and patched surfaces to match adjacent finish.
  - .1 For continuous surfaces, refinish to nearest intersection or natural break.
  - .2 For an assembly, refinish entire assembly.

- .J Over patched wall or ceiling surfaces, refinish to nearest cut-off line for entire surface, such as intersection with adjacent wall or ceiling, beam, pilasters, or to nearest opening frame, unless otherwise indicated.
- .K Refinished surfaces must not present a spotty, touched-up appearance.

**PART 4 - FORMS** (Not Used)**END OF SECTION 01 73 29**

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**SECTION 01 74 00  
CLEANING AND WASTE MANAGEMENT**

**PART 1 - GENERAL****1.01 SUMMARY**

.A This Section includes:

- .1 [Part 1 – General](#)
  - .a [1.01 – Summary](#)
  - .b [1.02 – Related Documents And Sections \(Not Used\)](#)
  - .c [1.03 – Definitions](#)
  - .d [1.04 - General Cleanup Responsibility](#)
  - .e [1.05 - Immediate Cleanup Activities](#)
  - .f [1.06 - Daily Cleanup Activities](#)
  - .g [1.07 - Weekly Cleanup Activities](#)
  - .h [1.08 - Owner's Right to Cleanup](#)
  - .i [1.09 - Storage and Disposal](#)
  - .j 1.10 – Recycling of Materials
  - .k [1.11 - Sand Blasting](#)
  - .l [1.12 - Final Cleaning](#)
- .2 [Part 2 – Products \(Not Used\)](#)
- .3 [Part 3 – Execution \(Not Used\)](#)
- .4 [Part 4 – Forms \(Not Used\)](#)

**1.02 RELATED DOCUMENTS AND SECTIONS (Not Used)****1.03 DEFINITIONS**

- .A "Clean," as used in this Section, and except as may be specifically provided otherwise, means the level of cleanliness generally provided by skilled cleaners using commercial quality building and parking lot cleaning equipment and materials.

**1.04 GENERAL CLEANUP RESPONSIBILITY**

- .A Contractor must keep the Work areas, Project Site, and surrounding areas free from waste materials, debris, and/or trash and rubbish caused by its operations.
- .B In addition to trash and rubbish generated by Contractor's operations, Contractor must keep the Work areas, Project Site, and surrounding areas free from trash and rubbish from any source that accumulates within the Work areas or Project Site or any other area designated by Owner for use by Contractor.
- .C Contractor must keep all surface areas (i.e., Site roads, off-Site streets, and parking areas) clear of dirt, mud, and debris and must Clean such surfaces as required, as needed, or as Directed by Owner's Project Manager.
- .D Contractor's and Subcontractors' tools, scaffolding and surplus materials must be neatly stored in designated storage areas when not in use.
- .E Contractor must maintain the Project Site in a neat and orderly condition at all times.

**1.05 IMMEDIATE CLEANUP ACTIVITIES**

- .A Properly dispose of packaging materials and Clean surrounding areas of packing debris

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immediately after unpacking of Products, materials, equipment, or other packaged items.

- .B Dispose of waste materials and Clean surrounding areas used for worker breaks and lunch immediately after worker break or lunch. Contractor must Provide trash receptacles in break and lunch areas.
- .C Contractor must immediately remove any spillage, dirt and mud, and/or debris resulting from Contractor's hauling or other operations along or across any public traveled way or public area.
- .D Remove debris and rubbish from pipe chases, plenums, down spouts, attics, crawl spaces, and other closed or remote spaces, prior to enclosing the space.
- .E Broom and vacuum clean interior areas prior to start of surface finishing, and continue cleaning to eliminate dust.

#### **1.06 DAILY CLEANUP ACTIVITIES**

- .A Wood, cardboard, packing material, form lumber and similar combustible debris must not be accumulated within buildings and such debris, rubbish and waste material must be removed from buildings on a daily basis.
- .B Contractor must leave Work areas "broom clean," or its equivalent, on a daily basis.
- .C Contractor must remove (pick up and place in trash receptacles) rubbish from and about areas of Work and the Project Site on a daily basis.
- .D Contractor must Clean the Project Site entrance area(s) of mud, dirt, displaced gravel, and rubbish each day.

#### **1.07 WEEKLY CLEANUP ACTIVITIES**

- .A Remove rubbish (pick up and place in trash receptacles) from and about the Project Construction Fencing line. This includes areas both inside and outside of the Project Site along the Temporary and Construction Fencing and/or permanent perimeter fence line.
- .B Place concrete debris in designated areas or remove from Project Site.
- .C Stack unused shipping pallets in designated areas or remove from Project Site.
- .D Repair, replace, or remove damaged and/or torn plastic sheeting used to protect stored materials, Products or Work.
- .E Empty all trash receptacles.
- .F Remove accumulated waste from the Project Site and dispose of in a proper and lawful manner.
- .G Organize and clean storage areas.

#### **1.08 OWNER'S RIGHT TO CLEAN UP**

- .A Deficient cleaning or disposal operations, as determined by Owner's Project Manager, must be immediately corrected by Contractor.
- .B After proper written notice, in cases where Contractor does not correct deficient cleaning or disposal operations, Owner may remove or cause to have removed waste materials, debris, and/or trash and rubbish, etc., and reduce the Contract Sum by the cost thereof.
- .C If a disagreement arises between Contractor and other separate contractors performing work at or adjacent to the Project Site, as to the responsibility pursuant to their respective contracts for maintaining the Project Site and surrounding areas free from waste materials, debris, and/or trash and rubbish, Owner may clean up or cause to be cleaned up the waste materials, debris, and/or trash and rubbish and allocate the costs among those responsible, and reduce the Contract Sum by Contractor's proportionate share of the cost thereof.

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**1.09 STORAGE AND DISPOSAL****.A Storage**

- .1 Waste materials, trash, and rubbish must be stored in covered containers.
- .2 Storage containers must not be allowed to overflow due to excessive waste materials, trash, and rubbish being placed in the storage container.
- .3 Storage container lids must be unobstructed by waste materials, trash, and rubbish when they are in the closed position.
- .4 Storage container lids must be closed at all times except when waste materials, trash, and rubbish are being placed into or removed from the storage container.
- .5 Recyclable materials must be segregated before storage and stored in separate containers or areas.

**.B Disposal**

- .1 Under no circumstances shall rubbish or waste material be disposed of in fills or backfills on the Project Site.
- .2 Contractor is responsible for making all arrangements and paying all costs for disposal of waste materials, debris, and/or trash and rubbish.
- .3 Waste materials, debris, and/or trash and rubbish, must be removed from the Project Site at least once each week.
- .4 When any material is to be disposed of outside the Project area, at other than a public disposal or recycling facility, Contractor must first obtain a written permit from the property owner of the proposed disposal site, and furnish Owner said permit or a certified copy thereof together with a written release from the property owner absolving Owner from any and all responsibility in connection with the disposal of said material on said site.
- .5 Before any material is disposed of on said site, Contractor must obtain written permission from the Owner to dispose of the material at the location designated in said permit.
- .6 Disposal of Hazardous Materials must comply with all legal requirements, including but not limited to containerization, labeling, manifesting, transportation, disposal site, and use of properly trained personnel. Contractor is responsible for chain-of-custody documentation for all Hazardous Materials and Hazardous Wastes.
- .7 Prior to Owner issuance of Notice of Substantial Completion, Contractor must submit two (2) copies of all Hazardous Waste Manifests signed by Toxic Substances Disposal Facilities ("TSDFs") and certificates of disposal, to prove that Contractor has legally disposed of such materials.
- .8 Contractor must separate and recycle the following waste material types in accordance Contractor's Solid Waste Management Plan (See [Section 01 35 63, "Solid Waste Management and Recycling Plan"](#)):
  - .a concrete;
  - .b metal;
    - .1 ferrous
    - .2 non-ferrous
  - .c wood;
  - .d debris;

- .e glass;
- .f paper; and
  - .1 bond
  - .2 newsprint
  - .3 cardboard and paper packaging materials
- .g Others as appropriate.

#### 1.10 RECYCLING OF MATERIALS

- .A The [California Integrated Waste Management Board](#) (CIWMB) requires all Cities and Counties to develop a Source Reduction and Recycling Program (SRRP) for all development projects such that solid waste intake to landfills is reduced. This Project is included in the CIWMB/SRRP requirements; therefore, Contractor is required to ensure that debris generated from demolition or construction activities is recycled or salvaged in accordance with all state and local CIWMB requirements.

#### 1.11 SAND BLASTING

- .A Sand blasting shall be only used upon receipt of written permission of the Project Manager.
- .B Perform sand blasting by experienced mechanics using sound modulated power machinery designed for this use.
  - .1 Comply with all applicable regulatory agencies.
  - .2 Use blasting aggregate uniformly graded, free from all animal or vegetable material, and not larger than No. 30 grit.
  - .3 Air compressor must be capable of providing air at a pressure of 100-110 pounds at 210-300 cfm. Use blast nozzle of 5/16-inch orifice.
- .C Operation
  - .1 Sand blast by the "flash" method.
  - .2 Pass continuously over the surface, to provide a uniform cutting of the surface, without pitting or excessive erosion of the base material.
  - .3 Exercise care to prevent corners or sharp edges from being broken or unduly rounded.
  - .4 Used aggregate must not be reused.
  - .5 Protect installed work of others from damage by blast, rebound, or used aggregate.
  - .6 Cover and protect mechanical work, air intakes, and similar items, as well as finished surfaces.
- .D Replace damaged work.
- .E Secure and pay for necessary permits required by state and local authorities having jurisdiction.

#### 1.12 FINAL CLEANING

- .A Substantial Completion Certification
  - .1 Contractor must, before requesting a Preliminary Walk-Through Inspection for Substantial Completion, perform a Final Cleaning of all Work areas associated with the Milestone. If the results of the Preliminary Walk-Through Inspection requires the scheduling of another Preliminary Walk-Through Inspection (reference Document 00 72 00), then Contractor again must perform a Final Cleaning.

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.B Project Completion Certification

- .1 Contractor must, before requesting a Preliminary Walk-Through Inspection for Final Inspection of the entire Work of the Project, perform a Final Cleaning of all Work areas and the Project Site including all areas associated with previously completed Milestones. If the results of the Preliminary Walk-Through Inspection requires the scheduling of another Preliminary Walk-Through Inspection (reference Document 00 72 00), then Contractor again must perform a Final Cleaning.

.C Final Cleaning Requirements

.1 General

- .a Cleaning for specific items of Work is specified in Divisions 2 through 16.
- .b Comply with manufacturer's instructions for Cleaning operations.
- .c Clean interior and exterior surfaces exposed to view.
- .d Remove labels that are not required as permanent labels.
- .e Dust, dirt, stains, hand marks, paint spots, and like defects must be completely removed from surfaces.
- .f Metal surfaces must be Cleaned, using only non-corrosive and non-abrasive materials.
- .g Remove debris and surface dust from limited-access spaces including roofs, plenums, shafts, trenches, equipment vaults, manholes, attics, and similar spaces.

.2 Transparent Surfaces

- .a Clean all glass, interior and exterior, affected by Work of this Project; including removal of foreign material from glass.
- .b Polish transparent and glossy surfaces.
- .c Clean transparent materials, including mirrors and window/door glass, to a polished condition, removing substances that are noticeable as vision-obscuring materials.
- .d Replace broken glass and damaged transparent materials.

.3 Soft Surfaces

- .a Vacuum carpeted surfaces.
- .b Vacuum all other soft surfaces.

.4 Hard Surfaces

- .a Clean exposed exterior and interior hard-surfaced finishes to a dirt-free condition, free of dust, stains, films, and similar noticeable distracting substances.
- .b Except as otherwise indicated, avoid disturbance of natural weathering of exterior surfaces.
- .c Restore reflective surfaces to original reflective condition.
- .d Clean concrete floors in unoccupied spaces broom clean.

.5 Equipment and Fixtures

- .a Clean equipment and fixtures to sanitary condition.
- .b Clean or replace filters of mechanical equipment.

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- .c Wipe surfaces of equipment and fixtures Clean, including elevator equipment and similar equipment.
  - .d Remove excess lubrication and other substances.
  - .e Clean plumbing fixtures to a sanitary condition, free of stains including those resulting from water exposure.
  - .f Clean food service equipment to a condition of sanitation ready and acceptable for intended food service use.
  - .6 Roofs, gutters, downspouts and drainage systems.
    - .a Clean roofs, gutters, downspouts and drainage systems.
  - .7 Exterior Grounds
    - .a Clean Project Site (yard and grounds), including landscape development areas, of litter, surplus materials, and foreign substances.
    - .b Sweep and power wash paved areas to Clean condition; remove stains, petro-chemical spills, and other foreign deposits.
    - .c Rake grounds that are neither planted nor paved to a smooth, even-textured surface.
  - .8 Lights and Lamps
    - .a Clean light fixtures and lamps so as to function with full efficiency.

**PART 2 - PRODUCTS** (Not Used)

**PART 3 - EXECUTION** (Not Used)

**PART 4 - FORMS** (Not Used)

**END OF SECTION 01 74 00**



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**201SECTION 01 77 00**  
**PROCEDURES FOR SUBSTANTIAL COMPLETION AND FINAL COMPLETION**

**PART 1 - GENERAL**

**1.01 SUMMARY**

- .A This Section includes:
  - .1 Part 1 – General
    - .a 1.01 – Summary
    - .b 1.02 – Related Documents And Sections **(NOT USED)**
    - .c 1.03 - Definitions
    - .d 1.04 - Closeout Conference
    - .e 1.05 - Contractor's Responsibility to Manage Incomplete and Deficient Work
    - .f 1.06 - Spare Parts and Keys
    - .g 1.07 - Operations and Maintenance (O&M) Data
    - .h 1.08 - Final Cleaning
    - .i 1.09 – Substantial Completion Inspection
    - .j 1.10 - Project Records for Milestone Substantial Completion
    - .k 1.11 - Project Records for Substantial Completion
    - .l 1.12 - Acceptance of the Work
    - .m 1.13 - Final Payment Application
    - .n 1.14 - Final Payment
  - .2 Part 2 – Products (Not Used)
  - .3 Part 3 – Execution (Not Used)
  - .4 Part 4 – Forms (Contractor's Conditional Waiver and Release Upon Final Payment)

**1.02 RELATED DOCUMENTS AND SECTIONS (Not Used)**

**1.03 DEFINITIONS**

- .A **Incomplete Work** – Work required by the Contract Documents that is not yet installed.
- .B **Deficient Work** – Installed Work that does not meet all the requirements of the Contract Documents.

**1.04 CLOSEOUT CONFERENCE**

- .A Owner's Authorized Representative will schedule a Closeout Conferences at approximately thirty (30), sixty (60) and ninety (90) Days before scheduled Substantial Completion of the entire Work of the Project.
- .B Conferences will be held at Project Site or another convenient location designated by Owner's Project Manager.
- .C Attendees:
  - .1 Owner's Authorized Representative
  - .2 Owner's Project Inspector

- .3 Contractor's Authorized Representative (Mandatory Attendance Required)
  - .4 Contractor's QC Manager (Mandatory Attendance Required)
  - .5 Necessary Subcontractors (to be determined)
  - .6 Other interested parties.
- .D Agenda: Closeout Conference Agenda will include:
- .1 Closeout Process and Procedures;
  - .2 Commissioning;
  - .3 Demonstration, training, and compiling and submitting operation and maintenance data;
  - .4 Compliance with and obtaining required permits, approvals, certificates and inspections, and submitting all required reports;
  - .5 Steps, submittals and certifications required to achieve Substantial Completion of the Work;
  - .6 Scope of work included in Contractor's Final Payment Application;
  - .7 Required submittals for Board of Supervisors Acceptance submittals; and
  - .8 Any requested or potentially requested contract adjustments, such as Outstanding Change Orders, Disputes, Potential Claims, Dispute Resolution procedures.
- .E Owner may elect to prepare meeting minutes of the Closeout Conference and distribute minutes to the attendees.
- .F Alternatively, Owner may direct Contractor maintain minutes and/or notes for the Closeout Conference and all follow-up closeout meetings in the form of a Decision/Action Tracking Report.
- .G Follow-up closeout meetings will occur at least monthly until Owner's Authorized Representative recommends Acceptance of the Project.

#### 1.05 COMPLETION OF WORK REQUIREMENTS FOR SUBSTANTIAL COMPLETION

- .A Completion of Work: With the sole exception of the certifications, records and submittals required for Final Acceptance described specifically in Section 1.08 below, Substantial Completion requires Contractor to achieve completion of all Work of the Contract Documents. Such Work includes, without limitation, completion of Incomplete Work, correction of Deficient Work; making certifications, submitting deliverables, and securing permits and approvals, and meeting all requirements for Substantial Completion and Final Completion expressed throughout the Contract Documents; correction, submittal and approval of corrections of all Notices of Noncompliance of Work; connection of all utilities and systems, testing and corrections so that all such utilities and systems work properly and meet all requirements of the Contract Documents. Contractor's attention is directed to the following elements of the Work.
- .B Commissioning. Completion of Commissioning, as may be required by Section 01 45 00 (Quality Control) and Section 01 91 00 (Commissioning), to include without limitation the following as may be applicable to the Project:
- .1 Testing and Commissioning;
  - .2 Conducting all required Pre-Functional Tests;
  - .3 Providing required certifications of Pre-Functional Tests by Contractor's Quality Control Manager per Section 01 45 00;

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- .4 Conducting all required Functional Tests;
  - .5 Providing required certifications of Functional Tests by the Commissioning Coordinator;
  - .6 Submittal and approval of Functional Testing Checklists by Owner's Representative and certification by Commissioning Coordinator;
  - .7 Successful performance testing including the Seven Day Performance Period;
  - .8 Commissioning Final Report submitted
  - .9 Certifications
- .C Permits and Inspections. Compliance with and obtain all required permits, approvals, certificates and inspections, and submitting all required reports to include without limitation the following as may be applicable to the Project:
- .1 Inspections and Certificates of Acceptance of systems requiring separate inspections.
  - .2 Certifications by QC Specialists per CBC Chapter 17.
  - .3 Building Department inspections.
  - .4 State Elevator Inspections.
  - .5 Fire Marshal Inspections.
  - .6 Permits from Authorities with Jurisdiction, including without limitation, City, Bay Area Air Quality Management District, Department of Environmental Health, OSHPD, other state or local agencies or departments. Specifications and technical specifications (Divisions 2 – 48) may contain additional testing, certificate and permit requirements, all of which must be met for Substantial Completion.
  - .7 Submittal of two (2) copies of all Hazardous Waste Manifests signed by Toxic Substances Disposal Facilities ("TSDFs") and certificates of disposal (See Section 01 74 00, "Cleaning and Waste Management");
  - .8 Any other permits required by the Contract Documents or necessary for occupancy and intended use of the Project and facilities, equipment and systems comprising the Project. Required permits, inspections and reports listed do not limit Contractor's obligation to timely complete the Work or justify delay to Contract close-out period to obtain such permits, inspections and reports where required sooner to meet the requirements of the Contract Documents.
- .D Demonstration and Training. Completion of all required demonstration, training, compiling and submitting operation and maintenance data, including requirements of Section 01 79 00 (Demonstration and Training), to include without limitation, the following as may be applicable to the Project:
- .1 Satisfactory completion of all demonstration and training (except Factory Training of Owner personnel on all equipment and systems required by the Contract Documents, including requirements of Section 01 79 00 (Demonstration and Training) and submittal of all sign-in sheets for attendance at Training by Owner's Staff.
- .E Receipt and Acceptance Of O&M Data
- .1 Submittal of Draft operation and maintenance manuals and documentation, sixty (60) days prior to the scheduled date for Substantial Completion, and final operation and maintenance manuals and documentation prior to Substantial Completion;
  - .2 Submittal of all operation and maintenance manuals and documentation, in corrected and final form, meeting the requirements of Section 01 78 23 (Operation and Maintenance Data) and all other requirements of the Contract Documents;
  - .3 Acceptance by Owner of Operation and Maintenance Manuals; and
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- .4 Submittal of all Videotapes of Training (by Final Acceptance).
  - .F FF&E. Completion of all CONTRACTOR responsibilities pertaining to Owner's Fixture, Furniture, and Equipment (FF&E) Schedule.
  - .G Spare Parts. All Spare Parts required by the Contract Documents must be submitted to Owner prior to Substantial Completion of the Work.
  - .H Keys, Key Control, and Key Cabinets. Contractor is responsible for key control of ALL keys (electrical panels, electrical/security/fire alarm control cabinets, doors, furniture, irrigation controllers, etc.), until Substantial Completion of the Work.
    - .1 Contractor shall provide a key cabinet(s) of a large enough capacity to hold keys for all: doors (including doors that will be have the construction cores replaced by Owner); cabinets; power panels; equipment; fire alarm panels; etc. The Key Cabinet shall have metal snap hooks, durable hinges, and durable, painted metal exterior. Capacity shall include key hooks for each key set for each door, cabinet, etc. Acceptable Manufacturers are TelKee and Lund.
    - .2 Contractor shall provide two (2) copies of each key (except for Owner-provided keys to doors having construction cores replaced), with a plastic tag label on each key (except for doors keyed by Owner after replacement of construction cores). Provide sufficient plastic key tags with metal snap hooks for each key, including door keys. Each key tag shall be labeled with a unique number and Contractor shall provide a separate, type-written key listing for mounting inside the key cabinet. The key listing shall identify the key number and the corresponding door, cabinet, etc. associated with that key. The key cabinet and all spare keys with tags must be submitted to Owner within ten (10) Days of Contractor's certification that the entire Work of the Project is complete, or earlier if requested by Owner's Project Manager.
  - .I Submittals. In addition to the requirement to complete all the physical Work, prior to Owner issuance of Notice of Substantial Completion, Contractor must submit all, further, documents and information required by the Contract Documents for Substantial Completion, including without limitation, the submittals and certifications identified in Section 01 32 00(Construction Progress Documentation) and Section 01 33 10 (Submittal Log) as Substantial Completion Submittals.
  - .J Cleaning of the Work per 01 74 00 (Cleaning and Waste Management).

#### **1.06 PROCEDURE AND SUBMITTALS TO ACHIEVE PROJECT SUBSTANTIAL COMPLETION**

- .A Procedures and steps for Contractor to achieve Substantial Completion of the Work, include without limitation the following steps as may be applicable to the Project. Contractor must satisfactorily perform and complete each step, in compliance with the Contract Documents, in order to proceed to the next step:
  - .1 Completion of All Physical Work on Site. Satisfactory completion of all physical Work on the Project Site.
  - .2 Cleaning. Cleaning of all Work areas and the Project Site including all areas associated with previously completed Milestones, meeting the standards of Section 01 74 00 and including graffiti removal, to be completed before requesting the Preliminary Walk-Through Inspection.
  - .3 Request for Preliminary Final Inspection. Submittal by Contractor of its Request for Preliminary Final Inspection, in the form and containing the certification of Contractor's QC Manager, as required by Section 01 45 00 (Quality Control).

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- .4 Satisfactory Completion of Owner's Punch List. Satisfactory completion of Owner's Punch List, which Owner will prepare provided the Preliminary Final Inspection indicates the Work is sufficiently complete for Owner to issue its Punch List, as provided for in Section 01 45 00 (Quality Control) and conduct any further cleaning per Section 01 74 00 required.
- .5 Request for Remaining Inspections (if any) and Satisfactory Completion of Punch Lists and Receipt of Permits by Authorities with Jurisdiction, including without limitation, inspections and completion of punch lists by the Fire Marshall, State Elevator Inspector, Department of Environmental Health, OSHPD. Specifications and technical specifications (Divisions 2 and up) may contain additional testing, certificate and permit requirements, all of which must be met for Substantial Completion.
- .6 Contractor's Request for Final Inspection. Submittal by Contractor of its Request for Final Inspection, in the form and containing the certification of Contractor's QC Manager, as required by Section 01 45 00 (Quality Control).
- .7 Project Final Inspection. Satisfactory completion by Owner of the Project's Final Inspection, as required by Section 01 45 00 (Quality Control). Subject only to the certifications, records and submittals required for Final Acceptance described specifically in Section 1.08 below, and Owner's sole and unfettered discretion regarding minor items described specifically below, all Work must be completed, including, for example and without limitation:
- .a All operating and maintenance data must be completed, submitted and accepted by owner;
  - .b All Cleaning under Section 01 74 00 must be completed;
  - .c All permits from Authorities with Jurisdiction, including City, Fire Marshall, State Elevator, OSHPD Temporary Certificate of Occupancy, must be obtained and inspections passed;
  - .d All connections, systems and tie-ins completed and fully operational;
  - .e All commissioning, all performance testing, is completed and certified
  - .f The Commissioning Seven Day Test is completed and the Final Commissioning Report is submitted and accepted.
- .8 Request for Substantial Completion. Provided the results of Project's Final Inspection are satisfactory, the submittal by Contractor of its Contractor may then submit its Request for Substantial Completion, which must be certified by Contractor's QC Manager, as required by Section 01 45 00 (Quality Control).
- .9 Letter Granting Substantial Completion. Provided the results of Project's Final Inspection are satisfactory, and all other requirements herein and in the Contract Documents are met, Owner issues its Letter Granting Substantial Completion.
- .10 Owner's Discretion. As referenced in Document 00 72 00 (General Conditions). Owner may, in its sole and unfettered discretion, elect to recognize Substantial Completion pending completion of minor items of the Work, however, Owner shall have no duty to do so. A condition subsequent to any such election is Contractor's prompt and timely completion of any such remaining minor items and any further conditions Owner may provide in writing.

#### 1.07 PROJECT RECORDS REQUIRED FOR PROJECT ACCEPTANCE AND FINAL COMPLETION

- .A After Substantial Completion and as a condition of Final Completion, Contractor must complete the Work required for Project Acceptance and Final Completion, submit all required Project Records, including but not limited to

- .1 Submittal of warranties and guarantees required by the Contract Documents, in the form and substance required by the Contract Documents, including the Warranty and Guaranty Register required by Section 01 78 36 (Warranties) containing information regarding extended Warranties, as well as information identified in Section 01 91 00 (if included as part of this contract) as equipment to be commissioned, with all warranties and guarantees fully executed.
- .2 Contractor's As-Built Document Certification, which must be certified by Contractor's QC Manager, as required by Section 01 45 00 (Quality Control).;
- .3 Owner's acceptance of final as-built documents and record documents required by Section 01 33 20 (Office of the Fire Marshall Permits).
- .4 Contractor's submittal and Owner's acceptance of final survey records required by Section 01 71 23 (Field Engineering).
- .5 Contractor's submittal and Owner's acceptance of Contractor's "Records of Quality Control Plan and its Implementation" required by Document 00 45 00 (Quality Control).;;
- .6 Submittal of final videotapes of demonstration and training of Owner personnel on equipment and systems required by the Contract Documents, including requirements of Section 01 79 00 (Demonstration and Training); Project Completion certification by an Officer of Contractor, pursuant to Section 01 45 00.
- .7 Two (2) copies of summary of solid waste generated by Contractor's operations. (Form 01 35 63 F-1; see Section 01 35 63, "Solid Waste Management and Recycling Plan").
- .8 Contractor's submittal and Owner's acceptance of any other submittals identified in the Contract Documents as required for Final Completion and Acceptance.
- .9 Contractor's satisfactory completion of any item of Work reserved to Final Acceptance, or which Owner may have excepted from the grant of Substantial Completion, or as subsequently discovered or observed as incomplete or deficient. This specifically includes correction of deficient Work identified in any non-compliance notice that may remain outstanding.
- .10 Final LEED submissions.
- .11 Contractor's Release (see form at end of this Section 01 77 00).

#### 1.08 ACCEPTANCE OF THE WORK AND FINAL COMPLETION

- .A When Contractor has achieved all requirements for Final Completion and Acceptance, Contractor shall make the required certifications permitting the Owner's Representative to recommend to the County Board of Supervisors that it formally accept the Project.
- .B Contractor's attention is directed to the requirements of Section 01 45 00. An Officer of Contractor, above the level of the Project Manager, is to then submit the following Project Completion certification:

*"I certify that, to the best of my knowledge, all Work of the Project is Complete, including the fulfillment of all administrative requirements of the Contract. I request the Board of Supervisors accept the project as complete."*

(signed)

*Officer of the Contractor*

- .C Acceptance of the Work will be made by the County Board of Supervisors or the Director, Facilities and Fleet Department, only after Owner's Authorized Representative has

recommended Acceptance.

- .D Receipt of Record Drawings, As-Built Documents and Solid Waste Summary are conditions of Acceptance of the Work.
- .E Owner's Authorized Representative may recommend to the Board that it accept the Project disputed items and incomplete work, and withhold one-hundred fifty percent (150%) of the value of such items in accordance with Public Contract Code section 7107.
- .F Contractor must take special note that, unless otherwise stated in the Contract Documents, without regard to the date(s) items of Work were actually put into service, all Guarantees/Warranties will commence on the date of Acceptance of the entire Work of the Project by the County Board of Supervisors or the Director, Facilities and Fleet Department.
- .G After formal Acceptance of the Work, the Clerk of the Board of Supervisors will record a Notice of Completion with the County Recorder.

**1.09 FINAL PAYMENT APPLICATION** (See Section 01 29 00, "Payment Procedures")

- .A After Acceptance of Work Contractor must submit four (4) copies of its Final Payment Application.

**1.10 FINAL PAYMENT**

- .A Thirty-five (35) Days after the date of recording of the Notice of Completion by the County Recorder, Owner's Authorized Representative will forward a request for Final Payment for the Work to the County Controller for payment.
- .B Owner will withhold from Retention and/or Final Payment such amounts that are in Dispute between Owner and Contractor, amounts subject to offset/setoff, and all other amounts that must be withheld by law (such as Stop Notice sums.)

**PART 2 -PRODUCTS** (Not Used)

**PART 3 -EXECUTION** (Not Used)

**PART 4 -FORMS:** Contractor's Conditional Waiver and Release Upon Final Payment conforming to California Civil Code 8136.

**END SECTION 01 77 00**



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**SECTION 01 78 23**  
**OPERATION AND MAINTENANCE DATA**  
(Shall applies to specific Job Order)

**PART 1 -GENERAL**

**1.01 SUMMARY**

- .A This Section includes:
  - .1 Part 1 – General
    - .a 1.01 –Summary
    - .b 1.02 - Related Documents And Sections
    - .c 1.03 – Definitions
    - .d [1.04 - Format](#)
    - .e [1.05 - Submittals](#)
  - .2 Part 2 - Products
    - .a [2.01 – Manual I - O&M Facility Information](#)
    - .b [2.02 – Manual II - Systems and Equipment O&M Manual](#)
    - .c [2.03 – Manual III - Product Data Maintenance Manual](#)

**1.02 RELATED DOCUMENTS AND SECTIONS**

- .A [Section 01 91 00, "General Commissioning Requirements"](#)
- .B Section 01 79 00, "Demonstration and Training"

**1.03 DEFINITIONS**

- .A **Manufacturer's Product Data** – Drawings, illustrations, catalog cuts, equipment listings and product technical data furnished by the manufacturer.
- .B **Equipment/System Maintenance Schedule.** Consolidated comprehensive spreadsheet summary of preventative maintenance requirements for all systems and equipment for subject project including at the minimum: Equipment Name and Model Number, Equipment Description, Equipment location, and Maintenance durations along with description of preventative maintenance scope.
- .C **Operating Procedures** - Step-by-Step instructions to bring systems from static to operational configuration and from operating to shut-down status. These instructions include both normal and emergency operating conditions.
- .D **O&M** - Operations and Maintenance
- .E **O&M Information – Divided into three separate sections** consisting of:
  - .1 **Manual I.** O&M Facility Information – basic information needed on a daily basis to maintain the building, including, but not limited to, warranty contact information, floor plans, utility connection and cut-off plans, and component inventories.
  - .2 **Manual II.** Systems and Equipment Maintenance Manual – contains detailed operation, preventive maintenance, repair, and manufacturer's O&M data for systems.



- .3 **Manual III.** Product Data and Maintenance Manual. Consists of catalog cuts and manufacturers make, model and color number, and all maintenance and cleaning instructions for designated architectural products, applied materials, and finishes.
- .F **Repair Procedures** – Repair instructions required to restore equipment and systems to proper operating conditions.
- .G **System** - An organized collection of parts, equipment, or subsystems united by regular interaction. In this specification, for example, systems include: Elevator; Boiler; HVAC (excluding boilers); Fire Alarm; etc.
- .H **System Components:** Equipment that act/operate “individually” but are essential to the operation of a System. System Components for HVAC, for example, would include fans with motors, compressors, chillers, VAV boxes, motorized dampers and pumps. For the purposes of this Section, “conveyance” mediums, such as ducts and pipes, are not considered System Components.
- .I **System Type:** Each System is one of three Types, as described in paragraph 2.03.
- .J **Troubleshooting Guides and Diagnostic Techniques** – Troubleshooting procedures promptly to isolate the cause of typical system malfunctions. Documentation of specialized test equipment needed to diagnose malfunctions and techniques for use on the equipment.

#### 1.04 FORMAT

- .A O&M information shall be submitted in electronic format. Note that “electronic” format is not simply .pdf copies of the O&M information. More specifically, the Asset List of Manuals 2 and 3 must be hyper-linked to actual O&M information. Further explanation is provided in the paragraphs that follow.
  - .1 Assemble each manual into a composite electronically indexed file using the most current version of Adobe Acrobat or similar software capable of producing PDF file format. Provide compact disks (CD-R/RW) or data digital versatile disk (DVD-R/RW) as appropriate, so that each one contains operation, maintenance and record files, project record documents, and training videos. Include a complete electronically linked operation and maintenance directory.
  - .2 Naming files, paths and namespaces shall follow Microsoft Windows standards and be descriptive, but kept as short as possible.
  - .3 Do not restrict files from being printed, exported, modified or copied. Do not deliver files with any restrictions (expiration date, locks, etc.) for access, viewing, archiving, or editing.
  - .4 Scan all files for malicious viruses using commercially available scanning program that is routinely updated to identify and remove current virus threats.
- .B Contractor may use purpose-built software for the O&M information, such as OMTRAK, or the information may be custom-developed by the Contractor in the format described throughout this Section.
- .C Documentation shall be submitted in “standard” electronic storage format, such as a “hard drive,” “Flash Drive,” or CD/DVD.

Provide the following information on the disk label and disk holder or case:

- .1 Building Facility Number

- .2 Project Title
  - .3 Project Location
  - .4 Construction Contract Number
  - .5 Prepared For: (Contracting Agency)
  - .6 Prepared By: (Name, title, phone number and email address)
  - .7 Disk content
  - .8 Date
- .D Each Manual (described below) shall have its own “folder” in the electronic medium, and subsets of the Manuals shall have their own folders in the Manual folder. For example:
- FlashDrive/Manual 1/Utility Connection Cut-off Plans/Water
- FlashDrive/Manual 1/Utility Connection Cut-off plans/Gas
- FlashDrive/Manual 2/Asset List/O&M Information AHU-1
- FlashDrive/Manual 3/Asset List/Maintenance Information Carpet Tile

#### 1.05 SUBMITTALS

- .A Submit the Manual 2 and Manual 3 Asset Lists, for Owner Review and Acceptance, 18 days before Project Milestone Completion.
- .B The final version of the O&M information must be submitted and Accepted by the County no later than the contract Substantial Completion Date defined in the Notice to Bidders/Notice to Proposers.
- .C Interim submissions and corresponding Owner reviews should be conducted well before the Milestone Completion date.
- .D The Final Submittal review time by the Owner is 21 D days. In other words, at a minimum, the Final submission of O&M information must be made 21 days before the Milestone Completion date.
- .E Provide 3 sets of final O&M manuals.

#### PART 2 - PRODUCTS

##### 2.01 Manual I - O&M Facility Information.

- .A **Table of Contents.**
- .B **Floor Plans.** Provide uncluttered, legible floor plans. Exact copies of the design plans are not acceptable because of extraneous information. Include the following information on the floor plans:
  - .1 Room numbers;
  - .2 Identify the type or function of each room/space; and
  - .3 Indicate overall facility dimensions on the floor plans.
  - .4 Do not include construction instructions, references, frame numbers, etc.
- .C **Utility Connection and Cutoff Plans; Fire Alarm, Lighting Control panel(s), Electrical panels and Security panel(s) location plans** – Provide site and building floor plans which show the

following indicate the exterior and main interior connection and cutoff points for all utilities. "Utilities" include:

- .1 Water: exterior and main interior connection and cutoff points and isolation valves ;
- .2 Gas: exterior and main interior connection and cutoff points and isolation valves;
- .3 Electric: Location and designation of all power panels and transformers and switchgear;
- .4 Lighting Control: Location and designation of all lighting control panels;
- .5 Fire Alarm: Location and designation of all FACP and annunciator panels;
- .6 Emergency Responder Distributed Antenna System (if part of the building): Location of Antennas and main control room;
- .7 Security panels: location and designation;
- .8 fire protection water: Location of all exterior and interior valves, connection and cut-off points, fire pumps and motorized gongs;
- .9 Floor plan showing location of all Fire-rated doors.

Each system above shall have its own separate plans. For example, a site plan would be provided that only showed the Gas system. A separate site plan would only show domestic water connection and entry points, etc.

Exact copies of the design site plans are not acceptable because of extraneous information. Include enough information to enable someone unfamiliar with the facility to quickly locate the connection and cutoff points. For the site plan(s) do not include items such as contour lines, elevations, and subsurface information, including buried utility lines. Dimension the location of all connection points, valves and cut-off points from established "benchmarks" so as to enable maintenance staff to easily locate these components.

On the building floor plan(s) indicate room numbers and room names so as to enable maintenance staff to easily locate these components. Exact copies of the design plans are not acceptable because of extraneous information. Include only information required of this sub-section.

- .D **Grounding System Plan.** . Provide an uncluttered, legible building floor plan showing location of all ground rods and supplementary grounding electrodes connected to the grounding system. The location of each ground rod, ground rod assembly and other grounding electrodes shall be identified by letter in alphabetical order, and keyed to the record of ground resistance tests.
- .E **Irrigation System Plan:** Provide uncluttered, legible site plan showing the layout of the site irrigation system, location of sprinkler heads (dimensioned from the building), location of isolation valves, location of connection points (for example, to City recycled water) and location of irrigation controller. Exact copies of the design plans are not acceptable because of extraneous information.
- .F **Operating Procedures Outline Sheet (OPOS) for Window Washing System** (If applicable for the building. All buildings 3 stories and over that have a window-washing system must have an OPOS).
- .G **Extended Warranty Information** – List in table format, and provide warranty contact information for products, equipment components, and sub-components whose warranty duration exceeds one year. For each warranty listed, indicate the applicable specification section, duration of warranty, and point of contact for warranty-related issues (name, address, phone number).

- .H **HVAC Filters** – Provide a table that lists the quantity, type, size and location of each HVAC filter.
- .I **Lighting Fixtures** – Provide a table that lists, by room number (including hallways and common spaces) the type of lighting fixture, number of lighting fixtures, and type of bulbs or tubes.
- .1 For lighting fixtures, provide two data tables: (1) a listing of all lighting fixtures and corresponding lamps/ballasts (with manufacturer identification) used in the building; (2) a spreadsheet table showing room number and types of lighting fixture in each room of the building, corresponding to (1). For example, room 253 might have lighting fixture nos. 46 and 47. Table (1) would identify and make and model no., along with lamp/ballast, of fixture Nos. 46 and 47.
- .J **Roofing** – Provide the total area of each type of roof surface and system. Provide the name of the roofing product and system, with names, addresses, and phone numbers of the manufacturer, supplier and installer. For each type of roof, provide a recommended inspection, maintenance and repair schedule that details checkpoints, frequencies and prohibited practices.
- .K **Painting Schedule:** Provide a spreadsheet identifying each room in the building by number and the specific paint color(s) for the walls and ceiling in the room.
- .L **Provide Circuit Directories of all electric, controls, security and communication Panel Boards** The designation of these panels should match that indicated in .C above. \*\*
- .M **As-Built Drawings for Fire Alarm and Fire Sprinkler systems.** Provide a copy of the As-built drawings as described in Section 01331 1.05 .B .1. The set of as-builts in the O&M manual is in addition to the set provided to the Fire Marshal. Provide all testing reports for smoke / fire system. Include any fire door / roll down doors / gate information and testing documentation.
- \*\* This information may be submitted separately at time of final Project Milestone Completion
- .N **Maintenance service contracts, if any.** Include copies of maintenance agreements with name and telephone number of service agent, if any are included as part of this contract.

## 2.02 MANUAL II - Systems and Equipment Operation and Maintenance Information

- .A **Overview:** The information required for this manual is organized using a **systems approach**. This approach requires that consideration be given to the entire system; that is, the interfaces of equipment, connections and material flow within the system.
- .1 Manual II shall be organized in a Systems hierarchy as follows:
- .2 System Type (I,II, or III—see below)
- .3 System
- .4 (System) Component
- .5 Sub-paragraph .6 below identifies Systems and System components that are included as part of this specification Section. The System Components listed are the minimum that shall be included. If a SC has not been identified below, but should be included based on the definition of 1.03 .G above, then the Contractor shall include the SC in the manual.
- .6 There are **three types** of Systems:
- .a **System Type 1:** Systems with moving parts that require lubrication, periodic changing of belts, etc. For the purposes of this project, the following systems are **Type 1**:

HVAC System

System Components:

Motors  
Pumps  
Fans  
RTU AHU  
Split System Air Conditioning Units  
Air Terminal Units  
etc.

Chilled Water

System Components:

Cooling Tower  
Compressor  
Pumps  
Water Treatment  
Refrigerant Monitoring and Safety Equipment

Elevator(s)

System Components:

Door Operator  
Controller  
Motor  
Emergency Telephone  
Etc.

Steam/Hot Water Boiler

Diesel Electric Generator

System Components

Generator  
Engine

Compressed Air/Vacuum

- .b **System Type 2:** "Static" type systems. For the purposes of this project, the following systems are **Type 2:**

Sprinkler System

System Components:

Pumps  
Sprinkler Heads  
Motorized Gong

Etc.

Site Irrigation System

System Components:

Controller

Sprinkler Heads

Pneumatic Tube

Emergency Plumbing Fixtures

- .c **System Type 3:** Electrical Equipment components or systems, for which wiring and control diagrams are needed for operation, maintenance and repair. For the purposes of this project, the following systems are **Type 3**:

Fire Alarm System

System Components

FACP

Anunciator panels

Detection/alert devices

Switchgear and Wiring

Transfer Switch

Automatic Lighting Control Equipment and Low Voltage Lighting Control Equipment

Security System

- .B Separate, distinct O&M information is required for the Building Automation System. See paragraph .H below.

.C **Contents and Organization of Manual II:**

.1 **Asset List.**

- .a The "Asset List" identifies, in tabular format, every system component either identified specifically in paragraph .6 above or covered by the definition in 1.03.G.
- .b On the left side of the table would be identified, under each System heading, each system component. On the right side of the table, the following information would be identified:
- .1 Identify each System/System Component with the same designation and tagging used in the Contract Documents, such as AHU-1, etc. If no designation exists, assign a designation according to ASHRAE Guideline 4, "Preparation of Operating and Maintenance Documentation for Building Systems." Also, include the following:
- 1) Product name and model number. The model number must be complete and details of each optional feature furnished shall be included;
  - 2) Manufacturer's name;
  - 3) Equipment function;

- 4) Rating, wither in CFM, Horsepower, tons of cooling, BTU, etc. as appropriate. for each Component;
- 5) Where located in the building;
- 6) Identify if any System Component has been specially modified, such as the blades of a pump impeller being shaved down from the manufacturer's standard.

An example is provided below:

System/Component	Product name/model No.	Serial number	Function	Building Location	Rating	Modifications?
Type 1						
<b>HVAC</b>						
AHU-1	Trane Model 4334	Xyz556	Air flow to Zone 3	Roof	6,000 CFM	None
EF-3	Greenheck Model 5678	435ZZ	Exhaust Zone 2	3 <sup>rd</sup> floor room 26	4,000 CFM	None
Type 2						
<b>Sprinkler System</b>						
Fire Pump	Peerless AE 1200	468595	Adds pressure and head to fire protection water	Basement Room 25	8,000 GPM	None

- .2 **Valve List** – Provide, by System, custom-prepared spreadsheets listing of all valves associated with each System. Show valve type, identification number, function, room location and normal operating position.
- .3 **Environmental compliance** – Provide a listing of the System/System Components that requires special operation, reporting, testing, analysis or inspection to comply with federal, state and local laws. Examples of possible list items include back flow preventer inspections, underground storage tank inspection and testing, hazardous material and air pollution control devices. For each item, include requirements for environmental operation, reporting and testing, regulations, and policies.
- .4 **Operation and Maintenance/Repair information:**
  - a By System, for each System Component, load (onto the electronic storage device described in paragraph 1.04) a complete copy of the Manufacturer's Operation and Maintenance manual.

- .b The O&M Manual shall be able to be accessed via “hyperlink” in the Asset List. Each System Component identified in the Asset list (under the System/Component column) shall be in a hyperlink format such that clicking on the Component hyperlink will take the reader directly to the O&M manual.
  - 1) Each Manufacturer’s manual must either come with a clear, concise table of contents at the beginning of the manual, or the Contractor must create a separate table of contents that clearly shows the location of the items identified in this section.
  - 2) **Performance and design criteria** if Contractor is delegated design responsibility, the Manual shall contain detailed “basis of design” information, including all relevant calculations. The purpose of this information is to enable the Owner to replace the equipment in the future with another make/model of equipment.

If the Manufacturer’s Operation and Maintenance manual does not contain any piece of the following information, then Contractor shall provide the information listed below separately for each System Component:

- .c **Start-up and Shutdown Procedures.** Provide step-by-step instructions to bring systems from static to operational configurations, and from operating to shutdown status.
- .d **Wiring diagrams.** These wiring diagrams must be in a format to allow ease in functional understanding and troubleshooting of each circuit. Diagrams shall be point-to-point drawings of wiring and control circuits including factory-field interfaces. In diagrams, number electrical and electronic wiring and pneumatic control tubing and the terminals for each type, identically to actual installation configuration and numbering. The diagrams must also include complete details showing each wire number, wire color, terminal number, and intermediate connection points. The final O&M submittal shall include certification that the wiring diagrams in the manual are complete and accurately reflect every change up to the date of the certification.
- .e **Control diagrams.** These control diagrams must be in a format to allow ease in functional understanding and troubleshooting of each control loop. Control programs shall be annotated to the extent possible to explain the control strategy; annotations shall use device descriptions consistent with the contract documents. The final O&M submittal above shall include certification that the control diagrams in the manual are complete and accurately reflect every change up to the date of the certification.
- .f **Emergency Operating Instructions.** Provide emergency operating procedures in the event of equipment malfunctions. Provide shutdown instructions for fires, explosions, spills or other foreseeable contingencies. Provide guidance and procedures for emergency operation of utility systems including required valve positions, valve locations and zones or portions of systems controlled.
- .g **Safety Instructions.** Provide a list of all personnel hazards and equipment or product safety precautions including recommended safeguards for each identified hazard.
- .h **Preventive Maintenance Plan and service schedules.** Include all major pieces of equipment. Provide a table or check sheet that details maintenance tasks and associated frequencies, such as daily, weekly, monthly, etc.



- 
- 1) Provide manufacturer's schedule for routine preventive maintenance, inspections and condition monitoring (predictive test) and adjustments required to ensure proper and economical operations and to minimize repairs. Provide instructions stating when the systems should be retested. For periodic calibrations, provide manufacturer's specified frequency and procedures for each separate operation.
  - .i **Lubrication Schedule.** Provide, indicating types, grades, frequencies, and capacities of lubricants for specific temperature ranges and applications. Provide charts with a schematic diagram of the equipment showing lubrication points, recommended types and grades of lubricants, and capacities.
  - .j **Replacement parts list and source information.** Include a list of spare parts and supplies required for maintenance to ensure continued service or operation without unreasonable delays.
  - .k **Removal and Replacement Instructions.** Include step-by-step procedures and a list of required tools and supplies for removal, replacement, disassembly, and assembly of components. Instructions shall include a combination of text and illustrations.
  - .5 **Building Automation System Information – Provide the following:**
    - .a Complete points list.
    - .b Names, addresses and phone numbers of installation contractor and control systems contractor
    - .c Operator's manual with procedures of operating the control systems including logging off and on, alarm handling, producing point reports, trending data, overriding computer control, and changing set points and other data;
    - .d Programming manual with a description of the programming language including syntax, statement descriptions including algorithms and calculations used, point database creation and modification, program creation and modification, and use of the editor;
    - .e Engineering, Installation and Maintenance Manual(s) that explains how to design and install new points, panels, and other hardware; preventive maintenance and calibration procedures; how to debug hardware problems; and how to repair and replace hardware;
    - .f Shop drawings showing verified as-built final field conditions as follows:
      - 1) Network Architecture, including all points and controllers;
      - 2) Complete wiring diagrams for all panels, controllers and field devices including wire colors and tags and actual routing order of network communication cable wiring.
      - 3) Signal and range information for all analog field devices (inputs and outputs)
      - 4) Schedule of all Constant Air Volume (CAV) and Variable Air Volume (VAV) boxes, to include Air Handling Units served, Box size, CFM and valve information;
    - .g Complete sequence of operation for each system including but not limited to all normal, special, safety and failure modes of operation, starting and

stopping, occupied and unoccupied functions, hardware and software interlocks, reset schedules, ramp times, delays, hi/low/average data sources and application, set points, variables, software points, alarms, conditions, restarting, etc. ;

- .h A listing and documentation of all custom software created using the programming language, including the point database. One set of magnetic media containing files of the software and database shall also be provided;
- .i One set of electronic media containing files of all color-graphic screens created for the project;
- .j A list of recommended spare parts with part numbers and supplier;
- .k Recommended preventive maintenance procedures for all system components including a schedule of tasks (inspection, cleaning, calibration, etc.), time between tasks, and task descriptions;
- .l Complete original issue documentation, installation, and maintenance information for all system components and third party hardware provided including but not limited to computer equipment and sensors;
- .m Complete original-issue media for all software provided including operating systems, programming language, operator work station software, and graphics software;
- .n All programs, code, databases, graphic files, CADD drawings, and symbol libraries generated for operation of the system shall be included as a part of the system documentation. This information shall be submitted both in hard copy bound format and magnetic media format; i.e., CD;
- .o Input/output schedules and data sheets including controller name, controller terminal, point software tag, software signal type, range and other configuration data, interposing devices, field device description, make, model and configuration, device signal range, device measurement/actuation range, calibration check date, displayed or commanded values, field measured values, correction factors if applicable, technician initials;
- .p Complete original issue documentation and software diskettes for all software furnished and installed as a part of the system or required for the operation of the system including text editors, control language program and compiler, database managers, graphics and CADD packages, preventative maintenance software, operating systems, and communications software;
- .q Complete original issue documentation, installation, operational manuals, and supporting software for all hardware furnished and installed as a part of the system or required for the operation of the system, including remote terminals, user's computer work station, monitors, graphics and memory boards, network servers, printers, and modems; and

### 2.03 MANUAL III, PRODUCT DATA AND MAINTENANCE MANUAL

.A Provide for the following architectural products as it applies to the specific Job Order:

**Note to spec writer: edit this section according to the project needs!**

Section 02950 Landscape Planting – See sub-paragraph .C below for requirements

Section 07411 – Pre-formed metal wall panels;

Section 07430 – Aluminum Faced Composite Wall Panels,

Section 07900 – Sealants;  
 Section 09310 – Ceramic tile;  
 Section 09510 – Acoustical Ceilings;  
 Section 09650 – Resilient Flooring;  
 Section 09680 – Carpet;  
 Section 01510 – Plumbing fixtures  
 Section 16510, 16520 – Lighting Fixtures including Exterior Lighting

**.B Content**

**.1 Asset List.**

- .a The “Asset List” identifies, in tabular format, each Architectural Product, its location in the building (if the product is location-specific) and the Product name and model number. See example below

<b>Architectural Product</b>	<b>Location (shall be room-specific, if necessary)</b>	<b>Product name/model No.</b>	<b>Installer name, address and Phone number</b>
Ceramic Tile	Restroom floors	Dal Model 4334	S&G Carpet Tile Co. 3300 Central Expressway, Santa Clara 408-000-1234
Ceramic Tile	Restroom walls	Dal Model 5449	
Carpet Tile	First Floor Offices	Mohawk Model 595	
Carpet Tile	Second Floor Common areas	Mohawk Model 635	
Roll-Down Grills	First Floor Pharmacy	Cornell Model ESG-23	

**.2 Operation and Maintenance/Repair information:**

- .a For each Architectural Product listed in 2.03 .A, load onto the electronic storage device described in paragraph 1.04 the information defined in paragraph .3 below.
- .b The information in .3 below shall be able to be accessed via “hyperlink” in the Asset List. Each Architectural Product identified in the Asset list shall be in a hyperlink format such that clicking on the Product hyperlink will take the reader directly to the information in paragraph .3 below.

**.3 Include:**

- .a Detailed product information, including catalog cuts
  - .b Maintenance procedures
    - .1 Types of cleaning agents to be used and methods of Cleaning.
    - .2 List of cleaning agents and methods of Cleaning detrimental to product.
  - .C For Landscape Planting provide the following information:
    - .1 Fertilizing requirements, including frequency and types;
    - .2 Pruning requirements;
    - .3 Plant “diagnosis” information, e.g. what to do if leaves turn yellow, etc.
- 2.04. **Consolidated Preventive Maintenance Schedule.** Provide for a single summary spreadsheet listing all equipment and systems installed or constructed as a part of subject project that includes equipment name and description, equipment model number, equipment location, specific maintenance requirements per the manufacturer’s documented recommendations, time intervals of preventative maintenance tasks and scope of the specific maintenance tasks.

**END OF SECTION 01 78 23**

## SECTION 01 78 36

## WARRANTIES

**PM must edit 1.03 .B .2 and 1.05****[FOR REVIEW OF COMMERCIAL ISSUES – SCOPE AND TERMS OF WARRANTY-GUARANTY]****PART 1 - GENERAL****1.01 SUMMARY**

- .A This Section includes requirements for guarantees and warranties required for Contract Closeout and during specified guaranty/warranty periods.

**1.02 RELATED DOCUMENTS AND SECTIONS (NOT USED)****1.03 DESCRIPTION OF REQUIREMENTS**

- .A The one-year minimum warranty period for all Work begins on the date of the County Board of Supervisors' Acceptance of the Project.
- .B Contractor shall compile required warranties and guarantees, duly executed, in a Warranty and Guarantee register and submit to Owner. Submission of the Warranty and Guarantee Register is a condition of Substantial Completion. This register shall also
  - .1 identify all warranties longer than one (1) year in duration; and
  - .2 identify all warranties for equipment listed in Section 01 78 36,
  - .3 For these warranties identified in .1 and .2 above, provide information described in paragraph 1.05 of this Section and submit to Owner for acceptance a minimum of ten (10) Days prior to Contractor's first request for inspections for determination of Substantial Completion of the Work. Submit also the warranty of Part 4 of this Section.
- .C General Limitations: It is recognized that specific guarantees and warranties are intended to protect Owner against failure of the Work to perform as required, and against deficient, defective, and faulty materials and workmanship, regardless of sources.
- .D Related Damages and Losses: When correcting guaranteed or warranted work which has failed, remove and replace other Work of Project which has been damaged as a result of such failure or which must be removed and replaced to provide access for correction of Work.
- .E Reinstatement of Guarantee or Warranty Period: In addition to requirements in Document 00 72 00, "General Conditions," when Work covered by a special project guaranty or product warranty has failed and has been corrected by replacement or restoration, reinstate guaranty or warranty by written endorsement for one (1) year starting on date of acceptance of replaced or restored Work.
- .F Replacement Cost, Obligations: Except as otherwise indicated, cost of replacing or restoring failing guaranties or warranted units or products is Contractor's obligation, without regard for whether Owner has already benefited from use through a portion of anticipated useful service lives.
- .G Specific Guarantee or Warranty Forms: Where a special Project guaranty or specified Project warranty is required, prepare a written document to contain terms and appropriate identification; ready for execution by required parties.
  - .1 Refer to the Guarantee-Warranty form at the end of this Section.
  - .2 Refer to individual sections of Divisions 2 through 16 for specific content and requirements.

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**1.04 REQUIREMENTS INCLUDED**

- .A Compile specified warranties.
- .B Compile specified service and maintenance contracts, if any.

**1.05 SUBMITTAL REQUIREMENTS – WARRANTY AND GUARANTEE REGISTER**

- .A If this Contract includes Section 01 78 36, provide warranty/guarantee contact information for each product/system identified.
- .B In addition to .A above, assemble and include in the Warranty and Guarantee Register all extended (more than one (1) year) warranties, bonds, and service and maintenance contracts, executed by each of the respective manufacturers, suppliers, and subcontractors.
- .C Number of original signed copies required: two (2) each.
- .D Table of Contents: Neatly typed, in orderly sequence. Provide complete index information for each item.
  - .1 product or work item with index number to bound item;
  - .2 firm, with name of principal, address, and telephone number;
  - .3 scope; and
  - .4 duration of warranty, bond, or service maintenance contract.
  - .5 Provide information for Owner's personnel:
    - .a procedure to be followed in case of failure.
    - .b circumstances which might affect the validity of warranty or bond.
  - .6 For Contractor, name of responsible principal, address and telephone number.

**1.06 FORM OF SUBMITTALS**

- .A Prepare in duplicate packets.
- .B Format:
  - .1 Size 8-1/2 inches x 11 inches on punched sheets for standard 3-ring binder.
    - .a Fold larger sheets to fit into binders.
  - .2 Warranty-Guaranty wording shall be as printed below.
  - .3 Cover: Identify each packet with typed or printed title "GUARANTIES AND WARRANTIES". List:
    - .a Title of Project.
    - .b Name of Contractor.
- .C Binders: Commercial quality, 3-ring, with durable and cleanable plastic covers.

**1.07 TIME OF SUBMITTALS**

- .A Make submittals a minimum of ten (10) Days prior to Contractor's first request for inspections for determination of Substantial Completion of the Work. The submission of the warranties required under this section are a condition of Substantial Completion.

**1.08 SAMPLE FORM OF WARRANTY-GUARANTY**

- .A Refer to Document {INSERT} "Warranty/Guarantee Form".
- .B For all extended Warranties, use form below.

**PART 2 - PRODUCTS** (Not used)

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**PART 3 - EXECUTION** (Not used)**PART 4 - FORMS****GUARANTEE-WARRANTY**

Contractor shall complete the below form for the following products which require, pursuant to the technical Sections of this Contract, a warranty period of greater than one (1) year from the Board of Supervisors' Acceptance of the Project. The below document shall be in the form of the following on Contractor/Sub-contractor's own letterhead. The list of products below may not be all-inclusive. Contractor is required to identify all warranties of greater than one (1) year and include this form for each of those products.

**List of Products:**

[List of Products]

**GUARANTEE-WARRANTY FOR (NAME OF PROJECT) COUNTY OF SANTA CLARA:**

We hereby warrant and Contractor and/or Material Manufacturer guarantee that the (name of product, equipment or system) which we have installed in the (name of Project) for the County of Santa Clara, has been done in accordance with the Contract Documents.

We agree to remedy at, at our expense, any failure to conform, or any defect, within a period of \_\_\_\_ years from the date of the Board of Supervisors' Acceptance of the Project, without any expense to Owner, except for ordinary wear and tear and unusual abuse or neglect.

In addition, we agree to remedy, at our expense, any damage to County-owned or controlled real or personal property, when that damage is the result of (1) a failure to conform to contract requirements; or (2) any defect of equipment, material, workmanship, or design furnished.

In the event of our failure to comply with the above mentioned conditions, within twenty-one (21) Days after being notified in writing by the County of Santa Clara, we collectively or separately do hereby authorize the County of Santa Clara to proceed to have said defects repaired and made good at our expense, and we will honor and pay the costs and charges therefore upon demand.

Signed _____	Countersigned _____
(Subcontractor)	(Contractor)
Name _____	Name _____
(Print)	(Print)
Company _____	Company _____

**END OF SECTION 01 78 36**

**SECTION 01 79 00  
DEMONSTRATION AND TRAINING**

**PART 1 - GENERAL****1.01 SUMMARY**

.A This Section includes:

- .1 [Part 1 - General](#)
  - .a [1.01 - Summary](#)
  - .b [1.02 - Related Documents And Sections](#) (NOT USED)
  - .c [1.03 -Definitions](#)
  - .d [1.04 - General](#)
  - .e [1.05 - Pre-instruction Conference](#)
  - .f [1.06 - Coordination](#)
  - .g [1.07 - Instruction Program](#)
- .2 [Part 2 - Products \(Not Used\)](#)
- .3 [Part 3 - Execution](#)
  - .a [3.01- Preparation](#)
  - .b [3.02- Instruction](#)
  - .c [3.03 - Submittals](#)
- .4 [Part 4 - Forms \(Not Used\)](#)

**1.02 RELATED DOCUMENTS AND SECTIONS (NOT USED)****1.03 DEFINITIONS**

- .A **Instructor** - A factory-authorized service representative, experienced in operation and maintenance procedures and training.

**1.04 GENERAL**

- .A Contractor must procure and pay for the services of qualified Instructors to instruct Owner's personnel to adjust, operate, and maintain systems, subsystems, and equipment not part of a system.
- .B Training requirements include:
- .1 Demonstration of operation of systems, subsystems, and equipment.
  - .2 Training in operation and maintenance of systems, subsystems, and equipment.
- .C The training may be conducted in a classroom setting with field training as required.
- .D Successful completion of the requirements of this Section 01 79 00 is a requirement of Substantial Completion..



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**1.05 PRE-INSTRUCTION CONFERENCE**

- .A QC Manager must schedule and conduct a Pre-instruction Conference at the Project Site.
- .B Review methods and procedures related to demonstration and training including, but not limited to, the following:
  - .1 Inspect and discuss locations and other facilities required for instruction.
  - .2 Review and finalize instruction schedule and verify availability of educational materials, instructors' personnel, audiovisual equipment, and facilities needed.
  - .3 Review required content of instruction.
  - .4 For instruction that must occur outside, review weather and forecasted weather conditions and procedures to follow if conditions are unfavorable.

**1.06 COORDINATION**

- .A Instructor(s) must coordinate instruction schedule with Owner's operations. Adjust schedule as required to minimize disrupting Owner's operations.
- .B Instructor(s) must coordinate content of training modules with content of Owner accepted Initial Submittal of the emergency, operation, and maintenance manuals.

**1.07 INSTRUCTION PROGRAM**

- .A Program Structure: Instructor(s) must develop an instruction program that includes individual training modules for each system and equipment not part of a system, as required by individual Specification Sections.
- .B Documentation: Review the following items in detail:
  - .1 Operations manuals.
  - .2 Maintenance manuals.
  - .3 Project Record Documents.
  - .4 Identification systems.
  - .5 Warranties and bonds.
  - .6 Maintenance service agreements and similar continuing commitments.
- .C Emergencies: Include the following, as applicable:
  - .1 Instructions on meaning of warnings, trouble indications, and error messages.
  - .2 Instructions on stopping.
  - .3 Shutdown instructions for each type of emergency.
  - .4 Operating instructions for conditions outside of normal operating limits.
  - .5 Sequences for electric or electronic systems.
  - .6 Special operating instructions and procedures.
- .D Operations: Include the following, as applicable:
  - .1 Startup procedures.
  - .2 Equipment or system break-in procedures.
  - .3 Routine and normal operating instructions.

- .4 Regulation and control procedures.
- .5 Control sequences.
- .6 Safety procedures.
- .7 Instructions on stopping.
- .8 Normal shutdown instructions.
- .9 Operating procedures for emergencies.
- .10 Operating procedures for system, subsystem, or equipment failure.
- .11 Seasonal and weekend operating instructions.
- .12 Required sequences for electric or electronic systems.
- .13 Special operating instructions and procedures.
- .E Adjustments: Include the following:
  - .1 Alignments.
  - .2 Checking adjustments.
  - .3 Noise and vibration adjustments.
  - .4 Economy and efficiency adjustments.
- .F Troubleshooting: Include the following:
  - .1 Diagnostic instructions.
  - .2 Test and inspection procedures.
- .G Maintenance: Include the following:
  - .1 Inspection procedures.
  - .2 Types of cleaning agents to be used and methods of Cleaning.
  - .3 List of cleaning agents and methods of Cleaning detrimental to product.
  - .4 Procedures for routine cleaning
  - .5 Procedures for preventive maintenance.
  - .6 Procedures for routine maintenance.
  - .7 Instruction on use of special tools.
- .H Repairs: Include the following:
  - .1 Diagnosis instructions.
  - .2 Repair instructions.
  - .3 Disassembly; component removal, repair, and replacement; and reassembly instructions.
  - .4 Instructions for identifying parts and components.
  - .5 Review of spare parts needed for operation and maintenance.

**PART 2 - PRODUCTS (Not Used)****PART 3 - EXECUTION**

**3.01 PREPARATION**

- .A Assemble educational materials necessary for instruction, including documentation and training module.
- .B Assemble training modules into a combined training manual.
- .C Set up instructional equipment at instruction location.

**3.02 INSTRUCTION**

- .A Owner will furnish Contractor with names and positions of participants.
- .B Scheduling
  - .1 Provide instruction at mutually agreed on times.
  - .2 For equipment that requires seasonal operation, provide similar instruction at start of each season.
  - .3 Schedule training with Owner at least twenty-one (21) Days in advance of the training.
  - .4 Include classroom instructions and demonstrations, board diagrams, and other visual aids, but not student practice.
  - .5 At beginning of each training module, record each chart containing learning objective and lesson outline.
- .C Cleanup
  - .1 Collect used and leftover educational materials and [remove from Site] [give to Owner].
  - .2 Remove instructional equipment.
  - .3 Restore systems and equipment to condition existing before initial training use.

**3.03 SUBMITTALS**

- .A Instruction Program
  - .1 At least four (4) weeks prior to conduct of training submit two (2) copies of an outline of instructional program for demonstration and training, including a schedule of proposed dates, times, length of instruction time, and instructors' names for each training module.
  - .2 Include learning objective and outline for each training module.
- .B Qualification Data
  - .1 Instructors
    - .a At least six (6) weeks prior to training, submit four (4) copies of the qualifications of all Instructors.
    - .b Include lists of completed projects with project names and addresses, names and addresses of architects and owners, and other information specified.
- .C Attendance Record: For each training module, submit three (3) copies of the list of participants and length of instruction time.

**PART 4 - FORMS (Not Used)**

END OF SECTION 01 79 00

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**PART 1 - SECTION 01 80 10**  
**INSPECTION BY BUILDING OFFICIAL**

**PART 1 - GENERAL**

**1.01 SUMMARY**

- .A This section includes:
  - .1 Part 1 – General
    - .a 1.01 Summary
    - .b 1.02 Related Documents and Sections (Not Used)
    - .c 1.03 References
    - .d 1.04 Overview
    - .e 1.05 Fees
  - .2 Part 2 (Not Used)
  - .3 Part 3 Execution
  - .4 Part 4 Forms

**1.02 RELATED DOCUMENTS AND SECTIONS (Not Used)**

**1.03 REFERENCES**

- .A California Building Code Section 1.08 Inspections
- .B California Building Code Chapter 17 Structural Tests and Inspections

**1.04 OVERVIEW**

- .A Construction of the building must comply with References .A and B. Contractor's Work, including submission of Contractor-required designs and calculations (defined in the Product Data submittal requirements of the various Project Manual Sections), and actual on-site Work, is subject to approval by the Building Official. In addition to any other inspections required pursuant to this contract in Section 01 45 00 and other Sections of the Contract Documents, Contractor's Work is subject to code-compliance inspections by the County of Santa Clara Building Official, pursuant to References .A and .B. These inspections are for code compliance only and do not relieve Contractor from performing all work to the standards established by the entirety of the Contract Documents.
- .B The Santa Clara County Building Department Plan Check and Building Permit will be secured by Owner, **prior** to Contract Award, except for (1) Product Data submittals which provide for Contractor-required designs and calculations; (2) Contractor Substitutions; and (3) Owner-issued Instructional Bulletins which modify the scope of the contract documents. Contractor shall coordinate with Owner to secure all subsequent trade or other permits required for the prosecution of the Work.
- .C In the cases of .B (1) and .B (2) above, the process of securing Building Department approval and issuance of a revised Building Permit, will take place in two steps:

Step 1: Following the requirements of Section 01 33 00 Submittals, Section 01 45 00 Contractor Quality Control, Contractor makes submittals to Owner without the actual Permit application.

These submittals must fulfill all the requirements of the individual governing specification sections. The processing procedures described in Section 01 33 00 will be followed. The submittal processing times established in Section 01 33 00 apply to this step.

Step 2: After Owner acceptance of these submittals Contractor makes a submittal directly to the Building Department. Included in Contractor's submittal to the Building Department shall be a copy of Owner's submittal acceptance form for the corresponding submittal, stamped and signed by Owner's Authorized Representative, along with all submittal review comments provided to Contractor.

Permit review/processing time for Step 2 is fifteen (15) working days from the date of the Building Department stamped receipt of the documents. Contractor must submit one (1) original, signed permit application with the original complete submittal package, and four (4) copies of the permit application. One of the copies shall be to Owner.

- .D If Contractor proposes any Substitution of materials or means of performance, or proposes any change of design, pursuant to Section 01 25 00, it is Contractor's responsibility to coordinate any follow-on action by the Building Department. Such effort may include submitting design documents or product submittals, to the Building Department, and obtaining Department approval, before proceeding with the Work.
- .E Owner will obtain all Permit revisions for .B (3) above.

#### **1.05 FEES**

- .A All Plan Check and Building Permit fees as well as all trade permit fees, i.e., plumbing, electrical, mechanical, etc., will be paid for by Owner directly to the Santa Clara County Building Department. Contractor shall not include any such fees in its bid for the Work. All fees for the initial code inspections by the Building Official will be paid for by Owner. At the discretion of Owner, the cost for re-inspections, if necessary, may be applied to Contractor.

#### **PART 2 - PRODUCTS (Not Used)**

#### **PART 3 - EXECUTION**

- 3.01** No work shall commence until Contractor has secured from the Building Official and posted a County Building Permit Record Card at the jobsite. This card shall be maintained available at the jobsite by Contractor until the Project has been signed off as "complete" by the Building Official or his designated representative. A sample card has been included at the end of this Section.
- 3.02** Work shall not proceed beyond the point indicated in each successive milestone section of the Building Card without obtaining the approval of the Building Official. The Building Official, when requested by Owner, shall make the requested inspections and shall indicate that portion of the Work that is satisfactory as completed, or shall notify Contractor wherein the same fails to comply with the CBC or other related Code. Any portions that do not comply shall be corrected by Contractor at Contractor's expense, and a request for re-inspected made.
- 3.03** The process of obtaining Building Official approval of specific Work takes place in three steps:
  - (1) Contractor's CQC Manager shall inspect the Work to verify compliance with the Contract Documents. The conduct of such an inspection shall be noted in the CQC Daily report, along with the "results" of the inspection.
  - (2) If the CQC Manager is satisfied that the appropriate Work is complete, the CQCM shall submit a request to the Owner's Authorized Representative (OAR), or OAR's designee, on a form agreed upon at the pre-construction conference, to review the Work for which Contractor is seeking Building Official approval. OAR/Designee will review the Work within one (1) full

working day after receipt of the CQCM's request. The OAR/Designee must concur with the satisfactory completion of the Work before the next step occurs. \*\*Note: any "acceptance" of Work by Owner does not supersede Contractor's obligations under Section 01 45 00 of the Contract Documents.

If, in the opinion of the OAR/Designee the Work is not completed to allow for a Building Department inspection, to the extent practicable, deficiencies will be noted on the CQCM's Inspection Request form, and this form returned to the CQCM.;

(3) Upon acceptance of the Work by Owner, Owner will submit a request to the Building Official to perform code-compliance inspection. Owner will execute such a request within one (1) full working day after acceptance of the Work. At the discretion of the OAR/Designee, a request for inspection may be made to the Building Department, even if the Work is not satisfactorily complete at the time of OAR/Designee review, if the OAR/Designee concludes that any deficiencies in the Work can be completed by Contractor in time for the Building Department inspection. The Building Department may require that every request for inspection be filed at least one (1) full working Day before such inspection is desired. Contractor shall allow such time as is necessary to comply with this requirement.

- 3.04** For those projects in which Section 01 43 00 is part of this Contract, Contractor shall follow the procedures outlined in Section 01 43 00 for inspections by Owner's Testing and Inspection Agency. These procedures will add another "layer" of inspections to those outlined in the previous paragraph.
- 3.05** Special Inspections. Owner is responsible for contracting for Special Inspection Services to provide inspections during construction as delineated in the California Building Code, Chapter 17. [Note to specifier: This paragraph does not apply to OSHPD III Buildings, which require a permit from the building Official.]

#### **PART 4 - FORMS (See Below)**

## SAMPLE BUILDING PERMIT CARD

Permit Number 77777	Issued By	Date
Job Address	CA	
Nearest Cross Street	Phone	
Owner	Phone	
mailing CA address	Phone	
Architect Or Engineer	Phone	
mailing address	License No.	
Contractor	Phone	
mailing CA address	License No.	
Build Addition	Type of Improvement	
Alteration Repair	Move Convert	Remodel Reroof
APN	Plan Cak.#	Checked By
Fees	Amount	Paid
Building	4,087.00	
Plunchcheck	3,095.00	
Planning	501.00	
Electrical	324.00	
Mechanical	180.00	
Plumbing	315.00	
SLIP/Cat	66.00	
Valuation	660000	
1. TOTAL FEES MAY NOT INCLUDE ALL APPLICABLE MECHANICAL, PLUMBING, AND ELECTRICAL PERMIT FEES. 2. PERMIT EXPIRES IF WORK IS NOT STARTED WITHIN 180 DAYS OF PERMIT ISSUANCE OR 180 DAYS FROM LAST SIGNED/LAST APPROVED INSPECTION.		
BUILDING PERMIT SANTA CLARA COUNTY BUILDING INSPECTION OFFICE 70 W. Hedding St., San Jose, CA 95110 408-299-5700		
Complete Before Final Inspection	See Back Page	
Geology		
Land Develop		
Planning		
Roads / Airports		
Environ Health		
Fire Marshal		
Job Notes		
Job Description		
Permit Detail		
Residence, Pier	630000	4500
Permit Fee, Elec-Fat	315	4500
Garage, Finished	30000	600
Permit Fee, Elec. Wire,	9	600
Permit Fee, Mechanical	180	4500
Permit Fee, Plumbing	315	4500
set back	ST01	special inspection RICE sign here
foundation forms		
piers/graze beam	ST02	elec.ground. EL01 elec.underground
piers		
ST05		slab ST03
DO NOT POUR CONCRETE UNTIL THE ABOVE HAS BEEN SIGNED		
underfloor ducts	ME01	temporary meter/pole FI05
girders	ST07	underfloor insulation ST08
rough plumbing	PL03	underground plumbing PL01
(girths)		
DO NOT COVER FLOOR UNTIL THE ABOVE HAS BEEN SIGNED		
bond beam (concrete block)	ST06	rough mechanical ME11
rough plumbing (complete)	PL04	shower pan PL05
sewer	PL02	water service PL08
gas pressure	PL06	propane gas (tank to house) PL10
rough electric	EL04	electric service bonding EL02
roof nailing	ST10	shear nailing ST09
rough frame & roof	ST11	roof tear off RR01
DO NOT INSULATE UNTIL THE ABOVE HAS BEEN SIGNED		
wall insulation	ST12	ceiling insulation ST13
sheet rock	ST14	demonition ST19
stucco wire or lath	ST15	
gas appliances & mech final	ME12	
plumbing final	PL09	swimming pool 1 SP01
electrical final	EL08	swimming pool 2 SP02
PROJECT COMPLETE	FI01	swimming pool 3 SP03
NO UTILITY WILL BE CLEARED UNTIL PROJECT COMPLETE HAS BEEN SIGNED		
2003-77777-		



END OF SECTION 01 80 10

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**SECTION 01 91 00  
GENERAL COMMISSIONING REQUIREMENTS**

**PART 1 - GENERAL****1.01 SUMMARY**

- .A This Section includes:
  - .1 Part 1 – General
    - .a 1.01 – Summary
    - .b 1.02 - Related Documents and Sections (NOT USED)
    - .c [1.03 - Submittals](#)
    - .d [1.04 - Definitions](#)
    - .e [1.05 – General](#)
    - .f [1.06 – Systems/Equipment Requiring Commissioning \(Cx\)](#)
    - .g 1.07 – Commissioning Team
    - .h [1.08 – Commissioning Process](#)
    - .i [1.09 – Commissioning Authority \(CxA\) Responsibilities](#)
    - .j [1.10 – Contractor’s Commissioning Responsibilities](#)
    - .k [1.11 – Commissioning Coordinator](#)
    - .l 1.12 – Contractor Quality Control Manager Responsibilities
    - .m 1.13 - CxA Provided Forms or Documents
    - .n [1.14 – Performance Period](#)
    - .o [1.15 – Training and Instruction](#)
  - .2 Part 2 – Products
    - .a 2.01 - Test Equipment
    - .b 2.02 – Data Logging Equipment
  - .3 Part 3 – Execution
    - .a [3.01 – General](#)
    - .b [3.02 – Pre-Functional Tests and Supporting Documentation](#)
    - .c [3.03 – Functional Performance Testing](#)
    - .d [3.04 – Commissioning Acceptance Procedures](#)
    - .e [3.05 – Non-conformance](#)
    - .f [3.06 – Performance Period](#)
    - .g 3.07 – Operations & Maintenance Data
    - .h 3.08 – Training and Instruction
    - .i 3.09 – Requests for Information

- .j 3.10 – Final Commissioning Test Documentation
- .4 Part 4 - Forms
  - .a [Table 01 91 00-01, "Systems/Equipment to be Commissioned"](#)

## 1.02 RELATED DOCUMENTS AND SECTIONS (NOT USED)

## 1.03 SUBMITTALS

- .A Qualifications of Commissioning Coordinator (CC).
- .B Integrated Commissioning Schedule with Baseline Schedule (see also 1.08.B).
- .C Systems and Systems Component (SC) data. See Table 01 91 00-01 for a listing of Systems and SC. See paragraph 1.04 U. for definition of SC. This submittal is **in addition** to submittals required in other sections of the Contract Documents. This information includes, for each item of equipment/system to be commissioned as identified in Table 01 91 00-01:
  - .1 SC nameplate data and characteristics, such as Voltage, AMPs, HorsePower, pump curve information, CFM information for pumps and fans, etc.;
  - .2 Manufacturer's Installation Procedures (IP). If the IP is not provided by the Manufacturer in a checklist format, the CC must extract the IP information from the Manufacturer's literature and submit it in a checklist format, along with the original Manufacturer's literature from which it was extracted;
  - .3 Manufacturer's start-up procedures (SP). If the SP is not provided by the Manufacturer in a checklist format, the CC must extract the SP information from the Mfr's literature and submit it in a checklist format, along with the original Mfr's literature from which it was extracted;
  - .4 Manufacturer's field quality control and testing procedures for software programs;
  - .5 Manufacturer's on-site storage requirements (SR). If the SR is not provided by the Manufacturer in a checklist format, the CC must extract the SR information from the Manufacturer's literature and submit it in a checklist format, along with the original Manufacturer's literature from which it was extracted; and
  - .6 Fire Alarm System Operational Matrix. This must include specific details of each operation initiated by each input device.

**Item .C above is a Product Data Submittal. Items .A and .B are Project Management Submittals.**

- .D Test Equipment Calibration Certifications.
- .E Completed pre-functional checklists, signed off by the CQC Manager and respective sub-contractors.
- .F Functional Performance Test Documentation, completed and signed off by the CC and respective sub-contractors.
- .G Completed Performance Period Test forms.

**Items .D - .G are Project Management submittals, in that they are Action Submittals requiring Owner Acceptance.**

- .H Direct Digital Control (DDC) Equipment List, System Sequence of Operations, and Points List including complete physical point verification and calibration documentation and graphics point verification documentation.
- .I O&M Manual (see Section 01 78 23).

- .J Performance Period Test Reports.
- .K Final Commissioning Test Documentation pursuant to paragraph 3.10. Submitted after completion of the Performance Test Period, and before Substantial Completion of the Project.

**Submittals above are required prior to Substantial Completion.**

- .L Commissioning Submittals: See paragraph 1.08.A for information summarizing timing, order and responsibility for making Commissioning submittals, as they are not all to be submitted simultaneously.
- .M Electronic copies of all submittal documents that were created specifically for this Project (e.g., commissioning checklists, Functional Testing Performance Plan (FPTP), DDC point validation/calibration forms, etc.) in Microsoft Office compatible form.

#### 1.04 DEFINITIONS

- .A **Acceptable Performance:** That level of performance by equipment and systems that meets the standards as defined by the equipment/system's manufacturer and the construction Contract Documents. "Acceptable Performance" is confirmed through Pre-functional and Functional Performance testing.
- .B **Commissioning (Cx):** The process of testing, verification and documentation to demonstrate to Owner and Commissioning Authority (CxA) that systems and equipment function properly, both individually and as a system, in order to meet the facilities operating requirements.
- .C **Commissioning Authority (CxA):** Represents Owner during the commissioning process, provides Quality Assurance of Contractor's Commissioning efforts, and is Owner's systems and equipment technical representative. The CxA does not have the authority to authorize changes or modifications to the requirements of the Contract Documents.
- .D **Commissioning Coordinator (CC):** An employee of the Contractor Quality Control organization, or a "third-party" outside consultant, independent of the "production organization," who manages the quality of the Contractor's commissioning process. The CC is a separate individual from the CQC Manager, Assistant CQC manager, or Section 01 45 00 Special Inspectors. The CC must have no other duties on the Project other than fulfilling the requirements of this Specification.
- .E **Commissioning Issues Log (Master Deficiency and Resolution Log):** A Contractor-maintained (by the CQC Manager and/or CC) sequential listing of all issues brought to light in the commissioning process briefly describing each issue and its eventual disposition, dated and with indication of the party who has assumed responsibility for resolution. The form is provided by the CxA and distributed in MS Excel format to all commissioning team members at regular intervals and reviewed at commissioning meetings to facilitate tracking and resolution of Cx issues.
- .F **Commissioning Plan:** A document prepared by the CxA which defines all tasks and responsibilities throughout the commissioning process, including pre-functional, functional, and performance period testing. It outlines specific tests for Contractor to perform, and the means of documenting the outcome of those tests. Documentation is done primarily through the completion of checklists, in order to test and document system and equipment performance in accordance with the Specifications and the equipment manufacturers field quality control requirements. The process integrates training, as defined in Section 01 79 00, and O&M data, as defined in Section 01 78 23, into Contractor's requirements for functional and performance testing. The Cx plan is developed by the CxA with relevant input from Cx team members.
- .G **Commissioning Process:** The process of demonstrating to Owner that systems are installed, functionally tested and capable of being operated and maintained to perform in conformity with the construction documents and manufacturer's standards. The commissioning process encompasses

and coordinates the traditionally separate functions of equipment start-up, control system calibration, testing adjusting and balancing, performance testing, acceptance, system documentation and training.

- .H **Commissioning Status Report / Schedule form:** A Table listing all equipment to be commissioned, grouped by system, with fields corresponding to each commissioning stage, form and/or milestone. The fields may be filled with either a percentage indicating progress, or a date indicating a work plan. Remarks are referenced as required.
- .I **Final Commissioning Test Documentation:** The compilation of all documents generated throughout the Commissioning process, to include completed and signed Pre-functional Tests, organized by system; completed and signed Functional Tests, organized by system; completed and signed Performance Period Testing reports, organized by system; Final Commissioning Issues Log; Testing Adjusting and Balancing (TAB) reports; Commissioning meeting minutes.
- .J **Functional Performance Testing (FPT):** The dynamic testing of systems (rather than just components) under full operation (e.g., the Air Handler is tested interactively with the heating hot water system functions to see if the pump ramps up and down to maintain the differential pressure set point, the heat exchangers are controlled properly to produce hot water at set point, and room comfort set points are maintained without excessive energy waste as loads vary). The plan for this testing developed by the CxA and executed by Contractor. The CxA performs Quality Assurance of the execution of the FPT.
- .K **Functional Performance Testing Plan (FPTP) and Forms:** These are components of the Cx Plan, and include the specific functional performance test procedures, checklists and documentation, in a sequential written form, developed by the CxA, to be executed by Contractor.
- .L **OEM:** Original Equipment Manufacturer or equipment vendor or supplier of equipment.
- .M **Performance Period (including Integrated Testing):** Period after successful completion of ALL Functional performance testing, in which the Contractor operates, tests, monitors, evaluates and documents equipment and systems under normal operating conditions, for a period of seven (7) Days. The performance period shall occur before Owner/CxA verifies the Work of the appropriate Milestone is complete.
- .N **Performance Period Testing, Monitoring and Evaluation Plan (PPTP):** This plan governs the testing, monitoring, evaluation and documenting of equipment and systems operation during the Performance Period. As part of this Contract, Owner/CxA will provide Performance Period Test and Integrated Systems Test forms to Contractor.
- .O **Pre-Functional Test Plan (PFTP):** This is a component of the Cx Plan and covers all Pre-functional testing. It is prepared by Owner/CxA, and executed by Contractor. The Pre-Functional Test Plan includes all Pre-functional checklists, which consists primarily of "static" checks and tests, designed to ensure the equipment to be commissioned has been installed properly, and is ready for Functional Performance Testing.
- .P **Pre-Functional Tests and Checklists:** Pre-functional Checklists are used to document and certify verification of completion of the steps necessary prior to Functional Performance Testing, such as installation, cleaning, start up, TAB, etc.
- .Q **Simulated Condition:** Condition that is created for the purpose of testing the response of a system (e.g., applying a hair dryer to a space temperature sensor to see the response in a reheat coil valve).
- .R **Simulated Signal:** Disconnecting a sensor and using a signal generator to send an amperage, resistance or pressure to the transducer and DDC system to simulate a sensor value.
- .S **Startup:** The initial starting or activating of dynamic equipment including executing pre-functional checklist items. Refers to the equipment manufacturer's field quality control process and procedures required to activate equipment.

- .T **System(s):** Group of components and equipment functioning as a unit or performing a common function (i.e., Chilled Water System: consisting of pumps piping, coils, valves, fittings, controls, expansion tanks, air relief, chemical treatment, etc.).
- .U **System Components:** Equipment that act/operate "individually" but are essential to the operation of a System. System Components for HVAC, for example, would include fans with motors, compressors, chillers, VAV boxes, dampers and pumps. For the purposes of this Section, "conveyance" mediums, such as ducts and pipes, are not considered System Components.
- .V **Test Equipment Calibration Certifications:** reports of traceable calibration of test equipment to NIST standards by certified agencies.
- .W **Test Procedures:** The step-by-step process which must be executed to test the performance of a given set of functions and/or operational modes.
- .X **Test Requirements:** Requirements specifying what modes and functions, etc. shall be tested. The test requirements are not the detailed test procedures. The test requirements are specified in the Contract Documents.

### 1.05 GENERAL

- .A Systems and equipment shall be commissioned in order to achieve the following specific objectives:
  - .1 Verify and document that equipment is installed, started, and operates properly pursuant to the requirements of the Contract Documents and manufacturer's specifications, instructions and recommendations.
  - .2 Identify deficient systems, equipment and/or installations as early as possible to facilitate timely corrective action minimizing schedule impact.
  - .3 Verify and document that equipment and systems receive complete operational checkout by installing contractors, vendors and manufacturers.
  - .4 Verify and document equipment and system performance.
  - .5 Verify and validate that Owner's operating personnel are adequately trained on the Operation and Maintenance of building equipment and systems.
  - .6 Verify completeness of Operations and Maintenance Data.
  - .7 The commissioning process does not reduce the responsibility of Contractor or Vendors to perform and complete all Work in accordance with the requirements of the Contract Documents.
- .B Successful completion of all requirements in this Section 01 91 00 is a requirement of Substantial Completion of the Work.

### 1.06 SYSTEMS/SYSTEM COMPONENTS REQUIRING COMMISSIONING (Cx)

- .A The Systems and System Components to be commissioned for this Project are identified in Table 01 91 0001, "Systems/System Components (SC) to Be Commissioned." If a specific System or System Component is required to be commissioned pursuant to the Technical Specifications (Divisions 2-16), but is omitted from Table 01 91 00-01 "Systems/System Components to Be Commissioned," the omitted System or SC must be commissioned as though it was included in summary Table 01 91 00-01.
- .B Where the requirements of this Section 01 91 00, "Commissioning" conflict with the Technical Specifications (Divisions 2-16), the requirements of the Technical Specifications take precedence, but do not eliminate the section 01 91 00 requirements.

### 1.07 COMMISSIONING TEAM

- .A It is the intent that all members of the Commissioning Team cooperate with each other to fulfill their individual responsibilities and support the overall commissioning process.
- .B The Commissioning Team consists of:
  - .1 Owner representatives;
  - .2 CxA;
  - .3 Contractor;
  - .4 Commissioning Coordinator;
  - .5 Contractor's QC Manager;
  - .6 Subcontractors to Contractor, including Fire alarm, Electrical and HVAC;
  - .7 HVAC Control Contractor;
  - .8 Testing, Adjusting and Balancing (TAB) Firm;
  - .9 Owner's Design Consultants, Engineers and Representatives;
  - .10 Owner's Building Operations Staff.

#### 1.08 COMMISSIONING PROCESS

- .A The following activities describe the key sequential tasks in the Commissioning process. This list is not all-inclusive:
  - .1 **Initial Commissioning Scope Meeting:** All members of the Commissioning Team involved in the commissioning process meet to review the scope of work, tasks, schedules, deliverables, and responsibilities for creation and implementation of the Commissioning Plan.
  - .2 **Contractor Submission of Commissioning Schedule (part of Baseline Schedule and Official Progress Schedule):** Contractor is responsible for identifying key commissioning milestones in the Baseline schedule, pursuant to paragraph 1.08 .B below. Owner/CxA will be providing the **specific** Pre-Functional tests and Functional Tests to be executed by Contractor; the scope of these tests will follow the **performance specifications** outlined in this Section.
  - .3 **Submission of Commissioning Coordinator Qualifications:** This is a key Contractor submittal. The CC manages the commissioning Process for Contractor. Owner must accept the individual designated by Contractor to be the CC before further elements of the commissioning process, defined below, may proceed.
  - .4 **Pre-Commissioning Submittals:** Contractor provides submittals as set forth in Part 1.03 .C of this Section and in compliance with Section 01 33 00, "Submittal Procedures".
  - .5 **Pre-Functional Test Plan (PFTP) with Checklists:** Within thirty (30) calendar Days of Owner's Acceptance of all Product Data submittals required by paragraph 1.03 .C of this Section, for all equipment/systems to be commissioned as identified in table 01 91 00-01, Owner will prepare the PFTP with checklists. Contractor will perform actions required of the PFTP, execute the Plan and complete the Pre-functional checklists, and submit to Owner for acceptance.
  - .6 **Owner/CxA develops the Functional Performance Testing Plan (FPTP):**
    - .a Within one-hundred twenty (120) calendar Days of Owner's Acceptance of all Product Data submittals required by paragraph 1.03 .C of this Section, **plus** submittals required by the Specifications for SC, for all Systems to be commissioned as identified in table 01 91 00-01, Owner/CxA will prepare the Cx Plan, which includes Functional Performance Testing checklists.



- 
- .7 **Completion of Pre-functional Testing/Inspection and Documentation:** This Work is accomplished through the performance of pre-functional checks and testing and submission to Owner of completed checklists and supporting documentation. QC Manager shall verify all pre-functional checklist items are complete, sign-off form(s), and submit to Owner for acceptance so the commissioning process can continue into the next commissioning phase. The purpose of completing the checklists is to verify and validate that all systems and equipment are ready for functional performance testing.
- .8 **Start-up and Initial Operation of Systems and SC:** This is the initial Contractor-effort to “de-bug” the systems to be commissioned. The actual performance of Functional Performance Testing (FPT) is NOT to be the first time Systems/SC are run and tested. The actual performance of FPT enables Owner to verify that Systems/SC functions in an acceptable manner (See 1.04 .A).
- .9 **Performance of Functional Performance Testing:** The performance of Functional Testing is managed by the CC. The CC is on site at all times during the performance of Functional Testing. Following the steps of the Cx Plan, Contractor shall perform the full range of checks and tests described in the plan, to verify that Systems, and interfaces between Systems function in accordance with the requirements of the Contract Documents and the standards defined by the equipment manufacturers (see the definition of “Acceptable Performance”). In this context, “function” includes all modes and sequences of control operation, all interlocks and conditional control response, and all specified responses to emergency conditions. The Owner reserves the right to make necessary modifications during FPT, in order to achieve the full range of testing to verify “acceptable performance,” at no additional cost to the Contract.
- .10 **Completion of Functional Performance Testing and documentation:** The milestone is accomplished through the CC-submission of completed checklists, test forms and test reports. The CC shall verify all items are complete and sign-off form(s) and submit to Owner for acceptance so the commissioning process can continue into the next commissioning phase. The purpose of Functional Performance Testing is to verify and validate that all systems and equipment are ready for Performance Period Testing.
- .11 **Completion of Testing and Balancing of air and water systems.**
- .12 **Submission of O&M Manuals:** Contractor shall prepare and submit O&M Manuals in accordance with 01 78 23 for Owner’s acceptance.
- .13 **Demonstration and Training:** Contractor performs Demonstration and Training of Owner's personnel in accordance with 01 79 00, for Owner’s acceptance.
- .14 **Regulatory Testing and Certifications** (elevator, fire alarm, etc.): shall be scheduled and performed after completion of related functional performance testing.
- .15 **The Contractor executes the Performance Period Testing, Monitoring and Evaluation portion of the Cx Plan and provides results to Owner:**
- .a Performance Period: Upon successful completion and acceptance by Owner of ALL Functional Performance Testing, Contractor shall operate systems and equipment for a Performance Period of seven (7) consecutive calendar Days.
  - .b Monitoring, data collection and simulated conditions shall proceed according to the PPT portion of the Cx Plan.
- .16 **Completion of Performance Period Testing and Documentation:** The milestone is accomplished through the CC-submission of completed test forms and test reports. Contractor (by way of the CC) shall certify all items are complete and sign-off form(s) and submit to Owner for acceptance so the commissioning process can continue to final acceptance. The purpose of the



Performance Period Testing is to verify and validate that all systems and equipment are ready for system sign off and equipment acceptance.

**.17 CC submits a Final Report pursuant to paragraph 3.10 below.**

**.B Scheduling**

- .1 Contractor shall integrate all commissioning milestones into Contractor's Baseline Schedule submission. (See Section 01 32 00, "Construction Progress Documentation".)
- .2 Commissioning milestones that must be included in Contractor's Baseline Schedule submission shall include, but not be limited to:
  - .a Submission of Equipment data (1.03 .C of this Section);
  - .b Contractor's receipt of the PFTP, including Pre-Functional Test checklists;
  - .c TAB Certification, preliminary;
  - .d TAB Certification and report final;
  - .e Commencement and Completion of Pre-functional testing (two separate activities);
  - .f Submit O&M Manuals (Initial, Final, and corrected Final);
  - .g Commencement of Functional Performance Testing;
  - .h Completion and Certification of FPT checklists;
  - .i Conduct Owner Personnel Training;
  - .j Completion of Performance Period (seven (7) calendar days for entire building); and
  - .k Submission of Final Report, pursuant to paragraph 3.10.

**.C Commissioning Meetings:**

- .1 Initial Commissioning Scope Meeting will occur within [TBD] Days of the official start date for the Contract Time stated in the Notice to Proceed (NTP) issued by Owner. The meeting will be lead by the CxA. The agenda shall include:
  - .a Introductions;
  - .b Roles and Responsibilities;
  - .c Lines of reporting & communication;
  - .d Flow of documents;
  - .e Submittal data;
  - .f Commissioning Schedule;
  - .g Start-up plan & checklist data requirements;
  - .h Shop Drawings, Coordination Drawings and single line diagrams;
  - .i Commissioning Plan requirements; and
  - .j Requirements for Contractor's Test Plans.
- .2 Commissioning meetings to discuss progress, scheduling, and resolution of deficiencies will be held beginning sixty- (60) calendar days prior to any System or SC start-up and will continue to be held through completion of the Performance Period with increasing frequency as final completion approaches. Meetings shall be held at least monthly until sixty (60) calendar Days prior to any

system functional performance test at which point, they will be held at least bi-weekly. Beginning sixty (60) calendar days prior to scheduled execution of the PPTP, through completion, meetings will often be held weekly.

- .3 Other meetings may be required and called by the CxA or Owner to resolve specific Commissioning issues.
- .4 CxA shall prepare and distribute minutes of all Commissioning meeting(s). (See also Section 01 31 19, "Project Meetings".)
- .D Project Site observation: CxA and Cx team members shall make periodic visits to the Project Site, in accordance with their contract, to witness equipment and system installation, participate in testing and monitor project schedule and progress.
- .E Observations, conflicts or areas needing clarification shall be documented and forwarded to the CxA for follow up with the Contractor. CxA shall maintain Observation & Response Log.

**1.09 CxA RESPONSIBILITIES (Included for Contractor understanding and coordination purposes)**

- .A The role of the CxA is to develop the Commissioning Plan, which includes all Pre-Functional Testing and Functional Tests, and perform Quality Assurance of the CQC and CC effort to commission systems. Contractor is responsible for all Quality Control activities associated with Construction Work as related to Commissioning activities.
- .B The CxA will prepare the Pre-Functional Checklists after Owner accepts Contractor-submitted equipment data information.
- .C The CxA will
  - .1 Perform Quality Assurance of Contractor's execution of Pre-Functional testing and FPT;
  - .2 Validate the completion of the Pre-Functional Checklists, Functional Performance Testing and Forms;
  - .3 Review commissioning submittals and comment or recommend acceptance to Owner; and
  - .4 Review Operation and Maintenance manuals.
- .D The CxA does not have the authority to modify, add to, or delete any of the requirements of the Contract Documents.
- .E The CxA does not have the authority to direct Contractor.
- .F The duties of the CxA are to
  - .1 Develop and establish:
    - .a System and SC Test Plans;
    - .b Systems start-up plans;
    - .c Completed installation, start-up, and Functional performance testing documentation;
    - .d Performance testing evaluation utilizing the DDC system;
    - .e Test plans, procedures, and reports;
    - .f Review testing, adjusting, and balancing (TAB) reports;
    - .g Electrical Testing Reports;
    - .h O&M Documentation evaluation; and
    - .i Training Plan and Documentation evaluation.

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- .2 Witness and verify satisfactory performance of:
    - .a System and SC tests;
    - .b Systems and inter-systems functional performance tests;
    - .c TAB activities (10% of the systems);
    - .d Functional Performance Testing;
    - .e Electrical Testing activities; and
    - .f Specialty system Testing activities
  - .3 Site observation:
    - .a The CxA will periodically visit to the Project Site to witness equipment and system installation.
    - .b Conflicts or areas needing clarification will be documented in writing by the CxA and will be forwarded to the PM for Contractor response and if required, corrective action.
    - .c Performance period system and equipment operation in accordance with the Cx Plan.
  - .4 Commissioning meetings:
    - .a Require special Commissioning meetings; and
    - .b Attendance at all Commissioning meetings

#### **1.10 CONTRACTOR'S COMMISSIONING RESPONSIBILITIES**

- .A The following is a general summary of the Contractor's overall responsibilities.
  - .1 Contractor has overall responsibility to ensure Acceptable Performance of all systems to be commissioned defined in this Section. The involvement of the CxA does not diminish Contractor's responsibilities for Quality Control.
  - .2 Coordinate and direct all Contractor Commissioning Activities.
  - .3 Make all required submittals per paragraph 1.03 of this section.
  - .4 Ensure that the Work is performed according to the requirements of the Contract Documents and the accepted Cx test plan.
  - .5 Attend Commissioning Plan Scoping Meeting and additional meetings, as required by CxA or the Contract Documents; invites subcontractors as appropriate to expedite Commissioning process.
  - .6 Include all key commissioning activities in Contractor's Baseline Schedule submission and submit updates and revisions to the commissioning activities pursuant to the requirements of Section 01 32 00, "Construction Progress Documentation", and section 01 80 10-1.08.B."
  - .7 Perform initial start-up and operation of Systems and SC, independent of Functional Testing, as the first effort to ensure proper operation.
  - .8 Operation of Systems throughout the commissioning process, in accordance with the pre-functional test checklist and procedures and the Functional Performance Test Plan.
  - .9 Provide Owner/CxA fourteen (14) calendar Day notification, in writing when Systems and SC are ready for Pre-functional Checklist activities.
  - .10 Provide and supervise Equipment or System Certified Manufacturer Technicians for startup and for Pre-functional activities (see specific equipment specifications).

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- .11 Coordinate Pre-functional activities to facilitate Owner/CxA witness of installation and documentation.
  - .12 Execution of Pre-Functional Testing:
    - .a Verify completion of Pre-functional Checklists. Certify completed and submit three (3) copies of the final Pre-functional Checklists. Requires final sign-off by the CQC Manager prior to continuing with the commissioning Functional Performance Testing in accordance with the Cx Plan.
  - .13 Execution of Functional Performance Testing:
    - .a Perform Functional Performance Testing in accordance with the Cx Plan.
    - .b Provide and supervise SC or System Manufacturer Certified Technicians for initial operation of equipment for Functional Performance Testing Activities (see specific equipment specifications).
    - .c Coordinate Functional Performance Testing Activities to facilitate CxA witness of testing and documentation of testing.
    - .d Verify completion of Functional performance testing activities and submit completed Test Forms to Owner for Owner's acceptance. The CC certifies that tests have been completed and that systems meet "acceptable" performance criteria. Submit three (3) copies of final Functional performance testing Forms.
  - .14 Execution of Performance Period Testing, Monitoring and Evaluation Plan and provision of documentation regarding system performance:
    - .a Certify to Owner completion of all Functional performance testing activities prior to beginning the Performance Period Testing, Monitoring and Evaluation.
    - .b Certify in writing to Owner that equipment and systems are operational and ready for Performance Period Testing, Monitoring and Evaluation.
    - .c Operate all equipment and systems in accordance with the Performance Period Testing, Monitoring and Evaluation Plan during a seven (7) calendar Day period after successfully completing all Functional performance-testing requirements.
    - .d Coordinate Performance Period Testing, Monitoring and Evaluation activities to facilitate Owner/CxA participation, witness and documentation of testing.
    - .e Verify completion of Performance Period Testing, Monitoring and Evaluation activities and submit completed Testing Forms and Report to the Owner.
    - .f Retesting: (See 3.04).
  - .15 O&M manuals, Training and Construction Documentation:
    - .a Prepare O&M manuals, according to the requirements of Section 01 78 23, "Operation and Maintenance Data", including updating original sequences of operation to as-built conditions.
    - .b Professionally maintain as-built drawings and system single-line schematics and diagrams in as installed condition for all systems that are installed. To be included in the O&M manual and used during the Commissioning process and CxA staff training.
  - .16 Coordinate Owner training in accordance with Division 01 79 00, "Demonstration and Training".
  - .17 Prepare and submit two (2) copies of the Final Commissioning Test Documentation, pursuant to paragraph 3.10 below, to Owner. Additionally, maintain all data and information gathered as part of

the commissioning process, such as checklists, the FPTP, completed FPT documentation, etc., in CD ROM format for Owner's use.

.18 Specific to Commissioning documentation:

- .a Certify all submittals in this Section. Following the submittal certification of Section 01 45 00.
- .b Certify complete execution (including data and related supporting documents) of all Pre-functional checklists and related supporting documents and compiling the results for submission to Owner.
- .c Monitor the performance of the TAB contractor.
- .d Certify readiness of equipment and systems for Functional Performance Testing.
- .e Certify readiness of equipment and systems for startup, testing, adjusting, balancing, and other special tests and inspections required.
- .f Attend and participate in all commissioning meetings. Note: The commissioning status report form shall be updated for distribution and presentation at each commissioning meeting following initiation of pre-functional checks.
- .g Coordinate with Owner/CxA and certify the execution of all re-testing efforts including compiling and submitting associated documentation.

### 1.11 COMMISSIONING COORDINATOR

.A General

- .1 The Commissioning Coordinator manages/controls the quality of Contractor's commissioning process.
- .2 The Commissioning Coordinator (CC) is the primary single Contractor point of contact for Owner and Contractor during the Functional Performance and Performance Period phases of the commissioning process.
- .3 The Commissioning Coordinator is a member of the Contractor Quality Control organization, and is independent of the "production organization."
- .4 The CC is a separate individual from the CQC Manager, Assistant CQC manager, or Special Inspectors. The CC must have no other duties on the Project other than fulfilling the requirements of this specification section.
- .5 **The CC coordinates with and supports the CxA in facilitating the Cx process, and is responsible for ensuring the Owner/CxA receives all completed test forms and test results.**

.B Qualifications

- .1 The minimum qualifications for the Commissioning Coordinator include documented experience demonstrating proficiency in the management of the commissioning of at least three (3) newly-constructed facilities of similar size and complexity to this Project.
- .2 The CC must demonstrate a comprehensive understanding of the commissioning process including procedures as outlined in this Section.
- .3 Owner will require the CC to demonstrate these qualifications through submittal of qualifications documentation and an interview process.

.C The responsibilities of the Commissioning Coordinator (CC) include:

- .1 Functioning as a member of the CQC organization, pursuant to Section 01 45 00.

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- .2 Certifying all Submittals in this Section, following the submittal certification of Section 01 45 00.(substituting the CC title for the CQC Manager).
  - .3 Coordinating with Owner/CxA in both the scheduling of all commissioning activities with the Baseline schedule, and the efforts of all parties involved in executing the Commissioning Plan, in order to meet the Baseline Schedule commissioning milestones.
  - .4 Attending and participating at all commissioning meetings. Note: The commissioning status report form shall be updated for distribution and presentation at each commissioning meeting following initiation of pre-functional checks.
  - .5 Monitoring the performance of the TAB contractor.
  - .6 Certifying the readiness of equipment and systems for Functional Performance Testing.
  - .7 Coordinating with Owner/CxA in the execution of Functional Performance testing. **Functional performance testing may not take place without the CC being on the Work site.** The CC certifies that the FPTP has been successfully executed.
  - .8 Complying with the requirements, and Certifying complete execution, of the Performance Period Testing, Evaluation and Monitoring Plan and providing the results to the CxA for submission to Owner.
  - .9 Reviewing all Operation and Maintenance information for compliance with Contract requirements.
  - .10 Preparing the Final Commissioning Report, pursuant to paragraph 3.10 below.

#### 1.12 CONTRACTOR QUALITY CONTROL MANAGER RESPONSIBILITIES

- .A The commissioning responsibilities of the Contractor Quality Control Manager (CQCM) include:
  - .1 Certifying complete execution (including data and related supporting documents) of all Pre-functional checklists and related supporting documents and compiling the results for submission to Owner.
  - .2 Certifying readiness of equipment and systems for startup, testing, adjusting and balancing and other special tests and inspections required.

#### 1.13 Owner/CxA- PROVIDED FORMS AND DOCUMENTS

- .A Owner/CxA will provide Contractor the following forms to be used in the Commissioning Process (MS Word Electronic Format), (printed example of the detail found in Section 01 80 10 Appendices):
  - .1 Pre-functional Checklists;
  - .2 Functional Tests;
  - .3 Performance Period Testing Plan and Forms; and
  - .4 Cx Administration and other forms as necessary in order to document the Commissioning of Systems and attainment of Acceptable Performance by those systems.

#### 1.14 PERFORMANCE PERIOD

- .A All Commissioned equipment and systems must operate under normal operating conditions for a minimum duration of seven (7) consecutive Days (see Table 01 91 00-01).
- .B The performance period shall occur after the completion of **ALL** Functional performance testing and before Contractor certifies the Work of the appropriate Milestone is complete.
- .C Owner will evaluate data to verify systems and equipment meet the requirements of the contract documents and design intent.

- .D Seasonal Testing may be required.

### **1.15 TRAINING AND INSTRUCTION**

- .A Contractor must provide training in accordance with Section 01 79 00, "Demonstration and Training" and as specified elsewhere within the Specifications.

## **PART 2 - PRODUCTS**

### **2.01 TEST EQUIPMENT**

- .A All testing equipment, supplies, materials, power, water, gas, electrical load banks, filters, etc., required to perform startup and initial checkout and Functional performance testing must be provided and paid for by Contractor.
- .B All testing equipment must be of sufficient quality, accuracy, and capacity to test or measure System and/or equipment performance for conformance with the requirements of the Contract Documents. Test equipment calibration certification shall be certified in the last twelve (12) months and provided to Owner, as required by 1.03.D of this Section.

### **2.02 DATA LOGGING EQUIPMENT**

- .A Contractor shall provide all data logging equipment and/or software required for recording data required and generated during the testing of the systems and/or equipment.

## **PART 3 - EXECUTION**

### **3.01 GENERAL**

- .A Contractor shall schedule equipment and systems testing to allow the CxA the opportunity to witness the tests.
- .B Testing must be conducted under design operating conditions as defined within the Contract Documents and accepted Test Plans, forms and checklists.
- .C Functional Performance Testing must be completed and accepted by the Owner prior to commencing the seven (7) calendar day Performance Testing Monitoring and Evaluation period.
- .D All elements of Systems must be tested to demonstrate that all systems satisfy all requirements of the Contract Documents.
- .E Testing must be accomplished on hierarchical basis. Each SC must be tested for proper operation, followed entire system, followed by interfaces to other major systems.
- .F Contractor or its subcontractor(s) shall provide all special testing materials and test equipment.
- .G Problem Solving: Owner/CxA may offer suggestions for Contractor to consider when resolving difficulties encountered during the Commissioning process. Suggestions offered by Owner/CxA are not binding on Contractor and the burden of responsibility to solve and correct deficiencies encountered during the Commissioning process is and remains the sole responsibility of Contractor.
- .H Acceptance Documentation: A copy of the accepted Functional performance test results certified by Contractor, as meeting the specifications for each system or piece of equipment shall be included within each copy of the Corrected Final Operations and Maintenance manuals.

### **3.02 PRE-FUNCTIONAL TESTS, CHECK LISTS, AND SUPPORTING DOCUMENTATION**

- .A General
  - .1 The Cx Plan, developed by Owner (from the CxA) and issued to Contractor for execution, includes Pre-functional Tests, and associated Checklists. The PFTP will include a list of items to inspect,



and elementary component tests to conduct, to verify proper installation of equipment. Pre-functional testing and inspection requires Contractor to review complete System installation, perform System and SC cleaning, make initial settings, and verify Systems are ready for start-up and continued operations. The term "Pre-Functional" refers to before-functional performance testing. Pre-functional Testing will include such items as:

- .a Performing manufacturer's start-up procedures and check-out procedures for SC;
  - .b Ensuring proper calibration of gauges, thermometers, etc.;
  - .c Performing static inspections and procedures that verify the SC or System is ready for initial operation (e.g., belt tension, oil levels OK, labels affixed, gages in place, sensors calibrated, etc.);
  - .d Testing of the function of a SC or System (such as measuring the voltage imbalance on a three phase pump motor of a chilled water system) as applicable; and
  - .e Verifying proper installation requirements, including System set points, correct rotation of pumps, damper positions, alignment of equipment, proper air/water flow, etc.
- .2 The PFTP checklists will be used by Contractor to document that Systems or SC are installed in accordance with the accepted Submittal(s) and OEM requirements.
- .3 Contractor must allow (and show) in Its Baseline schedule, sufficient time after CxA-issuance of the Cx Plan and Checklists, to satisfactorily perform all Pre-Functional Tests, and document the completion of those test in the Checklists, and submit the completed (and certified) Checklists to Owner for acceptance. Contractor is responsible for all scheduling effects of system failures, actions to correct those failures, and necessary re-tests.
- .B Pre-Functional Checklists and Test result Documentation
- .1 As part of this contract, Owner/CxA will provide the PFTP, including Pre-functional Checklists, to the contractor within [TBD] Days after Owner accepts Product data information submitted by Contractor, per 1.03 of this Section.
- .2 Pre-functional Test Checklists shall be completed by the respective contractors, installers, and/or vendors, for all Systems and SC to be commissioned, as shown in Table 01 91 00-01. The CC shall compile these packages in a series of binders (not greater than 2" thick) organized, indexed, and tab-separated by building phase, System and SC type, and checklist/procedure type, for inclusion in the Final Commissioning Report.
- .3 Deficiencies Documentation shall be completed by the CQC Manager.
- .4 Contractor Certification: the checklist for each piece of equipment/system shall contain a certification block stating: "On behalf of the Contractor I certify that all pre-functional checklist items have been satisfactorily completed and the equipment/system is ready for Functional Performance Testing." This certification shall be signed by the CQC Manager.
- .5 Each item in the checklist will have a date and initial line for the CQC Manager to indicate successful completion of the item. **Only qualified individuals who have completed or witnessed the line item task shall make initials or checks on the forms.**
- .6 Contractor must clearly list any items of pre-functional inspection not successfully completed at the bottom of the checklist form or on an attached sheet.
- .C Sampling Identical Systems
- .1 No sampling is allowed for pre-functional tests. Pre-functional checklists shall be one-hundred percent (100%) completed for all commissioned equipment.



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.D Coordination

- .1 Start up Scheduling: CQC Manager and the CC coordinates with Owner/CxA to facilitate Owner/CxA attendance at startup of all major systems and equipment.
- .2 Prior to initiating Functional Performance Testing for any system, the Pre-functional checklists for the equipment in that system must be completed and signed off by the contractor, certified by the CC and accepted by Owner.

**3.03 FUNCTIONAL PERFORMANCE TESTING**

.A General

- .1 Owner/CxA will develop the Functional Performance Tests Plan (FPTP) and associated Functional Performance Tests (FPT) and issue to Contractor within [TBD] Days of Owner acceptance of all Product Data submittals required by 1.03.C of this Section, and Owner approval of the CC. Contractor will execute these tests, document the results, and submit to Owner for acceptance, in order to demonstrate that the Systems and SC that comprise the Systems operate according to the Contract Documents and manufacturer's specifications (see the definition of "Acceptable Performance").
- .2 The Contractor shall fully execute the FPTP and document the results on Owner-provided forms, and submit these to Owner for acceptance.
- .3 Prior to initiating Functional Performance Testing for any system, the Pre-functional checklists for the SC in that System must be completed and signed off by the Contractor and relevant sub-contractors, certified by the CQC Manager, and accepted by Owner:
  - .a Systems and SC must not be "temporarily" started (for heating or cooling), until pre-functional checklist items and all Manufacturers' pre-start procedures are completed and moisture, dust and other environmental and building integrity issues will not interfere with the startup and/or operation and testing of the Systems and SC.
  - .b Functional Performance Testing must not begin until pre-functional testing is completed for a given system.
  - .c The controls system, and SC it controls, shall not be fully functionally tested until all points have been calibrated and pre-functional checklists are completed.
  - .d Provide copies of all test reports and records to Owner within five (5) work Days of such testing.
- .4 Functional Performance Testing will require that Contractor operate Systems through a full range of checks and tests in order to determine if SC and Systems, and interfaces between Systems, function in accordance with the contract documents. In this context, "function" includes:
  - .a All modes and sequences of control operation;
  - .b Starting, stopping, proper opening and closing of valves;
  - .c Operation of all interlocks and conditional control response; and
  - .d Compliance with all specified responses to emergency conditions.
  - .e The Owner-developed Plan, therefore, will reflect these checks and tests.
- .5 The Functional Performance Testing procedures and forms shall be maintained by the CC in updated form, compiled in a series of binders (not greater than two inches (2") thick) organized, indexed, and tab-separated by building phase, system and equipment type, and checklist/procedure type, and submitted as part of the Final Commissioning Test Documentation.

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.B Functional Performance Tests (FPT)

- .1 Based on the Performance Specification in .A .4 above and what follows in .3 – .7 below, Contractor shall schedule the accomplishment of FPT in the Baseline Schedule. Contractor is responsible for all scheduling effects of system failures, actions to correct those failures, and necessary re-tests.
- .2 Where the system is controlled by a software program, the FPT procedures will include testing of each control program module for proper system operation as well as testing the program and user interface as a whole for proper system operation.
- .3 FPT will include, but not be limited to, Contractor demonstration/performance of the following for each System/SC:
  - .a All normal modes of system operation, all failure, alarm and emergency modes;
  - .b Proper operation of lead, lag, standby, backup etc. operating sequences and systems;
  - .c System ability to operate at and transition between full capacity, partial capacity and minimum capacity;
  - .d Smooth modulation of modulating controls, stable operation (no hunting) and proper tuning of control loops, as applicable;
  - .e Separate testing and documentation for each system, sequence, mode and/or function tested;
  - .f Operation during and recovery from power failures, network failures, and emergencies;
  - .g Interaction with remote monitoring/control devices; and
  - .h Integration with existing systems.
- .4 Functional Performance Testing and verification may be achieved by:
  - .a Direct manipulation of System inputs (i.e., heating or cooling sensors)
  - .b Manipulation of System inputs with the building automation system (i.e., software override of sensor inputs)
  - .c Trend logs of System inputs and outputs using the building automation system; or
  - .d Short-term monitoring of System inputs and outputs using stand-alone data loggers.
  - .e A combination of methods may be required completely to test the entire sequence of operations. The CxA shall determine which method, or combination, is most appropriate.
- .5 At the completion of the each test, Contractor must return all affected building equipment and Systems to their pre-test conditions.
- .6 Setup:
  - .a Each test procedure shall be performed under conditions that simulate normal operating conditions and/or modes of operation as closely as possible.
  - .b Contractor shall make all necessary System modifications to produce the specified conditions (flows, pressures, temperatures, etc.) necessary to execute the test.
- .7 Sampling Identical systems:
  - .a Multiple identical pieces of non-life-safety or non-critical SC may be functionally tested using a sampling strategy.
  - .b The sampling strategy will be developed by the CxA as part of the FPT.

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- .1 General guidelines for sampling include a minimum sample size of twenty percent (20%) but not less than three (3) of similar pieces of equipment with similar applications, with deficiencies to be present in no more than ten percent (10%) of the pieces tested.
  - .2 Where sampling is applied, the units to be sampled shall be selected by the CxA at the time of testing.
  - .3 If, after three (3) attempts at testing using the accepted sampling method, failures are still present, all remaining units must be individually tested.
- .C Coordination
- .1 Notify Owner/CxA at least fourteen (14) calendar Days prior to scheduled start date of Functional Performance Tests.
  - .2 When the functional performance testing of all individual systems has been proven, the interface or coordinated responses between Systems must be checked. The Systems involved may be within the overall HVAC or electrical Work or they may involve other Systems, such as emergency Systems for fire and life safety and security.
  - .3 Each coordinated response between Systems must be demonstrated to the satisfaction of Owner/CxA.
- .D Checklists and Documentation
- .1 Contractor Certification: The FPT form for each system tested will contain a certification block stating: "Commissioning FPT accepted and certified." This certification shall be signed by the CC upon successful completion of each test.
  - .2 The CC certification of the submitted FPT documentation shall warrant that ALL dynamic elements of the system tested responded properly in each mode tested, except as noted clearly on the FPT form. This applies to ALL system responses whether listed in the FPT or not.
  - .3 Each item in the Form must have a date, start time and end time for correlation with logged data. Testing participants and witnesses must be noted for each test date. Only qualified individuals who have completed or witnessed the testing shall be included and names or initials shall be keyed to the commissioning team roster.
  - .4 The CC shall clearly list any pertinent observations, system failures, interactions, improper operation, and items of FPT not successfully completed with explanations at the bottom of the checklist form or on an attached sheet referenced to the particular test and date by numbered or lettered remark notations.

### 3.04 COMMISSIONING ACCEPTANCE PROCEDURES

- .A Contractor must notify Owner/CxA at least fourteen (14) calendar Days prior to starting Functional performance tests.
- .B Owner/CxA makes provisional acceptance of the Functional performance test after witnessing successful completion of the test.
- .C Owner/CxA recommends acceptance /rejection of the System or item of equipment to Owner.
- .D In coordination with Owner/CxA, contractor performs all Performance Period activities.
- .E Upon successful completion of the Performance Period and all other required items, Contractor certifies the Work is complete in accordance with Document {INSERT} , "Milestone Inspections and Certification".

### 3.05 NON-CONFORMANCE

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- .A If acceptable performance is not achieved:
    - .1 If there is no dispute on the deficiency and the responsibility to correct it:
      - .a Contractor documents the deficiency and the adjustments or alterations required to correct it.
      - .b Contractor corrects the deficiency and notifies Owner/CxA that the equipment is ready to be retested.
      - .c Owner/CxA witnesses the re-test when it is performed.
    - .2 If there is a dispute about a deficiency or who is responsible:
      - .a The deficiency is documented and Owner/CxA is notified in writing by Contractor of Contractor's position.
      - .b Owner will furnish Contractor with written clarification and/or Direction.
      - .c Once Owner furnishes Contractor with an interpretation and/or Direction, Contractor must proceed with the Work.
      - .d Contractor must notify Owner/CxA when the equipment is ready to be retested.
    - .3 Every check or test for which acceptable performance was not achieved must be repeated after the necessary corrective measures have been completed until acceptable performance is achieved.
    - .4 Owner/CxA must witness and sign-off on the correction of all performance deficiencies.

### 3.06 PERFORMANCE PERIOD

- .A General: Systems that operate continuously during occupied hours (i.e. heating, cooling and ventilation systems) are monitored throughout the performance period. Systems that operate occasionally (i.e. elevators, fire alarms) are tested periodically during the performance period.
- .B The Performance Period in this section applies to all commissioned equipment and systems.
- .C Upon successful completion of CxA-witnessed Functional performance testing, Contractor execution of a Performance Period of seven (7) consecutive calendar Days is required.
- .D The Performance Period commences on the first day following acceptance of the last approved Functional Performance test and must be completed prior to Contractor's Milestone certification. In event of failure to meet the standard of performance during any initiated performance period, it is not required that one seven (7) calendar Days period expire in order for another performance period to begin.
- .E Contractor must include the Performance Period in the Contractor's Baseline Schedule submission. This activity must occur after operational testing is completed and before Contractor certifies the Work of the Milestone is complete. (See Section 01 32 00). Note: Equipment or system failure or malfunction during this period will result in the re-starting of the seven (7) Day period and corresponding impact to the schedule.
- .F The final Plan will be issued to Contractor within thirty (30) Days after receipt of Contractor execution of all Pre-Functional Checks and CQC certification that all Pre-functional checks have been accomplished. Owner reserves the right to make minor modifications to this Plan in order to ensure proper operation of equipment and systems.
- .G Contractor must verify and document during the Performance Period, under normal conditions, the performance of the commissioned equipment, systems and related systems.

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- .H During the Performance Period, Contractor must leave systems operable and maintain or repair SC and Systems being verified. During normal working hours, Contractor shall maintain SC and make them available to Owner/CxA for continued testing. Contractor's role is to keep the Systems/SC available for operations so the CxA can verify integrity. If a problem is identified it is Contractor's sole responsibility to repair and maintain equipment for continuous operations.
- .1 Intermittently operating Systems or SC (Elevators, Fire Alarm, etc.):
- .a Example: During the performance period for the elevators, Contractor shall make them available for continuous use and verification for operations by the CxA. Contractor's responsibility is limited to access, coordination, observation, reporting, response to non-performance issues, breakdowns and repairs.
- .2 Continuously operating Systems or SC (HVAC, Medical Gas, electrical power distribution, lighting, etc.):
- .a Examples: For the HVAC/DDC systems, Contractor shall make the DDC system available for COV, set point, or trend modifications to normal operations. Contractor shall set up the trend logs and place system into test conditions. This is so Owner/CxA can verify the integrity of the system control and operations features.
- .b Examples: Set the zone at eighty (80) degrees and verify reactions to meet the temperature or set point or at sixty-five (65) degrees and watch the opposite and the reaction time. False load a zone and measure response times. Verify pressure differentials from zone to zone.
- .I Monitor all System alarms, System failures, SC failures, software failure, software errors, corrective actions and causes of alarms or failures. Classify as to type of failure or alarm. Compile a table listing the issue type and number of occurrences and submit to the CxA. Include identification and analysis of all control signals operating at or near one hundred percent (100%).
- .J Record and include all maintenance and adjustment operations performed on all Commissioned systems.
- .K Contractor must review System and SC performance during the Performance Period and correct problems as early as possible. All such corrections must be documented with date and time and submitted to Owner/CxA within twenty-four (24) hours of correction.
- .L If all SC and Systems operate so as to demonstrate continuing compliance with the Requirements of the Contract Documents, for a period of seven (7) consecutive Days from commencement date of Performance Period, the SC or Systems will be deemed to have satisfied the Performance Period requirement.
- .M Following Contractor's completion of the requirements of the Commissioning Process the successful completion of the Performance Period, and receipt of the required documentation, Owner/CxA shall provide Owner with a statement of acceptable performance. Receipt of the acceptable performance statement by Owner and Owner's acceptance is a condition of Division 01 77 00-Project Closeout as defined in the General Requirements.

### **3.07 OPERATIONS & MAINTENANCE DATA**

- .A Contractor shall compile O&M Documentation for each piece of equipment or System defined in Specification (Divisions 2 through 16) in accordance with Section 01 78 23, "Operation and Maintenance Data."

### **3.08 TRAINING AND INSTRUCTION**

- .A Training and instruction of Owner's personnel is a part of the Commissioning process and essential for the proper operation of the SC and Systems within the Project. Contractor must coordinate with Owner/CxA for the training of Owner's personnel. Detailed requirements for training and instruction

are contained in other sections of the Contract Documents including, but not limited to, Section 01 79 00, "Demonstration and Training," and the Specifications (Divisions 2 through 16).

- .B Training sessions shall be evaluated by Owner/CxA for operator retention, suitability, and subject completeness.

### 3.09 REQUESTS FOR INFORMATION

- .A In addition to the number of copies required by other sections of the Contract Documents, Contractor must submit two (2) additional copies of all RFI's that relate to Commissioned equipment and Systems directly to the CxA.

### 3.10 FINAL COMMISSIONING TEST DOCUMENTATION

- .A As a condition of achieving Substantial Completion of the Work, Contractor's CC shall compile and submit to Owner two (2) copies of a Final Report containing all documents generated throughout the Commissioning process, to include completed and signed Pre-functional Tests, organized by system; completed and signed Functional Tests, organized by system; completed and signed Performance Period Testing reports, organized by system; Final Commissioning Issues Log; TAB reports; Commissioning meeting minutes. The Report shall be submitted in binders, each not more than 2 inches (2") thick. Each binder shall have a table of contents and have labeled tabs separating the categories of the report.

## PART 4 - FORMS

### TABLE 01 91 00-01 SYSTEMS/SC TO BE COMMISSIONED

Legend:

- ☐ System
  - System Component

#### .A MECHANICAL

- ☐ HVAC
  - Motors
  - Pumps
  - Fans
  - Air Handling Unit
  - Fan Coil Units
  - Air cooled condensing units
  - Packaged A/C unit(s)
  - Terminal units
- ☐ Chilled Water

- 
- Cooling Tower
  - Compressor
  - Chiller
  - Pumps
  - Meters and Instruments
- ☐ Heating Hot Water Generation Systems
- Boiler
  - Pumps
  - Meters and Instruments
- ☐ Control Air Systems & Dryers
- Air Dryer
- ☐ Exhaust Fan Systems
- Exhaust Fan(s)
- ☐ Ventilation, Relief or Exhaust Fan Systems
- ☐ Building Automation System (BAS) Direct Digital Control (DDC) System and interfaces

**.B PLUMBING SYSTEMS**

- ☐ Domestic Hot Water System
- Pumps
  - Hot Water boiler/heater
- ☐ Laboratory Compressed Air System
- Air compressor
- ☐ Laboratory Vacuum System
- ☐ Laboratory Gas System
- ☐ Water booster systems

**.C FIRE PROTECTION**

- ☐ Fire Protection Sprinkler System
- Inspector's Test Station
  - Booster Pump
  - Jockey Pump
- ☐ Fire Alarm System & Interfaces
- ☐ Fire/Smoke Dampers & Interfaces
- FSDs

**ELECTRICAL**

- 
- ☐ Lighting Systems
  - ☐ Lighting Control Systems
  - ☐ Switchgear
  - ☐ Standby Power Generator
  - ☐ Electrical Metering, Monitoring, and Control Systems
  - ☐ Motors
  - ☐ Automatic Transfer Switches
  - ☐ Medium Voltage Interrupter Switch
  - ☐ Transformers
  - ☐ Motor Controls
  - ☐ UPS
  - ☐ Normal Power Distribution System
  - ☐ Emergency Power Distribution System

**.D CONVEYANCE SYSTEMS**

- ☐ Elevators
  - Elevators
- ☐ Traction Elevators & Interfaces
- ☐ Vertical Wheelchair Lifts & interfaces

**.E SPECIALTY SYSTEMS**

- ☐ Fume Hoods/Bio
- ☐ Firing Range Supply
- ☐ Exhaust System
- ☐ Interfaces Between BMS and Security System(s)
- ☐ Water Softener
- ☐ High-Purity Water System

**END OF SECTION 01 91 00**