

## DIVISION 1 GENERAL REQUIREMENTS

## SECTION 01100

## SUMMARY OF WORK

## PART 1 GENERAL

## 1.1 SUMMARY

- A. Section includes summary of Work including:
1. Work Covered By Contract Documents
  2. Bid Items, Allowances, and Alternates
  3. Work Under Other Contracts
  4. Future Work
  5. Work Sequence
  6. Work Days and Hours
  7. Cooperation of Contractor and Coordination with Other Work
  8. Maintenance, Product Handling, and Protection
  9. Partial Occupancy/Utilization Requirements
  10. Contractor Use of Premises
  11. Lines and Grades
  12. Protection of Existing Structures and Utilities
  13. Damage to Existing Property
  14. Dust Control
  15. Parking
  16. Laydown/Staging Area
  17. Permits
  18. Punch List Verification
  19. Unfavorable Construction Conditions
  20. Construction Site Access
  21. Specification Data Sheets and Schedules
  22. Site Administration
  23. CEQA Mitigations
  24. Products Ordered In Advance
  25. District-Furnished Products

## 1.2 WORK COVERED BY CONTRACT DOCUMENTS

- A. In General, the work consists of all of the items of work included in these Contract Documents, even if not specifically mentioned in this Section. The work generally consists of mobilization and demobilization, traffic control, the clearing and grubbing of the reservoir area, the reconstruction of the reservoir embankment, the installation of a HDPE reservoir liner, concrete stairs, relocation of pump house on top of the reservoir embankment, preparation of a SWPPP and installation and management of associated BMPs, earthwork, installation of 6", 8" and 12" waterlines and appurtenances, trenching and backfilling, sheeting, shoring and bracing, connections to existing water systems, retrofitting of the filter trains #1 and #2, installation of SCADA and control systems, upgrading the control systems for the filter train, a new influent, backwash and clearwell flow meters, installation of ARVs, Hydrants, and PRVs, improvements to water tanks, installation of raw water booster pumps and erosion control.

The installation of the reservoir liner, the recompaction of the reservoir embankment, the relocation of the existing fence, the construction of the concrete stairs, erosion control associated with the reservoir, and associated improvements will be made by Contractor beginning in the Summer of 2012. Contractor's bid prices for this work shall be valid for a period of eighteen (18) months after the Notice to Proceed is issued.

- B. Furnish all labor, materials, equipment, services, permits, temporary controls and construction facilities, and all general conditions, seismic requirements, general requirements and incidentals required to complete the Work in its entirety as described in the Contract Documents.

- C. The Work of this Contract includes work covered by unit prices, allowances, and alternates as shown in Document 00410 (Bid Form).
- D. The Work of this Contract comprises construction of all the Work indicated, described in the Specifications, or otherwise required by the Contract Documents.
- E. Unless provided otherwise in the Contract Documents, all risk of loss to Work covered by Contract Documents shall rest with Contractor until Final Acceptance of the Work.
- F. Contractor's use of the premises for Work and storage is limited to the area indicated.
- G. Contractor shall be solely responsible for all utilities (including without limitation electricity, water, gas, etc.) at the Site.
- H. Existing materials and equipment removed and not reused as a part of the Work shall be returned to the District. Contractor shall carefully remove, in a manner to prevent damage, all materials and equipment specified or indicated to be salvaged and reused or to remain the property of District. Contractor shall store and protect salvaged items specified or indicated to be reused in the Work.

Salvaged items not to be reused in the Work, but to remain District's property shall be delivered by Contractor in good condition to District at: **None**

Existing materials and equipment removed by Contractor shall not be reused in the Work, except where so specified or indicated.

### 1.3 BID ITEMS, ALLOWANCES, AND ALTERNATES

- A. Any Bid Item may be deleted from the Work and Contract Sum, in total or in part, prior to or after award of Contract without compensation in any form or adjustment of other Bid Items or prices therefore.
- B. Payment of all items is subject to provisions of Contract Documents, including without limitation Section 01200 (Measurement and Payment).
- C. For all Bid Items, furnish and install all work indicated and described in Specifications and all other Contract Documents, including connections to existing systems. Work and requirements applicable to each individual Bid Item, or unit of Work, shall be deemed incorporated into the description of each Bid Item (whether Lump Sum, or Unit Price).
- D. Descriptions of Lump Sum Items (**listed by Bid Item Numbers**). Bid items are not intended to be exclusive descriptions of work categories and Bidder shall determine and include in its pricing all materials, labor, and equipment necessary to complete each Bid Item as shown and specified:
  - 1. Bonds and Insurance: Includes the cost of all bonds and insurance specified for this project, including overhead, profit, and markups. This item shall not exceed 1 percent of the overall bid.
  - 2. Mobilization/Demobilization: Includes all costs to mobilize on site and demobilize equipment, manpower, etc. required for the project, project Traffic Control Plan and Storm Water Prevention Pollution Plan (SWPPP). Traffic Control Plan includes all costs to providing facilities for control of traffic and providing public safety during construction.
  - 12. Connect to existing Water Line (up to 4 connections): Includes all labor, material, and equipment necessary to connect to existing water lines, as indicated on the drawings; including but not limited to direct and tee connections.
    - D-1. Connect to existing Water Line (up to 2 connections) (Secondary Item): Includes all labor, material, and equipment necessary to connect to existing water lines, as indicated on Sheet C3; including but not limited to direct and tee connections.
    - E-1. Connect to existing Water Line (up to 1 connection) (Secondary Item): Includes all labor, material, and equipment necessary to connect to existing water lines, as indicated on Sheet C4; including but not limited to direct and tee connections.
  - 14. Tyler Tank Improvements: Includes all labor, material, and equipment necessary to construct tank, as indicated on the plans; including but not limited to new over flow, new drain and new ladder and railing.
  - 15. Winding Way Tank Improvements: Includes all labor, material, and equipment necessary to construct tank, as indicated on the plans; including but not limited to new over flow, new drain and new ladder and railing.
  - 16. Clearwell Tank Improvements: Includes all labor, material, and equipment necessary to construct tank, as indicated on the plans; including but not limited to new drain and new ladder and railing.
    - A. Rehabilitate Filter Water Treatment Plant #1 (Secondary Item): Includes all labor, material, and equipment necessary to rehabilitate plant #1 as indicated on the plans; including but not limited to new tube settler modules, raw water inlet, flow meter, Control Cabinet, filter water level sensor, associated conduits, programming and startup for plant #1.

- C. Rehabilitate Filter Water Treatment Plant #2 (Secondary Item): Includes all labor, material, and equipment necessary to rehabilitate plant #2 as indicated on the plans; including but not limited to a new pump and flow meter for plant #2.
  - 18. Safety Plan and Programs: Includes all cost to prepare and implement the Safety Plan and Programs.
  - 19. Erosion Control: Includes all labor, material, and equipment to provide erosion control for the site, as indicated on the plans.
  - 20. Mobilization/Demobilization: Includes all costs to mobilize on site and demobilize equipment, manpower, etc. required for the reservoir construction portion of the project.
  - 24. Reservoir Influent Flow Meter Improvements: Includes all labor, material, and equipment necessary to complete reservoir influent flow meter improvements, as indicated on the plans.
  - 26. Relocate Pump House: Includes all labor, material, and equipment to relocated existing pump house, as indicated on the plans.
  - 27. Reconstruct Intake: Includes all labor, material, and equipment to reconstruct intake near existing reservoir, as indicated on the plans.
- Secondary Items**
- B. Forest View Well Rehabilitation and Site Improvements (Secondary Item): Includes all labor, material, and equipment to construct Forest View Well Rehabilitations, as indicated on the plans; including but not limited to new pedestal, filter treatment system, building with rollup doors, Control Cabinet (minus SCADA radio), motor starters, tank level sensors, programming and startup.
  - G. Furnish and Install Low-Head Raw Water Booster Pump Station (Secondary Item): Includes all labor, material, and equipment necessary to install new raw water booster pump station, as indicated on the plans; including but no limited to new 150 amp 3-phase service from Maintenance Building to Filter Building, motor starters, associated conduits, programming and startup.
  - H. SCADA System (Secondary Item): Includes all labor, material, and equipment to provide new radio/Antenna/SCADA PC at filter plant, as indicated on plans; including but not limited to Control Cabinet/Antenna/Solar panels at Reservoir Influent Flowmeter, Control Cabinet/Antenna/Sensors at Tyler Dr., Control Cabinet/Antenna/Sensors at Winding Way, Radio/Antenna/Sensors at Forest View, associated conduits at all sites, PLC programming at all sites, Wonderware license and programming at filter plant, and startup at all sites.
  - J. Construct Concrete Stairs (Secondary Item): Includes all labor, material, and equipment necessary to complete construction of concrete stairs, as indicated on the plans.
- E. Descriptions of Unit Price Item and Basis of Measurement for Payment (**listed by Bid Item Numbers**).
- 3. Site Preparation, clearing and grubbing: Includes all labor, materials and equipment necessary to complete clearing and grubbing of entire project, as indicated on the plans; including but not limited to the existing rip rap within the reservoir.
  - 4. AC Overlay: Includes all costs to overlay existing intersections and road ½ widths as indicated on plans with AC, edge grinding, slurry seal (or chip seal), and raising existing water valves.
    - D-2. AC Overlay (Secondary Item): Includes all costs to overlay existing intersections and road ½ width as indicated on Sheet C3 with AC, edge grinding, slurry seal, and raising existing water valves.
  - 5. Furnish and Install 12-inch DIP and PVC Water Line and Appurtenances: Includes all labor, material, and equipment necessary to complete water line installation; including but not limited to reconstruction of driveway ditch with filter fabric (as indicated on the plans), 12" Butterfly Valves, and any and all shoring, bracing, and/or sheeting.
  - 6. Furnish and Install 8-inch Water Line and Appurtenances: Includes all labor, material, and equipment necessary to complete water line installation, as indicated on the plans; including but not limited to all types of 12-inch piping materials, Gate Valves, and any and all shoring, bracing, and/or sheeting per OSHA.
    - D-3. Furnish and Install 8-inch Water Line and Appurtenances (Secondary Item): Includes all labor, material, and equipment necessary to complete water line installation, as indicated on Sheet C3; including but not limited to Gate Valves and any and all shoring, bracing, and/or sheeting per OSHA.
  - 7. Furnish and Install 6-inch Gate Valves and Water Line: Includes all labor, material, and equipment necessary to complete install 6-inch Gate Valves and water line installation, as indicated on the plans.
  - 8. Furnish and Install 1-inch Services appurtenances: Includes all labor, material, and equipment necessary to complete 1-inch water services and appurtenances, as indicated on the plans.

- E-2. Furnish and Install 1-inch Services appurtenances (Secondary Item): Includes all labor, material, and equipment necessary to complete 1-inch water services and appurtenances, as indicated on Sheet C4.
- 9. Furnish and Install Fire Hydrant: Includes all labor, material, and equipment necessary to complete fire hydrant installation, as indicated on the plans; including but not limited to 6-inch line and gate valves.
  - D-4. Furnish and Install Fire Hydrant (Secondary Item): Includes all labor, material, and equipment necessary to complete fire hydrant installation, as indicated on the Sheet C3; including but not limited to 6-inch line and gate valves.
  - E-3. Furnish and Install Fire Hydrant (Secondary Item): Includes all labor, material, and equipment necessary to complete fire hydrant installation, as indicated on the Sheet C4; including but not limited to 6-inch line and gate valves.
- 10. Furnish and Install 2" Air Release Valves (ARV): Includes all labor, material, and equipment necessary to furnish and install 2" ARV's as indicated on the plans.
- 11. Furnish and Install 4" Blowoffs (BO): Includes all labor, material, and equipment necessary to furnish and install 4" BO's as indicated on the plans.
- 13. Pavement Replacement: Includes all labor, material, and equipment necessary to place 3" AC over 8" AB pavement section, as indicated on the plans; including but not limited to removing and sawcut to existing pavement.
  - D-5. Pavement Replacement (Secondary Item): Includes all labor, material, and equipment necessary to place 3" AC over 8" AB pavement section, as indicated on Sheet C3; including but not limited to removing and sawcut to existing pavement.
- 17. Furnish and Install Backwash Flow Meter: Includes all labor, material, and equipment necessary to install backwash flow meter, as indicated on the plans.
- 21. Reservoir Lining Geotextile Fabric: Includes all labor, material, and equipment necessary to complete reservoir lining with 8oz geotextile fabric, as indicated on the plans.
- 22. Reservoir Line 60mil HDPE Geomembrane: Includes all labor, material, and equipment necessary to complete reservoir lining with 60mil HDPE Geomembrane, as indicated on the plans.
- 23. Reservoir Embankment Earthwork: Includes all labor, material, and equipment necessary to complete reservoir embankment earthwork, as indicated on the plans; including but limited to screening, excavation, rework to 2% of optimum moisture content, and compaction of reservoir berm.
- 25. Remove and Replace Existing Chain Link Fence: Includes all labor, material, and equipment to replace the existing chain link fence around the existing reservoir during construction and replaced after construction, as indicated on plan and Specification Section 02830.
- 28. Erosion Control: Includes all labor, material, and equipment to provide erosion control for the reservoir site, as indicated on the plans.

#### **Secondary Items**

- E-4. Furnish and Install 6-inch Water Line and Appurtenances (Secondary Item): Includes all labor, material, and equipment necessary to complete water line installation, as indicated on Sheet C4; including but not limited to any and all shoring, bracing, and/or sheeting.
- F. Furnish and Install PRV's (Secondary Item): Includes all assembly, labor, material, and equipment to install pressure reducer valves, as indicated on the plans.
- I. Furnish and Install Water Sampling Stations (Secondary Item): Includes all assembly, labor, material, and equipment to install water sampling stations, as indicated on the plans.
- F. Description of Items for which District may pay prior to incorporation onto the work (if any). See Section 01200 (Payments and Completion), paragraphs 1.5E and 1.5F. N/A
- G. Allowances:
  - 1. Allowance work shall be done as Change Orders and as specified in Section 01250 (Modification Procedures).
  - 2. The Amount given on Document 00410 (Bid Form) under each Allowance Item is the sum of money set aside for each Allowance Item. These amounts shall be included in the Contract Sum on the Bid Form.
  - 3. If the cost of work done under any Allowance Item is less than the amount given on the Bid Form under that Allowance Item, the Contract Sum shall be reduced by the difference between the amount given in the Bid Form and the cost of work actually done.
    - a. Scope of Allowances (including Bid Item Numbers): N/A
    - b. Alternates: N/A

**1.4 WORK UNDER OTHER CONTRACTS**

Work at the Site performed by others includes the following: None.

**1.5 FUTURE WORK**

None.

**1.6 WORK SEQUENCE**

- A. Prior to construction, Contractor shall notify USA and pothole at all USA conflicts and crossings.
- B. Construct Work to accommodate District operation requirements during the construction period; coordinate construction schedule and operations with District.
- C. Contractor shall not have access to the Site prior to Tuesday after Labor Day.
- D. Contractor acknowledges that shoring may be required to maintain a safe excavation and protect facilities, including both existing and recently constructed under this Contract. All expenses for shoring of excavations shall be included in the appropriate bid items.

**1.7 WORK DAYS AND HOURS**

- A. Normal working days and hours: between local hours 6:00 a.m. and 6:00 p.m., Monday through Saturday, excluding night time pipeline work and holidays or otherwise approved by the District.
- B. In the case of Work by Contractor other than normal working hours, Contractor shall be responsible for any additional inspection costs incurred by the District. Such costs may be withheld from any succeeding monthly progress payment.
- C. Connections to Existing Facilities. Unless otherwise specified or indicated, Contractor shall make all necessary connections to existing facilities, including structures, drain lines, and utilities such as water, sewer, gas, telephone, and electric. In each case, Contractor shall receive permission from District or the owning utility prior to undertaking connections.
- D. Connections to existing waterlines may be performed at night (as approved by CSD) to avoid long term shut down of water.
- E. Contractor shall protect facilities against deleterious substances and damage.

**1.8 COOPERATION OF CONTRACTOR AND COORDINATION WITH OTHER WORK**

- A. Coordinate with District and any District forces, or other contractors and forces, as required by Document 00700 (General Conditions).
- B. Contractor shall coordinate the construction schedule with the schedule of the District for normal power service installation.
- C. Noise: Construction activities are to comply with applicable local noise ordinance and applicable Cal-OSHA regulations.

**1.9 MAINTENANCE, PRODUCT HANDLING, AND PROTECTION**

- A. Transport, deliver, handle, and store materials and equipment at the Site in such a manner as to prevent the breakage, damage or intrusions of foreign matter or moisture, and otherwise to prevent damage.
- B. Hazardous substance compliance: Provide District with copies of the OSHA Material Safety Data Sheets (MSDS) for all products containing a hazardous substance, examples: Adhesives, paints, sealants, and the like.
- C. Packaging: Provide packaged material in manufacturer's original containers with seals unbroken and labels intact until incorporated into the Work.
- D. Remove all damaged or otherwise unsuitable material and equipment promptly from the Site.
- E. Protection: Protect all finished surfaces.
- F. Asbestos Removal (other than Naturally Occurring Asbestos, if applicable) if, during the progress of the Work, suspected asbestos-containing products are identified, Contractor shall stop work in the affected area and immediately notify the District, and engage an asbestos removal Subcontractor to verify the materials and, if necessary, encapsulate, enclose, or remove and dispose of all asbestos in accordance with current regulations of the Environmental Protection Agency and the U. S. Department of Labor – Occupational Safety and Health Administration, the state asbestos regulating agency, and any local government agency. Payment for such work will be made by Change Order.  
Asbestos Removal Subcontractor's Qualifications. The Subcontractor for asbestos removal shall be regularly engaged in this type of activity and shall be familiar with the regulations that govern this work. The Subcontractor shall demonstrate to the satisfaction of District that it has successfully completed at least three asbestos removal projects, that it has the necessary staff and equipment to perform the work, and that it has an

approved site for disposal of the asbestos. Liability insurance covering the asbestos abatement work shall be provided as specified in the Supplementary Conditions.

Asbestos Removal Methods. The asbestos removal Subcontractor shall submit a work plan of its proposed removal procedure to District before beginning work and shall certify that the methods are in full compliance with the governing regulations. The work plan shall cover all aspects of the removal, including health and safety of employees and building occupants, hygiene facilities, employee certification, clearance criteria, transportation and disposal, enclosure techniques, and other techniques appropriate for the proposed work.

- G. Cost of maintenance of systems and equipment prior to either Substantial Completion or Final Completion will be considered as included in prices bid and no direct or additional payment will be made therefore.

#### **1.10 PARTIAL OCCUPANCY/UTILIZATION REQUIREMENTS**

- A. Allow District to take possession of and use any completed or partially completed portion of the Work during the progress of the Work as soon as is possible without interference to the Work.
- B. Possession, use of Work, and placement and installation of equipment by District shall not in any way evidence the completion of the Work or any part of it.
- C. Contractor shall not be held responsible for damage to the occupied part of the Work resulting from District occupancy.
- D. Make available, in areas occupied, on a 24-hour per day and 7-day per week basis if required, any utility services, heating, and cooling in condition to be put in operation at the time of occupancy.
  - 1. Responsibility for operation and maintenance of said equipment shall remain with Contractor.
  - 2. Make, and District shall certify, an itemized list of each piece of equipment so operated with the date operation commences.
  - 3. Itemized list noted above shall be basis for commencement of warranty period for equipment.
  - 4. District shall pay for utility cost arising out of occupancy by District during construction.
- E. Use and occupancy by District prior to acceptance of Work does not relieve Contractor of its responsibility to maintain insurance and bonds required under the Contract until entire Work is completed and accepted by District.
- F. Prior to date of Final Acceptance of the Work by District, all necessary repairs or renewals in Work or part thereof so used, not due to ordinary wear and tear, but due to defective materials or workmanship or to operations of Contractor, shall be made at expense of Contractor, as required in Document 00700 (General Conditions).
- G. Use by District of Work or part thereof as contemplated by this Section 01100 shall in no case be construed as constituting acceptance of Work or any part thereof. Such use shall neither relieve Contractor of any responsibilities under Contract, nor act as waiver by District of any of the conditions thereof.
- H. District may specify in the Contract Documents that portions of the Work, including electrical and mechanical systems or separate structures, shall be substantially completed on dates described in paragraph 1.6 of this Section 01100, if any, prior to substantial completion of all of the Work. Contractor shall notify District's Representative and Engineer in writing when Contractor considers any such part of the Work ready for its intended use and substantially complete and request District to issue a Certificate of Substantial Completion for that part of the Work.

#### **1.11 CONTRACTOR USE OF PREMISES**

- A. Confine operations at Site to areas permitted by Contract Documents, permits, ordinances, and laws.
- B. Do not unreasonably encumber Project Site with materials or equipment.
- C. Assume full responsibility for protection and safekeeping of products stored on premises.
- D. Move any stored products that interfere with operations of District or other contractor.
- E. Parking, storage, staging, and work areas shall be coordinated with the District, and comply with all other Contract documents requirements.

#### **1.12 LINES AND GRADES**

- A. All Work shall be done to the lines, grades, and elevations indicated on the Drawings.
- B. District shall provide basic horizontal and vertical control points to be used as datums for the Work. All additional survey, layout, and measurement work shall be performed by Contractor as a part of the Work.
- C. Contractor shall provide at its cost an experienced instrument person, competent assistants, and such instruments, tools, stakes and other materials required to complete the survey, layout, and measurement work. In addition, Contractor shall furnish at its cost competent persons and such tools, stakes, and other materials as

District (and/or any Engineer) may require in establishing or designating control points, or in checking survey, layout, and measurement work performed by Contractor.

- D. Contractor shall keep District informed, a reasonable time in advance, of the times and places at which it wishes to do Work, so that any checking deemed necessary by District may be done with minimum inconvenience to District and minimum delay to Contractor.
- E. Contractor shall remove and reconstruct Work which is improperly located.

#### **1.13 PROTECTION OF EXISTING STRUCTURES AND UTILITIES**

- A. The Drawings may indicate existing above- and below-grade structures, drainage lines, storm drains, sewers, water, gas, electrical, hot water, and other similar items and utilities that are known to District.
- B. Contractor shall locate these known existing installations before proceeding with trenching or other operations which may cause damage, shall maintain them in service where appropriate, and shall repair any damage to them caused by the Work, at no increase in Contract Sum.
- C. Additional utilities whose locations are unknown to District are suspected to exist. Contractor must be alert to their existence. If additional utilities are encountered, Contractor must immediately report to District for disposition.
- D. In addition to reporting, if a utility is damaged, Contractor must take appropriate action as provided in Document 00700 (General Conditions).
- E. Additional compensation or extension of time on account of utilities not indicated or otherwise brought to Contractor's attention including reasonable action taken to protect or repair damage shall be determined as provided in Document 00700 (General Conditions).

#### **1.14 DAMAGE TO EXISTING PROPERTY**

- A. Contractor will be responsible for any damage to existing structures, Work, materials, or equipment because of its operations and shall repair or replace any damaged structures, Work, materials, or equipment to the satisfaction of, and at no additional cost to, District.
- B. Contractor shall protect all existing structures and property from damage and shall provide bracing, shoring, or other work necessary for such protection.
- C. Contractor shall be responsible for all damage to streets, roads, curbs, sidewalks, highways, shoulders, ditches, embankments, culverts, bridges, or other public or private property, which may be caused by transporting equipment, materials, or workers to or from the Work. Contractor shall make satisfactory and acceptable arrangements with the agency having jurisdiction over the damaged property concerning its repair or replacement.

#### **1.15 DUST CONTROL**

- A. Contractor shall take reasonable measures to prevent unnecessary dust. Without limiting the foregoing, the following items shall be specifically implemented to control dust:
  - 1. The County's Prescriptive Standard for Fugitive Dust Prevention and Control and Contingent Asbestos Hazard Dust Mitigation Plan.
- B. Buildings or operating facilities which may be affected adversely by dust shall be adequately protected from dust. Existing and new machinery, motors, instrument panels, or similar equipment shall be protected by suitable dust screens. Proper ventilation shall be included with dust screens.
- C. Staging and access sites shall be wet down before use.

#### **1.16 PARKING**

Contractor shall provide and maintain suitable parking areas for the use of all construction workers and others performing work or furnishing services in connection with the Project, as required to avoid any need for parking personal vehicles where they may interfere with public traffic, District's operations, or construction activities.

#### **1.17 LAYDOWN/STAGING AREA**

Contractor shall utilize the area indicated on the Drawings for storage of all construction materials, and no other area at or adjacent to the site. This area shall be fenced and locked by Contractor for security purposes.

#### **1.18 PERMITS**

Applicable permits: Permits, agreements, or written authorizations that are known by the District to apply to this project are listed below:

- A. Cal/OSHA Permit. The Contractor shall obtain, as applicable, a permit as required by Cal/OSHA for each of the following:
  - 1. Construction of trenches or excavations that are five feet or more in depth and into which a person is required to descend.
  - 2. Construction or demolition of any building, structure, or scaffolding for falsework more than three stories high, or the equivalent height (36 feet).
  - 3. Erection or dismantling of vertical shoring systems more than three stories high, or the equivalent height (36 feet).
- B. All other permits that may be required, such as electrical, mechanical, fire prevention, irrigation, grading, slope protection, tree cutting, etc., have not been applied for and shall be obtained by Contractor. Applicable permit fees will be reimbursed to the extent specified in Document 00700 (General Conditions).

#### **1.19 PUNCH LIST VERIFICATION**

A punch list examination will be performed upon Substantial Completion of Work. One follow-up review of punch list items for each discipline will be provided. If further Site visits are required to review punch list items due to incompleteness of the Work by Contractor, Contractor shall reimburse District for these visits.

#### **1.20 UNFAVORABLE CONSTRUCTION CONDITIONS**

During unfavorable weather, wet ground, or other unsuitable construction conditions, Contractor shall confine its operations to Work which will not be affected adversely by such conditions. No portion of the Work shall be constructed under conditions which would affect adversely the quality or efficiency thereof, unless special means or precautions are taken by Contractor to perform the Work in a proper and satisfactory manner. The Contractor will employ best practices to manage the construction site during inclement weather.

#### **1.21 CONSTRUCTION SITE ACCESS**

Contractor shall at all times limit access to the Site to necessary personnel only. All personnel associated with construction of the Project shall enter the site through Contractor's access gate, at the location indicated on the Drawings. Access for construction personnel shall be limited to 8:00 a.m. to 5:00 p.m. local time. All mail and deliveries (Federal Express, equipment, etc.) shall be sent to a separate address, specifically arranged by Contractor for the Project. Contractor is responsible for providing adequate signage (subject to District approval) to alert delivery persons to the new address. The District will not receive or forward Contractor mail or deliveries.

#### **1.22 SPECIFICATION DATA SHEETS AND SCHEDULES**

Specifications may have data sheets and schedules as part of specific specification sections. Locations for data entries on the data sheets and schedules may be left blank intentionally. Each line where data may be entered on the data sheet has a selection box in the column 'Chk'. When the box for a line is checked and no data is entered in the respective line, this indicates that no data is required for that line of the data sheet.

Other standard codes which apply to the Work are designated in the Specifications.

#### **1.23 SITE ADMINISTRATION**

Contractor shall be responsible for all areas of the Site used by it and by all Subcontractors in the performance of the Work. Contractor shall exert full control over the actions of all employees and other persons with respect to the use and preservation of property and existing facilities, except such controls as may be specifically reserved to District or others. Contractor shall have the right to exclude from the Site all persons who have no purpose related to the Work or its inspection, and may require all persons on the Site (except District's employees) to observe the same regulations as Contractor requires of its employees.

#### **1.24 CEQA MITIGATIONS**

Contractor shall be responsible to implement and assist the District in compliance to the environmental conditions which apply to this Project. Contractor shall assist in compliance to the Grizzly Flats Community Services District Water System Improvement Project, "Project Mitigation Measures and Mitigation Monitoring and Reporting Plan," and the "Environmental Letter Report for the Grizzly Flats CSD Water System Improvement Project, El Dorado County, California," which is available at District Offices.



**PART 2 PRODUCTS**

**2.1 PRODUCTS ORDERED IN ADVANCE: N/A**

**2.2 DISTRICT-FURNISHED PRODUCTS**

- A. District's Responsibilities:
  - 1. Arrange for and deliver District-reviewed Shop Drawings, Product Data, and Samples, to Contractor.
  - 2. Arrange and pay for delivery to site.
  - 3. On delivery, inspect products jointly with Contractor.
  - 4. Submit claims for transportation damage and replace damaged, defective, or deficient items.
  - 5. Arrange for manufacturers' warranties, inspections, and service.
- B. Contractor's Responsibilities:
  - 1. Review District-reviewed Shop Drawings, Product Data, and Samples.
  - 2. Receive and unload products at site; inspect for completeness or damage jointly with District.
  - 3. Handle, store, install, and finish products.
  - 4. Repair or replace items damaged after receipt.
  - 5. Install into Project per Contract Documents.

**PART 3 EXECUTION – NOT USED**

END OF SECTION

## DIVISION 1 GENERAL REQUIREMENTS

## SECTION 01200

## PAYMENTS AND COMPLETION

## PART 1 GENERAL

## 1.1 SUMMARY

Section includes description of requirements and procedures for determining amount of Work performed and for obtaining payment for Work performed.

## 1.2 REFERENCES

- A. California Public Contract Code
- B. Code of Civil Procedures
- C. Government Code

## 1.3 SCOPE OF WORK

Work under Contract Documents, or under any Bid Item, allowance, or alternate, shall include all labor, materials, taxes, transport, handling, storage, supervision, administration, and all other items necessary for the satisfactory completion of Work, whether or not expressly specified or indicated.

## 1.4 DETERMINATION OF QUANTITIES

Quantity of work to be paid for under any item for which a unit price is fixed in Contract Documents shall be number, as determined by District, of units of work satisfactorily completed in accordance with Contract Documents or as directed by District. Unless otherwise provided, determination of number of units of work so completed will be based, so far as practicable, on actual measurement or count within prescribed or ordered limits, and no payment will be made for work done outside of limits. Measurements and computations will be made by methods set forth in Contract Documents, including without limitation this Section 01200. If methods are not so set forth, measurements shall be made in any manner which District considers appropriate for class of Work measured (e.g., pre-assigned values, percentage completion, units completed or incremental milestones). Contractor must immediately inform District of any disputes regarding quantity measurements and shall immediately supply District with any documentation supporting the disputed measurements.

## 1.5 SCOPE OF PAYMENT

- A. Except as otherwise expressly stated in Section 01100 (Summary), payment to Contractor at the unit price or other price fixed in Contract Documents for performing Work required under any item, or (if the Contract is on a single lump sum price basis) at the lump sum price fixed in the Contract Documents for performing all Work required under Contract Documents, and as either may be adjusted pursuant to any approved Change Order or Construction Change Directive, shall be full compensation for completing, in accordance with Contract Documents, all Work required under the item or under Contract Documents, and for all expense incurred by Contractor for any purpose in connection with the performance and completion of said Work, including all incidental work necessary for completion of the Work.
- B. The Contract Sum, whether lump sum, unit price or otherwise, shall be deemed to include all costs necessary to complete required Work, all costs (if any) for loss or damage arising from nature of Work or prosecution of the Work, and from action of elements. Unless 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 prosecution of Bid Item (whether lump sum or unit price) until acceptance by District;
  - 2. All expenses incurred due to suspension, or discontinuance of Work or discontinuance of Bid 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 completion of Bid Item (whether lump sum or unit price).
- C. Whenever it is specified herein that Contractor is to do work or furnish materials of any class for which no price is fixed in Contract Documents, it shall be understood that Contractor is to do such work or furnish such

materials without extra charge or allowance or direct payment of any sort, and that cost of doing work or furnishing materials is to be included in price Bid, unless it is expressly specified herein, in particular cases, that work or material is to be paid for as extra work.

- D. Unit Prices shall apply to work covered by unit prices regardless of actual quantities performed on the Project.
- E. No payment shall be made for materials or equipment not yet incorporated into the Work, except as specified in Section 01100 (Summary).
- F. The District may, in its discretion, where Contractor requests payment on the basis of materials and equipment not incorporated in the Work, require Contractor to satisfy the following conditions:
  - 1. 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 warehouse;
  - 2. Full title to the materials and/or equipment shall vest in District at the time of delivery to the Site, warehouse or other storage location;
  - 3. Obtain a negotiable warehouse receipt, endorsed over to District for materials and/or equipment stored in an off-site warehouse. No payment will be made until such endorsed receipts are delivered to District;
  - 4. Stockpiled materials and/or equipment shall be available for District inspection, but District 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;
  - 5. 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;
  - 6. 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;
  - 7. Contractor's Application for Payment shall be accompanied by a bill of sale, invoice or other documentation warranting that District 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 District's interest therein, all of which must be satisfactory to District. This documentation shall include, but not be limited to, conditional releases of mechanics' liens and stop notices from all those providing materials and equipment as to which the Application for Payment relates, as well as unconditional releases of the same from the same as to the previous Application for Payment for which they have not already been provided.
- G. 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.

## 1.6 BASIS OF PAYMENT

- A. Unit Price Quantities: When estimated quantity for specific portions of Work is listed in Bid Form, quantity of Work to be paid for shall be actual number of units satisfactorily completed, as determined by District and certified by Contractor, in accordance with Contract Documents.
- B. Lump Sum: When estimated quantity for specific portion of Work is not indicated and unit is designated as lump sum, payment will be on a lump sum basis for Work satisfactorily completed in accordance with Contract Documents.
- C. Allowances: Allowance items (if any) will be paid for as provided in Section 01100 (Summary). Funds authorized for Allowance work will not be released for Contract payments unless District has authorized Allowance work in writing.
- D. District 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 Bid Item or Items, or to add work not originally included in Bid or Contract Documents, when in its judgment such change is in best interest of District. 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 whatever, except as otherwise expressly provided for in Contract Documents, because of any differences between amount of work actually done and estimated amount as set forth herein, or for elimination of Bid Items.
- E. Compensation Adjustments for Price Index Fluctuations: The compensation payable for Flexible Membrane Liner (FML) and paving asphalt (binder, geosynthetic pavement interlayer) will be increased or decreased in conformance with the provisions of this section for paving asphalt price fluctuations exceeding 10 percent (1u/lb is greater than 1.10 or less than 0.90) which occur during performance of the work.

The quantity of asphalt binder used in tack coat will be determined by multiplying the item quantity for tack coat included in a monthly estimate by the minimum percent residue specified in Section 94, "Asphaltic Emulsions," of the Standard Specifications. The asphaltic emulsion minimum percent residue will be based on the type of emulsion used by the Contractor.

At the Contractor's option, the Contractor may provide actual daily test results for asphalt binder residue for the tack coat used. Test results provided by the Contractor shall be from an independent testing laboratory that participates in the AASHTO Proficiency Sample Program. The Contractor shall take samples of asphaltic emulsion from the distributor truck at mid-load from a sampling tap or thief. Two separate 1/2 gallon samples shall be taken in the presence of the Engineer. The Contractor shall provide one sample to the Contractor's independent testing laboratory within 24 hours of sampling. The second sample shall be given to the Engineer. The test results from the Contractor's independent testing laboratory shall be delivered to the Engineer within 10 days from sample date.

The adjustment in compensation will be determined in conformance with the following formulae when the item of paving asphalt (binder, geosynthetic pavement interlayer) is included in a monthly estimate:

1. Total monthly adjustment =  $AQ$
  2. For an increase in paving asphalt price index exceeding 10 percent:  $A = 0.90 (I_u/I_b - 1.10) I_b$
  3. For a decrease in paving asphalt price index exceeding 10 percent:  $A = 0.90 (I_u/I_b - 0.90) I_b$
- Where:
- a.  $A$  = Adjustment in dollars per ton of asphalt binder used to produce hot mix asphalt, asphaltic emulsion residue used as tack coat and paving asphalt (binder, geosynthetic pavement interlayer) rounded to the nearest \$0.01.
  - b.  $I_u$  = The California Statewide Paving Asphalt Price Index which is in effect on the first business day of the month within the pay period in which the quantity subject to adjustment was included in the estimate.
  - c.  $I_b$  = The California Statewide Paving Asphalt Price Index for the month in which the bid opening for the project occurred.
  - d.  $Q$  = Quantity in tons of asphalt binder used in producing hot mix asphalt, paving asphalt (binder, geosynthetic pavement interlayer) plus the quantity in tons of asphalt binder that would have been used as residue in the tack coat shown under "This Estimate" on the monthly estimate.
4. The adjustment in compensation will also be subject to the following:
    - a. The compensation adjustments provided herein will be shown separately on payment estimates. The Contractor shall be liable to the State for decreased compensation adjustments and the Department may deduct the amount thereof from any moneys due or that may become due the Contractor.
    - b. In the event of an overrun of contract time, adjustment in compensation for asphalt binder included in estimates during the overrun period will be determined using the California Statewide Paving Asphalt Price Index in effect on the first business day of the month within the pay period in which the overrun began.
    - c. The California Statewide Paving Asphalt Price Index is determined each month on the first business day of the month by the Department using the median of posted prices in effect as posted by Chevron, ExxonMobil, and Union 76 for the Buena Vista, Huntington Beach, and Midway Sunset fields.
    - d. In the event that the companies discontinue posting their prices for a field, the Department will determine an index from the remaining posted prices. The Department reserves the right to include in the index determination the posted prices of additional fields.

## 1.7 PROGRESS PAYMENTS

- A. If requested by Contractor, progress payments will be made monthly.
- B. Schedule of Values:

1. Within twenty eight Days from issuance of Notice of Award and prior to the Contractor's first Application for Payment, submit a detailed breakdown of its Bid by scheduled Work items and/or activities, including coordination responsibilities and Project Record Documents responsibilities. Where more than one Subcontractor comprises the work of a Work item or activity, the Schedule of Values shall show a separate line item for each subcontract. 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. The format and detail of the breakdown shall be as directed by District to facilitate and clarify future progress payments to Contractor for direct Work under Contract Documents. This breakdown shall be referred to as the Schedule of Values.

2. Contractor's overhead, profit, insurance, cost of bonds (except to the extent expressly identified in a Bid 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, and the like), shall be prorated through all activities so that the sum of all the Schedule of Values line items equals Contractor's total Contract Sum, less any allowances designated by District. Scheduling, record documents and quality assurance control shall be separate line items.
  3. District will review the breakdown in conjunction with the Progress Schedule to ensure that the dollar amounts of this Schedule of Values are, in fact, fair market cost allocations for the Work items listed. Upon favorable review by District, District will accept this Schedule of Values for use. District shall be the sole judge of fair market cost allocations.
  4. District will reject any attempt to increase the cost of early activities, i.e., "front loading" resulting in an inaccurate allocation of moneys until such "front loading" is corrected. Repeated attempts at "front loading" may result in suspension or termination of the Work for default, or refusal to process progress payments until such time as the Schedule of Values is acceptable to District.
- C. Applications for Payment: Contractor shall establish and maintain records of cost of the Work in accordance with generally accepted accounting practices. In addition:
1. On or before the last Day of each month (but after receipt of District's approval of the updated Schedule as required by Section 01320 (Progress Schedules and Reports)), Contractor shall submit to District five copies of an Application for Payment for the cost of the Work put in place during the period from the 20<sup>th</sup> Day of the previous month to the 20<sup>th</sup> Day of the current month. Such Applications for Payment shall be for the total value of activities completed or partially completed, including approved activity costs, based upon Schedule of Values prices (or Bid item prices if unit price) of all labor and materials incorporated in the Work up until midnight of the last Day of that one month period, less the aggregate of previous payments. Accumulated retainage shall be shown as separate item in payment summary. Contractor shall submit in a form acceptable to District an itemized cost breakdown of Contractor's record of Cost of the Work together with supporting data and any certification required by District. If Contractor is late submitting its Application for Payment, that Application may be processed at any time during the succeeding one-month period, resulting in processing of Contractor's Application for Payment being delayed for more than a Day for Day basis.
  2. Applications for Payment may include, but are not necessarily limited to the following:
    - a. Material, equipment, and labor incorporated into the Work, less any previous payments for the same;
    - b. Up to 75 percent of the cost of equipment identified in paragraph 1.5F of this Section 01200 (if any), if purchased and delivered to the Site or stored off Site, as may be approved by District.
    - c. Up to 50 percent of the cost of materials identified in paragraph 1.5F of this Section 01200 (if any), specifically fabricated for the Project that are not yet incorporated into the Work.
  3. At the time any Application for Payment is submitted, certify in writing the accuracy of the Application and that Contractor has fulfilled all scheduling requirements of Document 00700 (General Conditions) and Section 01320 (Progress Schedules and Reports), including updates and revisions. A responsible officer of Contractor shall execute the certification.
  4. No progress payment will be processed prior to District receiving all requested, acceptable schedule update information. Failure to submit a schedule update complying with Section 01320 justifies denying the entire Application for Payment.
  5. Each Application for Payment shall list each Change Order and Construction Change Directive ("CCD") executed prior to date of submission, including the Change Order/CCD Number, and a description of the work activities, consistent with the descriptions of original work activities. Submit a monthly Change Order/CCD status log to District.
  6. If District requires substantiating data, submit information requested by District, with cover letter identifying Project, Application for Payment number and date, and detailed list of enclosures. Submit one copy of substantiating data and cover letter for each copy of Application for Payment submitted.
  7. If Contractor fails or refuses to participate in work reconciliations or other construction progress evaluation with District, Contractor shall not receive current payment until Contractor has participated fully in providing construction progress information and schedule update information to District.
- D. Progress Payments
1. District will review Contractor's Application for Payment following receipt. If adjustments need to be made to percent of completion of each activity, District will make appropriate notations and return to Contractor. Contractor shall revise and resubmit. All parties shall update percentage of completion values in the same manner, i.e., express value of an accumulated percentage of completion to date.

2. Each Application for Payment may be reviewed by District and/or inspectors to determine whether the Application for Payment is proper, and shall be rejected, revised, or approved by District pursuant to the Schedule of Values prepared in accordance with paragraph 1.7B of this Section 01200.
  3. If it is determined that the Application for Payment is not proper and suitable for payment, District will return it to the Contractor as soon as practicable, but no later than seven Days after receipt, together with a document setting forth in writing the reasons why the Application for Payment is not proper. If District determines that portions of the Application for Payment are not proper or not due under the Contract Documents, then District may approve the other portions of the Application for Payment, and in the case of disputed items or defective Work not remedied, may withhold up to 150 percent of the disputed amount from the progress payment.
  4. Pursuant to Public Contract Code Section 20104.50, if District fails to make any progress payment within 30 Days after receipt of an undisputed and properly submitted Application for Payment from Contractor, District shall pay interest to the Contractor equivalent to the legal rates set forth in subdivision (a) of Section 685.010 of the Code of Civil Procedure. The 30-Day period shall be reduced by the number of Days by which District exceeds the seven-Day return requirement set forth herein.
  5. As soon as practicable after approval of each Application for Payment for progress payments, District will pay to Contractor in manner provided by law, an amount equal to 90 percent of the amounts otherwise due as provided in the Contract Documents, or a lesser amount if so provided in Contract Documents, provided that payments may at any time be withheld if, in judgment of District, Work is not proceeding in accordance with Contract, or Contractor is not complying with requirements of Contract, or to comply with stop notices or to offset liquidated damages accruing or expected.
  6. Before any progress payment or final payment is due or made, Contractor shall submit satisfactory evidence that Contractor is not delinquent in payments to employees, Subcontractors, suppliers, or creditors for labor and materials incorporated into Work. This specifically includes, without limitation, conditional lien release forms for the current progress payment and unconditional release forms for past progress payments. District also may elect in its sole discretion to pay progress payments by joint check to Contractor and each Subcontractor having an interest in that progress payment in such amount.
  7. District reserves and shall have the right to withhold payment for any equipment and/or specifically fabricated materials that, in the sole judgment of District, are not adequately and properly protected against weather and/or damage prior to or following incorporation into the Work.
  8. Granting of progress payment or payments by District, or receipt thereof by Contractor, shall not be understood as constituting in any sense acceptance of Work or of any portion thereof, and shall in no way lessen liability of Contractor to replace unsatisfactory work or material, though unsatisfactory character of work or material may have been apparent or detected at time payment was made.
  9. When District shall charge any sum of money against Contractor under any provision of Contract Documents, amount of charge shall be deducted and retained by District from amount of next succeeding progress payment or from any other moneys due or that may become due Contractor under Contract. If, on completion or termination of Contract, such moneys due Contractor are found insufficient to cover District's charges against it, District shall have right to recover balance from Contractor or Sureties.
- E. Retention Changes
1. Following satisfactory and timely completion of at least 50% of the total Work of the Contract Documents, following Contractor's request, District may, in its sole discretion, and notwithstanding paragraph 1.7.D.5 above, pay any or all subsequent Applications for Payment for progress payments at the rate of 95 percent of the amounts otherwise due.
  2. District reserves the right to revoke any election under paragraph 1.7.E.1 at any time.
  3. Nothing in this paragraph 1.7.E shall lessen or diminish any District right or remedy, including without limitation District's right to require Contractor to perform all Work within the time otherwise required in the Contract Documents.

## 1.8 SUBSTITUTION OF SECURITIES IN LIEU OF RETENTION

- A. In accordance with the provisions of Public Contract Code Section 22300, substitution of securities for any moneys withheld under Contract Documents to ensure performance is permitted under following conditions:
1. 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 District 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 moneys to Contractor. Upon satisfactory completion of Contract, securities shall be returned to Contractor.

2. Alternatively, Contractor may request and District 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 in this Section 01200 for securities deposited by Contractor. Upon satisfactory completion of Contract Documents, Contractor shall receive from escrow agent all securities, interest, and payments received by the escrow agent from District, pursuant to the terms of this Section 01200. 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 insure the performance of Contractor.
3. Contractor shall be beneficial owner of securities substituted for moneys withheld and shall receive any interest thereon.
4. Enter into escrow agreement with Controller according to Document 00680 (Escrow Agreement for Security Deposits in Lieu of Retention), 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.
5. Public Contract Code Section 22300 is hereby incorporated in full by this reference.

## **1.9 FINAL PAYMENT**

- A. As soon as practicable after all required Work is completed in accordance with Contract Documents, including punchlist, testing, record documents and Contractor maintenance after Final Acceptance, District will pay to Contractor, in manner provided by law, unpaid balance of Contract Sum of Work (including without limitation retentions), or whole Contract Sum of Work if no progress payment has been made, determined in accordance with terms of Contract Documents, less sums as may be lawfully retained under any provisions of Contract Documents or by law.
- B. Prior progress payments shall be subject to correction in the final payment. District's determination of amount due as final payment shall be final and conclusive evidence of amount of Work performed by Contractor under Contract Documents and shall be full measure of compensation to be received by Contractor.
- C. Contractor and each assignee under an assignment in effect at time of final payment shall execute and deliver at time of final payment, and as a condition precedent to District's obligation to make final payment, Document 00650 (Agreement and Release of Any and All Claims) discharging District, its officers, agents, employees, and consultants of and from liabilities, obligations, and claims arising under Contract Documents.

## **1.10 EFFECT OF PAYMENT**

- A. Payment will be made by District, based on District's observations at the Site and the data comprising the Application for Payment. Payment will not be a representation that District has:
  1. Made exhaustive or continuous on-Site inspections to check the quality or quantity of Work;
  2. Reviewed construction means, methods, techniques, sequences, or procedures;
  3. Reviewed copies of requisitions received from Subcontractors and material suppliers and other data requested by District to substantiate Contractor's right to payment; or
  4. Made examination to ascertain how or for what purpose Contractor has used money previously paid on account of the Contract Sum.

## **PART 2 PRODUCTS – NOT USED**

## **PART 3 EXECUTION – NOT USED**

END OF SECTION

## DIVISION 1 GENERAL REQUIREMENTS

## SECTION 01250

## MODIFICATION PROCEDURES

## PART 1 GENERAL

## 1.1 SUMMARY

- A. Section includes:
  - 1. Description of general procedural requirements for alterations, modifications, and extras.
- B. Reference
  - 1. Public Contract Code Section 7105 (d)(2).

## 1.2 GENERAL

- A. Any change in scope of Work or deviation from Contract Documents including, without limitation, extra work, or alterations or additions to or deductions from the original Work, shall not invalidate the original Contract, and shall be performed under the terms of the Contract Documents.
- B. Only Contractor or District may initiate changes in scope of Work or deviation from Contract Documents.
  - 1. Contractor may initiate changes by submitting RFIs, Notice of Concealed or Unknown Conditions, or Notice of Hazardous Waste Conditions.
    - a. RFIs shall be submitted to seek clarification of or request changes in the Contract Documents.
    - b. Notices of Concealed or Unknown Conditions shall be submitted in accordance with Document 00700 (General Conditions).
    - c. Notices of Hazardous Waste Conditions shall be submitted in accordance with Document 00700 (General Conditions).
  - 2. Contractor shall be responsible for its costs to implement and administer RFIs throughout the Contract duration. Regardless of the number of RFIs submitted, Contractor shall not be entitled to additional compensation. Contractor shall be responsible for both District and its Architect/Engineer's administrative costs for answering RFIs where the answer could reasonably be found by reviewing the Contract Documents, as determined by District; at District's discretion, such costs may be deducted from progress payments or final payment.
  - 3. District may initiate changes by issuing a Supplemental Instruction, which may revise, add to or subtract from the Work.
  - 4. District may initiate changes in the Work or Contract Time by issuing RFPs to Contractor. Such RFPs will detail all proposed changes in the Work and request a quotation of changes in Contract Sum and Contract Time from Contractor.
  - 5. District may also, by Construction Change Directive ("CCD"), order changes in the Work within the general scope of the Contract consisting of additions, deletions, or other revisions, the Contract Sum and Contract Time being adjusted accordingly. A CCD shall be used in the absence of total agreement on the terms of a Change Order and may, upon notice, consist of a Change Order executed by District only.

## 1.3 PROCEDURES

- A. Cost Proposal and Procedures: Whenever Contractor is required in this Section 01250 to prepare a Cost Proposal, and whenever Contractor is entitled to submit a Cost Proposal and elects to do so, Contractor shall prepare and submit to District for consideration a Cost Proposal using the form attached to this Section 01250. All Cost Proposals must contain a complete breakdown of costs of credits, deducts and extras; itemizing materials, labor, taxes, overhead and profit, and any requested changes to Contract Time. All Subcontractor Work shall be so indicated. Individual entries on the Cost Proposal form shall be determined as provided in paragraphs 1.4 and 1.5 of this Section 01250. After receipt of a Cost Proposal with a detailed breakdown, District will act promptly thereon.
  - 1. If District accepts a Cost Proposal, District will prepare Change Order for District and Contractor signatures.
  - 2. If Cost Proposal is not acceptable to District because it does not agree with cost and/or time included in Cost Proposal, District will submit in a response what it believes to be a reasonable cost and/or adjustment,



- if any. Except as otherwise provided in this Section 01250, Contractor shall have seven (7) Days in which to respond to District with a revised Cost Proposal.
3. When necessity to proceed with a change that does not allow the District sufficient time to conduct a proper check of a Cost Proposal (or revised Cost Proposal), District may order Contractor to proceed on a basis to be determined at the earliest practical date. In this event, the value of change, with corresponding equitable adjustment to Contract, shall not be more than the increase or less than the decrease proposed.
- B. Request for Information: Whenever Contractor requires information regarding the Project or Contract Documents, or receives a request for information from a Subcontractor, Contractor may prepare and deliver an RFI to District. Contractor shall use RFI format provided by District. Contractor must submit time critical RFIs at least 30 days before scheduled start date of the affected Work activity. Contractor shall reference each RFI to an activity of Progress Schedule and shall note time criticality of the RFI, indicating time within which a response is required. Contractor's failure to reference an RFI to an activity on the Progress Schedule and to note time criticality on the RFI shall constitute Contractor's waiver of any claim for time delay or interruption to the Work resulting from any delay in responding to the RFI.
1. District will respond within seven (7) Days from receipt of RFI with a written response to Contractor. Contractor shall distribute response to all appropriate Subcontractors.
  2. If Contractor is satisfied with the response and does not request change in Contract Sum or Contract Time, then the response shall be executed without a change.
  3. If Contractor believes the response is incomplete, Contractor shall issue another RFI (with the same RFI number with the letter "A" indicating if it is a follow-up RFI) to District clarifying original RFI. Additionally, District may return the RFI, and request additional information, should original RFI be inadequate in describing condition.
  4. If Contractor believes that the response results in change in Contract Sum or Contract Time, Contractor shall notify District in writing within seven Days after receiving the response. If District disagrees with Contractor, then Contractor may give notice of intent to submit a Claim as described in Article 12 of Document 00700 (General Conditions), and submit its Claim within 30 days. If District agrees with Contractor, then Contractor must submit a Cost Proposal within 21 Days of receiving the response to the RFI. Contractor's failure to deliver either the foregoing notice and Claim or Cost Proposal by the respective deadlines stated in the foregoing sentences shall result in waiver of the right to file a Cost Proposal or Claim.
- C. Supplemental Instruction: District may issue a Supplemental Instruction to Contractor.
1. If Contractor is satisfied with the Supplemental Instruction and does not request change in Contract Sum or Contract Time, then the Supplemental Instruction shall be executed without a Change Order.
  2. If Contractor believes that the Supplemental Instruction results in change in Contract Sum or Contract Time, then Contractor must submit a Cost Proposal to District within 21 Days of receiving the Supplemental Instruction.
- D. Construction Change Directives: If at any time District believes in good faith that a timely Change Order will not be agreed upon using the foregoing procedures, District may issue a CCD with its recommended cost and/or time adjustment. Upon receipt of a CCD, Contractor shall promptly proceed with the change of Work involved and concurrently respond to District's CCD within 10 Days.
1. Contractor's response must be any one of following:
    - a. Return the CCD signed, thereby accepting District's response, time and cost.
    - b. Submit a (revised if applicable) Cost Proposal with supporting documentation (if applicable, reference original Cost Proposal number followed by letter A, B, etc. for each revision), if District so requests.
    - c. Give notice of intent to submit a Claim as described in Article 12 of Document 00700 (General Conditions), and submit its Claim with 30 days.
  2. If the CCD provides for an adjustment to the Contract Sum, the adjustment shall be based on one of the following methods:
    - a. Mutual acceptance of a lump sum properly itemized and supported by sufficient substantiating data to permit evaluation.
    - b. Unit prices stated in the Contract Documents or subsequently agreed upon.
    - c. Cost to be determined in a manner agreed.
  3. CCD signed by Contractor indicates the agreement of Contractor therewith, including adjustment in Contract Sum and Contract Time or the method for determining them. Such agreement shall be effective immediately and shall be recorded as a Change Order.
  4. If Contractor does not respond promptly or disagrees with the method for adjustment in the Contract Sum, the method and the adjustment shall be determined by District on the basis of reasonable expenditures and

savings of those performing the Work attributable to the change including, in case of an increase in the Contract Sum, a reasonable allowance for overhead and profit. If the parties still do not agree on the price for a CCD, Contractor may file a Claim per Article 12 of Document 00700 (General Conditions). Contractor shall keep and present, in such form as District may prescribe, an itemized accounting together with appropriate supporting data. Unless otherwise provided in the Contract Documents, costs for the purposes of this paragraph shall be limited to those provided in paragraphs 1.4 and 1.5 of this Section 01250.

5. Pending final determination of cost to District, amounts not in dispute may be included in Applications for Payment. The amount of credit to be allowed by Contractor to District for a deletion or change which results in a net decrease in the Contract Sum shall be actual net cost as confirmed by District. When both additions and credits covering related Work or substitutions are involved in a change, the allowance for overhead and profit shall be figured on the basis of net increase, if any, with respect to that change.
- E. District Requested RFP: Contractor shall furnish a Cost Proposal within 21 Business Days of District's RFP. Upon approval of the RFP, District will issue a Change Order directing Contractor to proceed with extra Work. If the parties do not agree on the price for an RFP, District may either issue a CCD or decide the issue per Article 12 of Document 00700 (General Conditions). Contractor shall perform the changed Work notwithstanding any claims or disagreements of any nature.
- F. Differing Site Conditions: Contractor shall submit Notices of Differing Site Conditions to resolve problems regarding differing underground Site conditions encountered in the execution of the Work pursuant to paragraph 13.D of Document 00700 (General Conditions), which shall govern. If District determines that a change in Contract Sum or Contract Time is justified, District will issue RFP or CCD.
- G. Hazardous Waste Conditions: Contractor shall submit Notices of Hazardous Waste Conditions to resolve problems regarding hazardous materials encountered in the execution of the Work pursuant to paragraph 13.E of Document 00700 (General Conditions), which shall govern. If District determines that a change in Contract Sum or Contract Time is justified, District will issue RFP or CCD.
- H. All Changes:
  1. Documentation of Change in Contract Sum and Contract Time:
    - a. Contractor shall maintain detailed records of Work performed on a time-and-material basis.
    - b. Contractor shall document each proposal for a change in cost or time with sufficient data to allow evaluation of the proposal.
    - c. Contractor shall, on request, provide additional data to support computations for:
      - 1) Quantities of products, materials, labor and equipment.
      - 2) Taxes, insurance, and bonds.
      - 3) Overhead and profit.
      - 4) Justification for any change in Contract Time and new Progress Schedule showing revision due, if any.
      - 5) Credit for deletions from Contract, similarly documented.
    - d. Contractor shall support each claim for additional costs, and for Work performed on a cost-and-percentage basis, with additional information including:
      - 1) Credit for deletions from Contract, similarly documented.
      - 2) Origin and date of claim.
      - 3) Dates and times Work was performed and by whom.
      - 4) Time records and wage rates paid.
      - 5) Invoices and receipts for products, materials, equipment and subcontracts, similarly documented.
  - I. Correlation of Other Items:
    1. Contractor shall revise Schedule of Values and Application for Payment forms to record each authorized Change Order or CCD as a separate line item and adjust the Contract Sum as shown thereon prior to the next monthly pay period.
    2. Contractor shall revise the Progress Schedules prior to the next monthly pay period.
    3. Contractor shall enter changes in Project Record Documents prior to the next monthly pay period.
  - J. Responses: For all responses for which the Contract Documents, including without limitation this Section 1250, do not provide a specific time period, recipients shall respond within a reasonable time.
  - K. Disputes: For all disputes arising from the procedures herein, Contractor shall Document 00700.

#### 1.4 COST DETERMINATION

- A. Total cost of extra Work or of Work omitted shall be the sum of labor costs, material costs, equipment rental costs and specialist costs as defined herein plus overhead and profit as allowed herein. This limit applies in all

cases of claims for extra Work, whether calculating Cost Proposals, Change Orders or CCDs, or calculating claims of all types, and applies even in the event of fault, negligence, strict liability, or tort claims of all kinds, including strict liability or negligence. Contractor may recover no other costs arising out of or connected with the performance of extra Work, of any nature. No special, incidental or consequential damages may be claimed or recovered against District, its representatives or agents, whether arising from breach of contract, negligence or strict liability, unless specifically authorized in the Contract Documents.

- B. Overhead and Profit: (Overhead shall be as defined in paragraph 1.8 of this Section 01250)
  - 1. Overhead and profit on labor for extra Work shall be 15 percent.
  - 2. Overhead and profit on materials for extra Work shall be 15 percent.
  - 3. Overhead and profit on equipment rental for extra Work shall be 10 percent.
  - 4. When extra Work is performed by a first tier Subcontractor, Contractor shall receive a 5 percent markup on Subcontractors' total costs of extra Work. First tier Subcontractor's markup on its Work shall not exceed 15 percent.
  - 5. When extra Work is performed by a lower tier Subcontractor, Contractor shall receive a total of 5 percent markup on the lower tier Subcontractors' total costs of extra Work. Contractor and first tier Subcontractors and lower tier Subcontractors shall divide the 5 percent markup as mutually agreed.
  - 6. Notwithstanding the foregoing, in no case shall the total markup on any extra Work exceed 20 percent of the direct cost, notwithstanding the actual number of contract tiers.
  - 7. On proposals covering both increases and decreases in Contract Sum, overhead, profit, and commission shall be allowed on the net increase only as determined in paragraph 1.4 above. When the net difference is a deletion, no percentage for overhead profit and commission shall be allowed, but rather a deduction shall issue.
  - 8. The markup shall include profit, small tools, cleanup, engineering, supervision, warranties, cost of preparing the cost proposal, jobsite overhead, and home office overhead. No markup will be allowed on taxes, insurance, and bonds.
- C. Taxes:
  - 1. All State sales and use taxes, El Dorado County and applicable City sales taxes, shall be included.
  - 2. Federal and Excise tax shall not be included.
- D. Owner-Operated Equipment: When owner-operated equipment is used to perform extra Work, Contractor will be paid for operator as follows:
  - 1. Payment for equipment will be made in accordance with paragraph 1.5C of this Section 01250.
  - 2. Payment for cost of labor will be made at no more than rates of such labor established by collective bargaining agreements for type of worker and location of Work, whether or not owner-operator is actually covered by such an agreement.
- E. Accord and Satisfaction: Every Change Order and accepted CCD 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 subject matter of the change including, without limitation, impacts of all types, cumulative impacts, inefficiency, overtime, delay and any other type of claim. Contractor may elect to reserve its rights to disputed claims arising from or relating to the changed Work at the time it signs a Change Order or approves a CCD, but must do so expressly in a writing delivered concurrently with the executed Change Order or approved CCD, and must also submit a Claim for the reserved disputed items pursuant to Article 12 of Document 00700 no later than 30 days of Contractor's first written notice of its intent to reserve rights.

## 1.5 COST BREAKDOWN

- A. Labor: Contractor will be paid cost of labor for workers (including forepersons when authorized by District) used in actual and direct performance of extra Work. Labor rate, whether employer is Contractor, Subcontractor or other forces, will be sum of following:
  - 1. Actual Wages: Actual wages paid shall include any employer payments to or on behalf of workers for health and welfare, pension, vacation, and similar purposes.
  - 2. Labor surcharge: Payments imposed by local, county, state, and federal laws and ordinances, and other payments made to, or on behalf of, workers, other than actual wages as defined in paragraph 1.5A.1 of this Section 01250, such as taxes and worker's compensation insurance. Such labor surcharge shall not exceed that set forth in California Department of Transportation official labor surcharges schedule which is in effect on date upon which extra Work is accomplished and which schedule is incorporated herein by reference as though fully set forth herein.

- B. Material: Only materials furnished by Contractor and necessarily used in performance of extra Work will be paid for. Cost of such materials will be cost, including sales tax, to purchaser (Contractor, Subcontractor or other forces) from supplier thereof, except as the following are applicable:
1. If cash or trade discount by actual supplier is offered or available to purchaser, it shall be credited to District notwithstanding fact that such discount may not have been taken.
  2. For materials salvaged upon completion of extra Work, salvage value of materials shall be deducted from cost, less discounts, of materials.
  3. If cost of a material is, in opinion of District, excessive, then cost of material shall be deemed to be lowest current wholesale price at which material is available in quantities concerned delivered to Site, less any discounts as provided in paragraph 1.5B.1 of this Section 01250.
- C. Equipment Rental: For Contractor- or Subcontractor-owned equipment, payment will be made at the rental rates listed for equipment in California Department of Transportation official equipment rental rate schedule which is in effect on date upon which extra Work is accomplished and which schedule is incorporated herein by reference as though fully set forth herein. If there is no applicable rate for an item of equipment, then payment shall be made for Contractor- or Subcontractor-owned equipment at the rental rate listed in the most recent edition of the Association of Equipment Distributors (AED) book. For rented equipment, payment will be made based on actual rental invoices. Equipment used on extra Work shall be of proper size and type. If, however, equipment of unwarranted size or type and cost is used, cost of use of equipment shall be calculated at the rental rate for equipment of proper size and type, as determined by District. Rental rates paid shall be deemed to cover cost of fuel, oil, lubrication, supplies, small tools, necessary attachments, repairs and maintenance of any kind, depreciation, storage, insurance, and all incidentals. Unless otherwise specified, manufacturer's ratings, and manufacturer-approved modifications, shall be used to classify equipment for determination of applicable rental rates. Individual pieces of equipment or tools not listed in said publication and having a replacement value of \$100 or less, whether or not consumed by use, shall be considered to be small tools and no payment will be made therefor as payment is included in payment for labor. Rental time will not be allowed while equipment is inoperative due to breakdowns.
1. For equipment on Site, rental time to be paid for equipment shall be time equipment is in operation on extra Work being performed or on standby as approved by District. The following shall be used in computing rental time of equipment:
    - a. When hourly rates are listed, less than 30 minutes of operation shall be considered to be ½ hour of operation.
    - b. When daily rates are listed, less than four hours of operation shall be considered to be ½ Day of operation.
  2. For equipment that must be brought to Site to be used exclusively on extra Work, cost of transporting equipment to Site and its return to its original location shall be determined as follows:
    - a. District will pay for costs of loading and unloading equipment.
    - b. Cost of transporting equipment in low bed trailers shall not exceed hourly rates charged by established haulers.
    - c. Cost of transporting equipment shall not exceed applicable minimum established rates of California Public Utilities Commission.
    - d. District will not make any payment for transporting and loading and unloading equipment if equipment is used on Work in any other way than upon extra Work.
  3. Rental period may begin at time equipment is unloaded at Site of extra Work and terminate at end of the performance of the extra Work or Day on which District directs Contractor to discontinue use of equipment, whichever first occurs. Excluding Saturdays, Sundays, and District's legal holidays, unless equipment is used to perform extra Work on such Days, rental time to be paid per Day shall be four hours for zero hours of operation, six hours for four hours of operation and eight hours for eight hours of operation, time being prorated between these parameters. Hours to be paid for equipment that is operated less than eight hours due to breakdowns, shall not exceed eight less number of hours equipment is inoperative due to breakdowns.
- D. Work Performed by Special Forces or Other Special Services: When District and Contractor, by agreement, determine that special service or item of extra Work cannot be performed by forces of Contractor or those of any Subcontractors, service or extra Work item may be performed by specialist. Invoices for service or item of extra Work on basis of current market price thereof may be accepted without complete itemization of labor, material, and equipment rental costs when it is impracticable and not in accordance with established practice of special service industry to provide complete itemization. In those instances wherein Contractor is required to perform extra Work necessitating a fabrication or machining process in a fabrication or machine shop facility

away from Site, charges for that portion of extra Work performed in such facility may, by agreement, be accepted as a specialist billing. District must be notified in advance of all off-Site Work. In lieu of overhead and profit provided in paragraph 1.4B of this Section 01250, 15 percent will be added to specialist invoice price, after deduction of any cash or trade discount offered or available, whether or not such discount may have been taken.

#### **1.6 FORCE-ACCOUNT WORK**

- A. If it is impracticable because of nature of Work, or for any other reason, to fix an increase or decrease in price definitely in advance, the Contractor may be directed to proceed at a not-to-exceed (NTE) maximum price which shall not under any circumstances be exceeded. Subject to such limitation, such extra Work shall be paid for at actual necessary cost for Force-Account Work or at the negotiated cost, as determined by District. The cost for Force-Account Work shall be determined pursuant to paragraphs 1.4 and 1.5 of this Section 01250.
- B. Force-Account Work shall be used when it is not possible or practical to price out the changed Work prior to the start of that Work. In these cases, Force-Account Work will be utilized during the pricing and negotiation phase of the change. Once negotiations have been concluded and a bilateral agreement has been reached, the tracking of the Work under Force-Account is no longer necessary. Force-Account Work shall also be used when negotiations between District and Contractor have reached impasse and a bilateral agreement on the value of the changed Work cannot be reached. District may approve other uses of Force-Account Work.
- C. Whenever any Force-Account Work is in progress, and there is not a definite price which has been agreed on in advance, Contractor shall report to District each Business Day in writing in detail amount and cost of labor and material used, and any other expense incurred in Force-Account Work on preceding Day, by using the Cost Proposal form attached hereto. No claim for compensation for Force-Account Work will be allowed unless report shall have been made.
- D. Whenever Force-Account Work is in progress, definite price for which has not been agreed on in advance, Contractor shall report to District when 75 percent of the NTE amount has been expended.
- E. Force-Account Work shall be paid as extra Work under this Section 01250. Methods of determining payment for Work and materials provided in this paragraph 1.6 shall not apply to performance of Work or furnishings of material that, in judgment of District, may properly be classified under items for which prices are otherwise established in Contract Documents.

#### **1.7 DISTRICT-FURNISHED MATERIALS**

- A. District reserves right to furnish materials as it deems advisable, and Contractor shall have no claims for costs and overhead and profit on such materials.

#### **1.8 OVERHEAD DEFINED**

- A. The following constitutes charges that are deemed included in overhead for all Contract Modifications, including Force-Account Work or CCD Work, whether incurred by Contractor, Subcontractors, or suppliers, and Contractor shall not invoice or receive payment for these costs separately:
  - 1. Drawings: field drawings, Shop Drawings, etc., including submissions of drawings
  - 2. Routine field inspection of Work proposed
  - 3. General Superintendence
  - 4. General administration and preparation of cost proposals, schedule analysis, change orders and other supporting documentation as necessary
  - 5. Computer services
  - 6. Reproduction services
  - 7. Salaries of project Architect/Engineer, superintendent, timekeeper, storekeeper and secretaries
  - 8. Janitorial services
  - 9. Temporary on-Site facilities:
    - a. Offices
    - b. Telephones
    - c. Plumbing
    - d. Electrical: Power, lighting
    - e. Platforms
    - f. Fencing, etc.
    - g. water
  - 10. Home office expenses
  - 11. Insurance and Bond premiums

12. Procurement and use of vehicles and fuel used coincidentally in Work otherwise included in the Contract Documents
13. Surveying
14. Estimating
15. Protection of Work
16. Handling and disposal fees
17. Final cleanup
18. Other incidental Work

#### **1.9 RECORDS AND CERTIFICATION**

- A. Force-Account (cost reimbursement) charges shall be recorded daily and summarized in a Cost Proposal form attached hereto. Contractor or authorized representative shall complete and sign a form each day. Contractor shall also provide with the form: the names and classifications of workers and hours worked by each; an itemization of all materials used; a list by size type and identification number of equipment and hours operated; and an indication of all Work performed by specialists.
- B. No payment for Force-Account Work shall be made until Contractor submits original invoices substantiating materials and specialists charges.
- C. District shall have the right to audit all records in possession of Contractor relating to activities covered by Contractor's claims for modification of Contract, including Force-Account Work and CCD Work.
- D. Further, District will have right to audit, inspect, or copy all records maintained in connection with this Contract, including financial records, in possession of Contractor relating to any transaction or activity occurring or arising out of, or by virtue of, the Contract. If Contractor is a joint venture, this right of District shall apply collaterally to same extent to records of joint venture sponsor, and of each individual joint venture member. This right shall be specifically enforceable, and any failure of Contractor to voluntarily comply shall be deemed an irrevocable waiver and release of all claims then pending that were or could have been subject to Article 12 of Document 00700.

#### **PART 2 PRODUCTS – NOT USED**

#### **PART 3 EXECUTION – NOT USED**

END OF SECTION

## DIVISION 1 GENERAL REQUIREMENTS

## SECTION 01315

**PROJECT MEETINGS****PART 1 GENERAL****1.1 SUMMARY**

- A. Section Includes descriptions of the required Project meetings for the Work. These meetings include:
1. Preconstruction Conference.
  2. Schedule Review Meetings
  3. Weekly Progress Meetings.
  4. Progress Schedule and Billing Meetings.
  5. Special Meetings.
  6. Safety Meetings.

**1.2 PRECONSTRUCTION CONFERENCE**

- A. District or its representative will call for and administer the Preconstruction Conference at a time and place to be announced (usually the week prior to start of Work at the Site).
- B. Contractor, all major Subcontractors, and major suppliers shall attend the Preconstruction Conference.
- C. Agenda will include, but not be limited to, the following items.
1. Schedules
  2. Personnel and vehicle permit procedures
  3. Use of premises
  4. Location of the Contractor's on-Site facilities
  5. Security
  6. Housekeeping
  7. Submittal and RFI procedures
  8. Inspection and testing procedures, on-Site and off-Site
  9. Utility shutdown procedures
  10. Control and reference point survey procedures
  11. Injury and Illness Prevention Program
  12. Contractor's Initial Schedule
  13. Contractor's Schedule of Values
  14. Contractor's Schedule of Submittals
  15. Project Directory
  16. Contractor's Emergency Contact List
  17. Distribution of Plans and Specifications to Contractor's work area and supervisors
- D. District will distribute copies of minutes to the attendees. Attendees shall have seven (7) Days to submit comments or additions to minutes. Minutes will constitute final memorialization of results of the Preconstruction Conference.

**1.3 SCHEDULE REVIEW MEETINGS**

- A. Contractor shall meet with District prior to the Start Date of the Work under Contract Documents and conduct an initial review of Contractor's draft Shop Drawing and Sample Submittal Schedule, draft Schedule of Values, and Initial Schedule.
- B. An authorized representative in Contractor's organization, designated in writing, who will be responsible for working and coordinating with District relative to preparation and maintenance of Progress Schedule shall attend the initial schedule review meeting.
- C. Contractor shall, within sixty (60) Days from the Notice to Proceed date, meet with District to review the Progress Schedule and construction schedule submittals.
1. Contractor shall have its manager, superintendent, scheduler, and key Subcontractor representatives, as required by District, in attendance. The meeting will take place over a continuous one-Day period.

2. District's review will be limited to submittal's conformance to Contract Documents requirements including, but not limited to, coordination requirements. District's review may also include:
  - a. Clarifications of Contract Requirements.
  - b. Directions to include activities and information missing from submittal.
  - c. Requests to Contractor to clarify its schedule.
3. Within five (5) Days of the Schedule Review Meeting, Contractor shall respond in writing to all questions and comments expressed by District at the meeting.
- D. District will administer Schedule Review Meetings and shall distribute minutes of Schedule Review Meetings to attendees. Attendees shall have five (5) Days to submit comments or additions to minutes. Minutes will constitute final memorialization of results of Schedule Review Meetings.

#### **1.4 WEEKLY PROGRESS MEETINGS**

- A. District will schedule and administer weekly progress meetings throughout duration of Work. Progress meetings will be held weekly unless otherwise directed by District.
  1. Meetings shall be held on-Site unless otherwise directed by District.
  2. District or its representative will prepare an agenda and distribute it in advance of the meeting.
  3. District or its representative will record meeting notes of the Weekly Progress Meeting. Within three (3) Days after the meeting, District or its representative will distribute minutes to Contractor though e-mail, who will distribute them to those affected by decisions made at meeting. Attendees can either submit comments or additions to the minutes prior to the next progress meeting, or may attend the next progress meeting and submit comments or additions there. Minutes will constitute final memorialization of results of the meeting.
- B. Progress meetings shall be attended by Contractor's job superintendent, major Subcontractors and suppliers, District, and others as are appropriate to the agenda topics for each meeting.
- C. Each agenda will contain the following items, as appropriate:
  1. Review, revise as necessary, and approve the previous meeting minutes
  2. Review of Work progress since the last meeting
  3. Status of Construction Work Schedule, delivery schedules, and adjustments
  4. Submittal, RFI, and Change Order status
  5. Review of the Contractor's safety program activities and results, including a report on all serious injury and/or damage accidents
  6. Other items affecting progress of Work

#### **1.5 PROGRESS SCHEDULE AND BILLING MEETINGS**

- A. A meeting will be held on approximately the 3<sup>rd</sup> Tuesday of each month or as otherwise agreed to with the District (but no more than once every 30 days) to review the schedule update submittal and progress payment application.
  1. At this meeting, at a minimum, the following items will be reviewed:
    - a. Percent complete of each activity;
    - b. Time impact evaluations for Change Orders and Time Extension Request;
    - c. Actual and anticipated activity sequence changes;
    - d. Actual and anticipated duration changes; and
    - e. Actual and anticipated Contractor delays.
  2. These meetings are considered a critical component of overall monthly schedule update submittal and Contractor shall have appropriate personnel attend. At a minimum, Contractor's General Superintendent and Scheduler shall attend these meetings.
  3. Contractor shall set aside sufficient time to review the progress schedule and the monthly pay application.

#### **1.6 SPECIAL MEETINGS**

- A. Any party may call special meetings by notifying all desired participants and District five (5) Days in advance, giving reason for meeting. Special meetings may be held without advance notice in emergency situations.
- B. At any time during the progress of Work, District shall have authority to require Contractor to attend meeting of any or all of the Subcontractors engaged in Work or in other work, and notice of such meeting shall be duly observed and complied with by Contractor.
- C. Contractor shall schedule and conduct coordination meetings as necessary to discharge coordination responsibilities in Document 00700 (General Conditions). Contractor shall give District five (5) Days written notice of coordination meetings. Contractor shall maintain minutes of coordination meetings. Attendees shall



have seven (7) Days to submit comments or additions to minutes. Minutes will constitute final memorialization of results of coordination meetings.

**1.7 SAFETY MEETINGS**

- A. Conduct monthly Contractor Safety Committee meetings.
- B. Conduct weekly toolbox safety talks.

**PART 2 PRODUCTS – NOT USED**

**PART 3 EXECUTION – NOT USED**

END OF SECTION

## DIVISION 1 GENERAL REQUIREMENTS

## SECTION 01320

## PROGRESS SCHEDULES AND REPORTS

## PART 1 GENERAL

## 1.1 SUMMARY

- A. Perform scheduling of Work under this Contract in accordance with requirements of this Section 01320.
  - 1. Development of schedule, cost, and resource loading of the Progress Schedule, monthly payment requests, and project status reporting requirements of the Contract Documents shall employ scheduling as required in this Section 01320.
  - 2. The Schedule shall be cost-loaded based on Schedule of Values as approved by District.
  - 3. Submit schedules and reports as specified in 00700 (General Conditions).
- B. Upon Award of Contract, immediately commence development of Initial Schedule to ensure compliance with schedule submittal requirements.
- C. Contractor's obligations under this Section 01320 are hereby deemed material obligations justifying District's remedies for default if Contractor fails to perform. Nothing in this paragraph 1.1.C of this Section 01320 or the lack of an express statement that any other Contract Documents provision is or is not material shall be considered in determining whether any such other provision is material.
- D. Employ competent scheduling personnel or a schedule consultant with experience performing scheduling required herein on two prior, similar projects.

## 1.2 GENERAL

- A. Progress Schedule shall be based on and incorporate the milestone and completion dates specified in Contract Documents.
- B. Overall time of completion and time of completion for each milestone shown on Progress Schedule shall adhere to times in Document 00520 (Agreement), unless an earlier (advanced) time of completion is requested by Contractor and agreed to by District. A Change Order shall formalize any such agreement.
  - 1. District is not required to accept an earlier (advanced) schedule, i.e., one that shows early completion date(s) for the Contract Time.
  - 2. Contractor is not entitled to extra compensation in the event an agreement is reached on an earlier (advanced) schedule and Contractor completes its Work, for whatever reason, beyond the completion date shown in earlier (advanced) schedule but within the Contract Time.
  - 3. A schedule showing the Work completed in less than the Contract Time, which has been accepted by District, shall be considered to have Project Float. The Project Float is the time between the scheduled completion of the Work and Contract Substantial Completion. Project Float is a resource available to both District and Contractor.
  - 4. Float Ownership: Neither District nor Contractor owns float. The Project owns the float. As such, liability for delay of any Substantial Completion or Final Completion date rests with the party whose actions, last in time, actually cause delay to a Substantial Completion or Final Completion date.
    - a. For example, in the event of unexcused delay by Party A and Party B, and if Party A uses some, but not all of the float and Party B later uses remainder of the float as well as additional time beyond the float, Party B shall be liable for the time that represents a delay to the Substantial Completion date.
    - b. Under this scenario, Party A would not be responsible for the time since it did not consume all of the float and additional float remained; therefore, the Substantial Completion Date was unaffected.
- C. Progress Schedule shall be the basis for evaluating job progress, payment requests, and time extension requests. Responsibility for developing the Contract schedule and monitoring actual progress as compared to Progress Schedule rests with Contractor.
- D. Failure of Progress Schedule to include any element of the Work or any inaccuracy in Progress Schedule will not relieve Contractor from responsibility for accomplishing the Work in accordance with the Contract. District's acceptance of the Schedule shall be for its use in monitoring and evaluating job progress, payment requests, and time extension requests, and shall not, in any manner, impose a duty of care upon District, or act to relieve Contractor of its responsibility for the means and methods of construction.
- E. Transmit each item under form approved by District or following Section 01330.

1. Identify Project with the District Contract number, and name of Contractor.
2. Provide space for Contractor's approval stamp and District's review stamps.
3. Submittals received from sources other than Contractor will be returned to Contractor without District's review.

### **1.3 INITIAL AND ORIGINAL PROGRESS SCHEDULE**

- A. Initial Schedule submitted for review at the Preconstruction Conference shall serve as Contractor's schedule for up to 30 Days after the Notice to Proceed.
- B. Initial Schedule must indicate a detailed plan for the Work to be completed in first 30 Days of the Contract, including details of planned mobilization of plant and equipment; sequence of early operations; and procurement of materials and equipment. Initial Schedule shall show Work beyond 30 Days in summary form.
- C. Contractor shall submit its Original Schedule for review no later than first progress payment. Original Schedule and all updates shall comply with all standards herein.
- D. All Schedules shall be time-scaled.
- E. All Schedules shall be cost- and resource-loaded. Accepted cost- and resource-loaded Schedule will be used as basis for monthly progress payments. Use of Initial Schedule for progress payments shall not exceed 30 Days.
- F. Except as otherwise expressly provided in this Section 01320, Contractor shall meet with District to review and discuss the each Schedule (i.e., Initial, Original and monthly updates) within seven Days after each Schedule has been submitted to District.
  1. District's review and comment on any Schedule shall be limited to Contract conformance (with sequencing, coordination, and milestone requirements).
  2. Contractor shall make corrections to Schedule necessary to comply with Contract requirements, adjust Schedule to incorporate any missing information requested by District, and resubmit Initial Schedule if requested by District.
- G. If Contractor is of the opinion that any of the Work included on its Schedule has been impacted, Contractor shall submit to District a written Time Impact Evaluation (TIE) in accordance with paragraph 1.8 of this Section 01320. The TIE shall be based on the most current update of the Initial Schedule.

### **1.4 SCHEDULE FORMAT AND LEVEL OF DETAIL**

- A. Each Schedule (Initial, Original and updates) shall indicate all separate fabrication, procurement and field construction activities required for completion of the Work, including but not limited to the following:
  1. All Contractor, Subcontractor, and assigned Contractor work shall be shown in a logical work sequence that demonstrates a coordinated plan of work for all contractors. The intent is to provide a common basis of acceptance, understanding, and communication, as well as interface with other contractors.
  2. Activities related to the delivery of Contractor and District-furnished equipment to be Contractor-installed per Contract shall be shown.
  3. All activities shall be identified through codes or other identification to indicate the building (i.e. buildings, Site work) and Contractor/Subcontractor responsibility to which they pertain.
  4. Break up the Work schedule into activities of durations of approximately 21 Days or less each, except for non-field construction activities or as otherwise deemed acceptable by District.
  5. Show the critical path in red. For each activity, show early start, late start, early finish, late finish, durations measured in Days, float, resources, predecessor and successor activities, planned workday/week for the activity, man power loading, and scheduled/actual progress payments.
- B. Seasonal weather conditions (which do not constitute a delay as defined herein) shall be considered in the planning and scheduling of all work influenced by high or low ambient temperatures or presence of high moisture for the completion of the Work within the allotted Contract Time.
- C. Failure by Contractor to include any element of Work required for performance of the Work on the detailed construction schedule shall not excuse Contractor from completing all Work required within the Contract Time.
- D. A two-week "look ahead," detailed daily bar chart schedule shall be updated and issued weekly.
- E. Utilize computer-scheduling software, such as Microsoft Project software or approved equivalent, for all scheduling including schedule updates.

### **1.5 MONTHLY SCHEDULE UPDATE SUBMITTALS**

- A. Following acceptance of Contractor's Initial Schedule, Contractor shall monitor progress of Work and adjust Schedule each month to reflect actual progress and any anticipated changes to planned activities.
  1. Each Schedule update submitted shall be complete, including all information requested for the Initial Schedule and Original Schedule submittal.

2. Each update shall continue to show all Work activities, including those already completed. These completed activities shall accurately reflect "as built" information by indicating when activities were actually started and completed, and Contractor warrants the accuracy of as-built information as shown.
- B. A meeting will be held on approximately the 25<sup>th</sup> of each month to review the Schedule update submittal and progress payment application.
  1. At this meeting, at a minimum, the following items will be reviewed: Percent complete of each activity; TIEs for Change Orders and Time Extension Request; actual and anticipated activity sequence changes; actual and anticipated duration changes; and actual and anticipated Contractor delays.
  2. These meetings are considered a critical component of overall monthly schedule update submittal; have appropriate personnel attend. At a minimum, Contractor's General Superintendent and Scheduler shall attend these meetings.
- C. Within five Days after monthly Schedule update meeting, Contractor shall submit the updated Schedule.
- D. Within five Days of receipt of above-noted revised submittals, District will either accept or reject monthly schedule update submittal.
  1. If accepted, percent complete shown in the monthly update will be the basis for Contractor's Application for Payment. The schedule update shall be submitted as part of Contractor's Application for Payment.
  2. If rejected, the update shall be corrected and resubmitted by Contractor before the Application for Payment is submitted.
- E. Neither updating, changing nor revising of any report, curve, schedule or narrative submitted to District by Contractor under this Contract, nor District's review or acceptance of any such report, curve, schedule or narrative shall have the effect of amending or modifying, in any way, the Contract Substantial Completion date or milestone dates or of modifying or limiting, in any way, Contractor's obligations under this Contract.

#### 1.6 SCHEDULE REVISIONS

- A. Updating the Schedule (Initial and Original) to reflect actual progress shall not be considered revisions to the Schedule. Since scheduling is a dynamic process, however, revisions to activity durations and sequences are expected on a monthly basis.
- B. To reflect revisions to the Schedule, Contractor shall provide District with a written narrative with a full description and reasons for each Work activity revised. For revisions affecting the sequence of Work, Contractor shall provide a schedule diagram that compares the original sequence to the revised sequence of Work. Contractor shall clearly show and discuss any changes in the critical path, and provide the written narrative and schedule diagram for revisions three Days in advance of the monthly schedule update meeting.
- C. Schedule revisions shall not be incorporated into any schedule update until District has reviewed the revisions. District may request further information and justification for schedule revisions and, within three Days, provide District with a complete written narrative response to District's request.
- D. If District does not accept Contractor's revision, and Contractor disagrees with District's position, Contractor has seven Days from receipt of District's letter rejecting the revision, to provide a written narrative providing full justification and explanation for the revision. Contractor's failure to respond in writing within seven Days of District's written rejection of a schedule revision shall be contractually interpreted as acceptance of District's position, and Contractor waives its rights to subsequently dispute or file a claim regarding District's position. If Contractor files a timely response as provided in this paragraph, and the parties are still unable to agree, Contractor's sole right shall be to file a claim as provided in Document 00700 (General Conditions), Article 12.
- E. At District's discretion, Contractor can be required to provide Subcontractor certifications of performance regarding proposed schedule revisions affecting said Subcontractors.

#### 1.7 RECOVERY SCHEDULE

- A. If a Schedule update shows a substantial completion date 21 Days beyond any Contract Substantial Completion date, or individual Milestone completion dates, Contractor shall submit to District within seven Days the proposed revisions to recover the lost time. As part of this submittal, Contractor shall provide a written narrative for each revision made to recapture the lost time. If the revisions include sequence changes, Contractor shall provide a schedule diagram comparing the original sequence to the revised sequence of Work. If District requests, Contractor shall: show the intended critical path; secure appropriate Subcontractor and supplier consent to the recovery Schedule; submit a narrative explaining trade flow and construction flow changes, duration changes, added/deleted activities, critical path changes and identify all near critical paths and man hour loading assumptions for major Subcontractors.
- B. The revisions shall not be incorporated into any Schedule update until District has reviewed the revisions.

- C. If District does not accept Contractor's revisions, District and Contractor shall follow the procedures in paragraphs 1.6C, 1.6D, and 1.6E of this Section 01320.
- D. At District's discretion, Contractor can be required to provide Subcontractor certifications for revisions affecting said Subcontractors.

#### **1.8 TIME IMPACT EVALUATION FOR CHANGE ORDERS AND OTHER DELAYS**

- A. When Contractor is directed to proceed with changed work, Contractor shall prepare and submit, within 14 Days from the direction to proceed, a TIE that includes both a written narrative and a schedule diagram depicting how the changed work affects other schedule activities. The schedule diagram shall show how Contractor proposes to incorporate the changed work in the schedule, and how it impacts the current Schedule update critical path or otherwise. Contractor is also responsible for requesting time extensions based on the TIE's impact on the critical path. The diagram shall be tied to the main sequence of scheduled activities to enable District to evaluate the impact of changed work to the scheduled critical path.
- B. Comply with the requirements of paragraph 1.8A of this Section 01320 for all types of delays such as, but not limited to, Contractor/Subcontractor delays, adverse weather delays, strikes, procurement delays, fabrication delays, etc.
- C. Contractor is responsible for all costs associated with the preparation of TIEs, and the process of incorporating TIEs into the current schedule update. Provide District with four copies of each TIE.
- D. Once agreement has been reached on a TIE, the Contract Time will be adjusted accordingly. If agreement is not reached on a TIE, the Contract Time may be extended in an amount District allows, and Contractor may submit a claim for additional time claimed by Contractor as provided in Document 00700 (General Conditions).

#### **1.9 TIME EXTENSIONS**

- A. Contractor is responsible for requesting time extensions for time impacts that, in the opinion of Contractor, impact the critical path of the current schedule update. Notice of time impacts shall be given in accordance with Document 00700 (General Conditions).
- B. Where an event for which District is responsible impacts the projected Substantial Completion date, Contractor shall provide a written mitigation plan, including a schedule diagram, which explains how (e.g., increase crew size, overtime, etc.) the impact can be mitigated. Contractor shall also include a detailed cost breakdown of the labor, equipment, and material Contractor would expend to mitigate District-caused time impact. Contractor shall submit the mitigation plan to District within 14 Days from the date of discovery of said impact. Contractor is responsible for the cost to prepare the mitigation plan.
- C. Failure to request time, provide TIE, or provide the required mitigation plan will result in Contractor waiving its right to a time extension and cost to mitigate the delay.
- D. No time will be granted under the Contract Documents for cumulative effect of changes.
- E. District will not be obligated to consider any time extension request unless requirements of Contract Documents are complied with.
- F. Failure of Contractor to perform in accordance with the current schedule update shall not be excused by submittal of time extension requests.
- G. Notwithstanding any other provision of this Section 01320, if Contractor does not submit a TIE within the required 14 Days for any issue, Contractor hereby agrees that Contractor does not require a time extension for that issue.

#### **1.10 PROJECT STATUS REPORTING**

- A. In addition to submittal requirements for scheduling identified in this Section 01320, Contractor shall provide a monthly project status report (i.e., written narrative report) to be submitted in conjunction with each Schedule as specified herein. Status reporting shall be in form specified in this paragraph 1.10 below.
- B. Contractor shall prepare monthly written narrative reports of status of Project for submission to District. Written status reports shall include:
  - 1. Status of major Project components (percent complete, amount of time ahead or behind schedule) and an explanation of how Project will be brought back on schedule if delays have occurred.
  - 2. Progress made on critical activities indicated on each Schedule, including inspections.
  - 3. Explanations for any lack of work on critical path activities planned to be performed during last month.
  - 4. Explanations for any schedule changes, including changes to logic or to activity durations.
  - 5. List of critical activities scheduled to be performed during the next month.
  - 6. Status of major material and equipment procurement.
  - 7. Any delays encountered during reporting period.

8. Printed report indicating actual versus planned resource loading for each trade and each activity. This report shall be provided on weekly and monthly basis.
  - a. Actual resource shall be accumulated in field by Contractor, and shall be as noted on Contractor's daily reports. These reports will be basis for information provided in monthly and weekly printed reports.
  - b. Contractor shall explain all variances and mitigation measures.
9. Contractor may include any other information pertinent to status of Project. Include additional status information requested by District at no additional cost.
10. Status reports, and the information contained therein, shall not be construed as claims, notice of claims, notice of delay, or requests for changes or compensation.
- C. At the close of each workday, Contractor shall provide District with a report of Contractor and its Subcontractors' work activities for that day, including trades, equipment, work activities worked on, staff levels, and equipment deliveries.

**PART 2 PRODUCTS – NOT USED**

**PART 3 EXECUTION – NOT USED**

END OF SECTION

## DIVISION 1 GENERAL REQUIREMENTS

## SECTION 01330

**SUBMITTAL PROCEDURES****PART 1 GENERAL****1.1 SUMMARY**

- A. Section Includes:
1. Description of general requirements for Submittals for the Work:
    - a. Procedures
    - b. Schedule of Shop Drawing and Sample Submittals
    - c. Safety Program
    - d. Progress Schedule
    - e. Product Data
    - f. Shop Drawings
    - g. Samples
    - h. Quality Assurance Control Submittals
      - 1) Design Data
      - 2) Test Reports
      - 3) Certificates
      - 4) Manufacturers' Instructions
      - 5) Material Safety Data Sheets
    - i. Installation, Operations, and Maintenance Manuals
    - j. Computer Programs
    - k. Project Record Documents
  2. Delay of Submittals
  3. Optional Review Meeting

**1.2 PROCEDURES**

- A. Contractor shall submit at Contractor's expense, in duplicate sets, the following items ("Submittals") required by the Contract Documents:
1. Overall project schedule
  2. Schedule of Shop Drawing and Sample Submittals
  3. Safety Plans
  4. Progress Schedule
  5. Product Data; Shop Drawings
    - a. All materials to be used on the project including AB, AC, sand, gravel, trench backfill, concrete mix and rebar, etc.
    - b. All pipe materials and appurtenances including ductile iron pipe and PVC pipe, hydrant assemblies, BOV's, ARV's, PRV's, sampling stations, etc.
    - c. All pumps, flow meters, valves and restrained joints.
    - d. Tank improvements such as ladders and railings.
    - e. Fencing
    - f. Electrical and SCADA equipment.
    - g. Filter train liner materials
    - h. Prior to beginning construction, Contractor shall submit the manufacturer's instructions for the installation of all facilities for use by inspectors.
  6. Samples
  7. Coordination Drawings
  8. Quality Assurance Control Data
  9. Flexible Membrane Liner Construction Quality Control Plan
  10. Machine Inventory Sheets
  11. Installation, Operation, and Maintenance Manuals
  12. Computer Programs

13. Project Record Documents

- B. Contractor shall submit these Submittals to District for review and approval in accordance with accepted Schedule of Shop Drawings and Samples Submittals. If no such schedule is agreed upon, then all Shop Drawing, Samples, and product data Submittals shall be submitted within 21 Days after receipt of Notice of Award from District.
- C. Contractor shall transmit each item with the appropriate Submittal transmittal form (attached to this Section 01330 as Exhibits A and B). Identify Project, Contractor, Subcontractor, major supplier, pertinent Drawing sheet and detail number, and Specification Section number as appropriate. Where manufacturer's standard drawings or data sheets are used, they shall be marked clearly to show those portions of the data that are applicable to this Project. Inapplicable portions shall be marked out. Submittals shall be submitted based on each Specification Section. Submittals containing information about more than one Specification Section will be returned for resubmittal. Submittals shall include all information requested by each Specification Section. (No partial Submittals.) Incomplete Submittals will be returned not reviewed by District.
- D. The data shown on the Submittals shall be complete with respect to quantities, dimensions, specified performance and design criteria, materials and similar data to show District the materials and equipment Contractor proposes to provide and to enable District to review the information for the limited purposes specified in this Section 01330. Submittals shall be identified clearly as to material, supplier, pertinent data such as catalog numbers and the use for which it is intended and otherwise as District may require to enable District to review the Submittal. The quantity of each Submittal to be submitted will be as required by individual Specification Sections or this Section 01330.
- E. At the time of each submission, Contractor shall give District specific written notice of all variations, if any, that the submitted Submittal may have from the requirements of the Contract Documents, and the reasons therefore. This written notice shall be in a written communication attached to the Submittal transmittal form. In addition, Contractor shall cause a specific notation to be made on each Submittal submitted to District for review and approval of each such variation. If District accepts the deviation, District will note its acceptance on the returned Submittal transmittal form and, if necessary, issue an appropriate Contract Modification.
- F. Submittal coordination and verification is Contractor's responsibility; this responsibility shall not be delegated in whole or in part to Subcontractors or suppliers. Before submitting each Submittal, Contractor shall review and coordinate each Submittal with the other Submittals and with the requirements of the Work and the Contract Documents, and determine and verify:
  - 1. All field measurements, quantities, dimensions, specified performance criteria, installation requirements, materials, catalog numbers and similar information with respect thereto;
  - 2. All materials with respect to the intended use, fabrication, shipping, handling, storage, assembly and installation pertaining to the performance of the Work; and
  - 3. All information relative to Contractor's sole responsibilities and of means, methods, techniques, sequences and procedures of construction and safety precautions and programs incident thereto.
- G. Contractor's submission to District of a Submittal shall constitute Contractor's representation that it has satisfied its obligations under the Contract Documents, and as set forth immediately above in this paragraph 1.2 of Section 01330, with respect to Contractor's review and approval of that Submittal.
- H. Designation of work "by others," if shown in Submittals, shall mean that work will be responsibility of Contractor rather than Subcontractor or supplier who has prepared Submittals.
- I. After review by District of each of Contractor's Submittals, one set of material will be returned to Contractor with actions defined as follows:
  - 1. NO EXCEPTIONS TAKEN - Accepted subject to its compatibility with future Submittals and additional partial Submittals for portions of the Work not covered in this Submittal. Does not constitute approval or deletion of specified or required items not shown on the Submittal.
  - 2. MAKE CORRECTIONS NOTED (NO RESUBMISSIONS REQUIRED) - Same as item 1 above, except that minor corrections as noted shall be made by Contractor.
  - 3. REVISE AS NOTED AND RESUBMIT - Rejected because of major inconsistencies or errors that shall be resolved or corrected by Contractor prior to subsequent review by District.
  - 4. REJECTED - RESUBMIT - Submitted material does not conform to Drawings and/or Specifications in major respect, i.e.: wrong size, model, capacity, or material.
- J. Contractor shall make a complete and acceptable Submittal at least by second submission. District reserves the right to deduct monies from payments due Contractor to cover additional costs of review beyond the second submission. Illegible Submittals will be rejected and returned to Contractor for resubmission. Contractor shall be in breach of the Contract if Contractor's first resubmittal, following a Submittal which District determines falls within categories 3 or 4 above, does not fall within categories 1 or 2 above.



- K. Favorable review will not constitute acceptance by District of any responsibility for the accuracy, coordination and completeness of the Submittals. Accuracy, coordination, and completeness of Submittals shall be the sole responsibility of Contractor, including responsibility to back-check comments, corrections, and modifications from District's review before fabrication. Contractor, Subcontractors, or suppliers may prepare Submittals, but Contractor shall ascertain that Submittals meet all requirements of Contract Documents, while conforming to structural space and access conditions at point of installation. District's review will be only to assess if the items covered by the Submittals will, after installation or incorporation in the Work, conform to the information given in the Contract Documents and be compatible with the design concept of the completed Project as indicated by the Contract Documents. Favorable review of Submittal, method of work, or information regarding materials and equipment Contractor proposes to furnish shall not relieve Contractor of responsibility for errors therein and shall not be regarded as assumption of risks or liability by District, or any officer or employee thereof, and Contractor shall have no claim under Contract Documents on account of failure or partial failure or inefficiency or insufficiency of any plan or method of work or material and equipment so accepted. Favorable review shall be considered to mean merely that District has no objection to Contractor using, upon Contractor's own full responsibility, plan or method of work proposed, or furnishing materials and equipment proposed.
- L. District's review will not extend to the means, methods, techniques, sequences or procedures of construction or to safety precautions or programs incident thereto. The review and approval of a separate item as such will not indicate approval of the assembly in which the item functions.
- M. Contractor shall submit complete initial Submittal for those items where required by individual Specification Sections. The complete Submittal shall contain sufficient data to demonstrate that items comply with Specifications, shall meet minimum requirements for submissions cited in Specification Sections, shall include motor data and seismic anchorage certifications, where required, and shall include necessary revisions required for equipment other than the first named. If Contractor submits incomplete initial Submittal when complete Submittal is required, the Submittal may be returned to Contractor without review.
- N. Contractor shall copy, conform, and distribute reviewed Submittals in sufficient numbers for Contractor's files, Subcontractors, and vendors.
- O. After District's review of a Submittal, Contractor shall revise as noted and resubmit as required. Contractor shall identify changes made since the previous Submittal, and:
  - 1. Begin no fabrication or work that requires Submittals until the return of Submittals not requiring resubmittal. Contractor shall not extrapolate from Submittals covering similar work.
  - 2. Normally, Submittals will be processed and returned to Contractor within 21 Days of receipt.
- P. Contractor shall distribute copies of reviewed Submittals to concerned persons. Instruct recipients to promptly report any inability to comply with provisions.
- Q. All Submittals shall be number-identified by Contractor, prior to submission to District, in accordance with the following:
  - 1. Sequentially number each Submittal (i.e., "1", "2", "3", etc.) as the basis for number identification of Submittals.
  - 2. Affix the Submittal number under which each Submittal is made on every copy of each Shop Drawing, product data, sample, certification, etc.
  - 3. Number Installation, Operation, and Maintenance Manuals with original root number of the approved Submittal for the item.
  - 4. If the Submittal is a resubmittal (including without limitation after an initial Submittal is rejected, returned without review or marked 'Revise as Noted and Resubmit'), add the suffix designation "A" (i.e., a resubmittal of Submittal 1 would be numbered 1A). Subsequent resubmittals would be identified by the Submittal number and sequential letters (i.e., "B", "C", "D", etc.).
  - 5. All Submittals shall include all information requested by each Specification Section. No partial Submittals will be accepted unless previously authorized by District. In the event a partial Submittal is authorized, each subsequent different Submittal (as opposed to resubmittal) is given a new number.
- R. Submission Requirements:
  - 1. Deliver Submittals to District at least 30 Days before dates reviewed Submittals will be needed.
  - 2. Initial Submittal of Installation, Operation, and Maintenance Manuals shall be 45 Days after the date Submittals that pertain to the applicable portion of the Installation, Operation, and Maintenance Manual is satisfactorily reviewed.
  - 3. The following table lists the number of initial Submittals required from Contractor for each type of submission, to whom Contractor shall distribute the information, and District's distribution of reviewed submissions. If Contractor needs more copies of reviewed Submittals returned to it, then either submit

additional copies or make copies from the returned transparency Submittal. Submittals requiring resubmission will require the same quantity and distribution as an initial Submittal.

Submittal	Contractor Initial Submittal		District Submittal Review Return	
	# of Original Transparencies	# of Copies/ Prints/ Samples	# of Original Transparencies	# of Copies/ Prints/ Samples
	District	District	Contractor	Contractor
Shop Drawings	5		1	
Product Data	5		1	
Samples	1		0	
Materials Safety Data Sheets	1		0	
Installation, Operation, and Maintenance Manuals	5		1	
Other Documents	5		1	

Accompany Submittals with Submittal transmittal form, in duplicate, containing:

- a. Date, revision date, and Submittal log number.
  - b. Project name and District's Contract number.
  - c. Contractor's name, address, and job number.
  - d. Specification Section number clearly identified.
  - e. The quantity of Shop Drawings, Product Data, or Samples submitted.
  - f. Notification of deviations from Contract Documents.
  - g. Materials Safety Data Sheet (MSDS) for each item complying with OSHA's Hazard Communication Standard 29 CFR 1910.1200.
  - h. Other pertinent data.
4. Submittal shall include:
- a. Date and revision dates.
  - b. Revisions, if any, identified.
  - c. Project Name and Contract number.
  - d. The names of Contractor, Subcontractor, Supplier, Manufacturer, and separate detailer, when pertinent.
  - e. Identification of product material by location within the Project.
  - f. Relation to adjacent structure or materials.
  - g. Field dimensions, clearly identified as such.
  - h. Specification Section number and applicable detail reference number on the Drawings.
  - i. Applicable reference standards, such as ASTM, ANSI, FS, NEMA, SMACNA or ACI.
  - j. A blank space, on each Drawing or data sheet, 5" x 4" for the District's stamp.
  - k. Identification of deviations from Contract Documents.
  - l. Contractor's stamp, initialed or signed, with language certifying the review of Submittals, verification of field measurements, construction criteria and technical standards in compliance with Contract Documents.
- S. Resubmission requirements:
1. Shop Drawings:
    - a. Revise initial Shop Drawings as required and resubmit as specified for initial Submittals.
    - b. Indicate on Shop Drawings any changes that have been made other than those requested by District.
  2. Product Data and Samples:
    - a. Submit new Product Data and Samples as required for initial Submittals.
  3. Installation, Operation, and Maintenance Manuals:
    - a. Revise initial Installation, Operation, and Maintenance Manual(s) as required and resubmit as specified for initial Submittals.
- T. Number of resubmissions:
- One reexamination of Contractor's Submittals that have been returned for correction or replacement will be included in District's budget. Any additional reexamination of Contractor's Submittals will be considered additional scope services to be paid by Contractor through District. Contractor shall pay District (or District

may deduct from any progress or final payment), for engineering personnel, on an hourly basis at 2.5 times direct payroll expenses, and for consultant personnel time at 1.25 times the amount billed District.

### 1.3 SCHEDULE OF SHOP DRAWING AND SAMPLE SUBMITTALS

- A. Contractor shall submit preliminary Schedule of Shop Drawing and Sample Submittals as required by Document 00700 (General Conditions). Contractor shall submit two copies of final and accepted Schedule of Shop Drawings and Sample Submittals as required by paragraph 1.2A.2 of this Section 01330.
- B. Schedule of Shop Drawing and Sample Submittals will be used by District to schedule its activities relating to its review of Submittals. Schedule of Submittals shall indicate a spreading out of Submittals and early Submittals of long-lead-time items and of items that require extensive review.
- C. Schedule of Shop Drawing and Sample Submittals will be reviewed by District and shall be revised and resubmitted until accepted by District.
- D. Unless otherwise specified, Contractor shall make Submittals in groups containing all associated items to assure that information is available for checking each item when it is received. Contractor shall identify on the Submittal which Submittals should be reviewed together.

### 1.4 SAFETY PROGRAM

- A. Submit three copies of Safety Program specific to these Contract Documents to District within the time set forth in Section 01540 (Site Security and Safety), paragraph 1.5.

### 1.5 PROGRESS SCHEDULE

- A. See Section 01320 (Progress Schedules and Reports) for schedule and report requirements. Section 01320 shall control in any conflict with Section 01330.
- B. Submit one reproducible and three print copies of schedule at each of the following times:
  - 1. Initial Progress Schedule at the Preconstruction Conference.
  - 2. Original Schedule within 20 Days of the Notice to Proceed date.
  - 3. Adjustments to the Schedule as required.
  - 4. Schedule updates monthly, seven (7) Days prior to monthly progress meeting.
- C. Submit four (4) copies of the reports listed in Section 01320 (Progress Schedules and Reports) with:
  - 1. Initial Schedule
  - 2. Original Schedule
  - 3. Each monthly Schedule update
- D. Progress Schedules and Reports shall be submitted on 3½-inch, high-density floppy disks, using software described in paragraph 1.4E of Section 01320, in addition to hard copies specified in this paragraph 1.5. Electronic files shall be complete copies, including all programs and electronic coding.

### 1.6 PRODUCT DATA

- A. Within ten (10) Days after Start Date of the Contract Time, Contractor shall submit two (2) copies of complete list of major products proposed for use, with name of manufacturer, telephone number, trade name, and model number of each product. Tabulate product data by Specification Section.
- B. For products specified only by reference standards, Contractor shall give manufacturer, trade name, model or catalog designation, and reference standards.
- C. Product or Catalog Data:
  - 1. Manufacturer's standard drawings shall be modified to delete non-applicable data or include applicable data.
  - 2. For manufacturer's catalog sheets, brochures, diagrams, schedules, charts, illustrations and other standard descriptive data, Contractor shall:
    - a. Mark each copy to identify pertinent materials, products, or models.
    - b. Show dimensions and clearances required, performance characteristics and capacities, wiring diagrams and controls.
    - c. Include applicable MSDS.
- D. Supplemental Data:
  - 1. Contractor shall submit number of copies that Contractor requires, plus two copies that will be retained by District.
  - 2. Contractor shall mark each copy to identify applicable products, models, options, and other data, and supplement manufacturer's standard data to provide information unique to Project.
- E. Contractor shall provide copies for Project Record Documents described in Section 01770 (Contract Closeout).

**1.7 SHOP DRAWINGS**

- A. Minimum Sheet Size: 8½ inches by 11 inches. All others: Multiples of 8½ inches by 11 inches, 34 inches by 44 inches maximum.
- B. Original sheet or reproducible transparency will be marked with District's review comments and returned to Contractor.
- C. Mark each copy to identify applicable products, models, options, and other data; supplement manufacturers' standard data to provide information unique to Work.
- D. Include manufacturers' installation instructions when required by Specification Section.
- E. If Contractor submits Shop Drawings for items that Shop Drawings are not specified, District will not be obliged to review them.
- F. Contractor is responsible for procuring copies of Shop Drawings for its own use as it may require for the progress of the Work.
- G. Shop Drawings shall be drawn to scale and completely dimensioned, giving plan view together with such sectional views as are necessary to clearly show construction detail and methods.

**1.8 SAMPLES**

- A. Contractor shall submit full range of manufacturers' standard colors, textures, and patterns for District's selection.
- B. Contractor shall submit samples to illustrate functional and aesthetic characteristics of product, with integral parts and attachment devices, and coordinate Submittal of different categories for interfacing work.
- C. Contractor shall include identification on each sample, giving full information.
- D. Sizes: Unless otherwise specified, Contractor shall provide the following:
  - 1. Paint Chips: Manufacturers' standard
  - 2. Flat or Sheet Products: Minimum 6 inches square, maximum 12 inches square
  - 3. Linear Products: Minimum 6 inches, maximum 12 inches long
  - 4. Bulk Products: Minimum 1 pint, maximum 1 gallon
- E. Full size samples may be used in Work upon approval by District.
- F. Field Samples and Mock-ups (if applicable):
  - 1. Contractor shall erect field samples and mock-ups at Site in accordance with the requirements of Specification Sections. If testing is conducted, Contractor shall record and certify results and full Contract compliance.
  - 2. Contractor shall modify or make additional field samples and mock-ups as required to provide appearance and finishes approved by District.
  - 3. Approved field samples and mock-ups may be used in Work upon approval by District.
  - 4. Contractor shall construct or prepare as many additional Samples as may be required, as directed by the District, until desired textures, finishes, and/or colors are obtained.
  - 5. Accepted Samples and mock-up shall serve as the standard of quality for the various units of work.
- G. No review of a Sample shall be taken in itself to change or modify the requirements in the Contract Documents.
- H. Finishes, materials, and workmanship in the completed Work shall match accepted Samples.

**1.9 QUALITY ASSURANCE CONTROL SUBMITTALS**

- A. Test Reports:
  - 1. Submit three copies; One copy will be marked with District's review comments and returned to Contractor.
  - 2. Indicate that material or product conforms to or exceeds specified requirements.
  - 3. Reports may be from recent or previous tests on material or product, but shall be acceptable to District. Comply with requirements of each individual Specification Section.
- B. Certificates:
  - 1. Contractor shall submit five copies; one copy will be marked with District's review comments and returned to Contractor.
  - 2. Contractor shall indicate that material or product conforms to or exceeds specified requirements.
  - 3. Contractor shall submit supporting reference data, affidavits, and certifications as appropriate.
  - 4. Certificates may be recent or from previous test results on material or product, but shall be acceptable to District.
- C. Manufacturers' Instructions:

1. Contractor shall submit three copies; one copy will be marked with District's review comments and returned to Contractor.
  2. Contractor shall include manufacturers' printed instructions for delivery, storage, assembly, installation, startup, adjusting, and finishing.
  3. Contractor shall identify conflicts between manufacturers' instructions and Contract Documents.
- D. Material Safety Data Sheets:
1. In addition to Material Safety Data Sheets (MSDS) otherwise required by the Contract Documents, Contractor shall submit five copies for any paints, solvents, thinners, varnish, lacquer, glues and adhesives, mastics, or other materials needed for the Project as required by the individual Specification Sections or as otherwise specified in the Contract Documents.
  2. MSDS required for a Submittal shall be submitted with product data in order for the Submittal to be reviewed.

#### 1.10 INSTALLATION, OPERATIONS, AND MAINTENANCE MANUALS

- A. Sheet Size: 8½ x 11 inch
- B. Drawing Size: Contractor shall reduce drawings or diagrams to an 8½ x 11 inch or 11 x 17 inch size. However, where reduction is not practical to ensure readability, Contractor shall fold larger drawings separately and place in vinyl envelopes bound into the binder. Identify vinyl envelopes with drawing numbers.
- C. Binding: Contractor shall bind in stiff, metal-hinged, three-ring binder(s) with standard three-hole punching.
- D. Multiple Items: Multiple items may be combined into one binder; tab each section with plastic-coated dividers.
- E. Page Protectors: Contractor shall provide plastic sheet lifters prior to first page and following last page.
- F. Binder title: Contractor shall include the following title on front and spine of binder:  

**Grizzly Flats CSD Water System Improvements**
- G. Contents:
  1. Introductory Information shall include:
    - a. Title page providing the same information as paragraph 1.10F above
    - b. Contractor's name, address, and telephone number
    - c. Table of Contents
  2. Contractor shall include, at a minimum, the following detailed information for each item as applicable and as required by individual Specification Sections:
    - a. Equipment function, normal operating characteristics, limiting operations.
    - b. Assembly, disassembly, installation, alignment, adjustment, and checking instructions.
    - c. Operating instructions for startup, routine and normal operation, regulation and control, shutdown, and emergency conditions.
    - d. Lubrication and maintenance instructions including specific type and amount of lubricant and recommended lubrication interval.
    - e. Guide to "troubleshooting."
    - f. Parts list and predicted life of parts subject to wear.
    - g. Outline, cross-section, and assembly drawings; engineering data; and electrical diagrams, including elementary diagrams, labeled wiring diagrams, connection diagrams, word description of wiring diagrams and interconnection diagrams.
    - h. Test data and performance curves.
    - i. A list of recommended spare parts with a price list and a list of spare parts provided under this Contract.
    - j. Copies of parts lists or other documents packed with equipment when delivered.
    - k. Instrumentation or tag numbers relating the equipment back to the Contract Documents.
  3. Index
- H. Final Submittal: Upon favorable review of Installation, Operation, and Maintenance Manual(s) by District, Contractor shall deliver nine additional hard copies and one electronic media format copy of the final approved Installation, Operation, and Maintenance Manual(s). Electronic media format copy shall include all tables, charts, drawings, codes and all other matters reflected in hard copies. Contractor shall complete the Equipment and Tasks lists in digital format for each piece of equipment supplied.
- I. Electronic Media Format: Compatible with Microsoft® Word 2000 for Windows, AutoCAD 2000 Land Development Desktop for Windows in drawing format (.DWG), or Adobe (.PDF) unless directed otherwise by District. All files shall be delivered on a unique CD-ROM.
- J. Draft Submittal: The Draft Submittal of Installation, Operation, and Maintenance Manuals shall be submitted to District prior to equipment startup.

**1.11 COMPUTER PROGRAMS**

- A. When any equipment requires operation by computer programs, Contractor shall submit copy of the programs on appropriate diskettes, plus a hard-copy and an electronic copy (Adobe .PDF format) of all user manuals and guides for operating the programs and making changes in the programs for upgrading and expanding the databases. All such programs shall be Windows 2000 compatible. Provide all required licenses to use the programs to District at no additional cost.

**1.12 PROJECT RECORD DOCUMENTS**

- A. Contractor shall submit one copy of each of the Project Record Documents listed in Section 01770 (Contract Closeout).

**1.13 DELAY OF SUBMITTALS**

- A. Delay of Submittals by Contractor is considered avoidable delay. Liquidated damages incurred because of late Submittals will be assessed to Contractor.

**1.14 OPTIONAL REVIEW MEETING**

- A. At the Contractor's request, in order to facilitate the timeliness of the review process, the District may schedule a meeting to review the materials submitted. If this option is exercised, the following requirements apply:
  1. Contractor shall request a meeting date with the District at least 10 Business Days in advance.
  2. Contractor shall provide the complete package of Submittal information at least 5 Business Days in advance of the meeting.
  3. The meeting shall take place at District's office. District will provide the authorized staff to review and respond to the Submittal information during the meeting.
  4. Contractor shall make available for this meeting the job superintendent and/or foreman, Contractor's safety officer, and someone knowledgeable of all the items submitted and authorized to make substitutions or changes.

**PART 2 PRODUCTS – NOT USED**

**PART 3 EXECUTION – NOT USED**

**END OF SECTION**

TRANSMITTAL SHEETS AND MAINTENANCE SHEET FOLLOW THIS PAGE

**EXHIBIT A****SUBMITTAL No.**

Project Name: Grizzly Flats CSD Water System Improvements			Date Received:	
Grizzly Flats Community Services District 4765 Sciaroni Road Grizzly Flats, CA 95636			Checked By:	
Contractor:		Log Page:		
Address:		Address:		
Attention:		Specification Section Number:		
		1 <sup>st</sup> Submittal <input type="checkbox"/>		Resubmittal <input type="checkbox"/>
Date Transmitted:		Previous Transmittal Date:		
No. Copies	Description	Manufacturer	Dwg. or Data No.	Action Taken*

Remarks:

\* The action designated above is in accordance with the following legend:

A – No Exceptions Taken

B – Make Corrections Noted (No Resubmission Required)

C – Make Corrections Noted and Resubmit

D – Not Approved

1. Not enough information for review

2. No reproducibles submitted

3. Copies illegible

4. Not enough copies submitted

5. Wrong sequence number

6. Wrong resubmittal number

7. Wrong Specification section number

8. Wrong form used

9. See comments

10.

Comments

D – District's review not required

1. Submittal not required

2. Supplemental information. Submittal retained for informational purposed only

3. Information reviewed and approved on prior Submittal

4. See comments

By \_\_\_\_\_ Date \_\_\_\_\_

Distribution: Contractor ☐ File ☐ Field ☐ District ☐ Other ☐

**EXHIBIT B**  
**INSTALLATION, OPERATION, AND MAINTENANCE MANUAL**  
**TRANSMITTAL NO.**

Project Name: Grizzly Flats CSD Water System Improvements			Date Received:	
Grizzly Flats Community Services District 4765 Sciaroni Road Grizzly Flats, CA 95636			Checked By:	
Contractor:		Address:		Log Page:
Address:		Address:		Specification Section Number:
Attention:		Attention:		1 <sup>st</sup> Submittal <input type="checkbox"/> Resubmittal <input type="checkbox"/>
Date Transmitted:		Previous Transmittal Date:		
No. Copies	Description	Manufacturer	Dwg. or Data No.	Action Taken*

Remarks:

---



---

\* The action designated above is in accordance with the following legend:]

A – No exceptions taken

B – Make Corrections Noted (No Resubmission Required)

C. – Make Corrections Noted and Resubmit

D – Not Approved– this manual Submittal is deficient in the following area:

1. Equipment record sheets
2. Functional description
3. Assembly, disassembly, installation, alignment, adjustment, and checkout instructions
4. Operating instructions

D – (continued)

5. Lubrication and maintenance instructions
6. Troubleshooting guide
7. Parts list and ordering instructions
8. Organization (indexing and tabbing)
9. Wiring diagrams and schematics specific to installation
10. Test data and performance curves
11. Tag or equipment identification numbers
12. See comments:

Comments:

---



---



---

Distribution:	Contractor <input type="checkbox"/>	File <input type="checkbox"/>	By <input type="checkbox"/>	District <input type="checkbox"/>	Date <input type="checkbox"/>	Other <input type="checkbox"/>
---------------	-------------------------------------	-------------------------------	-----------------------------	-----------------------------------	-------------------------------	--------------------------------



## DIVISION 1 GENERAL REQUIREMENTS

## SECTION 01340

## SAFETY SUBMITTALS

## PART 1 GENERAL

## 1.1 SCOPE

Contractor shall prepare and submit written safety Plans and Programs as specified herein prior to start of the Work. All written safety Plans and Programs required to be submitted herein must be favorably reviewed by District prior to Contractor starting Work.

## 1.2 DISTRICT'S REVIEW OF SUBMITTALS

Neither District's review of, nor comments on, any of the submittals shall constitute a representation of warranty as to compliance with any legal requirements. District reserves the right to reject all or portions of a submittal as inadequate to protect health, or safety. If conditions change, Contractor shall promptly update the Plans and Programs, as appropriate, and submit the revised Plans and Programs to District at no additional charge to District.

## 1.3 PLANS AND PROGRAMS

A. Contractor shall submit the following site-specific, checked items within the time period established in Document 00510 Notice of Award and, in any event, prior to starting Work:

☒ 1. Health and Safety Plan:

☒ a. For Non-Hazardous Waste Operations:

Describe the health and safety hazards anticipated in performing the work, measures to be taken to reduce those hazards and to protect employees and the public. Include procedures for identifying and reporting unforeseen hazards.

☐ b. For Potential Hazardous Waste Operations:

Describe the health and safety hazards anticipated in performing the work, measures to be taken to reduce those hazards and to protect employees and the public. Include procedures for identifying and reporting unforeseen hazards.

Identify an individual(s), either an employee or subcontractor, who is trained in accordance with CCR Title 8, Section 5192 (Cal/OSHA), Hazardous Waste Operations and Emergency Response (HAZWOPER), and who is qualified to identify potentially hazardous wastes or contaminated soils which might be encountered on the jobsite. Describe methods of identifying these materials and communicating the findings to District. The Plan does not need to comply with CCR Title 8, Section 5192 (Cal/OSHA).

☐ c. For Identified Hazardous Waste Operations:

All aspects of the Health and Safety Plan shall comply with CCR, Title 8, Section 5192 (Cal/OSHA), Hazardous Waste Operations and Emergency Response. The Plan shall be signed by an individual Certified in the Comprehensive Practice of Industrial Hygiene (CIH) by the American Board of Industrial Hygiene and trained in hazardous waste site operations as required by Section 5192. If hazard conditions change, promptly update the Plan and resubmit to District, at no additional charge to District.

Include the following items:

- 1) Training, medical, and respirator approval documentation for all employees who will work at the site.
- 2) The names and addresses of the waste hauler and the landfill for hazardous waste.

- ☐2. Asbestos Abatement Program in accordance with CCR Title 8, Section 1529 (Cal/OSHA):  
Include the following items:
- a. Registration with Cal/OSHA as an Asbestos Abatement Contractor, (required for removing more than 100 square feet of materials containing greater than 0.1 percent asbestos).
  - b. Notifications for asbestos work, including Cal/OSHA, the Bay Area Air Quality Management District, and, where appropriate, EPA Region IX.
  - c. Training, medical, and respirator approval documentation for all employees who will work at the site.
  - d. The identity of the Competent Person, as defined by Cal/OSHA.  
A work plan to prevent asbestos fibers and debris being dispersed from the work area into the building or the environment, including diagrams showing:
    - 1) Staging of the project.
    - 2) Placement and number of negative air machines and exhausts.
    - 3) Staging of waste containers.
  - e. Weekly progress reports as the project progresses.
  - f. At project completion, documentation, including daily reports or logs, air monitoring results, waste manifests, and other similar pertinent information.
  - g. Material Safety Data Sheets for hazardous materials brought onto the site.
  - h. Procedures for identifying and reporting unforeseen hazards.
  - i. The names and addresses of the waste hauler and the landfill for asbestos waste.
- ☐3. Lead Compliance Program in accordance with CCR Title 8, Section 1532.1 (Cal/OSHA):  
Include the following checked items:
- a. Training, medical, and respirator approval documentation for all employees who will work at the site.
  - b. The identity of the Competent Person, as defined by Cal/OSHA.
  - c. Material Safety Data Sheets for hazardous materials brought onto the site.
  - d. The Contractor's procedures for identifying and reporting unforeseen hazards.
  - e. The names and addresses of the waste hauler and the landfill for hazardous and non-hazardous wastes.
- ☒4. Storm Water Pollution Prevention Plan (SWPPP) including:
- a. A site map identifying storm drain inlets.
  - b. Identification of potential sources of pollution.
  - c. A plan to eliminate non-storm water discharges such as wastewater, spills, and others.
  - d. Best Management Practices (BMPs) to minimize discharges of pollutants in storm water runoff.
  - e. How agencies and District will be notified in case of spills.
- ☐5. Compliance with State General Construction Activity Storm Water NPDES Permit, including:
- a. Development of a Storm Water Pollution Prevention Plan that complies with all requirements of the General Construction Activity Storm Water Permit.
  - b. Development of a color coded site map showing:
    - 1) Areas of soil disturbance that have been stabilized.
    - 2) Areas to be graded, in addition to a time schedule.
    - 3) Areas of potential soil erosion where control practices will be implemented (Indicate the control practices and time schedule for implementation).
    - 4) Locations of post-construction projects (i.e., ponds, grassy swales, detention basins).
  - c. Development of a Site Inspection Checklist.
  - d. Submittal of the Site Inspection Checklist on a weekly basis.
- ☐6. Disposal of Fluorescent Lights and/or Ballasts Plan, as applicable.
- ☐7. Soil and Groundwater Management Plan:  
Describe how any disturbed soil or collected water will be handled, including temporary storage, testing and/or treatment, and disposal. Identify all activity where potential exists for

waste to be generated, including materials associated with the destruction of monitoring wells.

Where feasible, excavated soil from utility trenching may be placed back within the utility corridor near the original excavation.

Soil that cannot be placed back in the utility trench, and waste generated from other activities shall be tested by the Contractor as per General Conditions, Article 14.1, Alterations, Modifications and Force Account Work. The Contractor shall provide the name of an analytical laboratory and contact name for coordinating environmental testing.

- ☒8. Debris Containment Program:  
Describe the control of debris generated by the performance of the work and how the work area will be maintained unencumbered by the debris confined inside the work area.

- ☐9. Soil and Air Pollution Management Plan:  
Describe measures to be taken to control dust and prevent pollution of soil, and air resulting from the performance of the work. Describe in detail how dust, air emissions, and/or soil pollutants generated during the performance of the work will be minimized, controlled, contained, treated, and/or disposed. The Plan shall include development of a Site Inspection Checklist to be completed and submitted on a weekly basis. The Plan must also incorporate air pollution controls described in these specifications.

- ☒10. Dust Control Plan:  
Submit plan in conformance with County's Prescriptive Standard for Fugitive Dust Prevention and Control and Contingent Asbestos Hazard Dust Mitigation Plan.

B. If checked, the following Plans and Programs must be made available within 10 calendar days only after being requested by District. Do not submit unless and until requested:

- ☒1. Injury and Illness Prevention Program, in accordance with CCR Title 8, Section 3203 (Cal/OSHA).
- ☐2. Hazard Communication Program, in accordance with CCR Title 8, Section 5194 (Cal/OSHA).
- ☐3. Respiratory Protection Program, in accordance with CCR Title 8, Section 5144 (Cal/OSHA).
- ☒4. Confined Space Entry Program, in accordance with CCR Title 8, Article 108 (Cal/OSHA).
- ☐5. Lockout/Tagout Program, in accordance with CCR Title 8, Sections 3314 and 2320 (Cal/OSHA).
- ☒6. Name of individual(s) having current Red Cross-equivalent first aid and CPR training.
- ☒7. Trenching and Shoring Plan, in accordance with CCR Title 8, Article 6 (Cal/OSHA).

## **PART 2 PRODUCTS – NOT USED**

## **PART 3 EXECUTION – NOT USED**

END OF SECTION

## DIVISION 1 GENERAL REQUIREMENTS

## SECTION 01410

## REGULATORY REQUIREMENTS

## PART 1 GENERAL

## 1.1 SUMMARY

- A. Section includes: regulatory requirements applicable to Contract Documents.
- B. Specific reference in the Specifications to codes and regulations or requirements of regulatory agencies shall mean the latest printed edition of each adopted by the regulatory agency in effect at the time of the opening of bids, except as may be otherwise specifically stated in the Contract Documents.
- C. Should any conditions develop not covered by the Contract Documents wherein the finished Work will not comply with current codes, a change order detailing and specifying the required Work shall be submitted to and approved by District before proceeding with the Work.

## 1.2 REFERENCES TO REGULATORY REQUIREMENTS

- A. Codes, laws, ordinances, rules and regulations referred to shall have full force and effect as though printed in full in these Specifications. Code, laws, ordinances, rules and regulations are not furnished to Contractor, because Contractor is assumed to be familiar with these requirements. The listing of applicable codes, laws, regulations and ordinances for hazardous waste abatement Work in the Contract Documents is supplied to Contractor as a courtesy and shall not limit Contractor's responsibility for complying with all applicable laws, regulations or ordinances having application to the Work. Where conflict among the requirements of or with these Specifications occurs, the most stringent requirements shall be used.
- B. Conform to all applicable codes, laws, ordinances, rules and regulations.
- C. Precedence:
  - 1. Where specified requirements differ from the requirements of applicable codes, ordinances and standards, the more stringent requirements shall take precedence.
  - 2. Where Drawings or Specifications require or describe products or execution of better quality, higher standard or greater size than required by applicable codes, ordinances and standards, Drawings and Specifications shall take precedence so long as such increase is legal.
  - 3. Where no requirements are identified on Drawings or in Specifications, comply with all requirements of applicable codes, ordinances and standards of governing authorities having jurisdiction.

## 1.3 CODES

- A. Codes that apply to Contract Documents include, but are not limited to, the following:
  - 1. CBC (Part 2, Title 24, CCR, including, without means of limitation, Sections 16A, 102A.23, 308, 420A, 504-506, 904.2.6, 1019 and 1604)
  - 2. CEC (Part 3, Title 24, CCR)
  - 3. CMC (Part 4, Title 24, CCR)
  - 4. CPC (Part 5, Title 24, CCR),
  - 5. State Elevator Safety Regulations (Part 7, Title 24, CCR)
  - 6. UBC
  - 7. UPC
  - 8. UMC
  - 9. NEC

## 1.4 LAWS, STATUTES, ORDINANCES, RULES, AND REGULATIONS

- A. During prosecution of Work to be done under Contract Documents, Contractor shall comply with applicable laws, ordinances, rules and regulations, including, but not limited to, the following:
  - 1. Federal
    - a. Americans With Disabilities Act of 1990
    - b. 29 CFR, Section 1910.1001, Asbestos
    - c. 40 CFR, Subpart M, National Emission Standards for Asbestos
    - d. Executive Order 11246

- e. Federal Endangered Species Act
- f. Clean Water Act
- 2. State of California
  - a. California Code of Regulations, Titles 5, 8, 19, 21, 22, 24 and 25
  - b. California Public Contract Code
  - c. California Health and Safety Code
  - d. California Government Code
  - e. California Labor Code
  - f. California Civil Code
  - g. California Code of Civil Procedure
  - h. CPUC General Order 95, Rules for Overhead Electric Line Construction
  - i. CPUC General Order 128, Rules for Construction of Underground Electric Supply and Communications Systems
  - j. Cal/OSHA
  - k. OSHA: Hazard Communications Standards
  - l. California Endangered Species Act
  - m. Water Code
  - n. Fish and Game Code
- 3. State of California Agencies
  - a. State and Consumer Services Agency
  - b. Office of the State Fire Marshall
  - c. Office of Statewide Health Planning and Development
  - d. Department of Fish and Game
  - e. El Dorado County Air Quality Management District
  - f. Central Valley Regional Water Quality Control Board
- 4. Local Agencies:
  - a. County of El Dorado
  - b. El Dorado County Fire District
- 5. Other Requirements:
  - a. National Fire Protection Association (NFPA): Pamphlet 101, Life Safety.
  - b. References on Drawings or in Specifications to "code" or "building code" not otherwise identified shall mean the codes specified in this Section 01410, together with all additions, amendments, changes, and interpretations adopted by code authorities of the jurisdiction.
- B. Contractor shall have access to all of the foregoing within 24 hours.
- C. Other Applicable Laws, Ordinances and Regulations:
  - 1. Work shall be accomplished in conformance with all applicable laws, ordinances, rules and regulations of federal, state, and local governmental agencies and jurisdictions having authority over the Project.
  - 2. Work shall be accomplished in conformance with all rules and regulations of public utilities and utility districts.
  - 3. Where such laws, ordinances rules, and regulations require more care or greater time to accomplish Work, or require better quality, higher standards or greater size of products, Work shall be accomplished in conformance to such requirements with no change to the Contract Time and Contract Sum, except where changes in laws, ordinances, rules and regulations occur subsequent to the time of opening of the bids.
- D. Change Orders and Claims:
  - 1. The California Public Contract Code, including but not limited to Section 7105(d)(2), and the California Government Code Section 930.2 et seq., apply to all contract procedures for changes, time extensions, change orders (time or compensation) and claims. Federal law (U.S. v. Holpuch (1946) 326 U.S. 234.) shall supplement but not supercede California law on these requirements.
  - 2. Any change, waiver, or omission to implement contract change order and claims procedures shall have no legal effect unless expressly permitted in a fully executed change order approved by District and approved in writing by District's General Counsel.

## 1.5 CONFLICTS

- A. If the conflict is between referenced regulatory requirements, Contractor shall comply with the one establishing the more stringent requirement.
- B. If the conflict is between referenced regulatory requirements and the Contract Documents, Contractor shall comply with the one establishing the more stringent requirement.

## 1.6 REQUIRED PROVISIONS ON CONTRACT CLAIM RESOLUTION

- A. The California Public Contract Code specifies required provisions on resolving contract claims less than \$375,000, which are set forth below, and constitute a part of this Contract.
1. For the purposes of this section, "Claim" means a separate demand by Contractor of \$375,000 or less for (1) a time extension, (2) payment or money or damages arising from Work done by or on behalf of Contractor arising under the Contract Documents and payment of which is not otherwise expressly provided for or the Claimant is not otherwise entitled to, or (3) an amount the payment of which is disputed by District. In order to qualify as a Claim, the written demand must state that it is a Claim submitted under paragraph 12 of Document 00700 (General Conditions) and be submitted in compliance with all requirements of Document 00700 (General Conditions), paragraph 12. Separate Claims which total more than \$375,000 do not qualify as a "separate demand of \$375,000 or less," as referenced above, and are not subject to this section.
  2. A voucher, invoice, payment application, or other routine or authorized form of request for payment is not a Claim for purposes of this section. If such request is disputed as to liability or amount, then the disputed portion of the submission may be converted to a Claim under this section by submitting a separate claim in claim in compliance with Contract Documents claim submission requirements.
  3. Caution. This section does not apply to tort claims and nothing in this section is intended nor shall be construed to change the time periods for filing tort claims or actions specified by Chapter 1 and Chapter 2 of Part 3 of Division 3.6 of Title 1 of the California Government Code.
- B. Procedure:
1. The Claim must be in writing, submitted in compliance with all requirements of Document 00700 (General Conditions), paragraph 12, including, but not limited to, the time prescribed by and including the documents necessary to substantiate the Claim, pursuant to Document 00700 (General Conditions), paragraph 12.3. Claims must be filed on or before the day of final payment. Nothing in this section is intended to extend the time limit or supersede notice requirements for the filing of claims as set forth in Document 00700 (General Conditions), paragraph 12 or elsewhere in the Contract Documents.
  2. For Claims of fifty thousand dollars (\$50,000) or less
    - a. District shall respond in writing within 45 days of receipt of the Claim, or
    - b. District may request in writing within 30 days of receipt of the Claim, any additional documentation supporting the Claim or relating to any defenses or claims District may have against Claimant.
      - 1) If additional information is thereafter required, it shall be requested and provided in accordance with this section upon mutual agreement of District and Claimant.
      - 2) District's written response to the Claim, as further documented, shall be submitted to Claimant within 15 days after receipt of further documentation or within a period of time no greater than taken by Claimant in producing the additional information, whichever is greater.
  3. For Claims over Fifty Thousand Dollars (\$50,000) and less than or equal to \$375,000:
    - a. District shall respond in writing within 60 days of receipt of the Claim, or
    - b. District may request in writing within 30 days of receipt of the Claim, any additional documentation supporting the Claim or relating to any defenses or claims District may have against Claimant.
      - 1) If additional information is thereafter required, it shall be requested and provided in accordance with this section, upon mutual agreement of District and Claimant;
      - 2) District's written response to the Claim, as further documented, shall be submitted to Claimant within 30 days after receipt of further documentation or within a period of time no greater than taken by Claimant in producing the additional information, whichever is greater.
  4. Meet and Confer:
    - a. If Claimant disputes District's written response, or District fails to respond within the time prescribed above, Claimant shall notify District, in writing, either within 15 days of receipt of District's response or within 15 days of District's failure to timely respond, and demand an informal conference to meet and confer for settlement of the issues in dispute. Upon demand District will schedule a meet and confer conference within 30 days for settlement of the dispute.
    - b. Following the meet and confer conference, if the Claim or any portion remains in dispute, Claimant may file a claim as provided in Chapter 1 (commencing with Section 900) and Chapter 2 (commencing with Section 910) of Part 3 of Division 3.6 of Title 1 of the California Government Code. For purposes of those provisions, the running of the period of time within which a claim must be filed shall be tolled from the time Claimant submits its written claim as set forth herein, until the time that Claim is denied as a result of the meet and confer process, including any period of time utilized by the meet and confer process.

**1.7 COMPLIANCE WITH AMERICANS WITH DISABILITIES ACT**

- A. Contractor acknowledges that, pursuant to the Americans with Disabilities Act (ADA), programs, services and other activities provided by a public entity to the public, whether directly or through a Contractor, must be accessible to the disabled public. Contractor shall provide the services specified in the Contract Documents in a manner that complies with the ADA and any and all other applicable federal, state and local disability rights legislation. Contractor agrees not to discriminate against disabled persons in the provision of services, benefits or activities provided under the Contract Documents and further agrees that any violation of this prohibition on the part of Contractor, its employees, agents or assigns shall constitute a material breach of the Contract Documents.

**PART 2 PRODUCTS – NOT USED****PART 3 EXECUTION – NOT USED****END OF SECTION**

## DIVISION 1 GENERAL REQUIREMENTS

## SECTION 01420

## REFERENCES AND DEFINITIONS

## PART 1 GENERAL

## 1.1 SUMMARY

- A. Section Includes: Reference standards, abbreviations, symbols, and definitions used in Contract Documents.
- B. Full titles are given in this Section for standards cited in other Sections of Specifications.
- C. Material and workmanship specified by reference to number, symbol, or title of specific standard such as state standard, commercial standard, federal specifications, technical society, or trade association standard, or other similar standard, shall comply with requirements of standards except when more rigid requirements are specified or required by applicable codes.
- D. Standards referred to, except as modified herein, shall have full force and effect as though printed in the Contract Documents. Standards are not furnished to Contractor because manufacturers and trades involved are assumed to be familiar with their requirements.

## 1.2 REFERENCE TO STANDARDS AND SPECIFICATIONS OF TECHNICAL SOCIETIES; REPORTING AND RESOLVING DISCREPANCIES

- A. 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 of opening of Bids, except as may be otherwise specifically stated in the Contract Documents.
- B. 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 District's Representative and Engineer, and Contractor shall not proceed with the Work affected thereby until consent to do so is given by District.
- C. Except as otherwise specifically stated in the Contract Documents or as may be provided by Change Order, CCD, 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:
  - 1. The provisions of any such standard, specification, manual, code, or instruction (whether or not specifically incorporated by reference in the Contract Documents); or
  - 2. 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).
- D. No provision of any such standard, specification, manual, code, or instruction shall be effective to change the duties and responsibilities of District, District's Representative, Engineer or Contractor, or any of their subcontractors, consultants, agents, or employees, from those set forth in the Contract Documents, nor shall it be effective to assign to District, Engineer, or any of their 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.
- E. Comply with the applicable portions of standards and specifications published by the technical societies, institutions, associations, and governmental agencies referred to in Specifications.
  - 1. Comply with referenced standards and specifications; latest revision in effect at the time of opening of Bids, unless otherwise identified by date.
    - a. Exception: Comply with issues in effect as listed in governing legal requirements.
- F. 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.
- G. Jobsite Copies:
  - 1. Obtain and maintain at the Site copies of reference standards identified on Drawings and in Specifications in order to properly execute the Work.



2. At a minimum, the following shall be readily available at the Site:
  - a. Safety Codes: State of California, Division of Industrial Safety regulations.
- H. 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 of opening Bids.
  2. All amendments, changes, errata and supplements as of the effective date shall be included.
- I. 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.

### 1.3 ABBREVIATIONS

- A. Listed hereinafter are the various organizations or references which may appear in the Contract Documents, along with their respective acronyms and/or abbreviations:

AA	Aluminum Association
AABC	Associated Air Balance Council
AAMA	Architectural Aluminum Manufacturers Association
AAP	Affirmative Action Program
AASHTO	American Association of State Highway and Transportation Officials
ABMA	American Boiler Manufacturers Association
ABPA	American Board Products Association
ACI	American Concrete Institute
AED	Association of Equipment Distributors
AGA	American Gas Association
AISC	American Institute of Steel Construction
AISI	American Iron and Steel Institute
AITC	American Institute of Timber Construction
AMCA	Air Moving and Conditioning Association, Inc.
ANSI	American National Standards Institute (formerly American Standards Association)
APA	American Plywood Association
ARI	Air-Conditioning and Refrigeration Institute
ASHRAE	American Society of Heating, Refrigeration, and Air-Conditioning Engineers
ASME	American Society of Mechanical Engineers
ASTM	American Society for Testing and Materials
AWCI	Association of the Wall and Ceiling Industries
AWPA	American Wood- Preservers Association
AWPB	American Wood Preservers Bureau
AWS	American Welding Society
AWWA	American Water Works Association
BIL	Basic Insulation Level
Cal/OSHA	California Occupational Safety and Health Administration
Caltrans	State of California, Department of Transportation
CBC	California Building Code
CCD	Construction Change Directive
CCR	California Code of Regulations
CEC	California Electric Code
CFR	Code of Federal Regulations
CISPI	Cast Iron Soil Pipe Institute
CLMFI	Chain Link Fence Manufacturers Institute
CMC	California Mechanical Code
CO	Change Order
CPC	California Plumbing Code
CPM	Critical Path Method
CPUC	California Public Utilities Commission
CRA	California Redwood Association
CRSI	Concrete Reinforcing Steel Institute

CS	Commercial Standards, U.S. Department of Commerce
CSA	Canadian Standards Association
CTI	Ceramic Tile Institute
DHI	Door and Hardware Institute
DSA	Division of State Architect (formerly known as the Office of the State Architect)
EPA	Environmental Protection Agency
FGMA	Flat Glass Marketing Association
FM	Factory Mutual
FS	Federal Specifications
GA	Gypsum Association
HPMA	Hardwood Plywood Manufacturers Association
HVAC	Heating, Ventilating and Air Conditioning
I.D.	Identification
IACS	International Annealed Copper Standards
IAPMO	International Association of Plumbing and Mechanical Officials
ICBO	International Conference of Building Officials
ICEA	Insulated Cable Engineers Association
IEEE	Institute of Electrical and Electronic Engineers, Inc.
IES	Illuminating Engineering Society
ISA	Instrumentation Society of America
JATC	Joint Apprenticeship Training Committee
JV	Joint Venture
LBE	Local Business Enterprise
M.I.	Middle Initial
M/WBE	Minority and/or Woman-Owned Business Enterprise
MBE	Minority Business Enterprise
MIA	Masonry Institute of America
MIA	Marble Institute of America
MLSFA	Metal Lath/Steel Framing Association
MS	Military Specifications
MSDS	Material Safety Data Sheet
MSS	Manufacturers Standardization Society of the Valve & Fitting Industry
NAAMM	National Association of Architectural Metal Manufacturers
NACE	National Association of Corrosion Engineers
NBS	National Bureau of Standards
NEC	National Electric Code
NEMA	National Electric Manufacturers Association
NESC	National Electrical Safety Code
NFPA	National Fire Protection Association
NFPA	National Forest Products Association
NIOSH	National Institute for Occupational Safety and Health
NIST	National Institute of Science and Technology (formerly the National Bureau of Standards)
NOFMA	National Oak Flooring Manufacturers Association
NSF	National Sanitation Foundation
NTMA	National Terrazzo & Mosaic Association
NWWDA	National Wood Windows and Doors Association
OSHA	Occupational Safety and Health Administration
OSHPD	Office of Statewide Health Planning and Department
PCA	Portland Cement Association
PCI	Prestressed Concrete Institute
PDI	Plumbing and Drainage Institute
PG&E	Pacific Gas and Electric Company
PM	Preventive Maintenance
PR	Proposal Request
PS	Product Standard, U. S. Department of Commerce
RFI	Request for Information
RFP	Request for Proposals