

CONTRACT NO.
70-712-7 #3

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PROJECT MANUAL

VOLUME 2

FOR

**North Bay Water Reuse Program Sonoma Valley County
Sanitation District Fifth Street East Recycled Water Pipeline**

MARCH 2016

SPECIFICATIONS

DIVISION 1

GENERAL REQUIREMENTS

SECTION 01100

SUMMARY

PART 1 GENERAL**1.1 SUMMARY**

A. Section includes:

1. Summary of Work and Work Restrictions including:
 - a. Summary
 - b. Submittals
 - c. Work Covered By Contract Documents
 - d. Bid Items, Allowances, and Alternates
 - e. Work Under Other Contracts
 - f. Work Sequence
 - g. Work Days and Hours
 - h. Shutdown for Discovery of Cultural Resources
 - i. Cooperation of Contractor and Coordination with Other Work
 - j. Partial Occupancy/Utilization Requirements
 - k. Contractor Use of Site
 - l. Air Quality Standards
 - m. Construction Staking and Monument Protection
 - n. Protection of Existing Structures and Underground Facilities
 - o. Permits
 - p. Actual Damages
 - q. Right-of-Way
 - r. Document Tracking

1.2 SUBMITTALS

A. Work Plans:

1. Utility Protection Plan

1.3 WORK COVERED BY CONTRACT DOCUMENTS

- A. The Sonoma Valley County Sanitation District's Fifth Street East Recycled Water Pipeline Project consists of approximately 8000 linear feet of recycled water mainline pipe, valves, appurtenances and service laterals. The pipeline begins at the intersection of Watmaugh Road at Shainsky Road and extends East to the intersection of Watmaugh Road at Fifth Street East. The pipeline then turns North on Fifth Street East and runs to the intersection with Denmark Street. At Denmark Street the pipeline turns West and runs to the back of Sonoma Valley High School campus. The Project includes an extension of the pipeline along Engler Street to the City of Sonoma's Valley Oaks Park
- B. The Work of this Contract comprises construction of all the Work indicated, described in the Specifications, or otherwise required by the Contract Documents.
- C. 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.
- D. Cost of maintenance of systems and equipment prior to Final Acceptance will be considered as included in prices Bid and no direct or additional payment will be made therefor.

1.4 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 (Price and Payment Procedures).
- C. For all Bid items, furnish and install all Work, including connections to existing systems, indicated and described in Specifications and all other Contract Documents. 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. Bid item descriptions (listed by Bid item number):
 - 1. Bonds. The lump sum price paid under this item shall be full payment for furnishing bonds as required by Document 00700 (General Conditions.)
 - 2. Insurance. The lump sum price paid under this item shall be full payment for furnishing insurance as required by Document 00700 (General Conditions).
 - 3. Safety Program and Implementation. The lump sum price paid under this item shall be full payment for furnishing and implementing the Safety Program as required by Section 01540 (Site Security and Safety) and Document 00700 (General Conditions).
 - 4. Construction Material Waste Management Plan and Implementation. The lump sum price paid under this item shall be full payment for furnishing and implementing the Construction Material Waste Management Plan as required by Section 01741 (Construction Material Waste Management Plan).
 - 5. Installation, Operation, and Maintenance Manuals. The lump sum price paid under this item shall be full payment for furnishing installation, operation, and maintenance manuals as required by Section 1330 (Submittal Procedures).
 - 6. Storm Water Pollution Prevention Plan and Implementation. The lump sum price paid under this item shall be full payment for furnishing and implementing the Storm Water Pollution Prevention Plan as required by Section 01500 (Temporary Facilities and Controls).
 - 7. Mobilization/Demobilization. The lump sum price paid under this item shall be full payment for initial mobilization at Project commencement (50% to be paid then), and cleanup and demobilization at Final Completion (50% to be paid then). Work includes, but is not limited to, installation and removal of Owner provided project funding sign
 - 8. Traffic Control and Equipment. The lump sum price paid under this item shall be full payment for submission of traffic control plans for review and approval by the City and County, providing traffic signs, traffic cones, temporary striping, signage, delineators, and K-rails; and incidentals required to temporarily control, detour, or stage traffic during construction and all other related Work.
 - 9. 18-inch Recycled Water Pipe. The unit price paid under this item shall be full payment for providing 18-inch diameter restrained recycled water main including fittings; joint restraints; connection to the existing 18-inch water main; trenching; shoring, as necessary; backfill; geotextile fabric; dewatering, as necessary; temporary surface restoration; trench dams; and hydrostatic testing. For purposes of payment, this item shall be measured by the linear foot, along the longitudinal axis, with 10% (in addition to any other retention) to be retained and paid after successful test results.
 - 10. 12-inch Recycled Water Pipe. The unit price paid under this item shall be full payment for providing 12-inch diameter recycled water main including fittings; trenching;

- shoring, as necessary; backfill; geotextile fabric; dewatering, as necessary; trench dams; temporary surface restoration; and hydrostatic testing. For purposes of payment, this item shall be measured by the linear foot, along the horizontal plane, with 10% (in addition to any other retention) to be retained and paid after successful test results.
11. 12-inch Recycled Water Pipe (restrained). The unit price paid under this item shall be full payment for providing 12-inch restrained recycled water main pipe including fittings; joint restraints; trenching; shoring, as necessary; backfill; geotextile fabric; dewatering, as necessary; trench dams; temporary surface restoration; and hydrostatic testing. For purposes of payment, this item shall be measured by the linear foot, along the horizontal plane, with 10% (in addition to any other retention) to be retained and paid after successful test results.
 12. 10-inch Recycled Water Pipe. The unit price paid under this item shall be full payment for providing 10-inch diameter recycled water main including fittings; trenching; shoring, as necessary; backfill; geotextile fabric; dewatering, as necessary; trench dams; temporary surface restoration; and hydrostatic testing. For purposes of payment, this item shall be measured by the linear foot, along the horizontal plane, with 10% (in addition to any other retention) to be retained and paid after successful test results.
 13. 10-inch Recycled Water Pipe (restrained). The unit price paid under this item shall be full payment for providing 10-inch restrained recycled water main pipe including fittings; joint restraints; trenching; shoring, as necessary; backfill; geotextile fabric; dewatering, as necessary; trench dams; temporary surface restoration; and hydrostatic testing. For purposes of payment, this item shall be measured by the linear foot, along the horizontal plane, with 10% (in addition to any other retention) to be retained and paid after successful test results.
 14. 8-inch Recycled Water Pipe. The unit price paid under this item shall be full payment for providing 6-inch diameter recycled water main including fittings; trenching; shoring, as necessary; backfill; geotextile fabric; dewatering, as necessary; trench dams; temporary surface restoration; and hydrostatic testing. For purposes of payment, this item shall be measured by the linear foot, along the horizontal plane, with 10% (in addition to any other retention) to be retained and paid after successful test results.
 15. 8-inch Recycled Water Pipe (restrained). The unit price paid under this item shall be full payment for providing 6-inch restrained recycled water main including fittings; joint restraints; trenching; shoring, as necessary; backfill; geotextile fabric; dewatering, as necessary; trench dams; temporary surface restoration; and hydrostatic testing. For purposes of payment, this item shall be measured by the linear foot, along the horizontal plane, with 10% (in addition to any other retention) to be retained and paid after successful test results.
 16. Horizontal Direction Drill Crossing of Nathanson Creek with Recycled Water Pipeline. The lump sum paid under this item shall be full payment for providing an HDD crossing of Nathanson Creek with a recycled water main pipe including fittings; subsurface settlement indicators and settlement markers; excavation and backfill of bore and receiving pits; removal and disposal of drilling fluids; grouting any voids; shoring, as necessary; dewatering, as necessary; surface restoration; and hydrostatic testing.
 17. Combination Air Valve. The unit price under this item shall be full payment for providing air valve, piping and appurtenances, precast concrete vault and lid, trenching, backfill, surface restoration, and hydrostatic testing. For the purposes of payment, this item will be measured by the unit for each combination air valve installed.

18. Blowoff. The unit price paid under this item shall be full payment for providing valves, piping and appurtenances, precast concrete vault and lid, trenching, backfill, surface restoration, and hydrostatic testing. For the purposes of payment, this item will be measured by the unit for each blowoff installed.
19. 6-inch Flow Meter Assembly. The unit price under this item shall be full payment for providing DIP piping, flow meter, pipe supports, and appurtenances, reinforcing steel, concrete slab, trenching, backfill, surface restoration, fence replacement, bollards and hydrostatic testing. For the purposes of payment, this item will be measured by the unit for each flow meter installed.
20. 4-inch Turnout with Meter. The unit price paid under this item shall be full payment for providing 4" recycled water pipeline on Engler Street to City of Sonoma's Valley Oaks Park, including valves, piping and appurtenances, meter, precast concrete vault and lid, trenching, backfill, surface restoration including temporary paving, final paving, concrete curb and gutter and hydrostatic testing. For the purposes of payment, this item will be measured by the unit for each turnout installed.
21. Isolation Valves. The unit price paid under this item shall be full payment for providing valve, piping and appurtenances, precast valve box and lid, trenching, backfill, surface restoration, and hydrostatic testing. For the purposes of payment, this item will be measured by the unit for each butterfly or plug valve installed.
22. 2-inch Turnout Dual Meter. The unit price paid under this item shall be full payment for providing valves, piping and appurtenances, meters, precast concrete vault and lid, trenching, backfill, surface restoration, and hydrostatic testing. For the purposes of payment, this item will be measured by the unit for each turnout installed.
23. 1-inch Turnout with Meter. The unit price paid under this item shall be full payment for providing valves, piping and appurtenances, meter, precast concrete vault and lid, trenching, backfill, surface restoration, and hydrostatic testing. For the purposes of payment, this item will be measured by the unit for each turnout installed.
24. Roadway Resurfacing - Type 1 (Watmaugh Rd). The unit price paid under this item shall be full payment for cleaning of street; tack coat; and providing a 2-inch thick asphalt overlay as indicated. For purposes of payment, this item will be paid by the square yard of asphalt concrete overlay placed.
25. Roadway Resurfacing - Type 2 (The unit price paid under this item shall be full payment for removal and disposal of existing structural section, providing subgrade compaction, cleaning of street, tack coating, providing geotechnical fabric, as required, and asphalt concrete paving, as indicated. For purposes of payment, this item will be measured by the square yard of asphalt concrete placed.
26. Roadway Resurfacing - Type 3 (City limits). The unit price paid under this item shall be full payment for removal and disposal of existing structural section, providing subgrade compaction, cleaning of street, tack coating, providing geotechnical fabric, as required, and asphalt concrete paving, as indicated. For purposes of payment, this item will be measured by the square yard of asphalt concrete placed.
27. All Other Work. The lump sum price paid under this item shall be full payment for all Work of Contract Documents other than Work separately provided for under other Bid items. Payment for Work under this item will commence upon 50 percent Project completion, based on Progress Payments as described in Section 01200 (Price and Payment Procedures), and will be paid on a prorated basis thereafter, based on percent Project completion.

- E. Contingency Reserve.
 1. Costs authorized to be paid from the Contingency Reserve:
 - a. Cost to Contractor or Subcontractor for removal, as directed by Owner, of unforeseen underground manmade structures that interfere with construction and that require special equipment or additional labor, time, or equipment.
 - b. Cost to Contractor or Subcontractor for relocation or repair, as directed by Owner, of unforeseen underground utilities.
- F. Allowances: (N/A)

1.5 WORK UNDER OTHER CONTRACTS

- A. A separate contractor may be performing work at the Sonoma Valley County Sanitation District treatment plant that could intermittently affect pressures or flows in the 5th Street East Recycled Water Pipeline once it is connected to the existing system.

1.6 WORK SEQUENCE

- A. Construct Work in stages and at times to accommodate Owner operation requirements during the construction period; coordinate construction schedule and operations with Owner.
- B. Special operational constraints include the following:
 1. Pump or pipeline shutdowns: Notify Owner in writing at least 2 Business Days prior to the need for a shutdown of any of the existing pump or pipeline systems. Certify that all materials, equipment, and personnel are available to perform the Work requiring the shutdown. Owner may verify this certification. Owner forces will perform shutdowns of existing systems. Timing of shutdowns will be at Owner's discretion.
 - a. Pipeline will be taken out of service to complete tie-in. Contractor is responsible for dewatering the existing pipeline as necessary to complete tie-in.
- C. Special Work sequence requirements include the following:
 1. Notify Owner at least 3 Business Days prior to any entry on property of Sonoma Valley Unified School District. Schedule work on school property so as to minimize inconvenience to students and staff.
 2. Environmentally-sensitive Site requirements: construction of the pipeline crossing at Nathanson Creek along Watmaugh Road and five service turnouts along the pipeline/Fifth Street East are subject to requirements outlined in the California Department of Fish and Wildlife Stream Alteration Agreement ("CDFW permit") and US Army Corps of Engineers Section 404 Permit.
 3. Construction activities in drainage channel crossings and turnouts is limited to April 15 to October 15. Additional weather and work period and planning requirements are specified in CDFW permit; construction schedule must be implemented in accordance with permit.
 4. Notify Owner at least 3 Business Days prior to start of construction at Nathanson Creek crossing and five biologically sensitive turnouts.
 - a. Owner's biologist must conduct biological surveys prior to start of construction to evaluate site and staging areas and advise Contractor and all personnel working on Site regarding habitat protection measures for sensitive species.
 - b. Owner's biologist will create buffer zones to protect special status species, if needed. Any claims or Contract Modifications that arise from time delays incurred under provisions of this article will be processed in accordance with Sections 01250 (Modification Procedures) and 1320 (Progress Schedules and Reports).

- c. Install fencing as determined by Owner's biologist prior to construction to establish setback from sensitive habitat (20 ft min.) if needed.
- d. Attend biological resources training provided by Owner prior to onset of Work at the Site. Training is mandatory for personnel who will participate in Work at the Site.

1.7 WORK DAYS AND HOURS

- A. Work Days and hours: Monday-Friday inclusive, 7:00 a.m.-6:00 p.m. local time.
- B. Exceptions:
 - 1. Within City of Sonoma limits, Work hours are 8:00 a.m. to 6:00 p.m. Monday-Friday, 9:00 a.m. to 6:00 p.m. Saturdays, and 10:00 a.m. to 6:00 p.m. Sundays and holidays as per the City of Sonoma noise ordinance.
 - 2. Work days and hours are subject to requirements and exceptions contained in any applicable permit.
- C. Work at the Site on weekends and holidays is permitted (subject to requirements and exceptions in any applicable permit or local ordinance), provided that Contractor submit requests to Owner in writing at least 48 hours in advance and Owner approves in its sole discretion. Days that have been designated as holidays by owner are listed in Section 1420 (References and Definitions).
- D. Contractor will not be permitted to schedule utility shutdowns on Fridays, weekends, or holidays.

1.8 SHUTDOWN FOR DISCOVERY OF CULTURAL RESOURCES

- A. If discovery is made of items of historical, archaeological, or paleontological interest, immediately cease all Work in the area of discovery. Archaeological indicators may include, but are not limited to, dwelling sites, locally darkened soils, stone implements or other artifacts, fragments of glass or ceramics, animal bones, human bones, and fossils. After cessation of excavation, immediately contact Owner. Do not resume Work until authorization is received from Owner. When resumed, excavation or other activities shall be as directed by Owner.

1.9 COOPERATION OF CONTRACTOR AND COORDINATION WITH OTHER WORK

- A. Coordinate with Owner and any Owner forces, or other contractors and forces, as required by Document 00700 (General Conditions), Article 6.
- B. Employ a full-time coordinator to constantly review Contract Documents, submittals, changes, and prepare overlay drawings as necessary to avoid conflicts, errors, omissions and untimely construction.

1.10 PARTIAL OCCUPANCY/UTILIZATION REQUIREMENTS

- A. Allow Owner 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 Owner 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 Owner 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 Owner 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. Owner shall pay for utility cost arising out of occupancy by Owner during construction.
- E. Use and occupancy by Owner 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 Owner.
- F. Prior to date of Final Acceptance of the Work by Owner, 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 Owner 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 Owner of any of the conditions thereof.
- H. Owner 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. Notify Owner in writing when Contractor considers any such part of the Work ready for its intended use and Substantially Complete and request Owner to issue a Certificate of Substantial Completion for that part of the Work.

1.11 CONTRACTOR USE OF SITE

- A. Confine operations at Site to areas permitted by Contract Documents, permits, ordinances, and laws.
- B. Do not unreasonably encumber 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 Owner or other contractor.
- E. Coordinate parking, storage, staging, and Work areas with Owner.
- F. Do not store construction materials in the Drip line of any tree.
- G. Access is available to the Site via County and City Streets including Watmaugh Road, Fifth Street East and Denmark Street along the routes indicated.
- H. Access to Sonoma Valley Unified School District ("SVUSD") property: Provide advance notice to Owner for access to locked gates at the terminus of Denmark St and beginning of SVUSD property. Ensure that the entrance is locked at the end of each work day and at other times as may be necessary to control unauthorized entry.
- I. Comply with requirements of Education Code section 45125.2

1.12 AIR QUALITY STANDARDS- EMISSIONS AND DUST CONTROL

- A. Ensure that idling time for all heavy equipment is minimized to reduce on-Site emissions.
- B. Maintain equipment in good mechanical condition.
- C. Limit dust emissions during periods of high winds (greater than 15 miles per hour).
Cover all trucks hauling soil, sand, and other loose materials or require trucks to maintain at least two feet of freeboard.
- E. Pave, apply water three times daily, or apply (non-toxic) soil stabilizers on unpaved access roads, parking areas and staging areas at construction sites.

- F. Sweep daily (with water sweepers) all paved access roads, parking areas and staging areas at Site.
- G. Sweep streets daily (with water sweepers) if visible soil material is carried onto adjacent public streets.
- H. Enclose, cover, water twice daily or apply (non-toxic) soil binders to exposed stockpiles (dirt, sand, etc.). See Section 02230 (Site Clearing).
- I. Limit traffic speeds on unpaved roads to 15 mph.
- J. Install sandbags or other erosion control measures to prevent silt runoff to public roadways, consistent with the SWPPP.
- K. Replant vegetation in disturbed areas as quickly as possible. See Section 02230 (Site Clearing).
- L. On road vehicles with a gross vehicular weight rating of 10,000 pounds or greater shall not idle for longer than five minutes at any location as required by Section 2485 of Title 13, Division 3, Chapter 10, Article 1 of the California Code of Regulations. This restriction does not apply when vehicles remain motionless during traffic or when vehicles are queuing.
- M. Off road equipment engines shall not idle for longer than five minutes per Section 2449(d)(3) of Title 13, Division 3, Chapter 9, Article 4.8 of the California Code of Regulations. All vehicle operators shall receive a written idling policy to inform them of idling restrictions. The policy shall list exceptions to this rule that include the following: idling when queuing; idling to verify that the vehicle is in safe operating condition; idling for testing, servicing, repairing or diagnostic purposes; idling necessary to accomplish work for which the vehicle was designed (such as operating a crane); idling required to bring the machine to operating temperature as specified by the manufacturer; and idling necessary to ensure safe operation of the vehicle.
- N. Off road engines greater than 50 horsepower shall, at a minimum, meet Tier 2 emissions standards. When available, higher Tier engines shall be utilized.

1.13 CONSTRUCTION STAKING AND MONUMENT PROTECTION

- A. Owner will provide construction staking and other surveying, mapping, or computational activities that Owner deems necessary in its sole judgment, including that which may be used by the Owner to determine pay quantities, or other elements required by or provided for in the Contract Documents.
- B. Contractor shall be responsible at its sole expense and direction for construction layout activities (as defined by Owner in its sole and exclusive judgment) and any surveying and/or mapping activities beyond that which will be performed by Owner in accordance with Paragraph A above, including that which may be required to establish and/or document as-built locations, alignments, elevations, grades or quantities required by or provided for in the Contract Documents.
- C. Contractor shall be required to prepare and submit to Owner, not less than five Business Days before the Preconstruction Meeting, a Construction Staking Outline consisting of completed draft Construction Survey Request forms detailing the scope, extent, and anticipated schedule of the construction staking proposed by Contractor for each phase of the work and separate Construction Survey Request to be submitted by Contractor during the course of the contract. Owner will review Contractor's Construction Staking Outline and notify Contractor of required changes, modifications, or deletions to the Construction Staking Outline prior to commencement of Work.
- D. Construction staking will be provided in accordance with the approved Construction Staking Outline. Modifications and alterations to the Construction Staking Outline must be

submitted and approved by Owner not less than five Business Days in advance of the requested date that construction survey activities are to begin (see Construction Survey Request: Requested Start Date). Owner reserves the right to reject, require modification and/or deletions to any such subsequent submittal prior to acceptance.

- E. Contractor shall be responsible at its sole expense to ready the area required for construction survey activities prior to the arrival of Owner's survey crews on Site. For the purpose of construction surveying activities, readying includes clearing, grubbing and ensuring that the area required for construction surveys is clear of obstacles, debris, materials, equipment or hazards that would unreasonably interfere with or impede Owner's ability in Owner's reasonable judgment, to productively and effectively provide the construction survey requested, establish reliable, stable, survey points and stakes or markings on the ground. Owner reserves the right to delay, discontinue, or suspend construction surveys in areas and situations that in the sole judgment of Owner, are not sufficiently readied for such surveys. Owner is not responsible for delays resulting from the areas required for construction survey activities not being sufficiently readied prior to survey crew's arrival on Site.
- F. Contractor is responsible at its sole expense to provide traffic control for construction surveying activities, and shall coordinate with Owner to ensure sufficient traffic control and or safety measures are in place, prior to the arrival of the survey crew on Site. Owner reserves the right to delay, discontinue or suspend construction surveys in areas and situations that in the sole judgment of Owner lack sufficient traffic control and/or safety measures to safely, productively and efficiently accommodate construction survey activities. Owner is not responsible for delays resulting from the areas required for construction survey activities lacking sufficient traffic control and/or safety measures in place prior to survey crew's arrival on Site.
- G. Construction Survey Request(s) shall be submitted by Contractor not less than five Business Days prior to the date that the Site will be readied for construction surveying activities (hereafter referred to as the advanced notice period for Construction Survey Request(s)). Scheduling or time changes for a previously accepted Construction Survey Request shall be submitted to Owner not less than two Business Days in advance of the date that the Site will be readied. Requests submitted after 12:00 noon will be held over to the next Business Day for the purpose of beginning the advanced notice period for Construction Survey Requests.
- H. Contractor is responsible to ensure that sufficient time is allowed to meet the advanced notice period for Construction Survey Request(s) requirements, to perform Site preparation requirements outlined above, to accommodate Owner's scheduling and resource availability, and for the Owner to complete construction survey activities. Contractor shall coordinate with Owner well in advance of the anticipated need, to ensure that sufficient resources are available to complete the construction surveys requested. No extension of time will be granted for delays resulting from construction survey activities.
- I. Contractor shall not begin work on any element of construction until construction staking or related survey activity associated with a Construction Survey Request submitted by the Contractor has been completed. For the purpose of this section: Completion of construction staking or related survey activity shall be determined by Owner. Contractor will be notified by Owner.
- J. Contractor shall protect and preserve stakes set by Owner in accordance with the above. Contractor shall be responsible at its sole expense for re-staking or verification of survey stakes, cut/fills or markings that are damaged, destroyed or otherwise made un-useful/reliable by activities within its control in the reasonable judgment of Owner. Owner

will provide replacement stakes or verification surveys requested by Contractor at Contractor’s expense in accordance with normal staff rates and charges associated with personnel, equipment and materials required to perform such activities.

- K. Contractor shall protect and preserve property or right of way monuments and survey control points. Whenever Contractor knows or reasonably should know that any Work or construction-related activity required under this Contract may, or is likely to damage, destroy or cause any property or right of way monument(s), survey control point(s), or Bench Marks to become unusable, Contractor shall notify Owner a minimum of five Business Days in advance of such work or activity. Owner will reference property or right of way monument(s) and survey control point(s) by survey, swing ties, or other appropriate means prior to their disturbance or destruction. Contractor will replace or restore as appropriate property or right of way monuments and survey control point(s) disturbed, destroyed or otherwise made un-useful by Contractor’s activities upon completion of the construction activities.
- L. Where sufficient notification to Owner was not provided in accordance with 1.13.K above, Contractor shall be responsible at its sole expense for the cost of replacing or restoring damaged or destroyed property or right of way monuments and survey control points, including the cost of preparing and filing a Corner Record or Record of Survey when required under Sec. 8771(b) of the Business and Professions Code of the State of California. Owner will perform such Surveying and Mapping activities required in Owner’s sole judgment, to restore or replace property or right of way monuments and survey control point(s) disturbed, destroyed or otherwise made un-useful by Contractor’s activities and required to comply Sec. 8771(b) of the Business and Professions Code of the State of California, in accordance with staff rates and charges in effect for the associated personnel, equipment and materials required to perform such activities.

1.14 PROTECTION OF EXISTING STRUCTURES AND UNDERGROUND FACILITIES

A. The Drawings may indicate existing above- and below-grade structures, drainage lines, storm drains, sewers, water lines, gas lines, electrical lines, and other similar items and Underground Facilities that are known to Owner.

1. At least 2 Business Days, or as otherwise noted, prior to commencement of excavation, notify the owners of the following Underground Facilities:

- a. Sewer lines: Agency, Service Center, Phone: (707) 521-1892
- b. Water/sewer lines: City of Sonoma Utilities Dept., Phone: (707) 933-2244
- c. Telephone conduit: AT&T, Phone: Common Ground Alliance, 811
- d. Cable: Comcast, Phone: Common Ground Alliance, 811
- e. Overhead telephone lines:
- f. Overhead power lines: PG&E, 811
- g. Gas Lines: Common Ground Alliance, 811
- h. Other: SVCSD 18” PVC Recycled Water Pipeline
- i. Storm Drain 66” Storm Drain, City of Sonoma (707) 933-2245

B. Where overhead service to a structure, known to receive service, does not exist, then underground service shall be assumed to exist.

C. Attention is also directed to the existence of overhead power and telephone lines.

D. Perform potholing using hand or mechanical vacuum methods within 24 inches (in any direction) of the Underground Facilities. This may be done on an area-by-area basis, but

shall be accomplished at least 7 Days in advance of the date of construction within such area.

- E. No attempt has been made to locate private utilities on private property such as sprinkler irrigation systems or electrical conduits. Contact the property owners prior to construction.
- F. In addition to reporting, if a utility is damaged, Contractor shall take appropriate action as provided in Document 00700 (General Conditions).
- G. 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).
- H. Provide Utility Protection Plan, including:
 - 1. Indication of all utilities that are expected to conflict with Work, including proposed pothole locations.
 - 2. Proposed measures to protect active utilities from damage and removal of inactive utilities, as necessary.
 - 3. Proposed measures to be taken in the event an active utility is damaged or broken due to Contractor's activities.

1.15 PERMITS

- A. Permits, agreements, or written authorizations that are known by Owner to apply to this Project, and that have been or will be obtained by Owner, are listed below:
 - 1. *US Department of the Army, Corps of Engineers Section 404 nationwide permit.* Owner is in the process of obtaining this permit.
 - 2. *California Department of Fish and Wildlife 1601, Stream Alteration Agreement (Notification #1600-2015-0288-03).* A copy of Owner's agreement is included at the end of this Section 01100.
 - 3. *San Francisco Bay Regional Water Quality Control Board (SFBRWQCB), Clean Water Act, Section 401 Certification for the 5th Street East Recycled Water Pipeline Project, dated November 16, 2015.* A copy of the certification is included at the end of this Section 01100.
 - 4. *State Water Resources Control Board (SWRCB), Order No. 2009-0009 – DWQ, National Pollutant Discharge Elimination System (NPDES), General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Construction General Permit).* The permit is available at Owner's office or is available online at http://www.swrcb.ca.gov/water_issues/programs/stormwater/constpermits.shtml. Owner will file a Notice of Intent with SWRCB to obtain coverage under the General Permit. Contractor shall provide the Storm Water Pollution Prevention Plan, as described in Section 01500 (Temporary Facilities and Controls), in support of the Notice of Intent. Owner has determined that this Project has a combined risk level 2 as defined by SWRCB.
 - 5. *County of Sonoma Encroachment Permit.* A copy of Owner's encroachment permit is included at the end of this Section 01100. Contractor will be required to obtain a separate no-cost permit from PRMD.
 - 6. *City of Sonoma Encroachment Permit.* A copy of Owner's encroachment permit will be available at Owner's office. Contractor will be required to obtain a separate permit.

- B. Permits, agreements, or written authorizations that are known by Owner to apply to this Project that shall be obtained by Contractor (and the cost of the Permit paid by Owner to permitting agency) are listed below:
1. *County of Sonoma Encroachment Permit*
 2. *City of Sonoma Encroachment Permit.*
 3. *One Time Groundwater Discharge Permit.* If disposing of groundwater to sewer, obtain the necessary no-cost permit from Owner.
 4. *San Francisco Bay Regional Water Quality Control Board (SFBRWQCB), Conditional Certification for the Sonoma Valley County Sanitation District Fifth Street East Recycled Water Pipeline Project.* If disposing of groundwater to surface, obtain the necessary permit from SFBRWQCB.
- C. All other permits that may be required, but that are not listed in 1.15 B above, shall be obtained by Contractor at Contractor's sole cost and expense. Such permits include, but are not limited to:
1. *Cal/OSHA Permit.* Obtain, as applicable, permit(s) as required by Cal/OSHA for the following:
 - a. Construction of trenches or excavations that are five feet or more in depth and into which a person is required to descend.
 The local Cal/OSHA district office is located at:

1221 Farmers Lane, Suite 300
Santa Rosa, CA 95405
Phone: (707) 576-2388
- D. Furnish copies of Contractor-obtained permits to Owner.

1.16 ACTUAL DAMAGES

- A. In addition to damages which are impracticable or extremely difficult to determine, for which liquidated damages will be assessed as described in Document 00520 (Agreement) and Document 00700 (General Conditions), Owner may incur other actual damages, including fines imposed by any regulatory agency, resulting from loss of use of Owner facilities, or use in violation of legal or regulatory requirements where the violations result from or arise out of Contractor's activities or omissions. Violations or threatened violations may subject Owner to fines of up to \$25,000 or more per Day or occurrence and/or other costs or civil liabilities.
- B. Contractor shall be liable for and shall pay Owner the amount of any actual damages in addition to liquidated damages or other remedies provided by the Contract Documents.
- C. The amount of liquidated damages provided in Document 00520 (Agreement) and Document 00700 (General Conditions) is not intended to include, nor does the amount include, any damages incurred by Owner for reasons other than those listed in that paragraph. Any money due or to become due to Contractor may be retained by Owner to cover both the liquidated and the actual damages described above and, should such money not be sufficient to cover such damages, Owner shall have the right to recover the balance from Contractor or its sureties.

1.17 RIGHT-OF-WAY

- A. Owner has secured perpetual easements and license agreements (sometimes referred to as "temporary construction easements") for the Project, as indicated, and/or Agreements for

Possession and Use of perpetual easement areas and license areas as necessary for the Project (collectively referred to herein as "Owner's right-of-way").

- B. Contractor's entry into and use of Owner's right-of-way shall be coordinated with and approved by Owner in advance of Contractor's entry into or use of Owner's right-of-way. Contractor shall provide not less than two Business Days advanced notice of Contractor's temporary entry or continued use of Owner's right-of-way.
- C. Contractor shall contain their activities within the boundaries of the Owner's right-of-way. If necessary, Contractor shall request Owner to delineate the boundaries of Owner's right-of-way on the ground, and such request shall be considered by Owner as Construction Staking for the purpose of this requirement (see applicable requirements under Paragraph 1.13).
- D. Owner shall be the primary point of contact for any necessary interactions required between Contractor and property owners affected by the Work unless specifically agreed to in advance by Owner.
- E. Contractor shall immediately notify Owner of any dispute with or issue raised by affected property owners, or others, in regard to Contractor's use of or activities within Owners' right-of-way. Should any issue arise regarding Contractor's activities within or use of Owner's right-of-way, Owner reserves the exclusive authority to determine or agree to any resolution of such matters.

1.18 DOCUMENT TRACKING

- A. Owner will maintain a computerized document control system to monitor the generation, status, and filing of documents. Documents such as, but not limited to, Contracts, Cost Proposals, Change Orders (proposed and approved), Meeting Minutes, Schedules and Reports, Payment Applications, certificates of insurance, Safety Reports, Requests for Information, Requests for Substitutions, correspondence, communications, notices, Submittals, transmittals, and logs shall be submitted electronically for Owner to control the documents using the computerized system. Owner will use the computerized system to track and manage all documents on the Project, after Notice to Proceed, to the greatest extent possible.
- B. Provide all Project documents to Owner in electronic format, unless otherwise required by the Contract Documents. If file size prohibits electronic transmittal, submit to Owner on compact disk (CD).
- C. Provide electronic format documents in searchable portable document format (PDF), unless otherwise required by the Contract Documents or directed in writing by Owner.

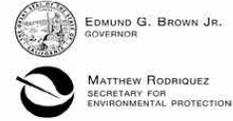
PART 2 PRODUCTS

PART 3 EXECUTION - NOT USED

END OF SECTION

OWNER PERMITS FOLLOW THIS SECTION

SUMMARY ATTACHMENTS



San Francisco Bay Regional Water Quality Control Board

Sent via electronic mail: No hard copy to follow

November 16, 2015
CIWQS Reg. Meas. 402610
CIWQS Place ID 817597

Sonoma Valley County Sanitation District
404 Aviation Blvd.
Santa Rosa, CA 95403
Attn.: David Cook
David.Cook@scwa.ca.gov

Subject: Notice of Applicability for Enrollment of the 5th Street East Recycled Water Pipeline Project under the Clean Water Act (CWA) Section 401 General Water Quality Certification for Nationwide Permit 12, Sonoma County

Dear Mr. Cook:

On August 25, 2015, you provided the Regional Water Board with a Notice of Intent to enroll the 5th Street East Recycled Water Pipeline Project (Project) for coverage under the State's CWA Section 401 General Water Quality Certification for Nationwide Permit 12 for Utility Line Activities (General Certification). The project qualifies for enrollment under the General Certification.

The Project consists of installing approximately 7,000 linear feet of 10-inch diameter pipeline extending east from the intersection of Watmaugh Road at Shainsky Road to 5th Street East, then north on 5th Street East to Denmark Street in the City of Sonoma. The pipeline would distribute recycled water for agricultural and urban uses thereby reducing reliance on local and imported surface and groundwater supplies and reducing the amount of treated wastewater effluent released to San Pablo Bay. The pipeline would serve Sonoma Valley High School Campus, Valley Oaks Park, and landowners adjacent to the pipeline. The pipeline would be installed within the existing paved roadway right-of-way, including all construction activities (e.g., equipment laydown, vehicular access, and excavation). The exception would be up to fifteen, 6-inch diameter pipe turnouts that would cross road shoulders and ditches to connect with adjacent landowners. The Project would utilize trenchless methods for pipeline installation at the Nathanson Creek crossing.

The Regional Water Board Executive Officer finds that the Project meets the eligibility criteria, and accordingly, is hereby conditionally authorized for coverage under the

DR. TERRY F. YOUNG, CHAIR | BRUCE H. WOLFE, EXECUTIVE OFFICER

1515 Clay St., Suite 1400, Oakland, CA 94612 | www.waterboards.ca.gov/sanfranciscobay

RECYCLED PAPER

Mr. Jim Miller and
Mrs. Tanya Miller

- 2 -

NOA for the Barthelemy
Creek Stabilization Project
CIWQS Place ID 813592

General Certification. The following conditions are associated with this Notice of Applicability (NOA):

1. All drilling muds, slurries, oils, oil-contaminated water, and other waste materials removed from the bore hole or otherwise used during the Project shall be disposed of at an appropriate location and not discharged to waters of the State. The Applicant shall monitor drill mud pressure and volume at all times during drilling to ensure that hydrofracture or other loss of drill muds has not occurred. In the event of a sudden loss in pressure or volume, the Applicant shall take appropriate steps, including immediately halting the drilling operation, to ensure that drilling muds are not discharged to waters of the State.
2. In the event that any watercourse downcuts and exposes the recycled water pipeline, then within 60 days of discovering the condition, the Applicant shall investigate the cause of the problem and propose and implement corrective actions, including an implementation schedule, acceptable to the Executive Officer.
3. The Applicant is required to use the Riparian Repair and Maintenance Form (Short Form) to provide Project information within 14 days from the date of this NOA. An electronic copy of the Short Form can be downloaded from: www.waterboards.ca.gov/sanfranciscobay/certs.shtml. The completed Short Form and map showing the Project boundaries shall be submitted electronically to habitatdata@waterboards.ca.gov or shall be submitted as a hard copy to both: 1) The Water Board (see the address on the letterhead), to the attention of EcoAtlas; and 2) The San Francisco Estuary Institute, 4911 Central Avenue, Richmond, CA, 94804, to the attention of EcoAtlas.

If you have any questions, please contact Ben Livsey of my staff at (510) 622-2308 or by e-mail to Ben.Livsey@waterboards.ca.gov.

Sincerely,



Digitally signed by
Keith H. Lichten,
Chief
Date: 2015.11.16
10:37:17 -08'00'

for Bruce H. Wolfe
Executive Officer

Cc: SWRCB, DWQ, Stateboard401@waterboards.ca.gov
Water Board, Victor Aelion, victor.aelion@waterboards.ca.gov
U.S. EPA, Region IX, WTR-8, 401 Mailbox, R9-WTR8-Mailbox@epa.gov
Corps, Pam Kostka, Pamela.K.Kostka@usace.army.mil
CDFW, Lorie Hammerli, Lorie.Hammerli@wildlife.ca.gov
EcoAtlas, Habitat.data@waterboards.ca.gov

DR. TERRY F. YOUNG, CHAIR | BRUCE H. WOLFE, EXECUTIVE OFFICER

1515 Clay St., Suite 1400, Oakland, CA 94612 | www.waterboards.ca.gov/sanfranciscobay





State of California – The Natural Resources Agency
DEPARTMENT OF FISH AND WILDLIFE
Bay Delta Region
7329 Silverado Trail
Napa, CA 94558
(707) 944-5500
www.wildlife.ca.gov

EDMUND G. BROWN JR., Governor
CHARLTON H. BONHAM, Director



January 28, 2016

Grant Davis
Sonoma Valley County Sanitation District
404 Aviation Blvd
Santa Rosa, CA 95403

Subject: Final Lake or Streambed Alteration Agreement
Notification No. 1600-2015-0288-R3
5th Street East Recycled Water Pipeline Project

Dear Mr. Davis:

Enclosed is the final Streambed Alteration Agreement (Agreement) for the 5th Street East Recycled Water Pipeline Project (Project). Before the California Department of Fish and Wildlife (Department) may issue an Agreement, it must comply with the California Environmental Quality Act (CEQA). In this case, the Department, acting as a responsible agency, filed a Notice of Determination (NOD) within five working days of signing the Agreement. The NOD was based on information contained in the final Environmental Impact Report prepared by the lead agency.

Under CEQA, the filing of an NOD triggers a 30-day statute of limitations period during which an interested party may challenge the filing agency's approval of the Project. You may begin the Project before the statute of limitations expires if you have obtained all necessary local, state, and federal permits or other authorizations. However, if you elect to do so, it will be at your own risk.

If you have any questions regarding this matter, please contact Lorie Hammerli, Environmental Scientist, at (707) 944-5568 or lorie.hammerli@wildlife.ca.gov.

Sincerely,

A handwritten signature in blue ink, appearing to read "CJW".

Craig J. Weightman
Environmental Program Manager
Bay Delta Region

cc: Dave Cook: Dcook@scwa.ca.gov
Lieutenant Jones
Warden Morton

Conserving California's Wildlife Since 1870

CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE

BAY DELTA REGION
7329 SILVERADO TRAIL
NAPA, CALIFORNIA 94558
(707) 944-5500
WWW.WILDLIFE.CA.GOV



STREAMBED ALTERATION AGREEMENT
NOTIFICATION No. 1600-2015-0288-R3
Nathanson Creek

SONOMA VALLEY COUNTY SANITATION DISTRICT
5TH STREET EAST RECYCLED WATER PIPELINE PROJECT

This Streambed Alteration Agreement (Agreement) is entered into between the California Department of Fish and Wildlife (CDFW) and Sonoma Valley County Sanitation District (Permittee) as represented by Grant Davis.

RECITALS

WHEREAS, pursuant to Fish and Game Code (FGC) section 1602, Permittee notified CDFW on August 24, 2015, that Permittee intends to complete the project described herein.

WHEREAS, pursuant to FGC section 1603, CDFW has determined that the project could substantially adversely affect existing fish or wildlife resources and has included measures in the Agreement necessary to protect those resources.

WHEREAS, Permittee has reviewed the Agreement and accepts its terms and conditions, including the measures to protect fish and wildlife resources.

NOW THEREFORE, Permittee agrees to complete the project in accordance with the Agreement

PROJECT LOCATION

The project areas subject to this Agreement are located at Nathanson Creek at Watmaugh Road latitude 38.2647163, longitude -122.4530390 and 5 locations parallel to 5th Street between latitude 38.280212, longitude -122.449300 and latitude 38.264414, longitude -122.451741W); City of Sonoma, Sonoma County (Exhibit A).

Ver 02/16/2010

Notification #1600-2015-0288-R3
Streambed Alteration Agreement
Page 2 of 21

PROJECT DESCRIPTION

The project is part of the North San Pablo Bay Restoration and Reuse Project (North Bay Water Recycling Program) a larger, multi-phase project. The 5th Street East Recycling Pipeline Project (Pipeline Project) will replace approximately 7,000 linear feet of 10-inch diameter pipeline extending east along Watmaugh Road starting at Shainsky Road to 5th Street East, then turn north on 5th Street to Denmark Street. Two small spurs will extend from the main line to serve additional customers: approximately 1,300 linear feet along Denmark Street to the east side of the Sonoma Valley High School campus, and approximately 400 linear feet along Engler Street to Valley Oaks Park.

The area of the Pipeline Project that is subject to this Agreement is limited to construction of the pipeline crossing at Nathanson Creek along Watmaugh Road and five service turnouts impacting jurisdictional drainages along 5th Street East (Exhibit B). The remainder of the Pipeline Project will not impact, bank, bed, channel, or riparian habitat.

Project activities

The pipeline will be installed underneath Nathanson Creek using horizontal directional drilling (HDD) methodology. Two approximately 10-foot by 10-foot access pits will be excavated within the existing asphalt at Watmaugh Road on either side of the creek for exit and entry points for the pipeline. The entry and exit pits shall be located a minimum of 20 feet away from riparian area and the area will be delimited with silt fencing. HDD will occur at a minimum of 10 feet beneath the bottom of the creek bed of Nathanson Creek.

The HDD drilling mud is composed of bentonite clay and water slurry. Drilling mud will be filtered and processed on-site during the bore operations to be (1) reused to cool the cutting head, (2) lubricate the bore piping, and (3) stabilize the bore hole. The drilling mud will be contained in exit and entry bore pits within existing upland areas beyond the riparian area. Excess drilling mud will be stored in appropriate containers for off-site disposal to an appropriate location. Trenching and excavation of the bore pits will not impact the bank, bed, channel, or riparian habitat of Nathanson Creek.

Five pipeline turnouts will consist of up to 6-inch diameter pipes that will extend service from the main pipeline to the property at each site. Turnouts at the five service locations (sites 1, 2, 5, 6 and 7) include trenching a maximum of 1.5-foot by 12-foot (18 square feet) area, placing the pipe and then backfilling with the excavated soil. Estimated volume of soil at the five turnouts is 3.3 cubic yards.

All access routes and staging areas will be on existing paved roads or previously disturbed areas. Areas impacted by construction activities will be restored to pre-project grade and hydroseeded with a seed mix native to the project area.

Notification #1600-2015-0288-R3
Streambed Alteration Agreement
Page 3 of 21

PROJECT IMPACTS

Existing fish or wildlife resources the project could substantially adversely affect include:

- Western pond turtle (State Species of Special Concern (SSC))
- steelhead trout (Federal Threatened)
- California red-legged frog (Federal Threatened and State SCC)
- California freshwater shrimp (Federal and State Endangered)
- Central Valley Fall and Late-Fall run Chinook Salmon (Federal Species of Concern)
- bats
- nesting birds
- riparian habitat
- aquatic species

The adverse effects the project could have on the fish or wildlife resources identified above include:

- construction pits and trenches that can capture terrestrial organisms
- direct take of fish and other aquatic species
- direct take of terrestrial species
- disturbance from project activity
- disruption to nesting birds and other wildlife
- short-term release of contaminants (e.g., incidental from construction)
- loss of natural bed or bank
- change in contour of bed, channel or bank
- change in gradient of bed, channel or bank
- change in channel cross-section (confinement)
- loss of bank stability during construction
- increase of bank erosion during construction
- soil compaction or other disturbance to soil layer
- change to, or loss or decline of natural bed substrate

Notification #1600-2015-0288-R3
Streambed Alteration Agreement
Page 4 of 21

MEASURES TO PROTECT FISH AND WILDLIFE RESOURCES

1. Administrative Measures

Permittee shall meet each administrative requirement described below.

- 1.1 Documentation at Project Site. Permittee shall make the Agreement, any extensions and amendments to the Agreement, and all related notification materials and California Environmental Quality Act (CEQA) documents, readily available at the project site at all times and shall be presented to CDFW personnel, or personnel from another state, federal, or local agency upon request.
- 1.2 Providing Agreement to Persons at Project Site. Permittee shall provide copies of the Agreement and any extensions and amendments to the Agreement to all persons who will be working on the project at the project site on behalf of Permittee, including but not limited to contractors, subcontractors, inspectors, and monitors.
- 1.3 Notification of Conflicting Provisions. Permittee shall notify CDFW if Permittee determines or learns that a provision in the Agreement might conflict with a provision imposed on the project by another local, state, or federal agency. In that event, CDFW shall contact Permittee to resolve any conflict.
- 1.4 Project Site Entry. Permittee agrees that CDFW personnel may enter the project site at any time to verify compliance with the Agreement.
- 1.5 No Trespass. To the extent that any provisions of this Agreement provide for activities that require the Permittee to traverse another owner's property, such provisions are agreed to with the understanding that the Permittee possesses the legal right to so traverse. In the absence of such right, any such provision is void.
- 1.6 Final Construction Plans. The Permittee shall provide CDFW with a construction ready set of plans prior to the commencement of work. Any changes or modifications to the plans shall be provided to CDFW for review and acceptance.
- 1.7 Notify CDFW Staff Before Beginning Work. Permittee shall notify CDFW, in writing, at least five (5) calendar days prior to initiation of construction (project) activities and at least five (5) calendar days prior to completion of construction (project) activities. Notification shall be made via e-mail at lorie.hammerli@wildlife.ca.gov.

Notification #1600-2015-0288-R3
Streambed Alteration Agreement
Page 5 of 21

2. Avoidance and Minimization Measures

To avoid or minimize adverse impacts to fish and wildlife resources identified above, Permittee shall implement each measure listed below.

Work Periods and Planning

- 2.1 Construction Activities Only During the Dry Season. No project related activities shall occur from November 1 through April 31.
- 2.2 Work Period in Dry Weather Only. The work period for completing the work within the stream zones, shall be restricted to periods of low stream flow and dry weather. Drilling shall not begin unless a no precipitation forecast is obtained covering the entire construction phase (within the area covered under this Agreement) and the time necessary to implement erosion control measures. Seventy-two-hour weather forecasts from the National Weather Service shall be consulted prior to startup of any phase of the project that may result in sediment runoff into the stream. The forecast shall be documents and provided to CDFW upon request.
- 2.3 Daily Work Window. Permittee shall terminate all project activities covered under this Agreement 30 minutes before sunset and shall not resume until 30 minutes after sunrise. Permittee shall use sunrise and sunset times established by the U.S. Naval Observatory Astronomical Applications Department for the geographic area where the project is located.
- 2.4 Work Period Modification. If a work period modification is needed, the work may be permitted outside of the work period and extended on a day-to-day basis by a CDFW representative who reviewed the project, or if unavailable, through contact with the Regional office at 707-944-5520. Permittee shall submit a written request for a work period variance to CDFW. The work period variance request shall: 1) describe the extent of work already completed; 2) detail the activities that remain to be completed; 3) provide a National Weather Service forecast covering the time to need to complete a phase or activity; 4) detail the time required to complete each of the remaining activities; and 5) provide photographs of both the current work completed and the proposed site for continued work. The work period variance request should consider the effects of increased stream flows, rain delays, increased erosion control measures, limited access due to saturated soil conditions, and limited growth of erosion control grasses due to cool weather. Work period variances are issued at the discretion of CDFW. CDFW will review the written request to work outside of the established work period. CDFW reserves the right to require additional measures to protect fish and wildlife resources as a condition for granting the variance.

Notification #1600-2015-0288-R3
Streambed Alteration Agreement
Page 6 of 21

- 2.5 Directional Drilling Fluid Release Contingency Plan. A HDD Fluid Release Contingency Plan shall be submitted to CDFW at least fifteen (15) days prior to operations. The plan shall be on site at all times and all contractors shall have pre-arranged duties in case of a frac-out. Clean up equipment shall be on site prior to the start of operations. In case of a frac-out, all drilling shall cease, and all personal shall implement the clean up contingency plan. Operations shall not resume until the frac-out is located, contained and cleaned up. CDFW shall be notified on every frac-out immediately. Directional drilling shall not resume until approved by CDFW.
- 2.6 Directional Drilling Plan. A directional drilling plan that includes figures and maps showing the pit locations, dimensions, access routes, staging areas, and wildlife resource considerations shall be submitted to CDFW for review and acceptance prior to any ground disturbance related to the directional drilling.
- 2.7 Frac-Out – Dye. A non-toxic fluorescent water soluble dye shall be added to the drilling muds to allow for frac-outs to be seen in muddy waters. The dye shall be used in a concentration which allows the monitors to easily determine the location of the frac-out.
- 2.8 Work According to Plans. All work shall be completed according to the plans submitted to CDFW entitled, *North Bay Water Reuse Program Sonoma Valley County Sanitation District: Fifth Street East Recycled Water Pipeline*, prepared by Sonoma Valley County Sanitation District, sheets 1-22, dated November 19, 2014. If the Permittee finds it necessary to update project plans prior to construction, the updated plans will be submitted to CDFW at least 10 days prior to beginning project activities to determine if an Amendment to this Agreement is required. Project activities shall not proceed until CDFW has accepted the updated plans in writing. At the discretion of CDFW, minor plan modifications may require an Amendment to this Agreement. At the discretion of the CDFW, if substantial changes are made to the original plans this Agreement becomes void and the Permittee shall submit a new Notification.

Notification #1600-2015-0288-R3
Streambed Alteration Agreement
Page 7 of 21

Directional Drilling (HDD)

- 2.9 Frac-out Containment. HDD operations shall not commence until all materials necessary to contain a frac-out or fluid spill are on site and immediately available.
- 2.10 Frac-out Contingency. In the event of a frac-out, that has the potential to impact Nathanson Creek or the supporting riparian habitat, all drilling shall cease, and all personal shall implement the HDD Fluid Release Contingency Plan. HDD shall not resume until approved by the CDFW.
- 2.11 HDD Entry and Exit Locations. HDD entry and exit pits shall be located a minimum of 20 feet from riparian areas. The exit and entry pits shall be appropriately sized to contain drilling fluids and cuttings. Control measures, to ensure drilling mud is contained, shall be monitored for effectiveness and shall be repaired or replaced as needed.
- 2.12 Drilling-Materials. No drilling spoils shall be allowed to enter the stream channel. Any contaminated water/materials from the drilling and/or project activities shall be pumped or placed into a holding facility and removed for proper disposal.
- 2.13 Boring Equipment Staging. Boring activities and set-up activities for boring operations shall be situated outside of riparian areas.
- 2.14 Drilling Method. The Permittee shall design, pre-plan and direct the HDD operations in such a way as to minimize the risk of spills of all types. In substrates where frac-outs are likely to occur, the Permittee shall operate in a manner that will reduce risk, such as using lower pressure and greater boring depths.
- 2.15 Spill Clean up. Permittee shall begin the clean-up of all spills immediately. CDFW shall be notified immediately by the Permittee of any spills within the stream zone and shall be consulted regarding clean-up procedures. The Permittee shall have all spill clean-up equipment on site and ready to deploy during construction.
- 2.16 Spill Containment. All activities performed in or within 50 feet of a watercourse shall have absorbent materials designated for spill containment and clean-up activities on-site for use in an accidental spill. If a spill occurs immediately initiate the clean-up activities. CDFW shall be notified by the Permittee and consulted regarding clean up procedures. The Permittee shall immediately notify the California Emergency Management Agency at 1-800-852-7550.

Notification #1600-2015-0288-R3
Streambed Alteration Agreement
Page 8 of 21

Trenching

- 2.17 Stockpile Topsoil. Permittee shall remove and stockpile separately the top six to twelve inches of soils and material. This stockpiled top soil material shall be replaced at the end of construction, and the stream channel returned to pre-project grade. With the exception of vegetation directly in the trench excavation area, vegetation within the stream zone that proves to be an obstruction to normal operations should be trimmed only as necessary. Trenches shall avoid large trees and their root zones.
- 2.18 Restore Contours. Permittee shall return all disturbed areas to as near as possible to pre-project grade and conditions.

Wildlife Protection and Prevention – Special Status Species

- 2.19 Unauthorized Take. The Project area has been identified as an area that is potentially inhabited by state or federally-listed species or State Species of Special Concern (special status species). Permittee is required to comply with all applicable state and federal laws, including the California Endangered Species Act (CESA) and the federal Endangered Species Act. This Agreement does not authorize the take of any State or federal endangered or threatened species (listed species). Liability for any take or incidental take of such listed species remains the responsibility of Permittee for the duration of the Project. Any unauthorized take of such listed species may result in prosecution and nullification of the Agreement.
- 2.20 Qualified Biologist. Prior to initiating Project related surveys or Project related activities, Permittee shall submit to CDFW in writing the name, qualifications, business address, and contact information for the Project biologist(s) (qualified biologist). Permittee shall obtain CDFW's written acceptance of the qualified biologist prior to the commencement of Project activities. The qualified biologist shall be knowledgeable and experienced in the biology and natural history of local fish and wildlife resources potentially present within and adjacent to the Project area. The qualified biologist shall be responsible for pre-Project activity surveys and monitoring the Project area during Project activities, including any ground- or vegetation-disturbing activities in areas subject to this Agreement.
- 2.21 Qualified Biologist. A qualified biologist is an individual who shall have a minimum of five (5) years of academic training and professional experience in biological sciences and related resource management activities with a minimum of two (2) years conducting surveys for each special-status species that may be present at or adjacent to the Project area. The qualified biologist is not authorized to handle special-status species unless approved and/or permitted by the appropriate agencies.

Notification #1600-2015-0288-R3
Streambed Alteration Agreement
Page 9 of 21

- 2.22 Qualified Biologist Authority. The qualified biologist shall have the authority to immediately stop any activity that is not in compliance with this Agreement, and/or to order any reasonable measure to avoid or minimize impacts to fish and wildlife resources. Neither the qualified biologist nor CDFW shall be liable for any costs incurred as a result of compliance with this measure. This includes cease-work orders issued by the CDFW.
- 2.23 Authority to Minimize frac-outs. The qualified biologist shall have the authority to make recommendations to the drilling Operators and, if necessary, shut down operations if the Operators are not following procedures which minimize frac-outs. The qualified biologist shall consult with the CDFW before allowing the Operator to resume HDD operations. Neither the qualified biologist nor CDFW shall be liable for any costs incurred as a result of compliance with this Measure.
- 2.24 On-site Education. The qualified biologist shall provide an education program for all persons employed or otherwise working on the project site prior to performing any work on-site. At a minimum, the program shall consist of a presentation from the qualified biologist that includes a discussion of special-status species that have the potential to occur at the project location, including a description of the species and their habitat, the importance of the species and their habitat, the general measures that are being implemented to conserve the species as they relate to the work site, and the work site boundaries where construction may occur. The qualified biologist shall also include as part of the education program the legal protections for the species, penalties for violations and project-specific protective measures. Interpretation shall be provided for non-English speaking workers, and the same instruction shall be provided for any new workers prior to their performing work on-site.
- 2.25 On-site Education. The qualified biologist shall provide on-site training for the work crews and monitors to ensure understanding and compliance with the *HDD Fluid Release Contingency Plan*.
- 2.26 Breeding Bird Survey Before Commencement. If construction, grading, or other project-related improvements are scheduled during the nesting season of protected raptors and migratory birds (typically February 15 to August 15), a focused survey for active bird nests shall be conducted the qualified biologist within 15 days prior to the beginning to project-related activities. The results of the survey shall be submitted to CDFW. If active nest are found, the Permittee shall consult with CDFW and the United States Fish & Wildlife Service (FWS) regarding appropriate action to comply with the Migratory Bird Treaty Act of 1918 and the Fish & Game Code of California, section 3503. If a lapse in project-related work of 15 days or longer occurs, another focused survey and if required, consultation with CDFW and FWS, will be required before project work can be reinitiated.

Notification #1600-2015-0288-R3
Streambed Alteration Agreement
Page 10 of 21

- 2.27 Bat Protection – Bridges.** Prior to work commencing at any bridge, the structure shall be surveyed for bats by the Qualified Biologist. If evidence of bat activity is identified during pre-project surveys, then the Permittee will consult with a biologist with an appropriate level of bat experience to identify the species and propose site specific avoidance and minimization measures. The bat biologist shall be approved by CDFW and the bat biologist shall submit avoidance and minimization measures to CDFW for review and acceptance. Bats shall not be disturbed without specific notice to and consultation with CDFW. CDFW reserves the right provide additional provisions to this agreement designed to protect nesting/roosting bats. Impact minimization measures shall be implemented prior to project activities.
- 2.28 Pre-Construction Surveys General.** Prior to ground disturbing activities the qualified biologist shall conduct surveys for special-status species. The surveys shall be appropriately timed and of a sufficient duration to maximize the potential to detect if species are present and implement avoidance measures.
- 2.29 Special-Status Species Protection Measures**
- 2.29.1 All qualified biologists conducting/implementing surveys and protection measures for special-status species shall be a CDFW approved biologists.
- 2.29.2 If CDFW determines or Permittee finds, that any special-status species are present at the Project area, Permittee shall stop all Project work and Permittee or the qualified biologist shall notify CDFW and other agencies such as the USFWS as may be appropriate. If there is imminent danger of injury to special-status species from Project related activities, and the special-status species individual(s) do not move out of the work area on their own, the qualified biologist shall contact the appropriate agency. Through consultation with CDFW, additional measures may be developed to protect special-status species.
- 2.29.3 If a special-status species enters the work area, all work shall stop until it leaves of its own volition. Any sightings and/or injuries of these species shall be reported to CDFW within 24 hours.

Notification #1600-2015-0288-R3
Streambed Alteration Agreement
Page 11 of 21

- 2.29.4 The qualified biologist will conduct clearance surveys at the beginning of each day within or adjacent to suitable special-status species habitat and regularly throughout the workday when project activities are occurring within or adjacent to suitable special-status species habitat.
- 2.29.5 If special-status species are found in the project area, any vehicle parked on site for more than 15 minutes shall be inspected by the project personnel before it is moved to ensure that special-status species have not moved under the vehicle. Any parking areas shall be checked in advance by the qualified biologist.
- 2.29.6 The qualified biologist shall have the authority to halt work activities that may affect special-status species, at any life stage.
- 2.29.7 In the event special-status species are found in the project area, the qualified biologist shall inspect the work area and areas adjacent to the work area that will support construction equipment prior to mobilization of the equipment. If the qualified biologist determines the work site is not occupied by special-status species, equipment may be moved onto the site.

Wildlife Protection and Prevention – General

- 2.30 Pipes and Culverts. All construction pipes, culverts, or similar structures that are stored at a construction site for one or more overnight periods shall be either securely capped prior to storage or thoroughly inspected by project personnel for wildlife before the pipe is subsequently buried, capped, or otherwise used or moved in any way.
- 2.31 Allow Wildlife To Leave Unharmd. Permittee shall allow any wildlife encountered during the course of construction to leave the construction area unharmed. This authorization does not allow for the trapping, capture, or relocation of any state or federally listed species.
- 2.32 Demarcate Project Area Boundary. In consultation with the qualified biologist, the Permittee shall demarcate the outer perimeter of the Project area to prevent damage to adjacent habitat and to provide visual orientation to its limits. Marking shall be in place while the work area is in use during construction. All persons employed or otherwise working in the Project area shall be instructed about the restrictions that the marking represents.

Notification #1600-2015-0288-R3
Streambed Alteration Agreement
Page 12 of 21

- 2.33 Remove Temporary Flagging, Fencing, and Barriers. Permittee shall remove all temporary flagging, fencing, and/or barriers from the Project area upon completion of Project-related activities.
- 2.34 Cover Open Excavations. Open excavations left overnight will be covered by materials flush with the ground surface to prevent entrapment of wildlife or appropriately sized and angled escape ramps shall be installed.

Construction Avoidance/Minimization Measures

- 2.35 Staging Areas. Unless otherwise authorized staging areas shall be located upland and well outside of riparian habitat. Vegetation disturbance from the staging area and associated access path shall be minimized and limited to the immediate construction area.
- 2.36 Operating Equipment and Vehicle Leaks. Any equipment or vehicles driven and/or operated within or adjacent to waterways shall be checked and maintained daily to prevent leaks of materials that could be deleterious to aquatic and terrestrial life or riparian habitat.
- 2.37 Stationary Equipment Leaks. Stationary equipment such as motors, pumps, generators, and welders, located within or adjacent to the waterways shall be positioned over drip pans. Stationary heavy equipment shall have suitable containment to handle a catastrophic spill/leak.
- 2.38 Equipment Maintenance and Fueling. No equipment maintenance or fueling shall be done within or near any stream channel or lake margin where petroleum products or other pollutants from the equipment may enter these areas.
- 2.39 Remove Temporary Flagging, Fencing, and Barriers. Permittee shall remove all temporary flagging, fencing, and/or barriers from the project site and vicinity of the stream upon completion of project activities.
- 2.40 Equipment Storage. Staging and storage areas for equipment, materials, fuels, lubricants and solvents, shall be located within the designated staging areas.
- 2.41 Stockpiled Materials. Building materials and/or construction equipment shall not be stockpiled or stored where they may be washed into the water or cover aquatic or riparian vegetation. Stockpiles shall be covered when measurable rain is forecasted.

Notification #1600-2015-0288-R3
Streambed Alteration Agreement
Page 13 of 21

- 2.42 Disposal and Removal of Materials. All removed vegetation and debris shall be moved outside the stream or locations that may be subjected to high storm flows. All removed vegetation and debris shall be disposed of according to State and local laws and ordinances.
- 2.43 Location of Spoil Sites. Spoil sites shall not be located in locations that may be subjected to high storm flows, where spoil may be washed back into the stream, or where it may impact streambed habitat, aquatic, or riparian vegetation.
- 2.44 Prohibition Against Use of Plastic Netting in Erosion Control Measures. Permittee shall not use temporary or permanent erosion control devices containing plastic netting, including photo- or bio-degradable plastic netting. Acceptable substitutes include coconut coir matting or tackified hydroseeding compounds.
- 2.45 No Equipment in Stream. No equipment shall be operated below the level of top-of-bank.
- 2.46 Staging Equipment. Staging and storage areas for equipment, materials, fuels, lubricants and solvents, shall be located within the designated staging area on paved surfaces. Heavy equipment shall be limited to the existing access roads. Stationary equipment such as motors, pumps, generators, compressors and welders, located adjacent to the stream channel and riparian area shall be positioned over drip-pans. Any equipment or vehicles driven and/or operated adjacent to the stream channel and riparian areas must be checked and maintained daily to prevent leaks of materials that if introduced to water could be deleterious to aquatic life. Vehicles must be moved away at a minimum distance of 300 feet from these habitats prior to refueling and lubrication.

Debris Materials and Waste

- 2.47 No Dumping. Permittee and all contractors, subcontractors, and employees shall not dump any litter or construction debris within the stream, or where it may pass into a watercourse.
- 2.48 Pick Up Debris. Permittee shall pick up all debris and waste daily.
- 2.49 Wash water. Water containing mud, silt, or other pollutants from equipment washing or other activities, shall not be allowed to enter a watercourse or placed in locations that may be subjected to high storm flows.
- 2.50 Clean-up: All construction debris and associated materials shall be removed from the work-site upon completion of this project.

Notification #1600-2015-0288-R3
Streambed Alteration Agreement
Page 14 of 21

Toxic and Hazardous Materials

- 2.51 Toxic Materials. Any hazardous or toxic materials that could be deleterious to aquatic life that could be washed into a watercourse or its tributaries shall be contained in water tight containers or removed from the project site.
- 2.52 Hazardous Substances. Raw cement/concrete or washings thereof, asphalt, paint or other coating material, oil or other petroleum products, or any other substances which could be hazardous to aquatic life, resulting from project related activities, shall be prevented from contaminating the soil and/or entering any watercourse or its tributaries. Any of these materials, placed within or where they may enter the stream by Permittee or any party working under contract, or with the permission of Permittee, shall be removed immediately.
- 2.53 Contaminants. Debris, soil, silt, bark, slash, sawdust, rubbish, creosote-treated wood, raw cement/concrete or washings thereof, asphalt, paint or other coating material, oil or other petroleum products, or any other substances which could be hazardous to aquatic life, wildlife, or riparian habitat resulting from the project related activities shall be prevented from contaminating the soil and/or entering any watercourse or its tributaries. Any of these materials, placed within or where they may enter the stream, by Permittee or any party working under contract, or with the permission of the Permittee, shall be removed immediately.

Site Restoration/Stabilization

- 2.54 Treat exposed areas. All exposed/disturbed areas and access points within jurisdictional areas left barren of vegetation as a result of Project activities shall be restored. Grassland areas shall be restored with a blend of native erosion control grass seeds and sites that contain wetland vegetation shall be restored with a blend of site appropriate wetland vegetation.
- 2.55 Retain Topsoil. At sites 1, 2, 5, 6 and 7; a minimum of 5 (five) inches of topsoil shall be salvaged and replaced after trenching. Top soil shall be maintained during construction to preserve the seed bank.
- 2.56 Erosion Control Measures. Permittee shall stabilize all exposed/disturbed soils within the Project area to reduce erosion potential, both during and following ground disturbance. Erosion control measures, such as straw wattles, straw hay bales, and broadcasted straw shall be used where ever silt-laden water has the potential to leave the Project area.
- 2.57 Site Stabilization. Site stabilization shall be completed as soon as possible after Project related activities in those areas cease. Seeding placed after October 15 shall be covered with broadcast straw, jute netting, coconut fiber

Notification #1600-2015-0288-R3
Streambed Alteration Agreement
Page 15 of 21

blanket or similar erosion control blanket. Monofilament or woven plastic strands shall not be used.

- 2.58 Revegetation Criteria. To ensure a successful revegetation effort, all revegetation shall be monitored and maintained over a two (2)-year monitoring period or until revegetation has met or exceeded pre-project baseline conditions, as determined by CDFW. If revegetation fails, then CDFW shall require additional mitigation that is appropriate to compensate for the temporal loss of habitat.
- 2.59 Remove Temporary Flagging, Fencing, and Barriers. Permittee shall remove all temporary flagging, fencing, and/or barriers from the project site and vicinity of the stream upon completion of project activities.
- 2.60 Prohibited Plant Species. Permittee shall not plant, seed or otherwise introduce invasive exotic plant species. Prohibited exotic plant species include those identified in the California Exotic Pest Plant Council's database, which is accessible at: <http://www.cal-ipc.org/ip/inventory/weedlist.php>
- 2.61 Irrigation. When supplemental watering is shall be used as necessary to establish and maintain plant growth in order to meet success criteria, irrigation shall be done in the most water efficient manner possible, such as using hand watering, drip/mircoirrigation or through the use of a time release system

Notification #1600-2015-0288-R3
Streambed Alteration Agreement
Page 16 of 21

3. Reporting Measures

Permittee shall meet each reporting and maintenance requirement described below.

- 3.1 Biological Surveys. Permittee shall submit the results of biological surveys to CDFW for review within fourteen (14) business days of the completion of the surveys. The summary of survey results should describe the date, duration and timing of the surveys, weather conditions, species observed (including potential predators, prey or competitors), behaviors observed (target species), and GPS coordinates for sightings. GPS coordinates for sensitive species should be taken at a distance and adjusted using a rangefinder. Results for multiple species may be combined into a single report. Send reports to: lorie.hammerli@wildlife.ca.gov. The report shall be no more than three (3) pages in length for each species surveyed.
- 3.2 Annual Status Report. An annual monitoring report on Project-related site restoration and monitoring shall be provided to CDFW by January 31 each year until the end of the CDFW required monitoring period. The report shall include monitoring results (including methods and discussion of modifications since the previous monitoring period); analysis of the monitoring results, including evaluation of conditions relative to success criteria; discussion of remedial measures identified and implemented following the previous monitoring period; overall site progress; any remedial actions taken during the year; and a summary of the general successes and failures of revegetation efforts. The report shall include site photos, maintenance activities, observed wildlife, and overall site conditions (garbage, vandalism, and invasive weed growth). Any proposed changes to the performance criteria or timelines shall require CDFW written acceptance.
- 3.3 California Natural Diversity Data Base. If any special-status species are observed during Project surveys or at any time during Project implementation or mitigation and monitoring work, Permittee shall submit California Natural Diversity Data Base (CNDDDB) forms to the CNDDDB within five (5) working days of the sightings, and provide CDFW Region 3 with copies of the CNDDDB forms and survey maps. Refer to <http://www.CDFW.ca.gov/biogeodata/cnddb/> for additional information on CNDDDB.

Notification #1600-2015-0288-R3
Streambed Alteration Agreement
Page 17 of 21

CONTACT INFORMATION

Any communication that Permittee or CDFW submits to the other shall be in writing and any communication or documentation shall be delivered to the address below by U.S. mail, fax, or email, or to such other address as Permittee or CDFW specifies by written notice to the other.

To Permittee:

Grant Davis
Sonoma Valley County Sanitation District
404 Aviation Blvd
Santa Rosa, CA 95403
707-547-1900

To Contact:

Dave Cook
404 Aviation Blvd
Santa Rosa, CA 95403
707-547-1944
dcook@scwa.ca.gov

To CDFW:

California Department of Fish and Wildlife
Bay Delta Region
7329 Silverado Trail
Napa, CA 94558
Attn: Lake and Streambed Alteration Program – Lorie Hammerli
Notification #1600-2015-0288-R3
Fax (707) 944-5553
Phone (707) 944-5568
lorie.hammerli@wildlife.ca.gov

Notification #1600-2015-0288-R3
Streambed Alteration Agreement
Page 18 of 21

LIABILITY

Permittee shall be solely liable for any violations of the Agreement, whether committed by Permittee or any person acting on behalf of Permittee, including its officers, employees, representatives, agents or contractors and subcontractors, to complete the project or any activity related to it that the Agreement authorizes.

This Agreement does not constitute CDFW's endorsement of, or require Permittee to proceed with the project. The decision to proceed with the project is Permittee's alone.

SUSPENSION AND REVOCATION

CDFW may suspend or revoke in its entirety the Agreement if it determines that Permittee or any person acting on behalf of Permittee, including its officers, employees, representatives, agents, or contractors and subcontractors, is not in compliance with the Agreement.

Before CDFW suspends or revokes the Agreement, it shall provide Permittee written notice by certified or registered mail that it intends to suspend or revoke. The notice shall state the reason(s) for the proposed suspension or revocation, provide Permittee an opportunity to correct any deficiency before CDFW suspends or revokes the Agreement, and include instructions to Permittee, if necessary, including but not limited to a directive to immediately cease the specific activity or activities that caused CDFW to issue the notice.

ENFORCEMENT

Nothing in the Agreement precludes CDFW from pursuing an enforcement action against Permittee instead of, or in addition to, suspending or revoking the Agreement.

Nothing in the Agreement limits or otherwise affects CDFW's enforcement authority or that of its enforcement personnel.

Notification #1600-2015-0288-R3
Streambed Alteration Agreement
Page 19 of 21

OTHER LEGAL OBLIGATIONS

This Agreement does not relieve Permittee or any person acting on behalf of Permittee, including its officers, employees, representatives, agents, or contractors and subcontractors, from obtaining any other permits or authorizations that might be required under other federal, state, or local laws or regulations before beginning the project or an activity related to it.

This Agreement does not relieve Permittee or any person acting on behalf of Permittee, including its officers, employees, representatives, agents, or contractors and subcontractors, from complying with other applicable statutes in the FGC including, but not limited to, FGC sections 2050 et seq. (threatened and endangered species), 3503 (bird nests and eggs), 3503.5 (birds of prey), 5650 (water pollution), 5652 (refuse disposal into water), 5901 (fish passage), 5937 (sufficient water for fish), and 5948 (obstruction of stream).

Nothing in the Agreement authorizes Permittee or any person acting on behalf of Permittee, including its officers, employees, representatives, agents, or contractors and subcontractors, to trespass.

AMENDMENT

CDFW may amend the Agreement at any time during its term if CDFW determines the amendment is necessary to protect an existing fish or wildlife resource.

Permittee may amend the Agreement at any time during its term, provided the amendment is mutually agreed to in writing by CDFW and Permittee. To request an amendment, Permittee shall submit to CDFW a completed CDFW "Request to Amend Lake or Streambed Alteration" form and include with the completed form payment of the corresponding amendment fee identified in CDFW's current fee schedule (see Cal. Code Regs., tit. 14, § 699.5).

TRANSFER AND ASSIGNMENT

This Agreement may not be transferred or assigned to another entity, and any purported transfer or assignment of the Agreement to another entity shall not be valid or effective, unless the transfer or assignment is requested by Permittee in writing, as specified below, and thereafter CDFW approves the transfer or assignment in writing.

The transfer or assignment of the Agreement to another entity shall constitute a minor amendment, and therefore to request a transfer or assignment, Permittee shall submit to CDFW a completed CDFW "Request to Amend Lake or Streambed Alteration" form and include with the completed form payment of the minor amendment fee identified in CDFW's current fee schedule (see Cal. Code Regs., tit. 14, § 699.5).

Notification #1600-2015-0288-R3
Streambed Alteration Agreement
Page 20 of 21

EXTENSIONS

In accordance with FGC section 1605(b), Permittee may request one extension of the Agreement, provided the request is made prior to the expiration of the Agreement's term. To request an extension, Permittee shall submit to CDFW a completed CDFW "Request to Extend Lake or Streambed Alteration" form and include with the completed form payment of the extension fee identified in CDFW's current fee schedule (see Cal. Code Regs., tit. 14, § 699.5). CDFW shall process the extension request in accordance with FGC 1605(b) through (e).

If Permittee fails to submit a request to extend the Agreement prior to its expiration, Permittee must submit a new notification and notification fee before beginning or continuing the project the Agreement covers (Fish & G. Code, § 1605, subd. (f)).

EFFECTIVE DATE

The Agreement becomes effective on the date of CDFW's signature, which shall be: 1) after Permittee's signature; 2) after CDFW complies with all applicable requirements under the California Environmental Quality Act (CEQA); and 3) after payment of the applicable FGC section 711.4 filing fee listed at http://www.dfg.ca.gov/habcon/ceqa/ceqa_changes.html.

TERM

This Agreement shall expire on December 31, 2019, unless it is terminated or extended before then. All provisions in the Agreement shall remain in force throughout its term. Permittee shall remain responsible for implementing any provisions specified herein to protect fish and wildlife resources after the Agreement expires or is terminated, as FGC section 1605(a)(2) requires.

EXHIBITS

The documents listed below are included as exhibits to the Agreement and incorporated herein by reference.

- A. 5th *Street East Recycled Water Pipeline Project: Location Map*, Figure1, prepared by Sonoma County Water Agency, undated.
- B. 5th *Street East Recycled Water Pipeline Project*, Sites, Figures 3, 4 and 5, prepared by Sonoma County Water Agency, undated.

Notification #1600-2015-0288-R3
Streambed Alteration Agreement
Page 21 of 21

AUTHORITY

If the person signing the Agreement (signatory) is doing so as a representative of Permittee, the signatory hereby acknowledges that he or she is doing so on Permittee's behalf and represents and warrants that he or she has the authority to legally bind Permittee to the provisions herein.

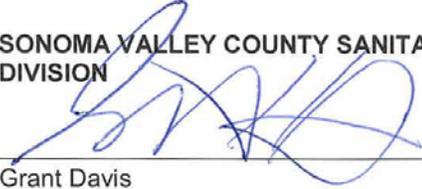
AUTHORIZATION

This Agreement authorizes only the project described herein. If Permittee begins or completes a project different from the project the Agreement authorizes, Permittee may be subject to civil or criminal prosecution for failing to notify CDFW in accordance with FGC section 1602.

CONCURRENCE

The undersigned accepts and agrees to comply with all provisions contained herein.

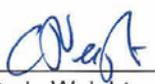
**SONOMA VALLEY COUNTY SANITATION
DIVISION**



Grant Davis
General Manager

1-14-16
Date

FOR DEPARTMENT OF FISH AND WILDLIFE



Craig Weightman
Environmental Program Manager

1/28/16
Date

Prepared by: L. Hammerli, Environmental Scientist

Date Sent: November 19, 2015
Date Revised: December 23, 2015

Exhibit A
5th Street East Recycled Water Pipeline Project
Location Map

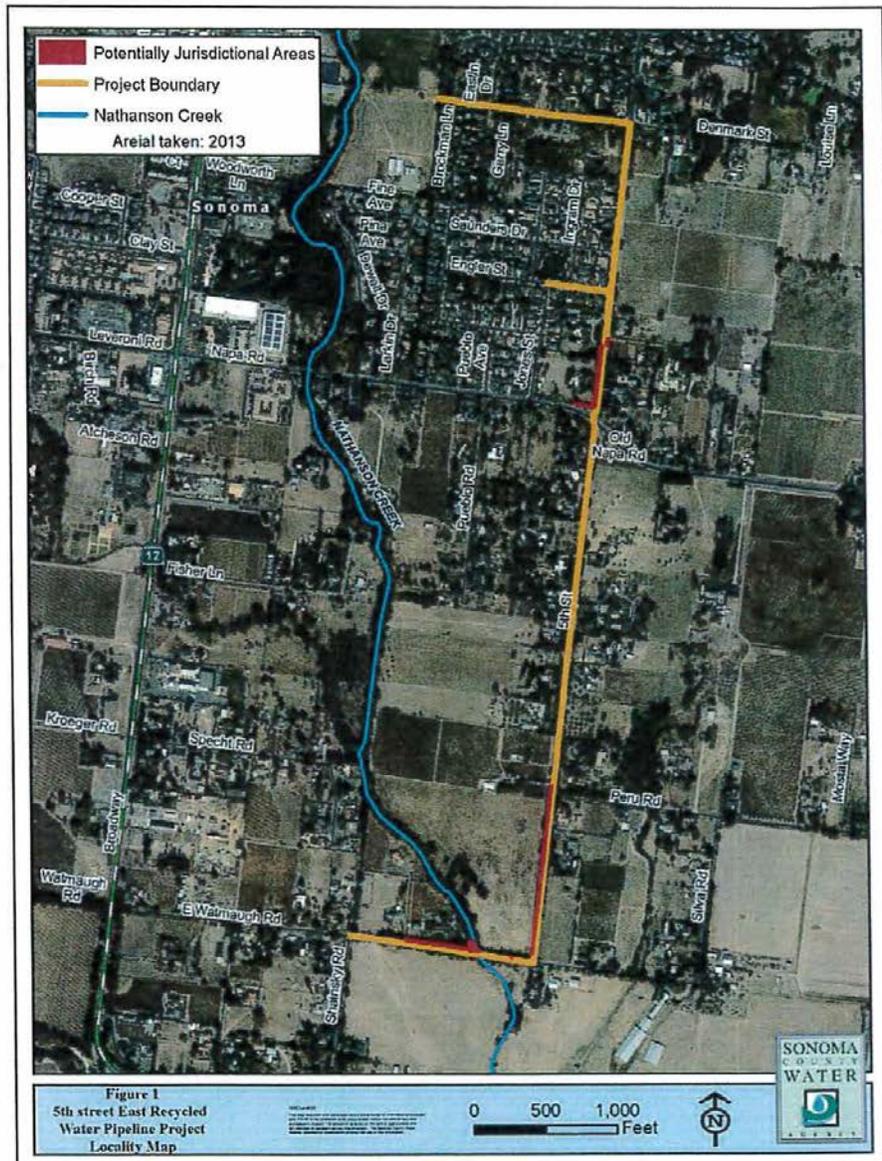
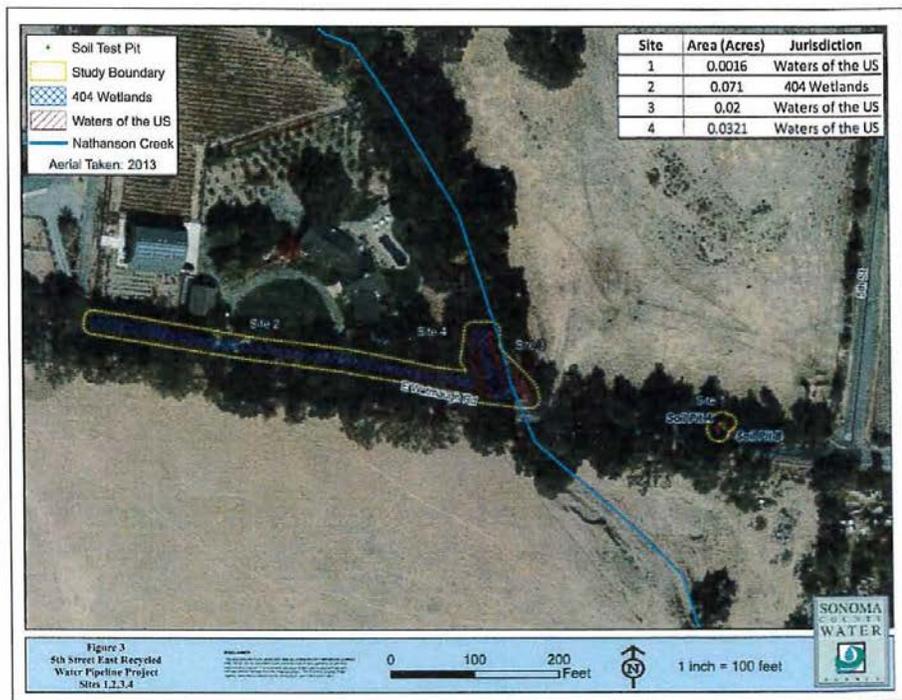


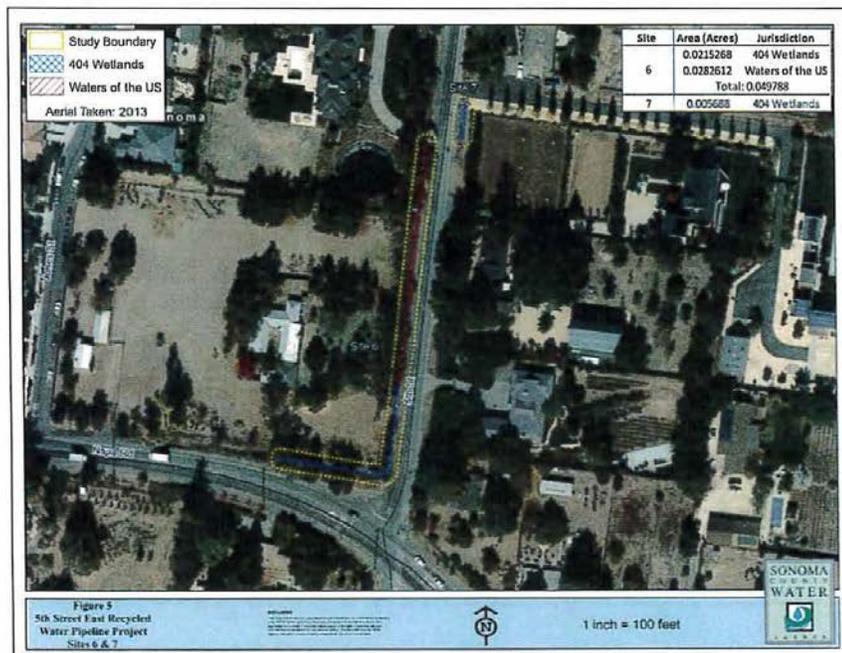
Exhibit B
5th Street East Recycled Water Pipeline Project
Site Maps





5th Street Recycled Water Pipeline
Sonoma County Water Agency

August 2015
Page | 9



5th Street Recycled Water Pipeline
Sonoma County Water Agency

August 2015
Page | 10

FOR DEPARTMENT USE ONLY				
Date Received	Amount Received	Amount Due	Date Complete	Notification No.
8/24/2015	\$ 4912.25	\$		1000-2015-0288-3



#1501073
County of Sonoma

STATE OF CALIFORNIA
DEPARTMENT OF FISH AND WILDLIFE

Hammerli
LT. Jones
John Morton



NOTIFICATION OF LAKE OR STREAMBED ALTERATION

Complete EACH field, unless otherwise indicated, following the enclosed instructions and submit ALL required enclosures. Attach additional pages, if necessary.

1. APPLICANT PROPOSING PROJECT

Fish & Wildlife

Name	Grant Davis - General Manager	
Business/Agency	Sonoma Valley County Sanitation District	AUG 24 2015
Street Address	404 Aviation Blvd	Napa
City, State, Zip	Santa Rosa, CA 95403	
Telephone	707 547-1900	Fax
Email		

2. CONTACT PERSON (Complete only if different from applicant)

Name	Dave Cook	
Street Address	404 Aviation Blvd	
City, State, Zip	Santa Rosa, CA 95403	
Telephone	707 547-1944	Fax
Email	dcook@scwa.ca.gov	

3. PROPERTY OWNER (Complete only if different from applicant)

Name		
Street Address		
City, State, Zip		
Telephone		Fax
Email		

4. PROJECT NAME AND AGREEMENT TERM

A. Project Name		5th Street East Recycled Water Pipeline Project		
B. Agreement Term Requested		<input checked="" type="checkbox"/> Regular (5 years or less) <input type="checkbox"/> Long-term (greater than 5 years)		
C. Project Term		D. Seasonal Work Period		E. Number of Work Days
Beginning (year)	Ending (year)	Start Date (month/day)	End Date (month/day)	
2016	2018	May 1	Dec 31	90

NOTIFICATION OF LAKE OR STREAMBED ALTERATION

5. AGREEMENT TYPE

Check the applicable box. If box B, C, D, or E is checked, complete the specified attachment.

A.	<input checked="" type="checkbox"/> Standard (Most construction projects, excluding the categories listed below)
B.	<input type="checkbox"/> Gravel/Sand/Rock Extraction (Attachment A) Mine I.D. Number: _____
C.	<input type="checkbox"/> Timber Harvesting (Attachment B) THP Number: _____
D.	<input type="checkbox"/> Water Diversion/Extraction/Impoundment (Attachment C) SWRCB Number: _____
E.	<input type="checkbox"/> Routine Maintenance (Attachment D)
F.	<input type="checkbox"/> CDFW Fisheries Restoration Grant Program (FRGP) FRGP Contract Number _____
G.	<input type="checkbox"/> Master
H.	<input type="checkbox"/> Master Timber Harvesting

6. FEES

Please see the current fee schedule to determine the appropriate notification fee. Itemize each project's estimated cost and corresponding fee. *Note: The Department may not process this notification until the correct fee has been received.*

A. Project		B. Project Cost	C. Project Fee
1	5th Street East Recycled Water Pipeline Project	2,000,000	4912.25
2			
3			
4			
5			
		D. Base Fee (if applicable)	
		E. TOTAL FEE ENCLOSED	4912.25

7. PRIOR NOTIFICATION OR ORDER

A. Has a notification previously been submitted to, or a Lake or Streambed Alteration Agreement previously been issued by, the Department for the project described in this notification?

Yes (Provide the information below) No

Applicant: _____ Notification Number: _____ Date: _____

B. Is this notification being submitted in response to an order, notice, or other directive ("order") by a court or administrative agency (including the Department)?

No Yes (Enclose a copy of the order, notice, or other directive. If the directive is not in writing, identify the person who directed the applicant to submit this notification and the agency he or she represents, and describe the circumstances relating to the order.)

Continued on additional page(s)

NOTIFICATION OF LAKE OR STREAMBED ALTERATION

8. PROJECT LOCATION

<p>A. Address or description of project location. <i>(Include a map that marks the location of the project with a reference to the nearest city or town, and provide driving directions from a major road or highway)</i></p> <p>The 5th Street East Recycled Water Pipeline Project consists of approximately 7,000 linear feet of pipeline along Watmaugh Road, 5th Street East, Denmark Street, and Engler Street in the City of Sonoma.</p> <p style="text-align: right;"><input type="checkbox"/> Continued on additional page(s)</p>				
B. River, stream, or lake affected by the project.		Nathanson Creek and roadside ditches		
C. What water body is the river, stream, or lake tributary to?		Schell Creek		
D. Is the river or stream segment affected by the project listed in the state or federal Wild and Scenic Rivers Acts?		<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/> Unknown
E. County	Sonoma			
F. USGS 7.5 Minute Quad Map Name	G. Township	H. Range	I. Section	J. ¼ Section
Sonoma	T5N	R5W	none	none
<input type="checkbox"/> Continued on additional page(s)				
K. Meridian <i>(check one)</i>	<input type="checkbox"/> Humboldt <input checked="" type="checkbox"/> Mt. Diablo <input type="checkbox"/> San Bernardino			
L. Assessor's Parcel Number(s)				
County of Sonoma and City of Sonoma right-of-way.				
<input type="checkbox"/> Continued on additional page(s)				
M. Coordinates <i>(If available, provide at least latitude/longitude or UTM coordinates and check appropriate boxes)</i>				
Latitude/Longitude	Latitude: 38.2647163		Longitude: 122.4530390	
	<input type="checkbox"/> Degrees/Minutes/Seconds		<input checked="" type="checkbox"/> Decimal Degrees	
UTM	<input type="checkbox"/> Decimal Minutes		<input type="checkbox"/> Zone 10 <input type="checkbox"/> Zone 11	
	Easting:	Northing:		
Datum used for Latitude/Longitude or UTM		<input type="checkbox"/> NAD 27 <input checked="" type="checkbox"/> NAD 83 or WGS 84		

NOTIFICATION OF LAKE OR STREAMBED ALTERATION

9. PROJECT CATEGORY AND WORK TYPE (Check each box that applies)

PROJECT CATEGORY	NEW CONSTRUCTION	REPLACE EXISTING STRUCTURE	REPAIR/MAINTAIN EXISTING STRUCTURE
Bank stabilization – bioengineering/recontouring	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Bank stabilization – rip-rap/retaining wall/gabion	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Boat dock/pier	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Boat ramp	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Bridge	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Channel clearing/vegetation management	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Culvert	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Debris basin	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Dam	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Diversion structure – weir or pump intake	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Filling of wetland, river, stream, or lake	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Geotechnical survey	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Habitat enhancement – revegetation/mitigation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Levee	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Low water crossing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Road/trail	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sediment removal – pond, stream, or marina	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Storm drain outfall structure	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Temporary stream crossing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Utility crossing : Horizontal Directional Drilling	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Jack/bore	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Open trench	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other (specify):	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

NOTIFICATION OF LAKE OR STREAMBED ALTERATION

10. PROJECT DESCRIPTION

<p>A. Describe the project in detail. Photographs of the project location and immediate surrounding area should be included.</p> <ul style="list-style-type: none"> - Include any structures (e.g., rip-rap, culverts, or channel clearing) that will be placed, built, or completed in or near the stream, river, or lake. - Specify the type and volume of materials that will be used. - If water will be diverted or drafted, specify the purpose or use. <p>Enclose diagrams, drawings, plans, and/or maps that provide all of the following: site specific construction details; the dimensions of each structure and/or extent of each activity in the bed, channel, bank or floodplain; an overview of the entire project area (i.e., "bird's-eye view") showing the location of each structure and/or activity, significant area features, and where the equipment/machinery will enter and exit the project area.</p>	
<p>The 5th Street East Recycled Water Pipeline Project consists of approximately 7,000 linear feet of 10-inch diameter pipeline along Watmaugh Road, 5th Street East, Denmark Street, and Engler Street. The proposed pipeline would be installed within the existing paved roadway, including all construction and staging activities. The exception would be up to fifteen, 6-inch diameter pipe turnouts that would cross road shoulders and ditches to connect with adjacent landowners. Trenchless methods at the Nathanson Creek crossing could require equipment access and excavation of bore pits for directional drilling within the paved right-of-way. Please see attached Project Description for more details.</p>	
<input type="checkbox"/> Continued on additional page(s)	
<p>B. Specify the equipment and machinery that will be used to complete the project.</p>	
<p>Excavator, trencher, directional drill, dump truck, maintenance vehicles.</p>	
<input type="checkbox"/> Continued on additional page(s)	
<p>C. Will water be present during the proposed work period (specified in box 4.D) in the stream, river, or lake (specified in box 8.B).</p>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No (Skip to box 11)
<p>D. Will the proposed project require work in the wetted portion of the channel?</p>	<input type="checkbox"/> Yes (Enclose a plan to divert water around work site) <input checked="" type="checkbox"/> No

NOTIFICATION OF LAKE OR STREAMBED ALTERATION

11. PROJECT IMPACTS

A. Describe impacts to the bed, channel, and bank of the river, stream, or lake, and the associated riparian habitat. Specify the dimensions of the modifications in length (linear feet) and area (square feet or acres) and the type and volume of material (cubic yards) that will be moved, displaced, or otherwise disturbed, if applicable.

Directional drilling would be used to install the pipeline beneath Nathanson Creek. The creek's bed, bank, and riparian vegetation would not be impacted. Please see attached Project Description for more details. Trenching across roadside ditches at 5 turnout connecting pipes would temporarily disturb seasonal wetland habitat.

Continued on additional page(s)

B. Will the project affect any vegetation? Yes (Complete the tables below) No

Vegetation Type	Temporary Impact	Permanent Impact
Seasonal wetland in ditches	Linear feet: 60 ft Total area: 0.002 ac	Linear feet: _____ Total area: _____
	Linear feet: _____ Total area: _____	Linear feet: _____ Total area: _____

Tree Species	Number of Trees to be Removed	Trunk Diameter (range)
none		

Continued on additional page(s)

C. Are any special status animal or plant species, or habitat that could support such species, known to be present on or near the project site?

Yes (List each species and/or describe the habitat below) No Unknown

Continued on additional page(s)

D. Identify the source(s) of information that supports a "yes" or "no" answer above in Box 11.C.

Please see Biological Resources section in project description for more details.

Continued on additional page(s)

E. Has a biological study been completed for the project site?

Yes (Enclose the biological study) No

Note: A biological assessment or study may be required to evaluate potential project impacts on biological resources.

F. Has a hydrological study been completed for the project or project site?

Yes (Enclose the hydrological study) No

Note: A hydrological study or other information on site hydraulics (e.g., flows, channel characteristics, and/or flood recurrence intervals) may be required to evaluate potential project impacts on hydrology.

NOTIFICATION OF LAKE OR STREAMBED ALTERATION

12. MEASURES TO PROTECT FISH, WILDLIFE, AND PLANT RESOURCES

A. Describe the techniques that will be used to prevent sediment from entering watercourses during and after construction.

Directional drilling beneath a waterway and riparian zone will avoid impacts to Nathanson Creek. Trenching across roadside ditches to install turnout pipes would be done in the dry season when ditches are dry. Please see Project Description for more details.

Continued on additional page(s)

B. Describe project avoidance and/or minimization measures to protect fish, wildlife, and plant resources.

Trenched ditches would be backfilled with native topsoil and recontoured to previous condition.

Continued on additional page(s)

C. Describe any project mitigation and/or compensation measures to protect fish, wildlife, and plant resources.

The proposed project would avoid disturbance to Nathanson Creek and only temporarily disturb 0.002 ac of degraded wetlands along roadside ditches. Mitigation Measure 3.5.1 will be implemented to avoid and minimize disturbance to wetlands and riparian habitat, as stated in the North San Pablo Bay Restoration and Reuse Project Draft EIR/EIS.

Continued on additional page(s)

13. PERMITS

List any local, state, and federal permits required for the project and check the corresponding box(es). Enclose a copy of each permit that has been issued.

A. US Army Corps of Engineers Applied Issued

B. SFRWQCB Applied Issued

C. _____ Applied Issued

D. Unknown whether local, state, or federal permit is needed for the project. (Check each box that applies)

Continued on additional page(s)

NOTIFICATION OF LAKE OR STREAMBED ALTERATION

14. ENVIRONMENTAL REVIEW

A. Has a draft or final document been prepared for the project pursuant to the California Environmental Quality Act (CEQA), National Environmental Protection Act (NEPA), California Endangered Species Act (CESA) and/or federal Endangered Species Act (ESA)?			
<input checked="" type="checkbox"/> Yes (Check the box for each CEQA, NEPA, CESA, and ESA document that has been prepared and enclose a copy of each) <input type="checkbox"/> No (Check the box for each CEQA, NEPA, CESA, and ESA document listed below that will be or is being prepared)			
<input type="checkbox"/> Notice of Exemption	<input type="checkbox"/> Mitigated Negative Declaration	<input type="checkbox"/> NEPA document (type): _____	
<input type="checkbox"/> Initial Study	<input checked="" type="checkbox"/> Environmental Impact Report	<input type="checkbox"/> CESA document (type): _____	
<input type="checkbox"/> Negative Declaration	<input type="checkbox"/> Notice of Determination (Enclose)	<input type="checkbox"/> ESA document (type): _____	
<input type="checkbox"/> THP/ NTMP	<input type="checkbox"/> Mitigation, Monitoring, Reporting Plan		
B. State Clearinghouse Number (if applicable)	2008072096		
C. Has a CEQA lead agency been determined?	<input checked="" type="checkbox"/> Yes (Complete boxes D, E, and F)		<input type="checkbox"/> No (Skip to box 14.G)
D. CEQA Lead Agency	Sonoma County Water Agency		
E. Contact Person	Dave Cook	F. Telephone Number	707 547-1944
G. If the project described in this notification is part of a larger project or plan, briefly describe that larger project or plan.			
North San Pablo Bay Restoration and Reuse Project (North Bay Water Recycling Program). The purpose of this program is to provide recycled water for agricultural, urban, and environmental uses thereby reducing reliance on local and imported surface and groundwater and reducing the amount of treated effluent releases to San Pablo Bay. The Sonoma Valley Recycled Water Project EIR (Addendum), incorporated by reference into the North Bay Reuse EIR/EIS, evaluated the 5th Street East Recycled Pipeline Project. No significant impacts were found.			
<input type="checkbox"/> Continued on additional page(s)			
H. Has an environmental filing fee (Fish and Game Code section 711.4) been paid?			
<input checked="" type="checkbox"/> Yes (Enclose proof of payment) <input type="checkbox"/> No (Briefly explain below the reason a filing fee has not been paid)			
A CDFG filing fee of \$2,818.25 was paid on 12/11/2009 for the North Bay Water Recycling Program Notice of Determination, attached.			
Note: If a filing fee is required, the Department may not finalize a Lake or Streambed Alteration Agreement until the filing fee is paid.			

15. SITE INSPECTION

Check one box only.
<input checked="" type="checkbox"/> In the event the Department determines that a site inspection is necessary, I hereby authorize a Department representative to enter the property where the project described in this notification will take place at any reasonable time, and hereby certify that I am authorized to grant the Department such entry.
<input type="checkbox"/> I request the Department to first contact (insert name) _____ at (insert telephone number) _____ to schedule a date and time to enter the property where the project described in this notification will take place. I understand that this may delay the Department's determination as to whether a Lake or Streambed Alteration Agreement is required and/or the Department's issuance of a draft agreement pursuant to this notification.

NOTIFICATION OF LAKE OR STREAMBED ALTERATION

16. DIGITAL FORMAT

Is any of the information included as part of the notification available in digital format (i.e., CD, DVD, etc.)?
<input checked="" type="checkbox"/> Yes (Please enclose the information via digital media with the completed notification form)
<input type="checkbox"/> No

17. SIGNATURE

I hereby certify that to the best of my knowledge the information in this notification is true and correct and that I am authorized to sign this notification as, or on behalf of, the applicant. I understand that if any information in this notification is found to be untrue or incorrect, the Department may suspend processing this notification or suspend or revoke any draft or final Lake or Streambed Alteration Agreement issued pursuant to this notification. I understand also that if any information in this notification is found to be untrue or incorrect and the project described in this notification has already begun, I and/or the applicant may be subject to civil or criminal prosecution. I understand that this notification applies only to the project(s) described herein and that I and/or the applicant may be subject to civil or criminal prosecution for undertaking any project not described herein unless the Department has been separately notified of that project in accordance with Fish and Game Code section 1602 or 1611.	
	8.19.15
Signature of Applicant or Applicant's Authorized Representative	Date
Grant Davis	
Print Name	

NOTICE OF DETERMINATION

TO: Office of Planning and Research
 Post Office Box 3044
 Sacramento, California 95812-3044

FROM: California Department of Fish and Wildlife
 Bay Delta Region
 7329 Silverado Trail
 Napa, California 94558

SUBJECT: Filing of Notice of Determination in compliance with Section 21108 or 21152 of the Public Resources Code

PROJECT TITLE: 5th Street East Recycled Water Pipeline Project

STATE CLEARINGHOUSE NUMBER: 2008072096

LEAD AGENCY: Sonoma County Water Agency
 CONTACT: Dave Cook, (707) 547-1944

RESPONSIBLE AGENCY: California Department of Fish and Wildlife
 CONTACT: Lorie Hammerli, Environmental Scientist (707) 944-5568

PROJECT DESCRIPTION / LOCATION: The Project proposes to replace approximately 7,000 linear feet of 10-inch diameter pipeline extending east along Watmaugh Road starting at Shainsky Road to 5th Street East, then turn north on 5th Street to Denmark Street. Two small spurs will extend from the main line to serve additional customers: approximately 1,300 linear feet along Denmark Street to the east side of the Sonoma Valley High School campus, and approximately 400 linear feet along Engler Street to Valley Oaks Park. The California Department of Fish and Wildlife (CDFW) is executing a Lake and Streambed Alteration Agreement Number 1600-2015-0288-R3 pursuant to Section 1602 of the Fish and Game Code to the project Applicant, Grant Davis/ Sonoma Valley County Sanitation District.

This is to advise that the California Department of Fish and Wildlife as a Responsible Agency approved the project described above on **January 28, 2016** and has made the following determinations regarding the above described project pursuant to section 15096 (i).

1. The project **will not** have a significant effect on the environment.
2. An EIR was prepared for this project pursuant to the provisions of CEQA.
3. Mitigation measures **were not** made a condition of the approval of the project.
4. A Statement of Overriding Considerations **was not** adopted for this project.
5. Findings **were not** made pursuant to the provisions of CEQA.

This is to certify that a copy of the EIR prepared for this project is available to the general public and may be reviewed at: 404 Aviation Blvd, Santa Rosa, on weekdays during normal business hours.



 Craig J. Weightman
 Environmental Program Manager
 Bay Delta Region

January 28, 2016

 Date

Date Received for Filing: _____

**COUNTY OF SONOMA
PERMIT AND RESOURCE MANAGEMENT DEPARTMENT**

2550 VENTURA AVENUE, SANTA ROSA, CA 95403-2829
(707) 565-1900 FAX (707) 565-1103

Encroachment Permit # ENC16-0002

To request an inspection, call (707) 565-3551 (5 days advance notice required)

<u>County Road Name</u>	<u>Road Number</u>	<u>Postmile</u>		
FIFTH ST EAST	55024	10.00 - 10.71	Plancheck Fee:	\$0.00
FIFTH ST EAST	5505	10.71 - 10.80	Permit Fee:	\$385.00
WATMAUGH RD EAST	55021	12.52 - 12.75	Inspection Fee:	\$0.00
			SUSMP Fee:	\$0.00
			NPDES Fee:	\$42.00
			Penalty Fee:	\$0.00
			Previously Paid:	.00
			<u>Additional Fee(s):</u>	<u>\$5,737.00</u>
			Balance Due:	\$6,410.00

Work Site Address:
 Type of Activity: Created for Bid Purposes
 Parcel Number:
 Project: BID- FIFTH ST E RECYCLED PIPELIN

Issue Date:
 To Expire:

APPLICANT:
 SONOMA COUNTY WATER AGENCY
 404 AVIATION BLVD
 SANTA ROSA, CA 95403

CONTRACTOR:
 TBD

707 526 5370

License #

Contact: MIKE WEST
 707 524 1178

Bonding Co:	Bond #:	Exp. Date:
2nd Bond Co:	Bond #:	Exp. Date:
Insurance Co:	Policy #:	Exp. Date:

Permittee agrees to accept all responsibility for loss or damage to any person or entity and to indemnify, hold harmless, and defend and release County of Sonoma, its agents, and employees from and against any and all liability actions, claims, damages, costs, or expenses which may be asserted by any person or entity, including Permittee, arising out of or in connection with the willful act or negligence of Permittee performing the work associated with this Encroachment Permit, whether or not there is concurrent negligence on the part of the County, but excluding liability due to the sole active negligence or sole willful misconduct of County.

THE PERMITTEE AGREES THAT THE EVENT ACTIVITY WILL BE CONDUCTED IN ACCORDANCE WITH AND SUBJECT TO THIS PERMIT'S TERMS AND CONDITIONS, THE STATE VEHICLE CODE, THE STATE STREETS AND HIGHWAYS CODE AND IS SUBJECT TO INSPECTION AND APPROVAL.

This permit is to be strictly construed and no work other than that specifically mentioned below is authorized hereby. Whenever Engineer concludes persons performing encroachment work are not complying with the provisions of this permit, Engineer may revoke permit. Subject to all the terms, conditions and restrictions written hereon or attached hereto, permission is hereby granted Permittee to:

FOR BID ONLY - ENCROACHMENT PERMIT ESTIMATE FOR TRENCHING IN THE ROAD TO PLACE RECYCLED WATER PIPELINE. ENCROACHMENT PERMIT ESTIMATE IS BASED ON 1 INSPECTION PER DAY FOR 8 WEEKS OF CONSTRUCTION.

ATTACHMENTS:	<input type="checkbox"/> Special Provisions	<input type="checkbox"/> Permit Plans
	<input type="checkbox"/> Signing	<input checked="" type="checkbox"/> Standard Conditions
	<input checked="" type="checkbox"/> Standard Drawings	<input checked="" type="checkbox"/> Backfill from Approved Source

COMPLETION CERTIFICATION

APPROVED:

Permit Inspected By: _____
 Date _____

 Nathan Quarles
 Deputy County Engineer
 Date _____
 Road Yard: _____ Area No. _____

Refunds will not be authorized unless circumstances comply with established PRMD refund policy provisions.

COUNTY OF SONOMA
PERMIT AND RESOURCE MANAGEMENT DEPARTMENT
 2550 VENTURA AVENUE, SANTA ROSA, CA 95403-2829
 (707) 565-1900 FAX (707) 565-1103

Application Fees / Invoice for: ENC16-0002

Project Address: FIFTH STREET EAST AND WATMAUGH RD EAST
Cross Street: NAPA RD
APN:
Description: FOR BID ONLY - ENCROACHMENT PERMIT ESTIMATE FOR

Printed: Wednesday, February 17, 2016
Initialized by: ODURANCZ
Activity Type: AB-ENC 1501
PCAS #:

Owner: SONOMA COUNTY TPW
 2300 COUNTY CENTER DR
 SANTA ROSA, CA

Applicant: SONOMA COUNTY WATER AGENCY
 404 AVIATION BLVD
 SANTA ROSA, CA
 95403
 707 526 5370

Fees:

Item#	Description	Account Code	Tot Fee	Prev. Pmts	Cur. Pmts
140	TECH ENHANCEMENT FEE	26010104-46040	18.00	.00	.00
419	ENCROACH PERMIT	26010111-45171	385.00	.00	.00
740	NPDES - ENCROACHMENT	26010112-45061	42.00	.00	.00
2037	HRLY RATE - BLDG INSPECT	26010115-45301	5,560.00	.00	.00
2043	HRLY RATE - ENG TECH	26010111-45301	177.00	.00	.00
3804	DTPW - ENC PLAN CHECK	34010101-46029	228.00	.00	.00
			\$6,410.00	\$0.00	

Total Fees: \$6,410.00
Total Paid: \$0.00

Balance Due: \$6,410.00

Refunds will not be authorized unless circumstances comply with established PRMD refund policy provisions.

When validated below, this is your receipt.



Standards for Construction Activity Within the County Road Right-of-Way

Note: Approval from PRMD Engineering Construction Inspection Staff must be granted prior to commencing any work in the County Right-of-Way. **Approval shall be requested by scheduling a "Start Work Notice (Item 240)" using the automated inspection system at (707) 565-3551.** Failure to obtain approval to start work will result in penalty fees and/or permit revocation.

I. General

- a. *Acceptance of the terms of the encroachment permit:* It is understood and agreed by the Permittee that performance of any work authorized by the encroachment permit shall constitute acceptance of all of the terms, provisions, and conditions of the permit and its attachments. Failure to comply with any of terms, provisions, or conditions of the permit and its attachments may result in penalty fees, permit revocation, and/or direction to immediately cease work and vacate the County Road Right-of-Way.
- b. *Standards:* Work shall comply with the latest edition of the State Specifications of the State of California Department of Transportation, County of Sonoma Transportation and Public Works Standards, or other standards and specifications as approved by the permit or its attachments.
- c. *Control of Work:* All work and all materials used to complete the work authorized by the encroachment permit shall be subject to the inspection and approval of the Inspector. Such inspection and approval of the work and materials shall not relieve the Permittee of any of their obligations to complete the work in conformance with all applicable specifications. Work and materials not meeting these requirements shall be rejected. If determined to be unsuitable, work and materials may be rejected even if previously inspected and approved by the Inspector.
- d. *Access to Work:* The Inspector shall have access to the work at all times to determine that the methods, materials and workmanship are in accordance with the terms of the encroachment permits and all applicable specifications. The Inspector may reject defective work and shall require its repair, replacement, or removal by the Permittee.
- e. *Permit On-Site:* The encroachment permit and all of its attachments shall be kept at the job site and must be made immediately available to the Inspector or any law enforcement officer upon demand.
- f. *Trench Permit:* The Permittee shall obtain a trench permit from the California Division of Industrial Safety prior to the excavation of any trench over five feet in depth.
- g. *Other Authorization:* When required, it is the Permittee's responsibility to ensure that all approval(s) have been obtained by other required jurisdictions.
- h. *Restoration of Right-of-Way:* Upon completion of the construction activity, the right-of-way shall be restored to as good as or better than its pre-construction condition. The permit shall not be finalized until the Inspector is satisfied that the right-of-way has been adequately restored. It is the responsibility of the Permittee to photograph and/or video the right-of-way affected by the work prior to beginning construction, and to make available said photograph(s) and/or video(s) to the Inspector before commencing work. If no such photograph(s) and/or videos are available, the right-of-way shall be assumed to have been in good condition and shall be restored as directed by the Inspector.

Effective Date: 07/13/2010

Page 1 of 8

- i. *Storage of Material and Equipment:* Unless allowed by the Inspector, no material or equipment shall be stored within ten (10) feet from the edge of the traveled way.
- j. *Approval of Work:* The inspector shall approve all work at the completion of each of the following stages of work and such approval must be obtained before subsequent stages of work may be commenced. The Permittee shall call the automated inspection system at (707) 565-3551 and use the codes provided on the green Engineering Division Permit Inspection Record (job card) to request inspection and/or approval to proceed.
 - 1. Earthwork:
 - Construction of embankments, excavations.
 - Excavation for storm drains and culverts.
 - Preparation of subgrade
 - Back-filling of structures and pipes and public utilities.
 - 2. Concrete work:
 - Construction of forms, for all concrete structures, including curbs, gutters, and sidewalks.
 - Placing of concrete in structures, including curbs, gutters, and sidewalks.
 - 3. Drainage facilities:
 - Placing of storm drains and culvert pipes.
 - Construction of roadside ditches and other drainage ways
 - 4. Roadway construction:
 - Placing and compacting of base material. If more than one course or type of base or sub-base is to be used, approval shall be necessary for each course and/or type.
 - Placing of pavement or surfacing.
 - 5. Final clean-up.
- k. *Additional Work or Facilities:* The Inspector may require additional work or facilities in the course of the construction of the project in order for the improvements to reasonably provide for the intended function or for public safety.
- l. *Maintenance and Repair:* The Permittee agrees by the acceptance of the encroachment permit to exercise reasonable care in properly maintaining any encroachment placed by the Permittee. The Permittee shall exercise reasonable care in inspecting and immediately repairing any damage to any portion of the road right-of-way which occurs as a result of the work done under the encroachment permit. If the Permittee does not repair existing road facilities, County crews may perform the repair work at their cost plus 100% for administration and overhead. The Permittee is responsible for paying the County for these costs within 30 days of receipt of invoice from the County.
- m. *Permit Revocation:* All encroachment permits are subject to revocation for failure to comply with the any of the conditions contained herein, or as deemed necessary by the Inspector for the protection of public safety or the protection of the County road right-of-way.
- n. *Future Removal or Relocation:* In the event of the future improvement of the County road right-of-way necessitating the relocation or removal of the encroachment(s) permitted herein, the permittee shall relocate or remove the same at their sole expense. In such event, written notice shall be served on the permittee specifying the work required and specifying a time within which the work of relocation or removal shall be commenced and completed.
- o. *Conflicting Construction:* When this permit authorizes work that occurs in the vicinity of a County

Effective Date: 07/13/2010

Page 2 of 8

project, the work conducted under this permit shall be coordinated with the Sonoma County Department of Transportation and Public Works so as not to cause any conflict with said County project, or the encroachment permit shall be revoked.

- p. *Ownership of Land in County Road Right-of-Way:* In many instances, the County does not own the underlying fee of the land in the County road right-of-way; its interest is limited to an easement only. In all such cases, it is the responsibility of the Permittee to obtain the consent of the owner or owners of the underlying fee before undertaking any below surface operations. (Note: Public Utility companies are afforded certain underground rights in the public road right-of-way by State law.)
- q. *Underground Service Alert (U.S.A.) Notification:* The Permittee shall be responsible for notifying U.S.A. Call toll-free (800) 642-2444 at least two working days prior to excavation. The Permittee shall uncover existing buried utilities with utility owner to verify locations and elevations of utilities. Buried utilities include but are not limited to: water, sewer, electrical, gas, cable, and telephone.
- r. *Cultural Resources:* In the event cultural resources (i.e., historical, archaeological, and paleontological resources and human remains) are discovered during grading or other construction activities, work shall be halted within a 100 foot radius of the find. The Northwest Information Center shall be notified at (707) 664-0880. A qualified archeologist shall be consulted for an on-site evaluation. Additional mitigation may be required by the County per the archeologist's recommendations. If human burials or human remains are encountered, the contractor shall also notify the County Coroner at (707) 565-5070.
- s. *Hazardous Materials:* Should hazardous materials, or apparent hazardous materials, be discovered during the course of work, work in the affected area shall be stopped immediately. Emergency Services, or the appropriate agency, and the Inspector shall be immediately notified.
- t. *Existing Striping and Pavement Markings:* All existing striping and pavement markings disturbed by construction activity shall be replaced in kind and shall be approved by the Encroachment Inspector or by the Sonoma County Traffic Engineering Department Inspector.
- u. *Existing Public Signs:* Relocation or removal of existing public signs shall not occur until approval has been obtained by the Inspector.
- v. *Precedent:* This permit is granted with the understanding that this action is not to be considered as establishing any precedent on the expediency of permitting or establishing any precedence on the permitting of a certain kind of encroachment within the County road right-of-way.
- w. *Conflict with Approved Plans:* If this permit contains a set of approved Encroachment plans and a conflict exists between the approved plans and these notes, the more restrictive shall prevail, or the Inspector may determine which is appropriate.

II. Liability

- a. *Liability for Damages:* Permittee agrees to accept all responsibility for loss or damage to any person or entity and to indemnify, hold harmless, and defend and release the County of Sonoma, its agents and employees of and against any and all liability, actions, claims, damages, costs or expenses which may be asserted by any person or entity, including Permittee, arising out of or in connection with the willful act or negligence of Permittee performing the work associated with this Encroachment Permit, whether or not there is concurrent negligence on the part of the County.

Effective Date: 07/13/2010

Page 3 of 8

III. Traffic Control

- a. *Traffic Control Plan:* Permittee shall provide and install all traffic control devices per the CA Supplement to the Manual of Uniform Traffic Control Devices (CA MUTCD) Typical Applications, or as otherwise required on the approved traffic control plan issued as an attachment to the encroachment permit.
- b. *Traffic Control Approval:* No construction activity shall commence until traffic control at the job site has been approved by the Inspector.
- c. *Other Authorization:* Where applicable, the Permittee shall obtain approval from any other jurisdictions necessary to place traffic control devices in their rights-of-way, or shall obtain permission from any applicable entity for the placement of traffic control devices outside of the County of Sonoma's right-of-way.
- d. *Lane of Travel:* One ten foot (10') wide lane shall be kept open at all times, unless otherwise approved by the Inspector or permitted by the approved traffic control plan.
- e. *Flaggers:* Flaggers shall be required per the CA MUTCD, the approved traffic control plan, or at the Inspector's discretion as necessary to protect public safety.
- f. *Pedestrians and Cyclists:* Permittee shall provide for and protect pedestrian and cyclist traffic per the CA MUTCD Typical Applications, the approved traffic control plan, or per the Inspector's direction. Where pedestrian or cyclist traffic is permitted to pass through the work zone, the Permittee shall provide them an appropriate escort.

IV. Backfill and Paving

- a. *Trench Backfill and Paving:* All trenching in the right-of-way shall conform to Sonoma County Transportation and Public Works Standard Drawing 219, unless otherwise specified on the encroachment permit, the attached approved plans, or as otherwise approved by the Inspector.
- b. *Trench Stability:* If the trench is not stable, remedial work may be required and the Permittee shall be responsible for submitting a proposal to address any unstable trench conditions.
- c. *Compaction Testing:* The Permittee shall hire individuals certified to perform testing in accordance with Caltrans' test method No. 216 Part II or ASTM 1557, and shall provide those test results to the Inspector. As an alternative to testing, the use of the County approved cement backfill (also known as CDF or CLSM) shall be used.
- d. *Compaction Requirements:* The subgrade, Class II Aggregate Base, and AC shall be compacted to 95% relative compaction.
- e. *Minimum Depths:* Underground utilities shall be located per the utility company or agency's standards, but in no case shall they be located any shallower than is allowed by Sonoma County Transportation and Public Works Standard Drawing 219.
- f. *Driveway Trench Crossings:* Trench backfill within driveway crossings shall conform to Sonoma County Transportation and Public Works Standard Drawing 804.

Effective Date: 07/13/2010

Page 4 of 8

- g. *Temporary Patching:* Any trench within the paved roadway left without final paving shall have cold patch material added at the end of each day. The Permittee, at their expense, shall continually maintain the cold patch, as directed by the Inspector, until the final pavement is placed. Temporary paving shall be completely removed prior to the final paving.
- h. *Paving Provisions:* Permittee shall restore the roadway to as good as or better than its pre-construction condition, as noted in the following:
 - 1. The Permittee shall restore the roadway to its pre-construction condition. Any pavement cracked, broken or damaged by the Permittee during construction shall be replaced or repaired to the satisfaction of the Inspector. This requirement does not preclude the overlaying (in kind) of the entire roadway if deemed necessary by the Inspector.
 - 2. The Permittee shall remove a minimum of 18 inches of existing asphalt between the edge of the trench and the existing edge of pavement or between the edge of the trench and existing lip of the gutter before placing the new asphalt.
- i. *Liquid Anti-Stripping Agent (LAS):* LAS shall be added to the asphalt binder at a rate of 0.5% by weight of asphalt binder. The LAS shall be AD-here LOF 65-00 or equivalent, and shall be stored, measured, and blended with the asphalt binder in accordance with the anti-stripping agent manufacturer's recommended practice. The LAS can be added at the asphalt plant or at the refinery. When added at the asphalt plant, the equipment shall indicate and record the amount of LAS added. If added at the refinery, the shipping ticket from the refinery shall certify the type and amount of LAS added.
- j. *Final Paving:* Unless otherwise approved by the Inspector, final paving shall be applied no later than ten (10) working days after traffic is allowed to pass over the work area.

V. Work Hours

- a. *Work Hours:* Work shall generally be permitted from 7:00AM - 7:00PM, but shall not begin earlier than one half hour after sunrise or end later than one half hour before sunset, unless otherwise noted in the special conditions of the encroachment permit or as approved by the Inspector.
- b. *Weekends, Nights, and Holidays:* No work shall be performed during weekends, nights, or holidays unless authorized by the Inspector or the special conditions of the encroachment permit.

VI. Public Safety

- a. *Excavations:* In addition to any other measures taken by the Permittee pursuant to the provisions of the Standard Specifications, Section 7-1.09, "Public Safety", the Contractor shall install temporary K-railing between any lane carrying public traffic and any excavation when the near edge of the excavation is 12 feet (12') or less from the edge of the lane, except for:
 - 1. Excavations covered with non-skid steel plates of adequate thickness to prevent accidental entry by traffic or the public.
 - 2. Excavations less than one foot (1') deep.
 - 3. Trenches less than one foot (1') wide for irrigation pipe or electrical conduit or excavations less than one foot (1') in diameter.
 - 4. Excavations in side slopes where the slope is less than 4:1.
 - 5. Excavations protected by an existing barrier or K-railing.

Effective Date: 07/13/2010

Page 5 of 8

- b. *Elevation of Pavement:* At the end of each working day if a difference in excess of 0.15 feet exists between the elevation of the existing pavement and the elevation of any excavation within 8 feet of the traveled way, material shall be placed and compacted against the vertical cuts adjacent to the existing pavement at a maximum 4:1 slope.
- c. *Trench Plates:* Trench plates placed in areas whereupon vehicles will travel shall be non-skid steel plates and shall be secured with temporary asphaltic concrete and/or pins as necessary to the Inspector's satisfaction.

VIII. Drainage

- a. *Care of Drainage:* Drainage shall not be impaired. If the work permitted herein interferes with drainage, the Permittee shall make ample accommodations as necessary to satisfy the Inspector.
- b. *Maintenance of Drainage:* The Permittee shall maintain drainage throughout the work area. Such maintenance shall include, but is not limited to, keeping all culverts and inlets clean and open.

IX. Removal or Trimming of Roadside Trees

- a. *Removal of Trees:* When a permit is issued for removal of a tree, as part of the project, the entire stump shall be taken out to a depth of at least two feet (2') below the ground surface, unless otherwise specified in the permit. The hole left by the stump shall be backfilled, and compacted. The site shall be approved by the Inspector.
- b. *Trimming of Trees:* Tree trimming shall be limited to branches up to two inches (2") in diameter unless otherwise specified by the permit. Scars resulting from trimming shall be appropriately treated.

X. Erosion Prevention and Sediment Control

- a. Perform erosion prevention and sediment control in accordance with Chapter 11 Grading, Drainage, and Vineyard and Orchard Site Development.
- b. Work shall conform to the erosion prevention and sediment control best management practices contained in the latest editions of the following publications or an equivalent best management practice:

Erosion and Sediment Control Field Manual, San Francisco Bay Regional Water Quality Control Board Manual of Standards for Erosion & Sediment Control Measures, Association of Bay Area Governments Construction Site Best Management Practices Manual, Caltrans Stormwater Best Management Practice Handbook, CA Stormwater Quality Association.
- c. If discrepancies occur between these notes, material referenced herein or manufacturer's recommendations, then the most protective shall apply.
- d. The Permittee is responsible for obtaining and complying with the National Pollutant Discharge Elimination System (NPDES) General Permit No. Cas000002 Waste Discharge Requirements for discharges of storm water runoff associated with construction activity disturbing land equal to or greater than one acre. Construction activities include but are not limited to clearing, grading, excavation, stockpiling, and reconstruction of existing facilities involving removal and replacement.
- e. Preservation of existing vegetation shall occur to the maximum extent practicable.

Effective Date: 07/13/2010

Page 6 of 8

- f. The Permittee is responsible for preventing storm water pollution generated from the construction site year round. The owner must implement an effective combination of erosion prevention and sediment control on all disturbed areas during the rainy season (October 15 - April 15).
- g. Erosion prevention and sediment control measures shall be inspected by the Permittee before forecasted storm events and after actual storm events to ensure measures are functioning properly. Storm events produce at least 1 inch of precipitation in a 24 hour period. Erosion prevention and sediment control measures that have failed or are no longer effective shall be promptly replaced. Erosion prevention and sediment control measures shall be maintained until disturbed areas are stabilized.
- h. Changes to the erosion prevention and sediment control plan may be made to respond to field conditions. Changes shall be noted on the plan when made.
- i. Discharges of potential pollutants from construction sites shall be prevented using source controls to the maximum extent practicable. Potential pollutants include but are not limited to: sediment, trash, nutrients, pathogens, petroleum hydrocarbons, metals, concrete, cement, asphalt, lime, paint, stains, glues, wood products, pesticides, herbicides, chemicals, hazardous waste, sanitary waste, vehicle or equipment wash water and chlorinated water.
- j. Entrance(s) to the construction site shall be maintained in a condition that will prevent tracking or flowing of potential pollutants offsite. Potential pollutants deposited on paved areas within the County road right-of-way, such as roadways and sidewalks, shall be properly disposed of at the end of each working day or more frequently as necessary.
- k. Exposed slopes shall be protected by using erosion prevention measures to the maximum extent practicable, such as establishing 70% vegetation coverage, hydroseeding, straw mulch, geotextiles, plastic covers, blankets or mats.
- l. Hydroseeding shall be conducted in a three step process. First, evenly apply seed mix and fertilizer to the exposed slope. Second, evenly apply mulch over the seed and fertilizer. Third, stabilize the mulch in place.

Applications shall be broadcasted mechanically or manually at the rates specified below. Seed mix and fertilizer shall be worked into the soil by rolling or tamping. If straw is used as mulch, straw shall be derived from wheat, rice or barley and be approximately 6 to 8 inches in length. Stabilization of mulch shall be done hydraulically by applying an emulsion or mechanically by crimping or punching the mulch into the soil. Equivalent methods and materials may be used only if they adequately promote vegetation growth and protect exposed slopes.

Materials	Application Rate (Pounds per Acre)
Seed Mix	
Bromus mollis (Blando Brome)	40
Trifolium hirtum (Hykon Rose Clover)	20
Fertilizer	
16-20-0 & 15% Sulphur	500
Mulch	
Straw	4000
Hydraulic Stabilizing (Non-asphaltic, derived from plants)	
M-binder or Sentinel	75-100
Equivalent Material	Per Manufacturer

Effective Date: 07/13/2010

Page 7 of 8

- m. Whenever it is not possible to utilize erosion prevention measures, exposed slopes shall employ sediment control devices, such as fiber rolls and silt fences. Fiber rolls and silt fences shall be trenched and keyed into the soil and installed on contour. Silt fences shall be installed approximately 2 to 5 feet from toe of slope.
- n. The Permittee shall protect storm drain inlets from potential pollutants until drainage conveyance systems are functional and construction has been completed.
- o. Energy dissipaters shall be installed at storm drain outlets which may convey storm water flow leading to soil erosion.
- p. Soil and material stockpiles shall be properly protected to minimize sediment and pollutant transport from the construction site.
- q. Solid waste, such as trash, discarded building materials and debris, shall be placed in designated collection areas or containers. The construction site shall be cleared of solid waste daily, or as necessary, and regular removal and proper disposal shall be arranged.
- r. A concrete washout area, such as a temporary pit, shall be designated to clean concrete trucks and tools. At no time shall concrete products and waste be allowed to enter county waterways such as creeks or storm drains.
- s. Proper application, cleaning and storage of potentially hazardous materials, such as paints and chemicals, shall be conducted to prevent the discharge of pollutants.
- t. When utilized, temporary restrooms and sanitary facilities shall be located and maintained to prevent the discharge of pollutants.
- u. Appropriate vehicle storage, fueling, maintenance and cleaning areas shall be designated and maintained to prevent discharge of pollutants.

Special Provisions Encroachment Permit # ENC16-0002

Wednesday, February 17, 2016

Permit # ENC16-0002 is issued subject to the following conditions:

- 1: CONTRACTOR TO APPLY FOR A SEPARATE ENCROACHMENT PERMIT FOR CONSTRUCTION PURPOSES. FEES FOR THIS PROJECT WILL BE AT COST . THE FEES PROVIDED HERE ARE FOR ESTIMATING PURPOSES ONLY.
- 2: CONTRACTOR SHALL PROVIDE PROOF IN WRITING OF NOTIFICATION OF LANE CLOSURES TO EMERGENCY SERVICES, PROPERTY OWNERS, MAIL DELIVERY, SCHOOLS AND PUBLIC TRANSIT WITHIN THE LIMITS OF THE WORK.
- 3: CONTRACTOR TO SEND OUT WRITTEN NOTIFICATION AND INSTALL INFORMATIONAL SIGNS TWO WEEKS PRIOR TO CONSTRUCTION, STATING LIMITS OF WORK, START OF WORK, WORKING HOURS, AND PHONE NUMBER TO CALL.
- 4: CLOSURE OF PUBLIC ROADS IS NOT PERMITTED. LANE CLOSURES ARE PERMITTED. HOWEVER, THE CONTRACTOR SHALL SUPPLY THE COUNTY OF SONOMA WITH THE ONE LANE TRAFFIC CONTROL PLAN, FROM THE CALIFORNIA MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES DATED 2003 FOR REVIEW AND APPROVAL PRIOR TO ISSUANCE OF ENCROACHMENT PERMIT. THE PLAN MUST INCLUDE PROVISIONS FOR SAFE PASSAGE OF PEDESTRIANS.
- 5: SONOMA COUNTY WATER AGENCY TO PROVIDE THEIR OWN SOIL TESTING AND PROVIDE WEEKLY REPORTS
- 6: PRIOR TO STARTING WORK, A 5 DAY NOTICE IS REQUIRED FOR A PRECONSTRUCTION MEETING WITH THE PRMD INSPECTOR.
- 7: A 5 DAY NOTICE MUST BE GIVEN TO THE COUNTY OF SONOMA TRAFFIC ENGINEERING DEPARTMENT PRIOR TO REPLACING EXISTING STRIPING AND PAVEMENT MARKINGS. CONTACT PHONE 707-565-3619. ALL STRIPPING, STOP BARS, LEGENDS SHALL BE REPLACED WITH THERMO PLASTIC.

CONDENC 10/22/04

SECTION 01200

PRICE AND PAYMENT PROCEDURES**PART 1 GENERAL****1.1 SUMMARY**

A. Section includes:

1. Description of requirements and procedures for determining amount of Work performed and for obtaining payment for Work performed.
2. Contingency Reserve

1.2 REFERENCES

- A. California Public Contract Code
- B. Code of Civil Procedure

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 Owner, of units of Work satisfactorily completed in accordance with Contract Documents or as directed by Owner. 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 Owner considers appropriate for class of Work measured (e.g., pre-assigned values, percentage completion, units completed or incremental Milestones). Contractor must immediately inform Owner of any disputes regarding quantity measurements and shall immediately supply Owner 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 Owner;
 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 so long as actual quantities performed on the Project are not less than 75 percent or greater than 125 percent of the estimated quantities contained in Document 00400 (Bid Form) or otherwise referenced in Section 01100 (Summary). If actual quantities exceed these parameters, then the unit price shall be adjusted by an amount to reflect the Contractor's incremental cost differential resulting from increased or decreased economies of scale. For quantities reduced to less than 75 percent of the estimated Bid quantity, the payment for the total pay quantity of such item of Work will in no case exceed the payment that would have been made for the performance of 75 percent of the estimated Bid quantity for such item at the original Contract unit price.
- E. No payment shall be made for materials or equipment not yet incorporated into the Work, except as specified in Section 01100 (Summary).
- F. For any materials and equipment referenced in Section 01100 (Summary) as subject to payment prior to incorporation into the Work, where Contractor requests payment on the basis of such materials and equipment not incorporated in the Work, Contractor must 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 Owner at the time of delivery to the Site, warehouse or other storage location;
 3. Obtain a negotiable warehouse receipt, endorsed over to Owner for materials and/or equipment stored in an Off Site warehouse. No payment will be made until such endorsed receipts are delivered to Owner;
 4. Stockpiled materials and/or equipment shall be available for Owner inspection, but Owner shall have no obligation to inspect them and its inspection or failure to inspect shall not relieve Contractor of any obligations under the Contract Documents. Materials and/or equipment shall be segregated and labeled or tagged to identify these specific Contract Documents;

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 Owner has received the materials and equipment free and clear of all liens and evidence that the materials and equipment are covered by appropriate property insurance and other arrangements to protect Owner's interest therein, all of which must be satisfactory to Owner. This documentation shall include, but not be limited to, conditional releases of mechanics' liens and stop 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 Document 00400 (Bid Form), quantity of Work to be paid for shall be actual number of units satisfactorily completed, as determined by Owner 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 Owner has authorized Allowance Work in writing.
- D. Owner does not expressly, or by implication, agree, warrant, or represent in any manner, that actual amount of Work will correspond with amount shown or estimated and reserves right to increase or decrease amount of any class or portion of Work, to leave out entire 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 Owner. No change in Work shall be considered a waiver of any other condition of Contract Documents. No claim shall be made for anticipated profit, for loss of profit, for damages, or for extra payment 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.

1.7 PROGRESS PAYMENTS

- A. Owner's General Manager is authorized to approve progress payments in conformance with Contract Documents and the Auditor/Controller of the County of Sonoma is authorized to process such payments upon their submission by the General Manager.
- B. If requested by Contractor, progress payments will be made monthly.
- C. Schedule of Values:
 1. Within the time set forth in Document 00700 (General Conditions), submit a detailed breakdown of Contractor's 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 Owner 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 Owner. Scheduling, record documents and quality assurance control shall be separate line items.
 3. Owner 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 Owner, Owner will accept this Schedule of Values for use. Owner shall be the sole judge of fair market cost allocations.
 4. Owner will reject any attempt to increase the cost of early activities, i.e., "front loading," resulting in a complete reallocation 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 Owner.
- D. Monthly Report Sheets and Applications for Payment: Contractor shall establish and maintain records of cost of the Work in accordance with generally accepted accounting practices; reconcile the amount of Work completed monthly with Owner, and sign Owner's monthly report sheet certifying the Work is done. Monthly report sheets shall be considered the true record of the Cost of the Work and Contractor shall submit in a form acceptable to Owner an itemized cost breakdown of Contractor's record of Cost of the Work together with supporting data and any certification required by Owner. In addition:
1. On or before the sooner of (a) the 20th Day of each month and (b) receipt of Owner's approval of the updated Schedule as required by Section 01320 (Progress Schedules and Reports), Owner and Contractor will reconcile any differences in the field, based on the reconciled monthly report sheets, and Contractor shall submit to Owner an Application for Payment for the cost of the Work put in place during the period from the 15th Day of the previous month to the 15th Day of the current month, along with the Owner-approved updated Schedule. 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. 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 Owner.
 - 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 Owner receiving all requested, acceptable schedule update information. Failure to submit a schedule update complying with Section 01320 justifies denying the entire Application for Payment, or in Owner's discretion withholding amounts as described in paragraph 1.7E.11 of this Section 01200.
 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 Owner.
 6. If Owner requires substantiating data, submit information requested by Owner, with cover letter identifying Project, Application for Payment number and date, and detailed list of enclosures.
 7. If Contractor fails or refuses to participate in monthly Work reconciliations or other construction progress evaluation with Owner, Contractor shall not receive current payment until Contractor has participated fully in providing construction progress information and schedule update information to Owner.
- E. Progress Payments
1. Owner will review Contractor's Application for Payment following receipt. If adjustments need to be made to percent of completion of each activity, Owner 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 Owner and/or inspectors to determine whether the Application for Payment is proper, and shall be rejected, revised, or approved by Owner pursuant to the Schedule of Values prepared in accordance with paragraph 1.7C of this Section 01200.
 3. If it is determined that the Application for Payment is not proper and suitable for payment, Owner 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 Owner determines that portions of the Application for Payment are not proper or not due under the Contract Documents, then Owner 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 California Public Contract Code Section 20104.50, if Owner fails to make any progress payment within 30 Days after receipt of an undisputed and properly submitted

- Application for Payment from Contractor, Owner 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 Owner exceeds the seven-Day return requirement set forth herein.
5. As soon as practicable after approval of each Application for Payment for progress payments, Owner will pay to Contractor in manner provided by law, an amount equal to 95 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 Owner, 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.
 7. Owner reserves and shall have the right to withhold payment for any equipment and/or specifically fabricated materials that, in the sole judgment of Owner, are not adequately and properly protected against weather and/or damage prior to or following incorporation into the Work.
 8. Owner reserves and shall have the right to withhold payment if, in the sole judgment of Owner, Contractor has not adequately and properly performed obligations associated with Federal funding requirements, including but not limited to all requirements set forth in Document 01415 (Regulatory Requirements - Funding).
 9. Granting of progress payment or payments by Owner, 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.
 10. When Owner shall charge sum of money against Contractor under any provision of Contract Documents, amount of charge shall be deducted and retained by Owner 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 Owner's charges against it, Owner shall have right to recover balance from Contractor or Sureties.
 11. If Contractor fails to submit an acceptable Progress Schedule update, or fails to bring an acceptable Project Record Drawings update to Progress Payment Meeting, Owner may retain 5% of each Progress Payment amount thereafter (in addition to any other retention) until Owner's acceptance of a Progress Schedule or Project Record Drawings update. This retention shall apply cumulatively.

1.8 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, Owner 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. Owner'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 final payment, Document 00650 (Agreement and Release of Any and All Claims).

1.9 EFFECT OF PAYMENT

- A. Payment will be made by Owner, based on Owner's observations at the Site and the data comprising the Application for Payment. Payment will not be a representation that Owner has:
 - 1. Made exhaustive or continuous on-Site inspections to check the quality or quantity of Work;
 - 2. Reviewed construction means, methods, techniques, sequences, or procedures;
 - 3. Reviewed copies of requisitions received from Subcontractors and material suppliers and other data requested by Owner 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.

1.10 CONTINGENCY RESERVE

- A. Owner will authorize and direct Contractor regarding provisions in this paragraph 1.10.
- B. Contingency Reserve Amount: as listed in Document 00520 (Agreement).
- C. Cost shall be determined for CCD Work as provided in Section 01250 (Modification Procedures) or on a time-and-materials basis if agreed by Contractor and Owner.
- D. Prior to final payment, an appropriate Change Order will be issued to reflect actual amounts due Contractor on account of Work covered by this Contingency Reserve, and the Contract Sum will be correspondingly adjusted.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION - NOT USED

END OF SECTION

SECTION 01250

MODIFICATION PROCEDURES**PART 1 GENERAL****1.1 SUMMARY**

A. Section includes:

1. Description of general procedural requirements for alterations, Modifications, and extras.

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 Owner may initiate changes in scope of Work or deviation from Contract Documents.
1. Contractor may initiate changes by submitting RFIs, Notice of Differing Site Conditions, or Notice of Hazardous Waste or Materials Conditions.
 - a. RFIs shall be submitted to seek clarification of or request changes in the Contract Documents.
 - b. Notices of Differing Site Conditions shall be submitted in accordance with Document 00700 (General Conditions).
 - c. Notices of Hazardous Waste or Materials 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 for administrative costs. Contractor shall be responsible for both Owner and its Engineer's administrative costs for answering RFIs where the answer could reasonably be found by reviewing the Contract Documents, as determined by Owner; at Owner's discretion, such costs may be deducted from progress payments or final payment.
 3. Owner may initiate changes by issuing a Supplemental Instruction, which may revise, add to or subtract from the Work.
 4. Owner 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. Owner 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 Owner 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 Owner 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; and itemizing materials, labor, taxes, overhead and profit. 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, Owner will act promptly thereon.

1. If Owner accepts a Cost Proposal, Owner will prepare Change Order for Owner and Contractor signatures.
 2. If Cost Proposal is not acceptable to Owner because it does not agree with cost and/or time included in Cost Proposal, Owner 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 Days in which to respond to Owner with a revised Cost Proposal.
 3. When necessity to proceed with a change does not allow the Owner sufficient time to conduct a proper check of a Cost Proposal (or revised Cost Proposal), Owner may order Contractor to proceed on basis to be determined at earliest practical date. In this event, value of change, with corresponding equitable adjustment to Contract, shall not be more than increase or less than decrease proposed.
- B. Request for Information (RFI): 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 Owner, using the Contractor interface for Owner's project management software. 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 RFI to an activity on the Progress Schedule and 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. Owner will respond within 15 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 to Owner clarifying original RFI. Additionally, Owner may return RFI requesting 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 Owner in writing within 15 Days after receiving the response. If Owner 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 Owner 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: Owner may issue Supplemental Instruction to Contractor.
1. If Contractor is satisfied with Supplemental Instruction and does not request change in Contract Sum or Contract Time, then Supplemental Instruction shall be executed without a Change Order.

2. If Contractor believes that Supplemental Instruction results in change in Contract Sum or Contract Time, then Contractor must submit a Cost Proposal to Owner within 21 Days of receiving the Supplemental Instruction.
- D. Construction Change Directives: If at any time Owner believes in good faith that a timely Change Order will not be agreed upon using the foregoing procedures, Owner may issue a CCD with its estimated cost and/or time adjustment. Upon receipt of CCD, Contractor shall promptly proceed with the change of Work involved and concurrently respond to Owner's CCD within 10 Days.
1. Contractor's response must be any one of following:
 - a. Return CCD signed, thereby accepting Owner'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 Owner 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 within 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 Owner 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 Owner 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 Owner, amounts not in dispute may be included in Applications for Payment. The amount of credit to be allowed by Contractor to Owner for a deletion or change that results in a net decrease in the Contract Sum shall be actual net cost as confirmed by Owner. 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. Owner Requested RFP: Contractor shall furnish a Cost Proposal within 21 Business Days of Owner's RFP. Upon approval of Cost Proposal, Owner will issue a Change Order directing Contractor to proceed with extra Work. If the parties do not agree on the price, Owner 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 13.4 of Document 00700 (General Conditions), which shall govern. If Owner determines that a change in Contract Sum or Contract Time is justified, Owner will issue RFP or CCD.

- G. Hazardous Waste Conditions: Contractor shall submit Notices of Hazardous Waste or Materials Conditions to resolve problems regarding hazardous materials encountered in the execution of the Work pursuant to paragraph 13.5 of Document 00700 (General Conditions), which shall govern. If Owner determines that a change in Contract Sum or Contract Time is justified, Owner 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.
 - 3) Justification for any change in Contract Time and new Progress Schedule showing revision due, if any.
 - 4) 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 01250, do not provide a specific time period, recipients shall respond within a reasonable time.

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 Owner, its representatives or agents, whether

arising from breach of Contract, negligence, or strict liability, unless specifically authorized in the Contract Documents.

- B. Markup for Overhead and Profit: (Overhead shall be as defined in paragraph 1.8 of this Section 01250)
1. Markup for overhead and profit on labor for extra Work shall not exceed 15 percent.
 2. Markup for overhead and profit on materials for extra Work shall not exceed 15 percent.
 3. Markup for overhead and profit on owner-operated equipment for extra Work shall not exceed 15 percent.
 4. Markup for overhead and profit on equipment for extra Work shall not exceed 10 percent.
 5. 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 percentages listed in paragraphs 1.4B.1, 1.4B.2, 1.4B.3, and 1.4B.4 immediately above.
 6. When extra Work is performed by a lower tier Subcontractor, Contractor, first tier Subcontractors, and lower tier Subcontractors shall divide (as mutually agreed) a total of 5 percent markup on the lower tier Subcontractors' total costs of extra Work.
 7. 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.
 8. On proposals covering both increases and decreases in Contract Sum, markup for overhead and profit shall be included on the net amount as determined in this paragraph 1.4.
 9. The markup shall include profit, small tools, cleanup, engineering, supervision, warranties, cost of preparing the cost proposal, jobsite overhead, and home office overhead.
- C. Taxes:
1. All State sales tax, use tax, and Sonoma 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 as follows:
1. Payment for cost of equipment will be made at no more than rates of such equipment established in 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.
 3. Invoices for owner-operated equipment need not itemize labor and equipment costs, unless specifically requested by Owner. In any event, the total rate for owner-operated equipment shall not exceed the combined rates for labor and equipment listed in paragraphs 1.4D.1 and 1.4D.2 above.
- 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 accepts 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 (General Conditions) 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 Owner) 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 insurance. Labor surcharge shall be and shall not exceed that set forth in Caltrans 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 Owner 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 Owner, 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: For Contractor- or Subcontractor-owned equipment, payment will be made at rental rates listed for equipment in Caltrans 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 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 rental rate for equipment of proper size and type, as determined by Owner. 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 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. Payment will not be made for time in which equipment is inoperative due to breakdowns.

1. For Contractor or Subcontractor -owned equipment on Site, payment for equipment use will be for time equipment is in operation on extra Work being performed or on standby as approved by Owner.
 2. For rented equipment on Site, 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.
 3. 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. Owner 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. Owner 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.
 4. For rented equipment, 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 Owner directs Contractor to discontinue use of equipment, whichever first occurs. Excluding Saturdays, Sundays, and Owner'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 Owner 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. Owner 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 Owner. 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 Owner and Contractor have broken apart and a bilateral agreement on the value of the changed Work cannot be reached. Owner may approve other uses of Force-Account Work.
 - C. Whenever any Force-Account Work is in progress, definite price for which has not been agreed on in advance, Contractor shall report to Owner 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 Owner 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 Owner, may properly be classified under items for which prices are otherwise established in Contract Documents.

1.7 OWNER-FURNISHED MATERIALS

- A. Owner 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 FOR MODIFICATIONS

- 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, as-builts, 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 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
- h. Sanitation
- 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. Permit fees
- 18. Final cleanup
- 19. Other incidental Work

1.9 RECORDS AND CERTIFICATION

- A. Force-Account (cost reimbursement) charges shall be recorded daily and summarized in Cost Proposal form attached hereto. Contractor or authorized representative shall complete and sign 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. Owner 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, Owner will have right to audit, inspect, or copy all records maintained in connection with this Contract, including financial records and Escrow Bid Documents, 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, right of Owner 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 the Article 12 of Document 00700 (General Conditions).

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION - NOT USED

END OF SECTION

COST PROPOSAL FORM FOLLOWS ON NEXT PAGE

COST PROPOSAL (CP)

North Bay Water Reuse Program Sonoma Valley County Sanitation District Fifth Street East Recycled Water Pipeline Contract Number 71-712-7 #3

CP Number: _____

Date: _____

In Response To _____
RFP #, etc.

To: Sonoma Valley County Sanitation District
Attention: Contract Administration/ Inspection
c/o Sonoma County Water Agency
404 Aviation Boulevard, Santa Rosa, CA 95403-9019

Subject Ref. No: _____
(for Project Manager use only)

Phone: (707) 547-1913

Fax: (707) 544-6123

From: [Insert Contractor's Name/Address]

This Cost Proposal is in response to the above-referenced _____ [insert RFP, etc. as applicable].
Brief description of change(s): _____

ITEM DESCRIPTION	PRIME CONTR.	SUB 1	SUB 2	SUB 3	SUB 4	TOTAL
MATERIAL						
DIRECT LABOR COST						
EQUIPMENT						
Other (Specify)						
Total Cost						
Subcontractor's Markup for Overhead and Profit 15 percent						
Contractor's Markup for Overhead and Profit 15 percent (Labor and Materials)						
Contractor's Markup for Overhead and Profit 10 percent (Equipment Rental)						
Markup for Overhead and Profit to Contractor for Subcontractor's Work 5 percent						
GRAND TOTAL						
(percent of Total Cost above not including any Markup for Overhead and Profit) [Grand Total divided by Total Cost]						
REQUESTED CHANGE IN CONTRACT TIME (DAYS)						

By Contractor: _____

Signature: _____

Date: _____

SECTION 01315

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

A. Section Includes:

1. Descriptions of the required Project meetings for the Work. These meetings include:
 - a. Post-Notice of Award Meeting
 - b. Schedule Review Meetings
 - c. Preconstruction Conference
 - d. Monthly Progress Meetings
 - e. Progress Payment Meetings
 - f. Optional Submittal Review Meeting
 - g. Special Meetings
 - h. Safety Meetings

1.2 POST-NOTICE OF AWARD MEETING

- A. Owner will call for and administer a Post-Notice of Award Meeting at time and place to be announced.
- B. Contractor's general superintendent, Contractor's foreman, preparer of Safety Program, preparer of SWPPP, if applicable, and all major Subcontractors shall attend this meeting.
- C. Agenda will include, but not be limited to, discussion of requirements for the following items:
 1. Insurance
 2. Bonds
 3. Notice to Proceed
 4. Commencement of Contract Time
 5. Start of Work at Site
 6. Contractor's Initial and Original Schedule
 7. Contractor's Schedule of Values
 8. Contractor's Schedule of Submittals
 9. Submittal and RFI procedures
 10. Safety Program
 11. SWPPP, if applicable
 12. Permits
 13. Name of Owner's Representative
 14. Other items as appropriate
- D. Owner will distribute minutes of Post-Notice of Award Meeting to attendees. Attendees shall have 5 Days to submit comments or additions to minutes. Minutes will constitute final memorialization of results of Post-Notice of Award Meeting.

1.3 SCHEDULE REVIEW MEETINGS

- A. Within 30 Days of issuance of Notice to Proceed, meet with Owner and conduct initial review of Contractor's draft Schedule of Submittals, draft Schedule of Values, and Initial Schedule.

- B. Authorized representative in Contractor's organization, designated in writing, who will be responsible for working and coordinating with Owner relative to preparation and maintenance of Progress Schedule shall attend the initial schedule review meeting.
- C. Contractor shall, within 30 Days from the commencement of Contract Time and prior to commencement of Work at the Site, meet with Owner to review the Original Progress Schedule and construction schedule submittals.
 - 1. Contractor shall have its manager, superintendent, scheduler, and key Subcontractor representatives, as required by Owner, in attendance. The meeting will take place over a continuous one-Day period.
 - 2. Owner's review will be limited to submittals' conformance to Contract Documents requirements including, but not limited to, coordination requirements. Owner's review may also include:
 - a. Clarifications of Contract Requirements
 - b. Directions to include activities and information missing from submittals
 - c. Requests to Contractor to clarify its schedule
 - 3. Within 5 Days of the Schedule Review Meeting, Contractor shall respond in writing to all questions and comments expressed by Owner at the meeting.
- D. Owner will administer Schedule Review Meetings and shall distribute minutes of Schedule Review Meetings to attendees. Attendees shall have 5 Days to submit comments or additions to minutes. Minutes will constitute final memorialization of results of Schedule Review Meetings.

1.4 PRECONSTRUCTION CONFERENCE

- A. Owner will call for and administer Preconstruction Conference at time and place to be announced.
- B. Contractor, all major Subcontractors, and major suppliers shall attend Preconstruction Conference.
- C. Agenda will include, but not be limited to, the following items.
 - 1. Revised/updated 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. Inspection and testing procedures, on-Site and off-Site
 - 8. Utility shutdown procedures
 - 9. Control and reference point survey procedures
 - 10. Safety Program
 - 11. Jurisdictional agency requirements
 - 12. Other items as appropriate
- D. Owner will distribute copies of minutes to attendees. Attendees shall have 7 Days to submit comments or additions to minutes. Minutes will constitute final memorialization of results of Preconstruction Conference.

1.5 MONTHLY PROGRESS MEETINGS

- A. Owner will schedule and administer monthly progress meetings throughout duration of Work. Progress meetings will be held monthly on approximately the 20th of each month.
 - 1. Meetings shall be held at Contractor's on-Site office unless otherwise directed by Owner.

2. An Owner Representative will prepare agenda and distribute it at the meeting to Contractor.
 3. Contractor's general superintendent shall attend these meetings.
 4. Owner will record. Approximately 7 Days after meeting, Owner will distribute minutes to Contractor, who will distribute to those affected by decisions made at meeting. Attendees can either submit comments or additions to 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 meeting.
- B. These meetings are considered a critical component of overall monthly schedule update submittal and Contractor shall have appropriate personnel attend. Contractor's job superintendent, major Subcontractors and suppliers, Owner, and others as appropriate shall attend progress meetings.
- C. Agenda will contain the following items, as appropriate:
1. Review, revise as necessary, and approve previous meeting minutes
 2. Review of Work progress since last meeting, including percent complete of each activity
 3. Review of the schedule update submittal
 - a. Time impact evaluations for Change Orders and Time Extension Request
 - b. Actual and anticipated activity sequence changes
 - c. Actual and anticipated duration changes
 - d. Actual and anticipated Contractor delays
 4. Review the Application for Payment
 5. Status of Construction Work Schedule, delivery schedules, adjustments
 6. Submittal, RFI, and Change Order status
 7. Review of the Contractor's safety program activities and results, including report on all serious injury and/or damage accidents
 8. Other items affecting progress of Work

1.6 PROGRESS PAYMENT MEETINGS

- A. Prior to official application for Payment submission, a meeting will be held on approximately the 20th of each month to review the Application for Payment.
1. At this meeting, the following items will be reviewed:
 - a. Percent complete of each activity
 - b. Project Schedule
 - c. Hard-copy updates of the Project Record Drawings (Field Set)
 2. Contractor's general superintendent shall attend these meetings.

1.7 OPTIONAL SUBMITTAL REVIEW MEETING

- A. At Owner or Contractor's request, in order to facilitate the timeliness of the review process, Owner may schedule a meeting to review the materials submitted.
1. Request a meeting date with Owner at least 10 Business Days in advance.
 2. Provide complete package of Submittals at least 10 Business Days in advance of the meeting.
 3. The meeting shall take place at Owner's office. Owner will provide the authorized staff to review Submittals during the meeting.
 4. Make available for this meeting the job superintendent and/or foreman, Contractor's safety officer, protective coating manufacturer's representative (if applicable), and someone knowledgeable of all Submittals and authorized to make substitutions or changes.

1.8 SPECIAL MEETINGS

- A. Owner or Contractor may call special meetings by notifying all desired participants and Owner 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, Owner 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 Owner 5 Days written notice of coordination meetings. Contractor shall maintain minutes of coordination meetings. Attendees shall have 7 Days to submit comments or additions to minutes. Minutes will constitute final memorialization of results of coordination meetings.

1.9 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

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 Owner.
 - 3. Submit schedules and reports as specified in Document 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 Owner's remedies for default if Contractor fails to perform. Nothing in this paragraph 1.1.C of this Document 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 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 Owner. A Change Order shall formalize any such agreement.
 - 1. Owner 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 event agreement is reached on an earlier (advanced) schedule and Contractor completes its Work, for whatever reason, beyond 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 Owner, 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 Owner and Contractor.
 - 4. Project Float Ownership: Neither Owner nor Contractor owns Project Float. The Project owns the Project Float. As such, liability for delay of any Substantial Completion date rests with the party whose actions, last in time, actually cause delay to a Substantial 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 Project Float and Party B later uses remainder of the

Project Float as well as additional time beyond the Project 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 Project Float and additional Project 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 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. Owner's acceptance of 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 Owner, or act to relieve Contractor of its responsibility for means and methods of construction.
- E. Transmit each item using form approved by Owner or following Section 01330 (Submittal Procedures).
 1. Identify Project with the Owner Contract number, and name of Contractor.
 2. Provide space for Contractor's approval stamp and Owner's review stamps.
 3. Submittals received from sources other than Contractor will be returned to Contractor without Owner's review.

1.3 INITIAL AND ORIGINAL PROGRESS SCHEDULE

- A. Initial Schedule submitted within 21 Days after issuance of Notice to Proceed for review at the initial Schedule Review Meeting shall serve as Contractor's schedule for up to 30 Days after the commencement of Contract Time.
 1. Initial Schedule must indicate detailed plan for the Work to be completed in first 30 Days after commencement of Contract Time of the Contract; details of planned mobilization of plant and equipment; sequence of early operations; and procurement of materials and equipment. Show Work beyond 30 Days in summary form.
- B. Contractor shall submit its Original Schedule for review no later than first Application for Payment and prior to commencement of Work at the Site. Original Schedule and all updates shall comply with all standards herein.
- C. All Schedules shall be time-scaled.
- D. Except as otherwise expressly provided in this Section 01320, meet with Owner to review and discuss each Schedule (i.e., Initial, Original and updates) within seven Days after each Schedule has been submitted to Owner.
 1. Owner'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 and shall adjust Schedule to incorporate any missing information requested by Owner. Resubmit Initial Schedule if requested by Owner.
- E. If Contractor is of the opinion that any of the Work included on its Schedule has been impacted, submit to Owner a written TIE in accordance with paragraph 1.8 of this Section 01320. The TIE shall be based on the most current update of the Schedule.

1.4 SCHEDULE FORMAT AND LEVEL OF DETAIL

- A. Each Schedule (Initial, Original, and updates) shall indicate all separate submittals, 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. Incorporate Schedule of Submittals into each Schedule.
 3. Activities related to the delivery of Contractor- and Owner-furnished equipment to be Contractor-installed per Contract shall be shown.
 4. 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.
 5. 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 Owner.
 6. Show the critical path in red. For each activity, show early start, late start, early finish, late finish, durations measured in Days, Project Float, resources, predecessor and successor activities, planned workday/week for the activity, manpower 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. Prepare schedule using Microsoft® Office Project 2007 software for all scheduling, including schedule updates.

1.5 MONTHLY SCHEDULE UPDATE SUBMITTALS

- A. Following acceptance of Contractor's Initial Schedule, 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. Completed activities (shown in blue) 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 in accordance with Section 01315 (Project Meetings) to review the Schedule update submittal. Submit Schedule updates monthly, 7 Days prior to the Monthly Progress Meeting.
- C. Within five Days after monthly Schedule update meeting, submit the updated Schedule.
- D. Within five Days of receipt of above-noted revised submittals, Owner will either accept or reject monthly schedule update submittal.
1. If accepted, percent complete shown in monthly update will be basis for Application for Payment by Contractor. The schedule update shall be submitted as part of Contractor's Application for Payment.

2. If rejected, update shall be corrected and resubmitted by Contractor before the Application for Payment is submitted.
- E. Updating, changing or revising of any report, curve, schedule or narrative submitted to Owner by Contractor under this Contract, nor Owner's review or acceptance of any such report, curve, schedule or narrative shall not 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, provide Owner with a written narrative with a full description and reasons for each Work activity revised. For revisions affecting the sequence of Work, provide a schedule diagram that compares the original sequence to the revised sequence of Work. Provide the written narrative and schedule diagram for revisions three Days in advance of the monthly schedule update meeting. Clearly show and discuss any changes in the critical path.
- C. Schedule revisions shall not be incorporated into any schedule update until Owner has reviewed the revisions. Owner may request further information and justification for schedule revisions and, within three Days, provide Owner with a complete written narrative response to Owner's request.
- D. If Owner does not accept Contractor's revision, and Contractor disagrees with Owner's position, Contractor has seven Days from receipt of Owner'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 Owner's written rejection of a schedule revision shall be contractually interpreted as acceptance of Owner's position, and Contractor waives its rights to subsequently dispute or file a claim regarding Owner'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 Owner'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, submit to Owner within seven Days the proposed revisions to recover the lost time. As part of this submittal, provide a written narrative for each revision made to recapture the lost time. If the revisions include sequence changes, provide a schedule diagram comparing the original sequence to the revised sequence of Work. If Owner reasonably requests, 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 Owner has reviewed the revisions.
- C. If Owner does not accept Contractor's revisions, Owner and Contractor shall follow the procedures in paragraphs 1.6C, 1.6D, and 1.6E of this Section 01320.

- D. At Owner's discretion, Contractor can be required to provide Subcontractor certifications for revisions affecting said Subcontractors.

1.8 TIME IMPACT EVALUATION (TIE) FOR CHANGE ORDERS AND OTHER DELAYS

- A. When Contractor is directed to proceed with changed Work, 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 Owner 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.
- 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 Owner 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 Owner is responsible impacts the projected Substantial Completion date, provide a written mitigation plan, including a schedule diagram, which explains how (e.g., increase crew size, overtime, etc.) the impact can be mitigated. Also include a detailed cost breakdown of the labor, equipment, and material Contractor would expend to mitigate Owner-caused time impact. Submit mitigation plan to Owner 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. Owner 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, 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. Prepare monthly written narrative reports of status of Project for submission to Owner. 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. Description or list of any required permit reports prepared or submitted.
 9. Provide 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. Explain all variances and mitigation measures.
 10. Contractor may include any other information pertinent to status of Project. Include additional status information requested by Owner at no additional cost.
 11. 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.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION - NOT USED

END OF SECTION

SECTION 01330

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

A. Section Includes:

1. Description of general requirements for Submittals for the Work, as applicable:
 - a. Procedures
 - b. Schedule of Submittals
 - c. Construction Material Waste Management Plan
 - d. Safety Program
 - e. Progress Schedule
 - f. Product Data
 - g. Shop Drawings
 - h. Samples
 - i. Coordination Drawings (If Applicable)
 - j. Quality Assurance/Control Submittals
 - 1) Design Data
 - 2) Test Reports
 - 3) Certificates
 - 4) Manufacturers' Instructions
 - 5) Work Plans
 - k. Installation, Operation, and Maintenance Manual
 - l. Project Record Documents
 - m. Storm Water Pollution Prevention Program
 - n. Delay of Submittals

1.2 PROCEDURES

- A. Submit at Contractor's expense the Submittals required by the Contract Documents.
- B. Submit Submittals to Owner in accordance with accepted Schedule of Submittals. If no such schedule is agreed upon, then all Submittals shall be submitted within 35 Days from the commencement of Contract Time.
- C. Transmit each item with the appropriate Submittal transmittal form (included at the end of this Section 01330). 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. Organize Submittals by 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. Incomplete Submittals will be returned not reviewed by Owner.
- 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 Owner the materials and equipment Contractor proposes to provide and to enable Owner 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 Owner may require to enable Owner to review the Submittal.

- E. At the time of each submission, give Owner specific written notice of all variations, if any, that the 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, cause a specific notation to be made on each Submittal submitted to Owner for review and approval of each such variation. If Owner accepts deviation, Owner will note its acceptance on the returned Submittal transmittal form and, if necessary, issue appropriate Contract Modification.
- F. Submittal coordination and verification is the responsibility of Contractor; this responsibility shall not be delegated in whole or in part to Subcontractors or suppliers. Before submitting each Submittal, review and coordinate each Submittal with 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 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 responsibility for means, methods, techniques, sequences, and procedures of construction and safety precautions and programs incident thereto.
- G. Contractor's submission to Owner 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 this 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 Owner of each Submittal, an electronic copy of each Submittal 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 Owner.
 - 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. Make a complete and acceptable Submittal at least by second submission. Owner reserves the right to deduct monies from payments due Contractor to cover additional costs of review beyond the second submission per paragraph 1.2T. 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 Owner 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 Owner of any responsibility for the accuracy, coordination, or completeness of the Submittals. Accuracy, coordination, and completeness of Submittals shall be sole responsibility of Contractor, including responsibility to back-check comments, corrections, and modifications from Owner's review before fabrication. Contractor, Subcontractors, or suppliers may prepare Submittals, but Contractor shall ascertain that Submittals meet requirements of Contract Documents, while conforming to structural space and access conditions at point of installation. Owner'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 Owner, 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 Owner 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. Unless otherwise specified, Owner'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. Submit complete initial Submittal for those items where required by individual Specification Sections. 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 first named. If Contractor submits incomplete initial Submittal when complete Submittal is required, Submittal may be returned to Contractor without review.
- N. Copy, conform, and distribute reviewed Submittals in sufficient numbers for Contractor's files, Subcontractors, and vendors.
- O. After Owner's review of Submittal, revise as noted and resubmit as required. Identify changes made since previous Submittal.
1. Begin no fabrication or Work that requires Submittals until return of Submittals not requiring resubmittal. Do not extrapolate from Submittals covering similar Work.
 2. Normally, Submittals will be processed and returned to Contractor within 30 Days of receipt.
- P. Distribute 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 Owner, in accordance with Owner's numbering format. Owner will provide Contractor with sample numbering format.
- R. Submission Requirements:
1. Deliver Submittals to Owner at least 30 Days before dates reviewed Submittals will be needed.

2. Initial Submittal of Installation, Operation, and Maintenance Manual shall be:
 - a. 45 Days after the date Submittal(s) that pertain to the item are favorably reviewed; and
 - b. Prior to start-up and testing of the applicable product or equipment.
3. The following table lists the number of initial Submittals required from Contractor for each type of submission and to whom Contractor shall distribute the information. Submittals requiring resubmission will require the same quantity and distribution as an initial Submittal.

Submittal	Contractor Submittal	
	# of hard copies/ Prints/ Samples	Electronic copy
	Owner	Owner
Items Go To →		
Schedule of Submittals	0	✓
Construction Material Waste Management Plan	0	✓
Monthly Progress Reports for Construction Material Waste Management Plan	0	✓
Safety Program	1	✓
Fire Protection Plan	1	✓
Progress Schedule	1	✓
Product Data	0	✓
MSDSs	0	✓
Shop Drawings	0	✓
Drawings or any documents larger than 11" x 17"	0	✓
Samples	2	-
Coordination Drawings	0	✓
Quality Assurance/Control Submittals:		
Design Data	0	✓
Test Reports	0	✓
Certificates	0	✓
Manufacturers' Instructions	0	✓
Work Plans	0	✓
Installation, Operation, and Maintenance Manuals (initial submittal)	0	✓
Installation, Operation, and Maintenance Manuals (final submittal)	4	✓
Major Products List	0	✓
Storm Water Pollution Prevention Program	0	✓
Other Documents	0	✓

4. The following table lists the Submittals required from Contractor after Owner’s favorable review, if Submittal requires a stamp or signature.

Submittal	Contractor Submittal	
	Items Go To →	# of hard copies Owner
Shop Drawings		1
Coordination Drawings		1
Quality Assurance/Control Submittals:		
Design Data		1
Test Reports		1
Certificates		1
Work Plans		1
Storm Water Pollution Prevention Program		1
Other Documents		1

5. Accompany each copy of the Submittal(s) with a Submittal transmittal form, containing:
 - a. Date, revision date, and Submittal identification number.
 - b. Project name and Owner’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. MSDS for each item complying with OSHA’s Hazard Communication Standard 29 CFR 1910.1200.
 - h. Other pertinent data.
6. Submittal shall include:
 - a. Date and revision dates.
 - b. Revisions, if any, identified.
 - c. Project Name and Contract number.
 - d. The names of:
 - 1) 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 and Drawing number.
 - i. Applicable reference standards, such as ASTM, ANSI, FS, NEMA, SMACNA or ACI.
 - j. A blank space, on the first sheet of each Submittal set, 5” x 4” for the Owner’s stamp.
 - k. Identification of deviations from 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 Owner.

2. Product Data and Samples:
 - a. Submit new Product Data and Samples as required for initial Submittals.
 3. Installation, Operation, and Maintenance Manual:
 - a. Revise initial Installation, Operation, and Maintenance Manual(s) as required and resubmit as specified for initial Submittals.
- T. Charge for resubmissions:
1. One re-examination of Contractor's Submittals that have been returned for correction or replacement will be included in Owner's budget. Any additional re-examination of Contractor's Submittals will be considered additional scope services to be paid by Contractor through Owner. Contractor shall pay Owner (or Owner 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 Owner.

1.3 SCHEDULE OF SUBMITTALS

- A. Submit a preliminary Schedule of Submittals as required herein and by Document 00700 (General Conditions). Utilize Owner's Submittal Log form to prepare Schedule of Submittals. Owner's Submittal Log form will be provided to Contractor in electronic media format compatible with Microsoft® Excel 2000.
- B. Schedule of Submittals will be used by Owner to schedule its activities relating to 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 Submittals will be reviewed by Owner and shall be revised and resubmitted until accepted by Owner.
- D. Unless otherwise specified, transmit Submittals for associated items simultaneously to ensure that information is available for checking each item when it is received. Identify on the Submittal transmittal form that such Submittals should be reviewed together.

1.4 CONSTRUCTION MATERIAL WASTE MANAGEMENT PLAN

- A. Submit Construction Material Waste Management Plan specific to these Contract Documents as required by Section 01741 (Construction Material Waste Management Plan).

1.5 SAFETY PROGRAM

- A. Submit Safety Program specific to these Contract Documents as required by Section 01540 (Site Security and Safety).

1.6 PROGRESS SCHEDULE

- A. See Section 01320 (Progress Schedules and Reports) for schedule and report requirements. Section 01320 (Progress Schedules and Reports) shall control in any conflict with this Section 01330.
- B. Progress schedules, schedule updates, and reports shall be submitted using software described Section 01320 (Progress Schedules and Reports). Electronic files shall be complete copies, including all programs and electronic coding.

1.7 PRODUCT DATA

- A. Within ten Days after Contract Time commences to run, submit complete list of major products proposed for use (included at the end of this Section 01330, if required), with name of manufacturer, telephone number, trade name, and model number of each product. Tabulate data by Specification Section.

- B. Product or Catalog Data:
1. Manufacturers' standard drawings shall be modified to delete non-applicable data or include applicable data.
 2. Manufacturers' catalog sheets, brochures, diagrams, schedules, charts, illustrations, and other standard descriptive data:
 - 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.
 3. For products specified only by reference standards, give manufacturer, trade name, model or catalog designation, and reference standards.
 4. Material Safety Data Sheets:
 - a. In addition to MSDSs otherwise required by the Contract Documents, submit MSDSs for any products containing a hazardous substance such as paints, solvents, thinners, varnish, lacquer, glues and adhesives, mastics, sealants, equipment fuel, equipment lubricant, or other materials needed for the Project as required by the individual Specification Sections or as otherwise specified in the Contract Documents.
 - b. MSDSs must be submitted with Product Data Submittal in order for the Submittal to be reviewed.
- C. Supplemental Data:
1. Mark each copy to identify applicable products, models, options, and other data. Supplement manufacturer's standard data to provide information unique to Project.

1.8 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. The electronic copy will be marked with Owner'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, Owner 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, showing plan view together with such sectional views as are necessary to clearly show construction detail, materials, and methods.

1.9 SAMPLES

- A. Submit full range of manufacturers' standard colors, textures, and patterns for Owner's selection.
- B. Submit Samples to illustrate functional and aesthetic characteristics of product, with integral parts and attachment devices. Coordinate Submittal of different categories for interfacing Work.
- C. Include identification on each Sample, giving full information.
- D. Sizes: Unless otherwise specified, 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 Owner.
- F. Field Samples and Mock-ups (if applicable):
 1. Erect field Samples and mock-ups at Site in accordance with requirements of Specification Sections. If testing is conducted, record and certify results and full Contract compliance.
 2. Modify or make additional field Samples and mock-ups as required to provide appearance and finishes approved by Owner.
 3. Approved field Samples and mock-ups may be used in Work upon approval by Owner.
 4. Construct or prepare as many additional Samples as may be required, as directed by the Owner, 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.
- I. Samples will not be returned to Contractor.

1.10 COORDINATION DRAWINGS (IF APPLICABLE)

- A. Layout Drawings: As soon as practical and in no case starting later than 30 Days after issuance of Notice to Proceed, Contractor shall prepare layout drawings of all equipment and piping at not less than 1/4" scale. The layout drawings shall show the location of all equipment as well as locations of all valves, piping, fittings, and other items requiring access for service and maintenance. The layout drawings shall also show beams, ceiling heights, walls, floor-to-floor dimensions, columns, doors and other major architectural and structural drawings.
 1. At Contractor's option, the layout drawings may be produced using computer-aided drafting.
- B. Coordination with Subcontractors: Within 30 Days after the date of the Notice to Proceed, send one reproducible and two prints of the layout drawings to Subcontractors who shall then make on the reproducible their own routings, etc., as required to determine interrelationship and possible interferences with mechanical equipment, piping and architectural or structural features. The marked-up reproducibles shall then be returned to Contractor no less than 30 Days after receipt by the Subcontractors.
- C. Composite Drawings: Contractor shall prepare preliminary composite drawings of such layout drawings, incorporating all the information and routings provided by the Subcontractors. (At Contractor's option, a group of transparent overlays may be substituted, provided that they clearly show the relationship of all proposed installations and they are pin-registered/aligned.)
 1. The preliminary composite drawings or the overlays shall be reviewed during a series of meetings called by Contractor and attended by Owner, at which all Subcontractors and trades shall be represented in order to review and resolve any real or apparent interferences or conflicts.
- D. Agreement by Subcontractors: After all conflicts or interferences are resolved, Contractor shall develop a final set of composite drawings showing the agreed-upon routing, layout and juxtaposition of all , piping, major conduit, valves, panels, controls, lighting fixtures and all major mechanical and electrical installations. In areas where no mechanical and electrical

installations are installed, each Subcontractor shall be responsible for its own Work and pay its own costs in connection therewith. In preparation of all the final composite drawings, large scale details as well as cross and longitudinal sections shall be prepared as required to fully delineate all conditions. Particular attention shall be given to the locations, size, and clearance dimensions of equipment items, shafts, and similar features. These final composite drawings shall then be signed off by Subcontractors and Contractor, indicating their awareness of and agreement with the indicated routings and layouts and their interrelationship with the adjoining or contiguous Work. Thereafter, no unauthorized deviations will be permitted and, if made without knowledge or agreement of Owner, such unauthorized Work will be subject to removal and correction at no additional cost to Owner.

- E. Minor Changes: In preparing the composite drawings, minor changes in duct, pipe or conduit routings that do not affect the intended function may be made as required to avoid space conflicts, when mutually agreed, but items may not be resized or exposed items relocated without Owner's written approval. No changes shall be made in any wall or chase locations, ceiling heights, door swings or locations, window or other openings or other features affecting the function or aesthetic effect of the building. If conflicts or interferences cannot be satisfactorily resolved, Owner shall be notified and Owner's decision obtained.
- F. Distribution of Composite Drawings: After the final composite drawings have been agreed upon and signed by all Subcontractors, provide and distribute four prints and one electronic copy to each of the Subcontractors for reference and record purposes. Make similar distribution of all supplementary composite drawings, initiated by other Subcontractors. Also provide final composite drawings to Owner. All Subcontractors desiring additional prints of such drawings, beyond the basic distribution indicated above in this paragraph 1.10F, shall arrange for and pay the cost of same.
- G. Record Composite Drawings: The record copies of the final composite drawings shall be retained by Owner, Contractor, and each Subcontractor as a working reference. All Shop Drawings, prior to their Submittal to Owner, shall be compared with the composite drawings and developed accordingly by Contractor and the responsible Subcontractor. Any revisions to the composite drawings that may become necessary during the progress of the Work shall be noted by Contractor and all Subcontractors and shall be neatly and accurately recorded on the record copies. Contractor and each Subcontractor shall be responsible for the up-to-date maintenance of Subcontractor record copies of the composite drawings and for keeping two copies available at the Site. Contractor and each Subcontractor shall utilize the composite drawings, and any subsequent changes thereto, in the development of Subcontractor "Project Record Documents" drawings.
- H. Timely Submission: The composite drawings need not be submitted as a whole, but shall be submitted in all cases in ample time to avoid construction delay. The coordination drawings may lack complete data in certain instances pending receipt of Shop Drawings, but sufficient space shall be allotted for the items affected. When final information is received, such data shall be promptly inserted on the composite drawings.
- I. Improperly Coordinated Work: No extra compensation will be paid for relocating any duct, pipe, conduit, or other material that has been installed without proper coordination between Contractor and all Subcontractors involved. If any improperly coordinated Work or Work installed that is not in accordance with the approved composite drawings, necessitates additional Work by Contractor or other Subcontractors, the costs of all such Work shall be borne solely by Contractor or the Subcontractor responsible for the Work.

- J. Incorporation of Changes: All changes in the scope of Work due to revisions formally issued and approved shall be shown on the composite drawings.
- K. Quality Draftsmanship: All Work on Shop Drawings, layout drawings, coordination drawings, and composite drawings shall be performed by competent drafters and shall be clear and fully legible. Owner shall be the sole judge of the acceptability of the drawings.
- L. Structural Cutting: Obtain specific positive written instructions from Owner before cutting beams or other structural members, walls, arches, or lintel, and comply with such instructions.

1.11 QUALITY ASSURANCE/CONTROL SUBMITTALS

- A. Design Data:
 - 1. Indicate that material or product conforms to or exceeds specified requirements.
- B. Test Reports:
 - 1. Indicate that material or product conforms to or exceeds specified requirements.
 - 2. Reports may be from recent or previous tests on material or product, but shall be acceptable to Owner. Comply with requirements of each individual Specification Section.
- C. Certificates:
 - 1. Indicate that material or product conforms to or exceeds specified requirements.
 - 2. Submit supporting reference data, affidavits, and certifications as appropriate.
 - 3. Certificates may be recent or from previous test results on material or product, but shall be acceptable to Owner.
- D. Manufacturers' Instructions:
 - 1. Include manufacturers' printed instructions for delivery, storage, assembly, installation, startup, adjusting, and finishing.
 - 2. Identify conflicts between manufacturers' instructions and Contract Documents.
- E. Work Plans:
 - 1. Submit work plans with sufficient detail to clearly indicate compliance with Specification requirements and to clearly describe by what means and methods Contractor intends to execute the subject Work.

1.12 INSTALLATION, OPERATION, AND MAINTENANCE MANUAL (IF APPLICABLE)

- A. Sheet Size: 8½ x 11 inch
- B. Drawing Size: 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, fold larger drawings separately and place in vinyl envelopes bound into the binder. Identify vinyl envelopes with drawing numbers.
- C. Binding: Bind in heavy-duty white vinyl D-ring binders (locking rings), not more than 3" thick, with standard three-hole punch, two inside pockets, and a clear overlay (front pocket). Binder shall be no more than 80% full.
- D. Multiple Items: Multiple items may be combined into one binder; tab each section with plastic-coated dividers.
- E. Volumes: create volumes, numbered sequentially, as appropriate.
- F. Page Protectors: Provide plastic sheet lifters prior to first page and following last page.
- G. Binder title: Include the following title on front and spine of binder(s):

NORTH BAY WATER REUSE PROGRAM SONOMA VALLEY COUNTY
SANITATION DISTRICT FIFTH STREET EAST RECYCLED WATER PIPELINE
INSTALLATION, OPERATION, AND MAINTENANCE MANUAL, [YEAR]
VOLUME [__(number) of __(total number of volumes)]

H. Contents:

1. Introductory Information:
 - a. Title page providing the same information as paragraph 1.12G above
 - b. Contractor's name, address, and telephone number
 - c. Table of Contents: include a complete table of contents in each volume, if applicable
2. Include, at a minimum, the following detailed information for each item as applicable and as required by individual Specification Sections:
 - a. Bill of materials: include manufacturer, complete model number, quantity, and equipment location.
 - b. Operational information:
 - 1) Equipment function, normal operating characteristics, limiting operations.
 - 2) Operating instructions for startup, routine and normal operation, regulation and control, shutdown, and emergency conditions.
 - 3) A list of recommended spare parts with a price list, predicted life of parts subject to wear, and a list of spare parts provided under this Contract.
 - 4) Instrumentation or tag numbers relating the equipment back to the Contract Documents.
 - c. Maintenance information:
 - 1) Assembly, disassembly, installation, alignment, adjustment, and checking instructions.
 - 2) Lubrication and maintenance instructions including specific type and amount of lubricant and recommended lubrication interval.
 - 3) 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.
 - 4) Test data and performance curves.
 - 5) Parts lists or other documents packed with equipment when delivered.
 - 6) Instrumentation or tag numbers relating the equipment back to the Contract Documents.
 - 7) Include a filled-out Maintenance Summary form (included at the end of this Section 01330) as the first page(s) of each manual. Complete maintenance requirements in detail. Reference to the manual will not be accepted. For equipment items involving components or sub-units, a Maintenance Summary for each operating component or sub-unit is required.
 - d. Troubleshooting guide.
 - e. Delete information that is not pertinent to the Project.
3. Index: alphabetical by keyword
- I. Final Submittal: Upon favorable review of Installation, Operation, and Maintenance Manual(s) by Owner, deliver the final approved Installation, Operation, and Maintenance Manual(s). Electronic media format copy shall be searchable and include all tables, charts, drawings, codes and all other matters reflected in hard copies.

1.13 PROJECT RECORD DOCUMENTS

- A. Submit Project Record Documents as required by Section 01780 (Project Record Documents).

1.14 STORM WATER POLLUTION PREVENTION PROGRAM (IF APPLICABLE)

- A. Submit Storm Water Pollution Prevention Program if required by Section 01500 (Temporary Facilities and Controls).

1.15 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.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION - NOT USED

END OF SECTION

TRANSMITTAL FORMS AND MAINTENANCE SUMMARY FORM FOLLOW THIS PAGE

SUBMITTAL, TRANSMITTAL NO. _____

Project Name: North Bay Water Reuse Program Sonoma Valley County Sanitation District Fifth Street East Recycled Water Pipeline		Date Received:	
Owner: Sonoma Valley County Sanitation District Attention: Construction Management Section 404 Aviation Boulevard Santa Rosa, CA 95403-9019		Checked By:	
Contractor: Address:		Log Page:	
Attention:		Specification Section Number:	
		1 st Submittal <input type="checkbox"/>	Resubmittal <input type="checkbox"/>

By _____ Date _____
 Contractor's signature above shall constitute Contractor's representation that it has satisfied its obligations under the Contract Documents with respect to Contractor's review and approval of Submittals.

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:

- | | |
|--|--|
| <ul style="list-style-type: none"> A - No Exceptions Taken B - Make Corrections Noted (No Resubmission Required) C - Revise as Noted and Resubmit | <ul style="list-style-type: none"> D - Rejected - Resubmit <ol style="list-style-type: none"> 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 |
|--|--|

Comments: _____

By _____	Date _____
----------	------------

INSTALLATION, OPERATION, AND MAINTENANCE MANUAL, TRANSMITTAL NO. _____

Project Name: North Bay Water Reuse Program Sonoma Valley County Sanitation District Fifth Street East Recycled Water Pipeline		Date Received:	
Owner: Sonoma Valley County Sanitation District 404 Aviation Boulevard Santa Rosa, CA 95403-9019		Attention: Construction Management Section	
Contractor: Address:		Log Page:	
Attention:		Specification Section Number:	
		1 st Submittal <input type="checkbox"/>	Resubmittal <input type="checkbox"/>

By _____ Date _____
 Contractor's signature above shall constitute Contractor's representation that it has satisfied its obligations under the Contract Documents with respect to Contractor's review and approval of Submittals.

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:

- | | |
|--|---|
| <p>A - No Exceptions Taken</p> <p>B - Make Corrections Noted (No Resubmission Required)</p> <p>C - Revise as Noted and Resubmit</p> <p>D - Rejected - Resubmit- this manual Submittal is deficient in the following area:</p> <ol style="list-style-type: none"> 1. Equipment record sheets 2. Functional description 3. Assembly, disassembly, installation, alignment, adjustment, and checkout instructions 4. Operating instructions | <p>D - (continued)</p> <ol style="list-style-type: none"> 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. Outline, cross section, and assembly diagrams 11. Test data and performance curves 12. Tag or equipment identification numbers 13. See comments |
|--|---|

Comments:

By _____ Date _____

MAINTENANCE SUMMARY

- 1. EQUIPMENT ITEM: _____
- 2. MANUFACTURER: _____
- 3. MODEL NUMBER: _____
- 4. SERIAL NO. (IF APPLICABLE): _____
- 5. NAMEPLATE DATE (HP, VOLTAGE, SPEED, ETC.): _____
- 6. MANUFACTURER'S LOCAL REPRESENTATIVE
NAME: _____
ADDRESS: _____
TELEPHONE NUMBER: _____ FAX NUMBER: _____
- 7. MAINTENANCE REQUIREMENTS:

MAINTENANCE OPERATION

List briefly each maintenance operation required and refer to specific information in manufacturer's standard maintenance manual, if applicable. _____

FREQUENCY

List required frequency of each maintenance operation. _____

LUBRICANT (IF APPLICABLE)

Refer by symbol to lubricant list as required. _____

COMMENTS

8. LUBRICANT LIST: REFERENCE SYMBOL

(A-) (B-) (C-) (D-)

List symbols used. List equivalent lubricants as distributed and recommended by manufacturer's representative listed in item 6 above.

9. SPARE PARTS:

Include your recommendations regarding what spare parts, if any, should be kept on the job.

SECTION 01410

REGULATORY REQUIREMENTS**PART 1 GENERAL****1.1 SUMMARY**

- A. Section includes: regulatory requirements that may be 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 Owner 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, and regulations 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 or with these Specifications occurs, the most stringent requirements shall be used.
- B. Conform to referenced codes, laws, ordinances, rules and regulations.

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. UPC
 - 7. UMC
 - 8. NEC
 - 9. Sonoma County Code

1.4 LAWS, ORDINANCES, RULES, AND REGULATIONS

- A. During prosecution of Work to be done under Contract Documents, 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 Wildlife
 - e. Bay Area Air Quality Management District
 - f. San Francisco Bay Regional Water Quality Control Board
 - g. North Coast Regional Water Quality Control Board
 - 1) Order No. 93-61
 - 2) Order No. 81-73
 - 3) Clean Water Act Section 401
- 4. County of Sonoma:
 - a. Ordinance 3836R
 - b. Building permit
 - c. Electrical permit
 - d. Grading permit
 - e. Encroachment permit
 - f. Valley Oak Protection Ordinance
- 5. Local Agencies:
 - a. Applicable City Ordinances
 - b. Northern Sonoma County Air Pollution Control District
- 6. 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. 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. The California Public Contract Code (including but not limited to Section 7105 (d)(2)) applies to all contract procedures for changes, time extensions, change orders (time and money), and claims, and per California Government Code Section 930.2, et seq., Contractor's timely compliance with these procedures is a mandatory prerequisite to filing a Government Code Claim. Any change, alteration, modifications, waiver, or omission to implement these procedures, shall have no legal effect unless approved in advance in a fully executed Change Order approved by the Board. Federal construction law (U.S. v. Holspuch 326 U.S. 234) and the jurisprudence of the Federal District of Columbia Circuit shall supplement (but not supersede) California law on construction claims topics including but not limited to, termination claims, home office overhead claims, and delay/disruption claims.

1.5 PRECEDENCE

- A. 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.
- B. 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.
- C. Conflicts between referenced regulatory requirements: Comply with the one establishing the more stringent requirement.
- D. Conflicts between referenced regulatory requirements and Contract Documents: 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 Owner. In order to qualify as a Claim, the written demand must state that it is a Claim submitted under Article 12 of Document 00700 (General Conditions) and be submitted in compliance with all requirements of Document 00700 (General Conditions), Article 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 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), Article 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), Article 12 or elsewhere in the Contract Documents.
 2. For Claims of fifty thousand dollars (\$50,000) or less
 - a. Owner shall respond in writing within 45 days of receipt of the Claim, or
 - b. Owner 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 Owner 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 Owner and Claimant.
 - 2) Owner'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. Owner shall respond in writing within 60 days of receipt of the Claim, or
 - b. Owner 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 Owner 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 Owner and Claimant;
 - 2) Owner'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 Owner's written response, or Owner fails to respond within the time prescribed above, Claimant shall notify Owner, in writing, either within 15 days of receipt of Owner's response or within 15 days of Owner's failure to timely respond, and demand an informal conference to meet and confer for settlement of

the issues in dispute. Upon demand Owner 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 in paragraph 12.2.B of Document 00700 (General Conditions), 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 this Agreement 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.

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 Owner which are equivalent to the amount withheld under retention provisions of Contract shall be deposited with Controller or with a state or federally chartered bank in California, as the escrow agent, who shall then pay such moneys to Contractor. Upon satisfactory completion of Contract, securities shall be returned to Contractor.
 2. Alternatively, Contractor may request and Owner shall make payment of retentions earned directly to the escrow agent at the expense of Contractor. At the expense of Contractor, Contractor may direct the investment of the payments into securities and receive the interest earned on the investments upon the same terms provided for in this Section 01410 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 Owner, pursuant to the terms of this Section 01410. 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.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION - NOT USED

END OF SECTION

SECTION 01415

REGULATORY REQUIREMENTS - FUNDING**PART 1 GENERAL****1.1 SUMMARY**

- A. Section Includes:
 - 1. Regulatory requirements applicable to Contract Documents related to Federal funding sources.
- B. This Section 01415 supplements Section 01410 (Regulatory Requirements) and the Work-specific listings of applicable regulatory requirements elsewhere in the Specifications.

1.2 LAWS, ORDINANCES, RULES, AND REGULATIONS

- A. Contractor shall be responsible for compliance with the federal and state requirements set forth or otherwise referenced in this Section 01415.

1.3 FUNDING SOURCE

- A. The Project is funded in whole or part under the California Department of Water Resources (DWR) Integrated Regional Water Management grant program, and the U.S. Department of Interior, Bureau of Reclamation (USBR) WaterSmart program. The agreements between DWR, USBR and Owner are included at the end of this Section 01415 as Attachment A. Contractor shall comply with all conditions of the Agreements between DWR, USBR and Owner which apply to any of Owner's contractors.

1.4 AUDIT

- A. Contractor agrees to provide access to the Owner, the Federal grantor agency, the Comptroller General of the United States, or any of their duly authorized representatives to any books, documents, papers, and records of the contractor which are directly pertinent to that specific contract for the purpose of making audit, examination, excerpts, and transcriptions.

1.5 DAVIS BACON ACT

- A. Davis Bacon Act requirements apply to this Project.
- B. Requirements of the Davis Bacon Act are included at the end of this Section 01415 as Attachment B. Owner is the "Recipient" for the purposes of the provisions in Attachment B and Contractor is the "Contractor." Contractor agrees to comply with the provisions included in Attachment B and shall include specified provisions in all subcontracts to the same extent as such obligations apply to the "Recipient."
- C. A copy of the Federal Wage Decision is included, as required by the Davis Bacon Act, as general information at the end of this Section 01415 as Attachment C. Attachment C was the most current Federal Wage Decision available at the time the Project Manual was assembled. The federal wage decision is updated periodically by the U.S. Department of Labor and is available online at www.wdol.gov. If there is a discrepancy between the state prevailing wage rate and the federal minimum wage rate, Contractor shall pay not less than the higher wage rate.

1.6 DBE/SBE/DVBE SOLICITATION REQUIREMENTS

- A. Contractor shall comply with the DBE/SBE/DVBE solicitation requirements included at the end of this Section 01415, Attachment D.
- B. DBE/SBE/DVBE solicitation requirements apply for Project duration and are required regardless of Contractor's DBE/SBE/DVBE status.
- C. Contractor shall update Document 00455 (Summary of Subcontractors/Suppliers/Vendors/Service Providers Hired Post Award) and provide completed Document 00470 (Certification Regarding Debarment Suspension Ineligibility and Voluntary Exclusion – Lower Tier Transactions) for each entity hired and submit to Owner within 3 Business Days of entering into any subcontract.
- D. Contractor shall complete and submit Document 00459 (Semi-Annual DBE/SBE/DVBE Procurement Report) as directed on the form. Negative reports are required. Upon Final Completion, Contractor shall submit Document 00459 to Owner, covering the period from the last submittal to the date of Final Completion.

1.7 DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION

- A. Contractor shall be responsible for compliance with 2 CFR part 180.
- B. Contractor shall obtain and submit Document 00470 (Certification Regarding Debarment, Suspension, Ineligibility, and Voluntary Exclusion – Lower Tier Covered Transactions) from each subcontractor/supplier that provides services or materials to the Project. This form shall be delivered to Owner as set forth in Document 00200 (Supplemental Submissions) and for the duration of the project within 3 Business Days of entering into any subcontractor/supplier agreement.

1.8 NEW RESTRICTIONS ON LOBBYING

- A. Contractor shall be responsible for compliance with 43 CFR part 18.
- B. Contractor shall obtain and submit form Document 00474 (Certification Regarding New Restrictions on Lobbying – Lower Tiers) from each subcontractor/supplier that provides services or materials to the Project, if the total sum to be paid to that subcontractor/supplier is or could surpass \$100,000. This form shall be delivered to Owner as set forth in Document 00200 (Supplemental Submissions) and for the duration of the project within 3 Business Days of entering into any subcontractor/supplier agreement.

1.9 NOTICE OF CONTRACT MATERIALITY AND OWNER'S REMEDIES

Failure to comply with the requirements set forth or otherwise referenced in this Section 01415 and its attachments is a material breach of the Contract Documents, which may result in withholding of payment, suspension of work, termination, and any other remedies which may be provided under the Contract Documents or at law. Without limiting the generality of the foregoing, Contractor is advised and understands that failure to comply with these requirements may result in liability under the State and Federal False Claims Acts (Cal. Government Code §12650-12656; 31 U.S.C. §3729-33) and, further, that the federal government may invoke its own enforcement mechanisms as against any firm participating in any violation of these requirements, including, but not limited to, prosecution pursuant to 18 USC § 1001.

1.10 FUNDING COMPLIANCE FORMS

Doc #	Title	Purpose	When to submit
00490	Summary of Subcontractors Listed on Document 00430	Documents DBE/SBE/DVBE outreach efforts	At time of Bid.
00490	Summary of Subcontractors/Suppliers/Vendors/Service Providers Hired Post Award	Documents DBE/SBE/DVBE outreach efforts	Any time a new vendor, subcontractor, or supplier is hired that was not listed on Document 00430 (Subcontractor List)
00457	Affirmative Steps Checklist	Documents DBE/SBE/DVBE outreach efforts	At time of Bid.
00491	Semi-Annual DBE/SBE/DVBE Procurement Report	Report DBE/SBE/DVBE activity to Owner’s funding agency	Semi-annually and at Final Completion, as directed on form.
00467	Certification of Drug-Free Workplace	Certification of compliance with Code Section 8355 in matters relating to providing a drug-free workplace	At time of Bid.
00469	Certification Regarding Debarment, Suspension, Ineligibility, and Voluntary Exclusion – Contractor	Certification that all participants are eligible for federal funded projects	At time of Bid.
00492	Certification Regarding Debarment, Suspension, Ineligibility, and Voluntary Exclusion – Lower Tier Transactions	Certification that all lower tier participants (subcontractors/suppliers) are eligible for federal funded projects	Within 3 Business Days after Apparent Low Bidder is notified of its status, and within 3 Business Days of entering into a new subcontractor/supplier agreement.
00473	Certification Regarding New Restrictions on Lobbying – Contractor	Certification that Contractor followed lobbying regulations	At time of Bid.

Doc #	Title	Purpose	When to submit
00493	Certification Regarding New Restrictions on Lobbying - Lower Tiers	Certification that lower tier participants who will be paid more than \$100,000 on Project followed lobbying regulations	Within 3 Business Days after Apparent Low Bidder is notified of its status, and within 3 Business Days of entering into a new subcontractor/supplier agreement when total value of that agreement is or could surpass \$100,000.

COPIES OF FUNDING AGREEMENT, DAVIS BACON ACT REQUIREMENTS, FEDERAL WAGE DECISION, AND DBE SOLICITATION REQUIREMENTS FOLLOW THIS PAGE

END OF SECTION

ATTACHMENT A

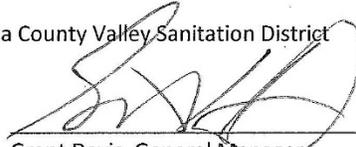
Grant Agreement 4600010575
 Amendment #1
 LOCAL PROJECT SPONSOR AGREEMENT
 between
 ABAG/SFEP and Sonoma Valley County Sanitation District
 Bay Area Proposition 84 Integrated Regional Water Management Grant
 Department of Water Resources

This Amendment #1 to the Local Project Sponsor Agreement between ABAG/SFEP and the Sonoma Valley County Sanitation District (SCVSD) effective February 4, 2014 (LPS Agreement) serves to incorporate all work scope revisions, budget revisions, and schedule revisions for SVCSD's specific project (Project 6) as detailed in the Grant Agreement Amendment 1 from the Department of Water Resources. The Revised Attachment 1 includes all changes in the Grant Agreement Amendment 1 and hereby replaces Attachment 1 of the LPS Agreement.

All other terms and conditions of the original LPS Agreement remain the same.

IN WITNESS WHEREOF, Sonoma Valley County Sanitation District and ABAG have duly executed this Agreement, or caused it to be duly executed on its behalf.

Sonoma County Valley Sanitation District



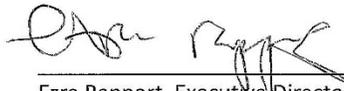
Grant Davis, General Manager

Approved as to form:



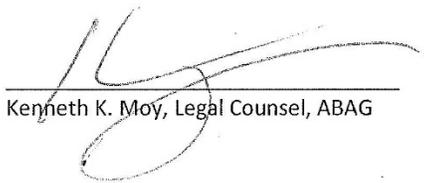
David McFadden, County Counsel

Association of Bay Area Governments



Ezra Rapport, Executive Director

Approved as to Form:



Kenneth K. Moy, Legal Counsel, ABAG

To: Spaulding

CF/71-712-16 Department of Water Resources (DWR) (Grant Agree for North Bay Water Reuse Program – SVCSD 5th Street East/McGill Road Recycled Water Project) FP-00041 (ID 5069)

comments. The report shall be prepared and presented in accordance with the provision of Exhibit G.

Deliverables:

Draft and Final Project Completion Report

Task 1 e) Labor Compliance Program

This task consists of completing the required implementation of a Labor Compliance Program (LCP), if applicable. The Labor Compliance Plan will be compliant with Department of Industrial Relations standards and needs to be in place prior to any construction activities covered under this grant agreement.

Deliverables:

- Proof of Labor Compliance Plans for each project component

Task 2: Land Purchase/Easement – Budget Category (b)

Task 2 a) Land Purchase/Easement Acquisition

This task consists of finalizing the negotiations for obtaining an easement for the work to be completed at the location of the recycled water sub-projects.

Deliverables:

- Copies of the recorded easement agreements

Task 3: Planning/Design/Engineering/Environmental Documentation – Budget Category (c)

Task 3 a) Assessment and Evaluation

This task consists of completing the planning assessment and feasibility studies prior to project development. This task also includes developing the 10%, 30% and 60% design plans and specifications.

Deliverables:

- A copy of the site assessment and feasibility studies
- A copy of the 60% design plans and specifications

Task 3 b) Planning/Design/Engineering

This task consists of finalizing project engineering designs (90% and 100%) for the project. Finalized 100% design/ engineering plans and specifications will be submitted to DWR.

Deliverables:

- A copy of the 100% complete design plans and specifications

Task 3 c) Environmental Documentation

This task consists of completing the required environmental compliance, completing any tribal notification, and environmental documentation as necessary.

Deliverables:

- Copy of environmental documents as required by CEQA

Task 3 d) Permitting

This task consists of acquiring all identified federal, state, and local permits. Work includes coordinating and complying with requirements for issuance of a permit.

- Post-construction photographs

Task 4 e) Environmental Compliance/Mitigation/ Enhancement

This task consists of monitoring contractor compliance with general construction measures, environmental mitigation measures, and requirements of the biological opinion, as well as, contractor creation of a stormwater pollution prevention plan, traffic control plan, and hazardous materials management plan.

Deliverables:

- List of construction compliance measures, environmental mitigation measures, and requirements of the biological opinion
- Copies or links to the stormwater pollution prevention plan
- Copies or links to the traffic control plan
- Copies or links to the hazardous materials management plan

Task 4 f) Construction Administration

This task consists of reviewing the contractor's schedule and recommendations, managing and coordinating the agencies and contractors involved with the project, and providing construction inspection tests and management oversight.

Deliverables:

- A copy of the inspection reports
- A copy of meeting minutes from construction management reports

Schedule

Project 6: North Bay Water Reuse Program			
	Category	Start Date	End Date
Task 1	(a) Direct Project Administration	January-12	April-18
Task 1 a	Project Administration	January-12	April-18
Task 1 b	Quarterly Progress Report	January-12	April-18
Task 1 c	Invoices	January-12	April-18
Task 1 d	Draft and Final Project Completion Report	January-12	April-18
Task 1 e	Labor Compliance Plan	July-14	June-16
Task 2	(b) Land Purchase/Easement	November-12	July-15
Task 3	(c) Planning/Design/ Engineering/ Environmental Documentation	December-12	July-15
Task 3 a	Assessment and Evaluation	January-12	June-14
Task 3 b	Planning/Design/Engineering	January-12	July-15
Task 3 c	Environmental Documentation	January-12	December-13
Task 3 d	Permitting	December-12	June-15
Task 3 e	Project Monitoring Plan	June-14	June-15
Task 4	(d) Construction/ Implementation	May-14	July-16
Task 4 a	Construction Contracting	May-14	Feb-16
Task 4 b	Mobilization and Site Preparation	Jul-14	Jun-16
Task 4 c	Project Construction	Jul-14	Jun-16
Task 4 d	Performance Testing and Demobilization	Jul-14	Jun-16
Task 4 e	Environmental Compliance/ Mitigation/ Enhancement	Jul-14	Jun-16
Task 4 f	Construction Administration	May-14	Jul-16

Base Document

LOCAL PROJECT SPONSOR AGREEMENT
between
ABAG/SFEP and Sonoma Valley County Sanitation District
Bay Area Proposition 84 Integrated Regional Water Management Grant
- Department of Water Resources -

Through this Local Project Sponsor Agreement by and between the Association of Bay Area Governments (ABAG), a joint powers authority existing under the laws of the State of California acting on behalf of the San Francisco Estuary Partnership (SFEP), a project sponsored by ABAG, and Sonoma Valley County Sanitation District (SVCS D), a local district of the State of California, the parties hereby agree as follows:

RECITALS

- A. Whereas, ABAG applied for a Proposition 84 Integrated Regional Water Management (IRWM) Program Grant from the State of California, Department of Water Resources (DWR) to help fund twenty (20) local, subregional and regional projects located within the San Francisco Bay Area IRWM region (Work Plan);
- B. Whereas, on July 16, 2014 DWR and ABAG entered into Agreement No. 4600010575 (Grant Agreement) awarding to ABAG a grant for Twenty Million Dollars (\$20,000,000) in State funding (State Grant) requiring an estimated Fourteen Million Four Hundred Twenty-eight Thousand Nine Hundred Ninety-seven Dollars (\$14,428,997) in matching funds to be expended over the grant period which extends from September 30, 2008 until December 31, 2018 when the Work Plan will be completed;
- C. Whereas, subrecipients of the State Grant (Local Project Sponsors) and ABAG will be responsible for implementing their respective component parts of the Work Plan (such component parts of the Work Plan are referred to generically as 'Local Projects');
- D. Whereas, SVCS D is a subrecipient of the State Grant and is responsible for the North Bay Water Reuse Program – Sonoma Valley CSD 5th Street East/McGill Road Recycled Water Project (Project) as part of the Work Plan and for matching funds in the amount of One Million One Hundred Thirty Thousand Four Hundred Ten Dollars (\$1,130,410) required under the Grant Agreement.

NOW THEREFORE, based upon the foregoing recitals, ABAG and SVCS D further agree as follows:

AGREEMENT

1.0 Applicable Documents. The following are attached:

DWR Prop 84 – Local Project Sponsor Agreement – IRWM 2 – Sonoma Valley County Sanitation District – OWP 102240

Base Document

- 1.1 Attachment 1 Project Description
- 1.2 Attachment 2 Insurance Requirements
- 1.3 Attachment 3 Grant Agreement including the following exhibits that were attached:
 - 1.4 Exhibit A, 'Work Plan'
 - 1.5 Exhibit B, 'Budget'
 - 1.6 Exhibit C, 'Schedule'
 - 1.7 Exhibit D, 'Standard Conditions'
 - 1.8 Exhibit E, 'Authorizing Resolution'
 - 1.9 Exhibit F, 'Local Project Sponsors'
 - 1.10 Exhibit G, 'Report Formats and Requirements'
 - 1.11 Exhibit H, 'Requirements for Statewide Monitoring and Data Submittal'
 - 1.12 Exhibit I, 'State Audit Document Requirements & Funding Match Guidelines for Grantees'
 - 1.13 Exhibit J, 'Monitoring and Maintenance Plan Components'

This Local Project Sponsor Agreement is comprised of this document (Base Document) and Attachments 1, 2 and 3, and is the complete and exclusive statement of understanding between ABAG and SVCSD, and supersedes any all previous understandings or agreements, whether written or oral, and all communications between the parties relating to the subject matter of this Local Project Sponsor Agreement.

- 2.0 Term of Agreement. This Local Project Sponsor Agreement shall commence as of February 4, 2014 (Effective Date) and continue until December 31, 2018, or until terminated by ABAG pursuant to the terms of this Local Project Sponsor Agreement, or until terminated by DWR pursuant to the terms of the Grant Agreement.
- 3.0 Project, Subaward and Matching Funds. Under the terms of the Grant Agreement, SVCSD will implement the Project as more particularly described in Attachment 1. ABAG/SFEP will disburse up to One Million Twenty Thousand Dollars (\$1,020,000) of the State Grant to SVCSD in accordance with the Grant Agreement. SVCSD will provide and document the matching funds referenced in Attachment 1 to this Local Project Sponsor Agreement in accordance with the Grant Agreement.
- 4.0 ABAG Obligations
 - 4.1 ABAG will undertake and complete the following Local Projects, including all administrative and management responsibilities relating solely to such Local Projects, in accordance with the Grant Agreement: Project 14 - San Francisco

DWR Prop 84 – Local Project Sponsor Agreement – IRWM 2 – Sonoma Valley County Sanitation District – OWP 102240

Base Document

Bay Climate Change Pilot Projects Combining Ecosystem Adaptation, Flood Risk Management and Wastewater Effluent Polishing and Project 20: Grant Administration (ABAG Projects).

- 4.2 ABAG shall disburse Grant funds as required or permitted by the Grant Agreement. Notwithstanding the foregoing, ABAG is not obligated to disburse any funds to SVCSD and is not obligated to disburse any other funds until such are authorized and disbursed from DWR to ABAG.
- 4.3 ABAG will promptly notify SVCSD of any notices given or actions taken by DWR if such notices or actions are likely to affect SVCSD's performance, duties, obligations or funding under this Local Project Sponsor Agreement, including but not limited to notices from DWR regarding SVCSD's invoices under section 12.c.5 of the Grant Agreement or alleged default by SVCSD under section 14 of the Grant Agreement. ABAG shall consult with the Local Project Sponsor Committee as defined below in carrying out ABAG's responsibilities.
- 4.4 Commencing with DWR's award of the State Grant on February 4, 2014 and continuing until December 31, 2018 when the lengthiest projects covered by the Grant Agreement are expected to wind down and Grant closeout activities are expected to be completed, ABAG will undertake and complete all administrative and management responsibilities under the Grant Agreement that are not related solely to Local Projects. ABAG has incurred, and will continue to incur, numerous costs for administrative and management responsibilities under the Grant Agreement that are not related solely to Local Projects (the "Grant Administrative Costs"). The Grant allocates Seven Hundred Fifty Thousand Dollars (\$750,000) for Grant Administrative Costs.
- 4.5 ABAG will cause to be formed a Local Project Sponsors (LPS) Committee comprised of one representative from each Participating Agency, including ABAG. The LPS Committee will provide input to ABAG in carrying out its responsibilities under sections 4.3 and 4.4. Further, the LPS Committee will allocate among the Local Project Sponsors, any Grant Administrative Costs that exceed the amount allocated for same by the Grant Agreement. The LPS Committee will assess the potential for exceedances upon the completion of each Local Project. ABAG will convene the LPS Committee on an as-needed basis, and provide staff support. ABAG will provide the LPS Committee with available information in a timely manner to enable the LPS Committee to undertake the functions described in this section. The LPS Committee will provide input and make decisions based on consensus but if it cannot reach consensus, such input and decisions will be provided and made based on a majority vote of the quorum present at the meeting.
- 4.6 The obligations of ABAG under section 6.2 shall survive the termination of this Local Project Sponsor Agreement.

DWR Prop 84 – Local Project Sponsor Agreement – IRWM 2 – Sonoma Valley County Sanitation District – OWP 102240

3 of 19

Base Document

5.0 SVCSD Obligations

- 5.1 SVCSD is, and at all times will continue to be, in full compliance with the terms and conditions of the Grant Agreement that are applicable to it as a subrecipient of the State Grant. SVCSD understands and agrees that for purposes of the foregoing, any requirements and responsibilities imposed upon ABAG as Grantee under the Grant Agreement are hereby passed-through to, and adopted by SVCSD, as obligations of SVCSD, excepting only ABAG's obligations as defined in subsections 4.1 – 4.3 of this Local Project Sponsor Agreement. Further, SVCSD acknowledges and agrees to comply with any requirements directly imposed on SVCSD as a Local Project Sponsor under the Grant Agreement.
- 5.2 SVCSD agrees to fund the difference between the Total Project Cost and Grant Amount specified in Attachment 1 of this Local Project Sponsor Agreement. Cost share consists of Funding Match and Additional Cost Share as documented in Attachment 1. SVCSD is required to maintain all financial records associated with the total project cost for inclusion in the final project report.
- 5.3 Pursuant to DWR requirements, SVCSD may invoice ABAG for grant share reimbursement incurred after the grant award date of February 4, 2014 in their first invoice. Subsequent invoices must bill for costs incurred during the quarter in which they were incurred by SVCSD. Match costs can include project related costs incurred after September 30, 2008. Required match costs related to a specific task must be documented to the same level of detail as costs for a grant invoice. Required match costs must be approved by DWR prior to the SVCSD invoicing the grant for payment for that specific task. Additional cost share will be documented by SVCSD in the Final Project Report.
- 5.4 SVCSD hereby assumes responsibility for submitting Post-Performance Reports as required under section 19 of the Grant Agreement. Reports will be sent to ABAG for submittal to DWR within sixty (60) calendar days after the first year of project operation/completion and annually for a total of ten (10) years following project completion.
- 5.5 SVCSD hereby assumes responsibility for the following as required under section 20 of the Grant Agreement: (a) operating and maintaining facilities and structures, (b) all costs for the operation and maintenance of the facilities and structures, and (c) performing as required under (a) and (b) for the period required.
- 5.6 The obligations of SVCSD under sections 5.3, 5.4 and 6.1 shall survive the termination of this Local Project Sponsor Agreement.
- 5.7 SVCSD shall not cause ABAG to be in violation of the Grant Agreement, whether by act or omission.

DWR Prop 84 – Local Project Sponsor Agreement – IRWM 2 – Sonoma Valley County Sanitation District –
OWP 102240

4 of 19

Base Document

- 5.8 SVCSD shall comply with all applicable Federal, State, and local laws, rules, regulations, ordinances, and directives, now existing and as such may change from time-to-time. Any such laws, rules, regulations, ordinances, and directives required thereby to be included in this Local Project Sponsor Agreement are incorporated herein by reference.
- 5.9 SVCSD shall procure and submit proof of insurance coverage in compliance with the requirements of Attachment 2 or as approved in writing by ABAG.
- 5.10 SVCSD will appoint a representative to the LPS Committee who will participate in the proceedings of the LPS Committee. SVCSD acknowledges and affirms the responsibilities of the LPS Committee and agrees to be bound by the decisions of the LPS Committee.
- 5.11 If, pursuant to section 4.5, the LPS Committee determines that there are exceedances in the Grant Administrative Costs, SVCSD will not be obligated to pay more than Three Thousand Eight Hundred Twenty-five Dollars (\$3825) as its allocated share of exceedances in Grant Administrative Costs.
- 5.12 SVCSD further acknowledges and affirms that every other Participating Agency is a third party beneficiary of this Local Project Sponsor Agreement and SVCSD is a third party beneficiary of every other Local Project Sponsor Agreement.
- 6.0 Indemnification
- 6.1 SVCSD shall indemnify, defend, and hold harmless the other Local Project Sponsors and ABAG and their respective members, elected and appointed officers, employees, and agents from and against any and all liability resulting from SVCSD's act(s) and/or omission(s) arising from and/or relating to the Project, and as such would be imposed in the absence of Government Code section 895.2.
- 6.2 ABAG shall indemnify, defend, and hold harmless SVCSD and its elected and appointed officers, employees, and agents from and against any and all liability resulting from ABAG's act(s) and/or omission(s) arising from and/or relating to the ABAG Projects, and as such would be imposed in the absence of Government Code section 895.2.
- 6.3 Without limiting the scope of subsections 6.1 or 6.2, such liability includes but is not limited to the following: any funding disallowance; audits; demands; claims; actions; liabilities; damages; fines; fees, costs, and expenses, including attorney, auditor, and/or expert witness fees.
- 7.0 Termination.

Base Document

- 7.1 Upon termination of the Grant Agreement, this Local Project Sponsor Agreement shall terminate effective the same date as the Grant Agreement and in accordance with the terms and conditions for the termination of the Grant Agreement.
- 7.2 ABAG may terminate this Local Project Sponsor Agreement upon the occurrence of all of the following: (a) receipt prior written notice from DWR of a default under section 14 of the Grant Agreement caused in whole or in part by SVCSD that provides at least ten (10) days to cure said default, (b) ABAG's prompt transmittal of said notice to SVCSD, (c) SVCSD's failure to cure the default within the time prescribed by DWR and (d) DWR takes any of the actions described in subsections 14.i – iv of the Grant Agreement. Upon termination of this Local Project Sponsor Agreement: (1) the rights and duties of the parties with respect to the Work Plan, any portion of the Subaward Amount and any asset acquired with proceeds of the Subaward Amount shall be determined in accordance with the provisions of the Grant Agreement and this Local Project Sponsor Agreement and (2) SVCSD shall pay all costs incurred by the State in enforcing section 14 of the Grant Agreement including, but not limited to, reasonable attorneys' fees, legal expenses, and costs.
- 8.0 Notices and Administrative Contacts
- 8.1 All notices or notifications under this Local Project Sponsor Agreement shall be in writing addressed to the persons set forth in this section.
- 8.2 All notices or notifications to ABAG shall be sent to:
- Jennifer Krebs
San Francisco Estuary Partnership
1515 Clay Street, Suite 1400
Oakland, California 94612
Email: jennifer.krebs@waterboards.ca.gov
- 8.3 All notices or notifications to SVCSD shall be sent to:
- Kevin Booker, Principal Engineer
404 Aviation Blvd
Santa Rosa, CA 95403
Email: kevin.booker@scwa.ca.gov
- 9.0 Amendments and Changes. This Local Project Sponsor Agreement may be changed only by a written amendment duly signed by ABAG and SVCSD, provided that any changes to sections 4.4, 4.5 or 5.6 also require written concurrence by the LPS Committee.

Base Document

- 10.0 Assignment and Delegation. SVCSD shall not assign its rights or delegate its duties under this Local Project Sponsor Agreement. Any attempted assignment or delegation shall be null and void, and constitute a material breach of this Local Project Sponsor Agreement.
- 11.0 Governing Law and Venue. This Local Project Sponsor Agreement shall be governed by, and construed in accordance with, the substantive and procedural laws of the State of California. SVCSD further agrees and consents that the venue of any action brought between SVCSD and ABAG shall be exclusively in the County of Alameda.
- 12.0 Validity and Severability. If any provision of this Local Project Sponsor Agreement or the application thereof to any person or circumstance is held invalid, the remainder of this Local Project Sponsor Agreement and the application of such provision to other persons or circumstances shall not be affected thereby.
- 13.0 No Waiver. No waiver by either party of any event of breach and/or breach of any provision of this Local Project Sponsor Agreement shall constitute a waiver of any other event of breach and/or breach. Either party's non-enforcement at any time, or from time to time, of any provision of this Local Project Sponsor Agreement shall not be construed as a waiver thereof.
- 14.0 Priority of Documents. The provisions of the Grant Agreement shall prevail over provisions of this Local Project Sponsor Agreement.

END OF BASE DOCUMENT
SIGNATURE PAGE TO FOLLOW

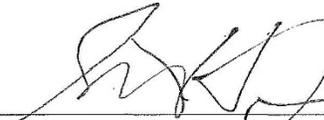
Base Document

**Bay Area Proposition 84 Integrated Regional Water Management Grant
- Department of Water Resources -
Local Project Sponsor Agreement**

AUTHORIZED SIGNATURES

IN WITNESS WHEREOF, Sonoma Valley County Sanitation District and ABAG have duly executed this Agreement, or caused it to be duly executed on its behalf.

Sonoma Valley County Sanitation District

By 
Grant Davis, General Manager

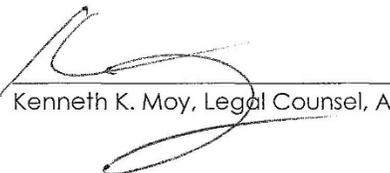
Approved as to Form:

By 
David McFadden, County Counsel

Association of Bay Area Governments


Ezra Rapport, Executive Director

Approved as to Form:


Kenneth K. Moy, Legal Counsel, ABAG

DWR Prop 84 – Local Project Sponsor Agreement – IRWM 2 – Sonoma Valley County Sanitation District – OWP 102240

ATTACHMENT 1: PROJECT DESCRIPTION

WORK PLAN

Project 6: Sonoma Valley CSD 5th Street East/McGill Road Recycled Water Project

This project is the second phase of the Sonoma Valley Recycled Water Project, extending existing recycled water pipelines from the Watmaugh Recycled Water pipeline to serve additional properties. Phase 2 will be implemented in two sub-projects, the 5th Street East Recycled Water Project and the McGill Recycled Water Project. The first sub-project constructs approximately 8,720 linear feet of new pipeline to connect to the exiting recycled water pipeline on Watmaugh Road. This pipeline provides recycled water to replace the current potable water used for landscape irrigation and irrigation of athletic fields and agricultural properties adjacent to the new pipeline at a later date. The 5th Street East Recycled Water Project will offset approximately 50 to 60 acre-feet of potable water annually. The second sub-project constructs approximately 700 linear feet of new pipeline to connect to an existing recycled water pipeline along McGill Road. This pipeline serves recycled water to agricultural properties on the east side of Highway 12 and will supply approximately 150 AFY of recycled water.

Task 1: Direct Project Administration – Budget Category (a)

Task 1 a) Project Administration

This task consists of the project administration responsibilities, which includes coordinating agency responsibilities and managing cost commitments. This task also includes providing other supporting documentation required for this grant agreement (e.g., financial statements, etc.).

Deliverables:

- Environmental Information Form (EIF)
- Financial Statements
- Other Applicable Project Deliverables

Task 1b) Quarterly Progress Reports

This task consists of preparing progress reports detailing work completed in prior quarter as outlined in Exhibit G of the Grant Agreement (Attachment 3) and submitting to the Grantee for its submittal to DWR review.

Deliverables:

- Quarterly Project Progress Report

Task 1c) Invoices

This task consists of preparing quarterly invoices including relevant supporting documentation for submittal to DWR via Grantee.

Deliverables:

- Quarterly Invoices and associated backup documentation

Task 1 d) Draft and Final Project Completion Report

This task consists of preparing draft Final Project Completion Report and submitting to DWR via Grantee for DWR Project Manager’s comment and review no later than 90 days after project completion. This task also consists of preparing the Final Report addressing Grantee/DWRs comments. The report shall be prepared and presented in accordance with the provision of Exhibit G of the Grant Agreement (Attachment 3).

Deliverables:

- Draft and Final Project Completion Report

Task 1 e) Labor Compliance Program

This task consists of completing the required implementation of a Labor Compliance Program (LCP), if applicable. The Labor Compliance Plan will be compliant with Department of Industrial Relations standards and needs to be in place prior to any construction activities covered under this grant agreement.

Deliverables:

- Proof of Labor Compliance Plans for each project component

Task 2: Land Purchase/Easement – Budget Category (b)

Task 2 a) Land Purchase/Easement Acquisition

This task consists of finalizing the negotiations for obtaining an easement for the work to be completed at the location of the recycled water sub-projects.

Deliverables:

- Copies of the recorded easement agreements

Task 3: Planning/Design/Engineering/Environmental Documentation – Budget Category (c)

Task 3 a) Assessment and Evaluation

This task consists of completing the planning assessment and feasibility studies prior to project development. This task also includes developing the 10%, 30% and 60% design plans and specifications.

Deliverables:

DWR Prop 84 – Local Project Sponsor Agreement – IRWM 2 – Sonoma Valley County Sanitation District – OWP 102240

Attachment 1

- A copy of the site assessment and feasibility studies
- A copy of the 60% design plans and specifications

Task 3 b) Planning/Design/Engineering

This task consists of finalizing project engineering designs (90% and 100%) for the project. Finalized 100% design/ engineering plans and specifications will be submitted to DWR.

Deliverables:

- A copy of the 100% complete design plans and specifications

Task 3 c) Environmental Documentation

This task consists of completing the required environmental compliance, completing any tribal notification, and environmental documentation as necessary.

Deliverables:

- Copy of environmental documents as required by CEQA

Task 3 d) Permitting

This task consists of acquiring all identified federal, state, and local permits. Work includes coordinating and complying with requirements for issuance of a permit.

Deliverables:

- Copy of all required permits

Task 3 e) Project Monitoring Plan

A Project Monitoring Plan (PMP) shall be submitted to the State prior to disbursement of grant funds for construction or monitoring activities for this Project. Along with the Attachment 6 Project Performance Measures Tables requirements for the Project, the PMP will also include: a) Baseline conditions, b) Brief discussion of monitoring systems to be utilized, c) Methodology of monitoring, d) Frequency of monitoring, and e) Location of monitoring points.

The LPS will lead work for monitoring and performances measures verification after Project completion. Costs for monitoring and performance measures are not included in the budget (funding match or grant award).

Deliverables:

- Project Monitoring Plan

Task 4: Construction/Implementation – Budget Category (d)

Task 4 a) Construction Contracting

This task consists of construction contracting including solicitations for bids and awards of contracts.

Deliverables:

- Copy of bid package

Task 4 b) Mobilization and Site Preparation

This task consists of mobilization and site preparation including implementation of site security measures, installation of temporary sanitary facilities, implementation of site BMPs, clearing and grubbing, stockpile and material storage designation, and traffic control.

Deliverables:

- Pre-construction photographs

Task 4 c) Project Construction

This task includes constructing approximately 9,420 feet of new pipeline as an extension to two existing recycled water projects. This task consists of project construction activities, including the purchase and installation of pipeline, connection to existing pipelines and treatment facilities, and set up for future lateral connections. This task also includes all construction equipment and supplies.

Deliverables:

- Construction and post-construction photographs
- Certified engineer inspection completion report with final as-built drawings

Task 4 d) Performance Testing and Demobilization

This task consist of project performance testing and demobilization, including removal of all debris and construction spoils from the site, removal of excess materials, removal of temporary sanitary facilities, removal of equipment, transfer of site responsibility back to owner, and pipeline pressure testing, disinfection, pump tests, treatment performance testing, flow rate, and wastewater lab testing in compliance with National Pollutant Discharge Elimination System (NPDES) requirements.

Deliverables:

- Post-construction photographs

Task 4 e) Environmental Compliance/Mitigation/ Enhancement

This task consists of monitoring contractor compliance with general construction measures, environmental mitigation measures, and requirements of the biological opinion, as well as, contractor creation of a stormwater pollution prevention plan, traffic control plan, and hazardous materials management plan.

Deliverables:

DWR Prop 84 – Local Project Sponsor Agreement – IRWM 2 – Sonoma Valley County Sanitation District – OWP 102240

Attachment 1

- List of construction compliance measures, environmental mitigation measures, and requirements of the biological opinion
- Copies or links to the stormwater pollution prevention plan
- Copies or links to the traffic control plan
- Copies or links to the hazardous materials management plan

Task 4 f) Construction Administration

This task consists of reviewing the contractor's schedule and recommendations, managing and coordinating the agencies and contractors involved with the project, and providing construction inspection tests and management oversight.

Deliverables:

- A copy of the inspection reports
- A copy of meeting minutes from construction management reports

BUDGET

Project 4: North Bay Water Reuse Program					
Category	(a)	(b)	(c)	(d)	
	Grant Amount	Cost Share: Required Funding Match	Additional Cost Share	Total Cost	
(a) Direct Project Administration	\$ -	\$ -	\$ 128,720.00	\$ 128,720.00	
(b) Land Purchase/Easement	\$ -	\$ 88,000.00	\$ -	\$ 88,000.00	
(c) Planning/Design/ Engineering/ Environmental Documentation	\$ -	\$ 21,640.00	\$ 281,360.00	\$ 303,000.00	
(d) Construction/ Implementation	\$ 1,020,000.00	\$ 1,020,770.00	\$ -	\$ 2,040,770.00	
Grand Total	\$ 1,020,000.00	\$ 1,130,410.00	\$ 410,080.00	\$ 2,560,490.00	

SCHEDULE

Project 6: North Bay Water Reuse Program			
	Category	Start Date	End Date
Task 1	(a) Direct Project Administration	January-12	April-18
Task 1 a	Project Administration	January-12	April-18
Task 1 b	Quarterly Progress Report	January-12	April-18
Task 1 c	Invoices	January-12	April-18
Task 1 d	Draft and Final Project Completion Report	January-12	April-18
Task 1 e	Labor Compliance Plan	July-14	June-16
Task 2	(b) Land Purchase/ Easement	November-12	July-15
Task 3	(c) Planning/ Design/ Engineering/ Environmental Documentation	December-12	July-15
Task 3 a	Assessment and Evaluation	January-12	June-14
Task 3 b	Planning/ Design/ Engineering	January-12	July-15
Task 3 c	Environmental Documentation	January-12	December-13
Task 3 d	Permitting	December-12	December-14
Task 3 e	Project Monitoring Plan	June-14	December-14
Task 4	(d) Construction/ Implementation	May-14	July-16
Task 4 a	Construction Contracting	May-14	Feb-16
Task 4 b	Mobilization and Site Preparation	Jul-14	Jun-16
Task 4 c	Project Construction	Jul-14	Jun-16
Task 4 d	Performance Testing and Demobilization	Jul-14	Jun-16
Task 4 e	Environmental Compliance/ Mitigation/ Enhancement	Jul-14	Jun-16
Task 4 f	Construction Administration	May-14	Jul-16

DELIVERABLES TABLE

This deliverables table lists all deliverables due to ABAG for this project. It will be included in the progress report template. Any missing due dates should be filled in and included in the first progress report.

Note that before you can invoice for any task, you must have satisfied the match requirement for that task.

Type	Task # (from DWR- ABAG agreement)	Description	Estimated Due Date	Submitted Date
ABAG requirements		Proof of Insurance Coverage	Upon return of signed agreement	
IRWMP eligibility requirements and basic conditions	Task 1a	Environmental Information Form (EIF)	3/14/14	3/6/14
		Financial Statements	3/14/14	2/25/14
Project deliverables due before invoicing for construction		NEPA documents, if applicable		
	Task 1e	Proof of Labor Compliance Plans for each project component	June 2016	
	Task 2a	Copies of the recorded easement agreements	July 2015	
	Task 3a	Copy of the site assessment and feasibility studies	June 2014	
		Copy of the 60% design plans and specifications		
	Task 3b	Copy of the 100% complete design plans and specifications	July 2015	
	Task 3c	Copy of environmental documents as required by CEQA	December 2013	
		Copy of State review and concurrence with CEQA documents		
	Task 3d	Copy of all required permits	December 2014	
		Copy of State notice of verification of environmental permit submittal		
	Task 3e	Project Monitoring Plan	December 2014	
Other project deliverables	Task 4a	Copy of bid package	February 2016	
	Task 4b	Pre-construction photographs	June 2016	

Attachment 1

Type	Task # (from DWR- ABAG agreement)	Description	Estimated Due Date	Submitted Date
	Task 4c	Construction and post-construction photographs	June 2016	
		Certified engineer inspection completion report with final as-built drawings		
	Task 4d	Post-construction photographs	June 2016	
	Task 4e	List of construction compliance measures, environmental mitigation measures, and requirements of the biological opinion	June 2016	
		Copies or links to the stormwater pollution prevention plan		
		Copies or links to the traffic control plan		
	Task 4f	A copy of the inspection reports	July 2016	
		A copy of meeting minutes from construction management reports		
Reports	Task 1b	Quarterly project progress report	45 days after calendar quarter ends	
	Task 1c	Quarterly invoices and associated backup documentation	45 days after calendar quarter ends	
	Task 1d	Draft Project Completion Report	30 calendar days after project completion	
		Final Project Completion Report	60 calendar days after project completion	
		Post-Performance Reports	60 calendar days after 1 st operational year, for 10 years post-completion	

ATTACHMENT 2: INSURANCE REQUIREMENTS

Insurance Requirements. Local Project Sponsor shall procure and maintain for the duration of this agreement insurance against claims for injuries to persons or damages to property which may arise from or in connection with the performance of the work hereunder by the Local Project Sponsor, its agents, representatives, or employees.

- a) Minimum Scope of Insurance. Coverage shall be at least as broad as:
 - i) Insurance Services Office Commercial General Liability coverage (occurrence Form CG 0001).
 - ii) Insurance Services Office Form Number CA 0001 covering Automobile Liability, Code 1 (any auto).
 - iii) Workers' Compensation insurance as required by the State of California and Employer's Liability Insurance.
 - iv) Errors and Omissions Liability insurance appropriate to the Local Project Sponsor's profession. Architects' and engineers' coverage is to be endorsed to include contractual liability.

- b) Minimum Limits of Insurance. Local Project Sponsor shall maintain limits no less than:
 - i) General Liability: \$1,000,000 per occurrence for bodily injury, personal injury and property damage. If Commercial General Liability Insurance or other form with a general aggregate limit is used, either the general aggregate limit shall apply separately to this project/location or the general aggregate limit shall be twice the required occurrence limit.
 - ii) Automobile Liability: \$1,000,000 per accident for bodily injury and property damage.
 - iii) Employer's Liability: \$1,000,000 per accident for bodily injury or disease.
 - iv) Errors and Omissions Liability: \$1,000,000 per occurrence.

- c) Deductibles and Self-Insured Retentions. Any deductibles or self-insured retentions must be declared to and approved by ABAG. The insurer shall reduce or eliminate such deductibles or self-insured retentions as respects ABAG, its officers, officials, employees and volunteers; or the Local Project Sponsor shall pay said deductible or self-insured retention. (Including operations, products and completed operations, as applicable.).

- d) Other Insurance Provisions. The commercial general liability and automobile liability policies are to contain, or be endorsed to contain, the following provisions:
 - i) ABAG, its officers, officials, employees and volunteers are to be covered as insureds as respects: liability arising out of work or operations performed by or on behalf of the Local Project Sponsor; or automobiles owned, leased, hired or borrowed by the Local Project Sponsor.

Attachment 2

- ii) For any claims related to this project, the Local Project Sponsor's insurance coverage shall be primary insurance as respects ABAG, its officers, officials, employees and volunteers. Any insurance or self-insurance maintained by ABAG, its officers, officials, employees or volunteers shall be excess of the Local Project Sponsor's insurance and shall not contribute with it.
 - iii) Except for General Liability and Automobile Liability, each insurance policy required by this clause shall be endorsed to state that coverage shall not be canceled by either party, except after thirty (30) days' prior written notice by certified mail, return receipt requested, has been given to ABAG. For General Liability and Automobile Liability, Local Project Sponsor shall provide ABAG with thirty (30) day's prior notice of cancellation by either the insurer or the Local Project Sponsor.
 - iv) Coverage shall not extend to any indemnity coverage for the active negligence of the additional insured in any case where an agreement to indemnify the additional insured would be invalid under Subdivision (b) of Section 2782 of the Civil Code.
- e) Acceptability of Insurers. Insurance is to be placed with insurers with a current A.M. Best's rating of no less than A:VII, unless otherwise acceptable to ABAG.
- f) Verification of Coverage. Local Project Sponsor shall furnish the ABAG with original certificates and amendatory endorsements effecting coverage required by this clause. All certificates and endorsements are to be received and approved by ABAG before work commences. ABAG reserves the right to require complete, certified copies of all required insurance policies, including endorsements effecting the coverage required by these specifications at any time.

Self Insurance Option. If a Local Project Sponsor is a public entity self-insures for bodily injury, personal injury and property damage liability, the Local Project Sponsor shall submit written evidence of such self-insurance for approval by ABAG in lieu of complying with Insurance Requirements above. Such written evidence may, but is not required to, consist of a letter authorized by its chief administrative/executive officer, chief financial officer, risk manager or equivalent, stating that the Local Project Sponsor is self insured and that the Local Project Sponsor, has or will have, sufficient resources to effect the coverage required by the Insurance Requirements.

Attachment 3

Grant Agreement No. 4600010575
Page 1 of 103

**GRANT AGREEMENT BETWEEN THE STATE OF CALIFORNIA (DEPARTMENT OF WATER RESOURCES) AND
ASSOCIATION OF BAY AREA GOVERNMENTS
AGREEMENT No. 4600010575
PROPOSITION 84 ROUND 2 INTEGRATED REGIONAL WATER MANAGEMENT (IRWM) IMPLEMENTATION GRANTS
CALIFORNIA PUBLIC RESOURCES CODE §75026 ET SEQ.**

THIS GRANT AGREEMENT is entered into by and between the Department of Water Resources of the State of California, herein referred to as the "State" or DWR and the Association of Bay Area Governments, a public agency, in the State of California, duly organized, existing, and acting pursuant to the laws thereof, herein referred to as the "Grantee", which parties do hereby agree as follows:

1. PURPOSE. State shall provide funding from the Safe Drinking Water, Water Quality and Supply, Flood Control, River and Coastal Protection Bond Act of 2006 to Grantee to assist in financing projects associated with the Bay Area Integrated Regional Water Management Plan pursuant to Chapter 8 (commencing with Section 79560) of Division 26.5 of the California Water Code (CWC), hereinafter collectively referred to as "IRWM Program."
2. TERM OF GRANT AGREEMENT. The term of this Grant Agreement begins on the date this Grant Agreement is executed by State, and terminates on December 31, 2018, or when all of the Parties' obligations under this Grant Agreement are fully satisfied, whichever occurs earlier. Execution date is the date the State signs this Grant Agreement indicated on page 9.
3. TOTAL PROJECT COST. The reasonable Total Cost of the Projects is estimated to be \$52,951,468.00.
4. GRANT AMOUNT. The maximum amount payable by the State under this Agreement shall not exceed \$20,000,000.00. Of this grant amount, not less than \$700,000.00 shall be expended to projects that benefit the critical water supply or water quality needs of disadvantaged communities (DAC) in the IRWM region.
5. GRANTEE COST SHARE. Grantee agrees to fund the difference between the Total Project Cost, and the Grant Amount (amount specified in Paragraph 4). Cost Share consists of Funding Match and Additional Cost Share, as documented in Exhibit B (Budget). Additional Cost Share is the amount necessary to fund the project above the Grant Amount and the Funding Match. Additional Cost Share will not be reviewed by the State for invoicing purposes; however, the Grantee is required to maintain all financial records associated with the project in accordance with Exhibit I (State Audit Document Requirements).
6. FUNDING MATCH. Funding Match is defined as the minimum amount of Grantee Cost Share required, and cannot include other State funds. Grantee is required to provide a Funding Match of at least 25% of the Total Project Cost. The Grantee's Funding Match is estimated to be \$14,428,997.00. Grantee's Funding Match may include in-kind services that are part of Exhibit A (Work Plan) and performed after September 30, 2008.
7. GRANTEE'S RESPONSIBILITY. Grantee and its representatives shall:
 - a) Faithfully and expeditiously perform or cause to be performed all project work as described in Exhibit A (Work Plan) and in accordance with Exhibit B (Budget) and Exhibit C (Schedule).
 - b) Accept and agree to comply with all terms, provisions, conditions, and written commitments of this Grant Agreement, including all incorporated documents, and to fulfill all assurances, declarations, representations, and statements made by Grantee in the application, documents, amendments, and communications filed in support of its request for Safe Drinking Water, Water Quality and Supply, Flood Control, River and Coastal Protection Bond Act of 2006 financing.
 - c) Comply with all applicable California laws and regulations.
 - d) Implement the Projects in accordance with applicable provisions of the law.
 - e) Fulfill its obligations under the Grant Agreement, and be responsible for the performance of the projects.
8. LOCAL PROJECT SPONSOR'S RESPONSIBILITY. Grantee shall assign Local Project Sponsors to act on behalf of Grantee for the purposes of individual project management, oversight, compliance, and operations and maintenance. Local Project Sponsors shall be assigned in accordance with the participating agencies

DWR Prop 84 - Local Project Sponsor Agreement - IRWM 2

Attachment 3

Grant Agreement No. 4600010575
Page 2 of 103

identified in the San Francisco Bay Area Water Enhancement Program IRWM Round 2 Implementation grant application. Exhibit F identifies Local Project Sponsors. Local Project Sponsors shall also act on behalf of Grantee in the fulfillment of Grantee responsibilities where specifically specified in this Grant Agreement.

9. **BASIC CONDITIONS.** State shall have no obligation to disburse money for projects under this Grant Agreement until Grantee has satisfied the following conditions (if applicable):
- a) Grantee and Local Project Sponsors demonstrate the availability of sufficient funds to complete each project, as stated in the Commitment Letter, by submitting the most recent 3 years of audited financial statements.
 - b) Grantee must demonstrate compliance with the groundwater compliance options set forth on page 15 of the IRWM Program Guidelines, dated November 2012.
 - c) For the term of this Grant Agreement, Grantee submits timely Quarterly Progress Reports as required by Paragraph 19, "Submission of Reports."
 - d) Grantee submits deliverables as specified in Paragraph 19 of this Grant Agreement and in Exhibit A.
 - e) Prior to the commencement of construction or implementation activities, Grantee shall submit the following to the State for each project:
 - 1) Final plans and specifications certified by a California Registered Professional (Civil Engineer or Geologist, as appropriate) for each approved projects as listed in Exhibit A of this Grant Agreement.
 - 2) Environmental Documentation
 - i) Grantee submits to the State all applicable environmental permits,
 - ii) Documents that satisfy the CEQA process are received by the State,
 - iii) State has completed its CEQA compliance review as a Responsible Agency, and
 - iv) Grantee receives written concurrence from the State of Lead Agency's CEQA documents and State notice of verification of environmental permit submittal.

State's concurrence of Lead Agency's CEQA documents is fully discretionary and shall constitute a condition precedent to any work (i.e., construction or implementation activities) for which it is required. Once CEQA documentation has been completed, State will consider the environmental documents and decide whether to continue to fund the projects or to require changes, alterations or other mitigation. Grantee must also demonstrate that it has complied with all applicable requirements of the National Environmental Policy Act by submitting copies of any environmental documents, including environmental impact statements, Finding of No Significant Impact, and mitigation monitoring programs as may be required prior to beginning construction/implementation.
 - 3) A monitoring plan as required by Paragraph 21, "Project Monitoring Plan Requirements."
10. **DISBURSEMENT OF FUNDS.** State will disburse to Grantee the amount approved, subject to the availability of funds through normal State processes. Notwithstanding any other provision of this Grant Agreement, no disbursement shall be required at any time or in any manner which is in violation of, or in conflict with, federal or state laws, rules, or regulations, or which may require any rebates to the federal government, or any loss of tax-free status on state bonds, pursuant to any federal statute or regulation. Any and all money disbursed to Grantee under this Grant Agreement and any and all interest earned by Grantee on such money shall be used solely to pay Eligible Project Costs, as defined in Paragraph 11.
11. **ELIGIBLE PROJECT COST.** Grantee shall apply State funds received only to Eligible Project Costs in accordance with applicable provisions of the law and Exhibit B. Eligible project costs include the reasonable costs of studies, engineering, design, land and easement acquisition, legal fees, preparation of environmental documentation, environmental mitigations, monitoring, and project construction. Reasonable administrative expenses may be included as Total Project Costs and will depend on the complexity of the project preparation, planning, coordination, construction, acquisitions, and implementation. Reimbursable administrative expenses are the necessary costs incidentally but directly related to the projects including the portion of overhead and administrative expenses that are directly related to the projects included in this Agreement in accordance with the standard accounting practices of the Grantee. Work performed on the projects after February 4, 2014 shall be eligible for reimbursement.

Costs that are not eligible for reimbursement with State funds cannot be counted as Funding Match. Costs that are not eligible for reimbursement include, but are not limited to the following items:

Attachment 3

Grant Agreement No. 4600010575

Page 3 of 103

- a) Costs, other than those noted above, incurred prior to the award date of the Grant.
 - b) Operation and maintenance costs, including post construction performance and monitoring costs.
 - c) Purchase of equipment not an integral part of a project.
 - d) Establishing a reserve fund.
 - e) Purchase of water supply.
 - f) Monitoring and assessment costs for efforts required after project construction is complete.
 - g) Replacement of existing funding sources for ongoing programs.
 - h) Travel and per diem costs (per diem includes subsistence and other related costs).
 - i) Support of existing agency requirements and mandates (e.g., punitive regulatory agency requirement).
 - j) Purchase of land in excess of the minimum required acreage necessary to operate as an integral part of a project, as set forth and detailed by engineering and feasibility studies.
 - k) Payment of principal or interest of existing indebtedness or any interest payments unless the debt is incurred after execution of this Grant Agreement, the State agrees in writing to the eligibility of the costs for reimbursement before the debt is incurred, and the purposes for which the debt is incurred are otherwise eligible costs. However, this will only be allowed as Grantee cost share (i.e., Funding Match).
 - l) Overhead not directly related to project costs.
12. METHOD OF PAYMENT. Submit a copy of invoice for costs incurred and supporting documentation to the DWR Project Manager via Grant Review and Tracking Systems (GRanTS). Additionally, the original invoice form with signature and date (in ink) of Grantee's Project Representative, as indicated on page 9 of this Agreement, must be sent to the DWR Project Manager for approval. Invoices submitted via GRanTS shall include the following information:
- a) Costs incurred for work performed in implementing the projects during the period identified in the particular invoice.
 - b) Costs incurred for any interests in real property (land or easements) that have been necessarily acquired for the projects during the period identified in the particular invoice for the implementation of a project.
 - c) Invoices shall be submitted on forms provided by State and shall meet the following format requirements:
 - 1) Invoices must contain the date of the invoice, the time period covered by the invoice, and the total amount due.
 - 2) Invoices must be itemized based on the categories (i.e., tasks) specified in Exhibit B. The amount claimed for salaries/wages/consultant fees must include a calculation formula (i.e., hours or days worked times the hourly or daily rate = the total amount claimed).
 - 3) Sufficient evidence (e.g. receipts, copies of checks, time sheets) as determined by the State must be provided for all costs included in the invoice. Additional Cost Share shall be accounted for separately in the progress reports.
 - 4) Each invoice shall clearly delineate those costs claimed for reimbursement from the State's Grant Amount, as depicted in Paragraph 4, and those costs that represent Grantee's Funding Match, as applicable, in Paragraph 6.
 - 5) DWR Project Manager will notify Grantee, in a timely manner, when, upon review of an Invoice, the State determines that any portion or portions of the costs claimed are not eligible costs or are not supported by documentation or receipts acceptable to State. Grantee may, within thirty (30) calendar days of the date of receipt of such notice, submit additional documentation to State to cure such deficiency(ies). If Grantee fails to submit adequate documentation curing the deficiency(ies), State will adjust the pending invoice by the amount of ineligible or unapproved costs. After the disbursement requirements in Paragraph 9 "Basic Conditions" are met, State will disburse the whole or portions of State funding to Grantee, following receipt from Grantee via US mail or Express mail delivery of a "wet signature" invoice for costs incurred, including Cost Share, and timely Quarterly Progress Reports as required by Paragraph 19, Submission of Reports. Payment will be made no more frequently than monthly, in arrears, upon receipt of an invoice bearing the Grant Agreement number.

Attachment 3

Grant Agreement No. 4600010575

Page 4 of 103

13. WITHHOLDING OF DISBURSEMENTS BY STATE. If State determines that a project is not being implemented in accordance with the provisions of this Grant Agreement, or that Grantee has failed in any other respect to comply with the provisions of this Grant Agreement, and if Grantee does not remedy any such failure to State's satisfaction, State may withhold from Grantee all or any portion of the State funding attributable to that project and take any other action that it deems necessary to protect its interests. Where a portion of the State funding has been disbursed to the Grantee and State notifies Grantee of its decision not to release funds that have been withheld pursuant to Paragraph 14, the portion that has been disbursed shall thereafter be repaid immediately with interest at the California general obligation bond interest rate at the time the State notifies the Grantee, as directed by State, except if the State determines that the portion disbursed has been expended for eligible project costs in accordance with the provisions of the Grant Agreement. State may consider Grantee's refusal to repay the requested disbursed amount a contract breach subject to the default provisions in Paragraph 14, "Default Provisions." If State notifies Grantee of its decision to withhold the entire funding amount from Grantee pursuant to this paragraph, this Grant Agreement shall terminate upon receipt of such notice by Grantee and the State shall no longer be required to provide funds under this Grant Agreement and the Grant Agreement shall no longer be binding on either party.
14. DEFAULT PROVISIONS. Grantee will be in default under this Grant Agreement if any of the following occur:
- Substantial breaches of this Grant Agreement, or any supplement or amendment to it, or any other agreement between Grantee and State evidencing or securing Grantee's obligations.
 - Making any false warranty, representation, or statement with respect to this Grant Agreement or the application filed to obtain this Grant Agreement.
 - Failure of Grantee or a Local Project Sponsor receiving grant funding through this Grant Agreement to adopt, no later than 2 years after the State executes the Grant Agreement, an IRWM Plan that meets the requirements contained in Part 2.2 of Division 6 of the CWC, commencing with Section 10530.
 - Failure to operate or maintain projects in accordance with this Grant Agreement.
 - Failure to make any remittance required by this Grant Agreement.
 - Failure to comply with Labor Compliance Program requirements (Paragraph 18).
 - Failure to submit timely progress reports.
 - Failure to routinely invoice State.
 - Failure to meet any of the requirements set forth in Paragraph 15, "Continuing Eligibility."

Should an event of default occur, State shall provide a notice of default to the Grantee and shall give Grantee at least ten (10) calendar days to cure the default from the date the notice is sent via first-class mail to the Grantee. If the Grantee fails to cure the default within the time prescribed by the State, State may do any of the following:

- Declare the funding be immediately repaid, with interest, which shall be equal to State of California general obligation bond interest rate in effect at the time of the default.
- Terminate any obligation to make future payments to Grantee.
- Terminate the Grant Agreement.
- Take any other action that it deems necessary to protect its interests.

In the event State finds it necessary to enforce this provision of this Grant Agreement in the manner provided by law, Grantee agrees to pay all costs incurred by State including, but not limited to, reasonable attorneys' fees, legal expenses, and costs.

15. CONTINUING ELIGIBILITY. Grantee must meet the following ongoing requirement(s) to remain eligible to receive State funds:
- Timely adoption of an IRWM Plan that meets the requirements contained in Part 2.2 of Division 6 of the CWC, commencing with Section 10530.
 - An urban water supplier that receives grant funds governed by this Grant Agreement shall maintain compliance with the Urban Water Management Planning Act (CWC§10610 et. seq.);
 - An agricultural water supplier must maintain compliance with SBx7-7 as outlined in Part 2.55 of Division 6 of the CWC.

Attachment 3

Grant Agreement No. 4600010575

Page 5 of 103

- d) Grantees diverting surface water must maintain compliance with diversion reporting requirements as outlined in Part 5.1 of Division 2 of the CWC.
- e) Projects with potential groundwater impacts must demonstrate compliance with the groundwater compliance options set forth on page 15 of the IRWM Program Guidelines, dated August 2012.
16. PERMITS, LICENSES, APPROVALS, AND LEGAL OBLIGATIONS. Grantee shall be responsible for obtaining any and all permits, licenses, and approvals required for performing any work under this Grant Agreement, including those necessary to perform design, construction, or operation and maintenance of the Projects. Grantee shall be responsible for observing and complying with any applicable federal, state, and local laws, rules or regulations affecting any such work, specifically those including, but not limited to, environmental, procurement, and safety laws, rules, regulations, and ordinances. Grantee shall provide copies of permits and approvals to State.
17. RELATIONSHIP OF PARTIES. Grantee is solely responsible for design, construction, and operation and maintenance of projects within the work plan. Review or approval of plans, specifications, bid documents, or other construction documents by State is solely for the purpose of proper administration of funds by State and shall not be deemed to relieve or restrict responsibilities of Grantee under this Grant Agreement.
18. LABOR COMPLIANCE. Grantee agrees to comply with all applicable California Labor Code requirements, and Standard Condition D.28 in Exhibit D. Grantee must, independently or through a third party, adopt and enforce a Department of Industrial Relations-certified Labor Compliance Program (LCP) meeting the requirements of Labor Code section 1771.5 for projects funded by:
- Proposition 84 (Safe Drinking Water, Water Quality and Supply, Flood Control, River and Coastal Protection Bond Act of 2006; PRC sections 75075 et seq.) or
 - Any other funding source requiring an LCP.

At the State's request, Grantee must promptly submit written evidence of Grantee's compliance with the LCP requirements.

19. SUBMISSION OF REPORTS. The submittal and approval of all reports is a requirement for the successful completion of this Grant Agreement. Reports shall meet generally accepted professional standards for technical reporting and shall be proofread for content, numerical accuracy, spelling, and grammar prior to submittal to State. All reports shall be submitted to the State's Project Manager, and shall be submitted via DWR's "Grant Review and Tracking System" (GRANTS). If requested, Grantee shall promptly provide any additional information deemed necessary by State for the approval of reports. Reports shall be presented in the formats described in the applicable portion of Exhibit G. The timely submittal of reports is a requirement for initial and continued disbursement of State funds. Submittal and subsequent approval by the State, of a Project Completion Report is a requirement for the release of any funds retained for such projects.
- Progress Reports: Grantee shall submit progress reports on a regular and consistent basis to meet the State's requirement for disbursement of funds. The reporting period shall not exceed one quarter in length. The progress reports shall be sent via e-mail to the State's Project Manager and shall be uploaded into GRANTS at the frequency specified in Exhibit C, Project Schedule. The progress reports shall provide a brief description of the work performed during the reporting period including: Grantee's activities, milestones achieved, any accomplishments, and any problems encountered in the performance of the work under this Agreement.
 - Project Completion Report: Grantee shall prepare and submit to State a separate Project Completion Report for each project included in Exhibit A. Grantee shall submit a Project Completion Report within ninety (90) calendar days of projects completion. Project Completion Report(s) shall include, in part, a description of actual work done, any changes or amendments to each project, and a final schedule showing actual progress versus planned progress, copies of any final documents or reports generated or utilized during a project. The Project Completion Report shall also include, if applicable, certification of final project by a California Registered Professional (Civil Engineer or Geologist, as appropriate),

Attachment 3

Grant Agreement No. 4600010575
Page 6 of 103

consistent with Standard Condition D.19 in Exhibit D. A DWR "Certification of Project Completion" form will be provided by the State.

- Grant Completion Report: Upon completion of all projects included in Exhibit A, Grantee shall submit to State a Grant Completion Report. The Grant Completion Report shall be submitted within ninety (90) calendar days of submitting the Project Completion Report for the final project to be completed under the Grant Agreement. The Grant Completion Report shall include reimbursement status, a brief description of each project completed, and how those projects will further the goals of the IRWM Plan and identify any changes to the IRWM Plan, as a result of project implementation. Retention for the last project to be completed as part of this Grant Agreement will not be disbursed until the Grant Completion Report is submitted to and approved by the State.
 - Post-Performance Reports: Grantee shall submit Post-Performance Reports. Post-Performance Reports shall be submitted to State within ninety (90) calendar days after the first operational year of a project has elapsed. This record keeping and reporting process shall be repeated annually for a total of 10 years after the completed projects begins operation.
20. OPERATION AND MAINTENANCE OF PROJECT. For the useful life of construction and implementation projects and in consideration of the Grant made by State, and subject where applicable to the federal Anti-Deficiency Act, Grantee agrees to ensure or cause to be performed the commencement and continued operation of the projects, and shall ensure or cause the projects to be operated in an efficient and economical manner; shall ensure all repairs, renewals, and replacements necessary to the efficient operation of the same are provided; and shall ensure or cause the same to be maintained in as good and efficient condition as upon its construction, ordinary and reasonable wear and depreciation excepted. The Grantee shall ensure that all operations and maintenance costs of the facilities and structures are contractually assumed by the appropriate Local Project Sponsors for their respective projects, subject where applicable to the federal Anti-Deficiency Act; State shall not be liable for any cost of such maintenance, management, or operation. Grantee or Local Project Sponsors may be excused from operations and maintenance only upon the written approval of the State's Project Manager. For purposes of this Grant Agreement, "useful life" means period during which an asset, property, or activity is expected to be usable for the purpose it was acquired or implemented; "operation costs" include direct costs incurred for material and labor needed for operations, utilities, insurance, and similar expenses, and "maintenance costs" include ordinary repairs and replacements of a recurring nature necessary for capital assets and basic structures and the expenditure of funds necessary to replace or reconstruct capital assets or basic structures. Refusal of Grantee to ensure operation and maintenance of the projects in accordance with this provision may, at the option of State, be considered a breach of this Grant Agreement and may be treated as default under Paragraph 13, "Default Provisions."
21. PROJECT MONITORING PLAN REQUIREMENTS. Exhibit A of this Grant Agreement shall contain activities to develop and submit to State a Project Monitoring Plan. Along with the Project Performance Measures Table requirements outlined in the Proposition 84 Round 2 Implementation Grants Proposal Solicitation Package (in Attachment 6), and guidance provided in Exhibit J, "Project Monitoring Plan Components," the Project Monitoring Plan should also include:
- a) Baseline conditions.
 - b) Brief discussion of monitoring systems to be used.
 - c) Methodology of monitoring.
 - d) Frequency of monitoring.
 - e) Location of monitoring points.
- A Project Monitoring Plan shall be submitted to the State prior to disbursement of State funds for construction or monitoring activities. See Exhibit H, "Requirements for Statewide Monitoring and Data Submittal", for web links and information regarding other State monitoring and data reporting requirements.
22. STATEWIDE MONITORING REQUIREMENTS. Grantee shall ensure that all groundwater projects and projects that include groundwater monitoring requirements are consistent with the Groundwater Quality Monitoring Act of 2001 (Part 2.76 (commencing with Section 10780) of Division 6 of California Water Code) and, where

Attachment 3

Grant Agreement No. 4600010575
Page 7 of 103

applicable, that projects that affect water quality shall include a monitoring component that allows the integration of data into statewide monitoring efforts, including where applicable, the Surface Water Ambient Monitoring Program carried out by the State Water Resources Control Board.

- 23. NOTIFICATION OF STATE. Grantee shall promptly notify State, in writing, of the following items:
 - a) Events or proposed changes that could affect the scope, budget, or work performed under this Grant Agreement. Grantee agrees that no substantial change in the scope of a projects will be undertaken until written notice of the proposed change has been provided to State and State has given written approval for such change. Substantial changes generally include changes to the work plan, schedule or term, and budget.
 - b) Any public or media event publicizing the accomplishments and/or results of this Grant Agreement and provide the opportunity for attendance and participation by State's representatives. Grantee shall make such notification at least 14 calendar days prior to the event.
 - c) Final inspection of the completed work on a project by a California Registered Professional (Civil Engineer or Geologist, as appropriate), in accordance with Standard Condition D.19 in Exhibit D. Grantee shall notify the State's Project Manager of the inspection date at least 14 calendar days prior to the inspection in order to provide State the opportunity to participate in the inspection.
- 24. NOTICES. Any notice, demand, request, consent, or approval that either party desires or is required to give to the other party under this Grant Agreement shall be in writing. Notices may be transmitted by any of the following means:
 - a) By delivery in person.
 - b) By certified U.S. mail, return receipt requested, postage prepaid.
 - c) By "overnight" delivery service; provided that next-business-day delivery is requested by the sender.
 - d) By electronic means.

Notices delivered in person will be deemed effective immediately on receipt (or refusal of delivery or receipt). Notices sent by certified mail will be deemed effective given ten (10) calendar days after the date deposited with the U. S. Postal Service. Notices sent by overnight delivery service will be deemed effective one business day after the date deposited with the delivery service. Notices sent electronically will be effective on the date of transmission, which is documented in writing. Notices shall be sent to the addresses set forth in Paragraph 26. Either party may, by written notice to the other, designate a different address that shall be substituted for the one below.

- 25. PERFORMANCE EVALUATION. Upon completion of this Grant Agreement, Grantee's performance will be evaluated by the State and a copy of the evaluation will be placed in the State file and a copy sent to the Grantee.
- 26. PROJECT REPRESENTATIVES. The Project Representatives during the term of this Grant Agreement are as follows:

Department of Water Resources
 Paula Landis
 Chief, Division of IRWM
 P.O. Box 942836
 Sacramento CA 94236-0001
 Phone: (916) 651-9220
 e-mail: plandis@water.ca.gov

Association of Bay Area Governments
 Ezra Rapport
 Executive Director
 101 8th Street
 Oakland, CA 94607
 Phone: (510) 464-7900
 e-mail: ezrar@abag.ca.gov

Direct all inquiries to the Project Manager:

Department of Water Resources
 Melissa Sparks
 Project Manager
 Division of Integrated Regional Water Management

Association of Bay Area Governments, San
 Francisco Estuary Partnership division
 Jennifer Krebs
 Project Manager

Attachment 3

*Grant Agreement No. 4600010575
Page 8 of 103*

PO Box 942836
Sacramento, CA 94236-0001
Phone: (916) 651-9221
e-mail: melissa.sparks@water.ca.gov

151 Clay Street, Suite 1400
Oakland, CA 94612
Phone: (510) 622-2315
e-mail: jkrebs@waterboards.ca.gov

Either party may change its Project Representative or Project Manager upon written notice to the other party.

27. STANDARD PROVISIONS. The following Exhibits are attached and made a part of this Grant Agreement by this reference:

- Exhibit A – Work Plan
- Exhibit B – Budget
- Exhibit C – Schedule
- Exhibit D – Standard Conditions
- Exhibit E – Authorizing Resolution
- Exhibit F – Local Project Sponsors
- Exhibit G – Report Formats and Requirements
- Exhibit H – Requirements for Statewide Monitoring and Data Submittal
- Exhibit I – State Audit Document Requirements and Funding Match Guidelines for Grantees
- Exhibit J – Project Monitoring Plan Components

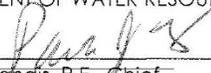
DWR Prop 84 - Local Project Sponsor Agreement - IRWM 2

Attachment 3

Grant Agreement No. 4600010575
Page 9 of 103

IN WITNESS WHEREOF, the parties hereto have executed this Grant Agreement.

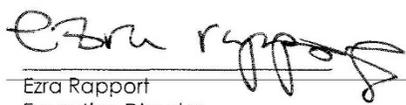
STATE OF CALIFORNIA
DEPARTMENT OF WATER RESOURCES



Paula J. Landis, P.E., Chief
Division of Integrated Regional Water Management

Date 7/6/14

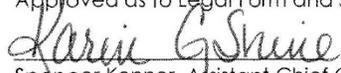
ASSOCIATION OF BAY AREA GOVERNMENTS



Ezra Rapport
Executive Director

Date 7/1/14

Approved as to Legal Form and Sufficiency

for 

Spencer Kenner, Assistant Chief Counsel
Office of Chief Counsel

Date 14 July 2014

Attachment 3

Grant Agreement No. 4600010575
Page 10 of 103

**EXHIBIT A
WORK PLAN**

The Proposition 84 Round 2 Implementation agreement awards funding for 20 projects located within the San Francisco Bay Area IRWM region.

Project 1: Bay Area Regional Water Conservation and Education Program

The Regional Water Conservation and Education Program is a program that is implemented by 12 Bay Area agencies. The IRWM Round 2 Implementation funding will expand the implementation of existing water conservation practices in the Bay Area, resulting in reduced potable water use and improve the existing Bay Area regional water conservation initiative. A suite of program elements will promote high-efficiency technologies and best water conservation practices that improve indoor and outdoor water use efficiency throughout the San Francisco Bay Area. The specific program elements that will result in quantifiable and sustainable water savings include:

Element 1-1: High-Efficiency Toilet Rebates

This project element includes the installation of approximately 2,300 high efficiency toilets (HETs) and a total potable water savings of approximately 834 acre-feet (AF) over the lifespan of the fixtures.

Element 1-2: High-Efficiency Washer Rebates

This project element provides a dual benefit by approximately reducing energy costs by more than a third and water costs by more than half. This project element installs approximately 5,750 high-efficiency clothes washers (HEW), resulting in an estimated water savings of over 769 AF over approximately a 10-year lifespan of the appliance.

Element 1-3: Water-Efficient Sustainable Landscape Education Program

This project element provides practical training and education programs to landscape professionals and home gardeners throughout the Bay Area. This project element may include topics such as the importance of soil health, mulch and compost to improve water retention and the use of sheet mulching to replace water-thirsty turf with climate appropriate plants. The goal of this program is to conduct approximately 20 home gardener events and approximately 10 professional training courses, and leverage electronic media, to reach approximately 20,000 consumers with messages about how to reduce water use in their yards and gardens.

Element 1-4: Water-Efficient Landscape and Weather-Based Irrigation Controller Rebate

This project element promotes environmental sustainability and improve environmental stewardship by reducing potable water use, reducing carbon emissions from mechanized gardening, and reducing the amount of fertilizer, herbicide and pesticide laden water runoff into local streams. The first component of this project element is the Water-Efficient Landscape Rebate Program. This project element component replaces approximately 1.3 million square feet of lawn with water-efficient landscaping by providing rebates based for each square foot of lawn converted. This project element component results in an estimated 1,060 AF of potable water savings over an approximate 10-year period. The second component of this project element is the Weather-Based Irrigation Controllers Rebate Program. This component provides incentives to replace existing irrigation controllers with new efficient equipment. The new controllers automatically adjust watering times based on local weather conditions and plant types. This component results in the installation of approximately 3,145 single-family residence weather-based irrigation controllers and approximately 4,200 commercial, industrial, and/or institutional weather-based irrigation controllers to achieve a water savings of an estimated 550 AF over the approximate 10-year lifespan of the equipment.

Element 1-5: Large Landscape Irrigation System Retrofit Program

This project element improves irrigation efficiency, installs appropriate plantings, and improves landscape uses at large landscape sites. It retrofits at least one large landscape site with new irrigation, controllers, plantings, and educational signage. This project element results in a water savings of approximately 12 AF per year, and approximately 240 AF over the approximate 20-year lifespan of the project.

DWR Prop 84 - Local Project Sponsor Agreement - IRWM 2

Element 1-6: Home Water Reports

This project element encourages water savings by providing customers with individualized water use reports and water scores with a comparison to other homes or businesses with similar characteristics and demographics. Customers will register on-line to receive water use reports, which will include customized water saving recommendations. This project's goals are to send an estimated 230,000 single-family home reports with approximately 101,500 completed within the first year. These reports are anticipated to result in potable water savings of approximately 768 AF each year with savings of approximately 4,610 AF over the approximate 6-year implementation of the program.

Element 1-7: Water Conservation and Mobile Water Lab Project

This project element conducts approximately 48 agricultural irrigation efficiency evaluations to provide recommendations on irrigation system and scheduling improvements to conserve water. These evaluations will be conducted for agricultural producers in the Sonoma Creek, Petaluma River, and Napa River watersheds. Up to two workshops will be held to encourage the sharing of valuable technology and information and to assist growers in obtaining funds to implement irrigation improvement recommendations. This project element estimates approximately 44 AF of water savings per year, with approximately 442 AF of savings over the approximate 20-year lifespan of implemented irrigation improvements.

Task 1: Direct Project Administration – Budget Category (a)

Task 1 a) Project Administration

This task consists of the project administration responsibilities, which includes coordinating with up to 12 participating agencies, developing interagency agreements, coordinating agency responsibilities, and managing cost commitments. This task also includes providing other supporting documentation required for this grant agreement (e.g., financial statements, etc.).

Deliverables:

- Environmental Information Form (EIF)
- Financial Statements
- Other Applicable Project Deliverables

Task 1b) Quarterly Progress Reports

This task consists of preparing progress reports detailing work completed in prior quarter as outlined in Exhibit (G) of this agreement and submitting to the Grantee for its submittal to DWR review.

Deliverables:

- Quarterly Project Progress Report

Task 1c) Invoices

This task consists of preparing quarterly invoices including relevant supporting documentation for submittal to DWR via Grantee.

Deliverables:

- Quarterly Invoices and associated backup documentation

Task 1d) Draft and Final Project Completion Report

This task consists of preparing draft Final Project Completion Report and submitting to DWR via Grantee for DWR Project Manager's comment and review no later than 90 days after project completion. This task also consists of preparing the Final Report addressing Grantee/DWR's comments. The report shall be prepared and presented in accordance with the provision of Exhibit G.

Deliverables:

- Draft and Final Project Completion Report

Attachment 3

Grant Agreement No. 4600010575
Page 12 of 103

Task 2: Land Purchase/Easement – Budget Category (b)

Not applicable. This project does not require land purchases or easements.

Task 3: Planning/Design/Engineering/Environmental Documentation – Budget Category (c)

Not applicable. This project does not require preparation of assessment and evaluation studies.

Task 4: Construction/Implementation – Budget Category (d)*Element 1-1: High-Efficiency Toilet Rebates*

Task 4.1 a) Project Implementation

This project provides rebates for replacement older, high-volume flush toilets with high-efficiency toilets. This task consists of providing and evaluating rebate applications, processing rebates, providing public outreach and customer service, and providing education surveys and analysis. Additionally, this project element may include the development and coordination of marketing materials.

Deliverables:

- Eligible customer list
- Example of rebate application
- Database of participants in rebate program
- List of completed HETs
- Copies of the public outreach materials

Element 1-2: High-Efficiency Washer Rebates

Task 4.2 a) Project Implementation

This task consists of providing and evaluating rebate applications, processing rebates, providing public outreach and customer service, and providing education surveys and analysis. Additionally, this project element may include the development and coordination of marketing materials.

Deliverables:

- Eligible customer list
- Example of rebate application
- Database of participants in rebate program
- List of completed HEWs
- Copies of the public outreach materials

Element 1-3: Water-Efficient Sustainable Landscape Education Program

Task 4.3 a) Project Implementation

This task consists of organizing water-efficient sustainable gardening events and product expositions, holding trainings and qualification courses, and conducting outreach to promote the events/expositions and water-conservation and rebate marketing messages. This project element includes providing onsite training for staff at participating nurseries to promote successful communication with customers about the benefits of water conservation and the availability of local rebates and resources on sheet mulching lawns in place, and proper irrigation and techniques to reduce toxic runoff. Additionally, it includes the production and distribution of a pocket guide to water-conserving plants that thrive in the Bay Area, the development of an online clearinghouse of regional information about outdoor water conservation and local rebate programs, and the identification and promotion of landscape professionals that offer lawn conversion services. This project element includes the development and coordination of marketing materials.

Deliverables:

- A list of completed water-efficient sustainable gardening events and expos and number of participants

Attachment 3

Grant Agreement No. 4600010575

Page 13 of 103

- A list of completed professional training programs and number of participants
- A report on results/metrics achieved through public outreach campaign
- A list of the number of staff training sessions held at nurseries
- Online posting and monitoring of website activity
- A copy of the pocket guide

Element 1-4: Water-Efficient Landscape and Weather-Based Irrigation Controller Rebate

Task 4.4 a) Project Implementation

The Water Efficient Landscape Program component of this project element includes outreach to property owners and managers, both residential and commercial, to minimize and remove turf, and replace it with a more sustainable water efficient landscape. This task consists of providing and evaluating rebate applications, processing rebates, and providing public outreach and customer service. The Weather-based Irrigation Controller Program component of this project element includes the replacement of standard irrigation "clock-type" controllers with self-adjusting automatic irrigation controllers that schedule irrigation events using evapotranspiration (ET) controllers. Participating agencies shall review and evaluate customer rebate applications. Additionally, agencies may conduct customer and retailer marketing and public outreach activities to implement the incentive program, including outreach to retailers, production of rebate materials, and post-cards associated with the distribution of the incentives.

Deliverables:

- An example of a Water Efficient Landscape rebate application
- Database of participants in Water Efficient Landscape Rebate Program
- A copy of public outreach materials for Water Efficient Landscape Program
- An example of a Weather-based Irrigation Controller customer application
- Database of participants in Weather-based Irrigation Controller Program
- A copy of public outreach materials for Weather-based Irrigation Controller Program

Element 1-5: Large Landscape Irrigation System Retrofit Program

Task 4.5 a) Project Implementation

This task consists of selecting qualifying large landscape sites in San Francisco and completing irrigation and landscape design plans that meet the requirements of San Francisco's Water Efficient Irrigation Ordinance. This task also includes developing a construction contract to implement the project's design and complete the site retrofit with new irrigation system, weather-based irrigation controller(s), and low water-use plantings. This task also includes the installation of educational public signage about water-efficient landscaping practices, and public outreach materials. Additionally, this project element may include the development and coordination of marketing materials.

Deliverables:

- A copy of the water-efficient irrigation and landscape design plans
- Copies of public outreach materials
- A copy of the bid documents and construction award
- Photos of the educational signage at the site

Element 1-6: Home Water Reports

Task 4.6 a) Project Implementation

This task consists of creating the home water report interface, including procuring software product and professional services, developing project specifications and a monitoring plan, implementing the backend database, establishing the system for consumption data feeds, and deploying user interface and backend database. This task also consists of issuing home water reports, monitoring participation, and conducting water savings evaluations.

Deliverables:

- A copy of the professional services contract

Attachment 3

*Grant Agreement No. 4600010575
Page 14 of 103*

- A list of participants in the Home Water Report Program
- A copy of the final water savings report

Element 1-7: Water Conservation and Mobile Water Lab Project

Task 4.7 a) Project Implementation

This task consists of providing outreach and up to 2 educational workshops to agricultural landowners/managers, conducting approximately 48 agricultural irrigation system evaluations, providing recommendations on irrigation system and scheduling improvements to conserve water, sharing valuable technology and information with growers, and assisting growers in obtaining necessary funds to implement recommendations.

Deliverables:

- A copy of materials used at workshops
- A list of on-site irrigation system evaluations completed
- A copy of outreach materials distributed
- An example of recommendations provided based on evaluation

Attachment 3

Grant Agreement No. 4600010575
Page 15 of 103**Project 2: East Bayshore Recycled Water Project Phase 1A (Emeryville)**

The East Bayshore Recycled Water Project (EBRWP) provides approximately 2.5 million gallons/day (mgd) or approximately 2,800 acre-feet/year (AFY) of recycled water to customers within the Cities of Alameda, Albany, Berkeley, Emeryville, and Oakland. The project will extend the recycled water transmission pipeline constructed in 2012 by approximately 5,200 feet to the north in Emeryville. The extended recycled water pipeline will provide new customers in Emeryville with recycled water deliveries of approximately 40,000 gpd or approximately 50 AFY.

Task 1: Direct Project Administration – Budget Category (a)

Task 1 a) Project Administration

This task consists of the project administration responsibilities, which includes coordinating agency responsibilities and managing cost commitments. This task also includes providing other supporting documentation required for this grant agreement (e.g., financial statements, etc.).

Deliverables:

- Environmental Information Form (EIF)
- Financial Statements
- Other Applicable Project Deliverables

Task 1b) Quarterly Progress Reports

This task consists of preparing progress reports detailing work completed in prior quarter as outlined in Exhibit (G) of this agreement and submitting to the Grantee for its submittal to DWR review.

Deliverables:

- Quarterly Project Progress Report

Task 1c) Invoices

This task consists of preparing quarterly invoices including relevant supporting documentation for submittal to DWR via Grantee.

Deliverables:

- Quarterly Invoices and associated backup documentation

Task 1 d) Draft and Final Project Completion Report

This task consists of preparing draft Final Project Completion Report and submitting to DWR via Grantee for DWR Project Manager's comment and review no later than 90 days after project completion. This task also consists of preparing the Final Report addressing Grantee/DWR's comments. The report shall be prepared and presented in accordance with the provision of Exhibit G.

Deliverables:

Draft and Final Project Completion Report

Task 1 e) Labor Compliance Program

This task consists of completing the required implementation of a Labor Compliance Program (LCP), if applicable. The Labor Compliance Plan will be compliant with Department of Industrial Relations standards and needs to be in place prior to any construction activities covered under this grant agreement.

Deliverables:

- Proof of Labor Compliance Plans for each project component

Task 2: Land Purchase/Easement – Budget Category (b)

Not applicable. The pipeline will be located in city streets within public right-of-way. This project does not require land purchases or easements.

DWR Prop 84 - Local Project Sponsor Agreement - IRWM 2

Attachment 3

Grant Agreement No. 4600010575
Page 16 of 103

Task 3: Planning/Design/Engineering/Environmental Documentation – Budget Category (c)

Task 3 a) Planning/Design/Engineering

This task consists of evaluating the proposed alignment constructability and identifying alternatives if planning alignment is not applicable. This task also includes completing the 30%, 60%, 90% and 100% design phases, including conducting surveys, performing calculations, preparing cross section drawings, preparing construction specifications, and completing construction drawings and specifications for final approval.

Deliverables:

- Copies of 30%, 60% and 90% design drawings and specifications
- A copy of the final drawings and specifications

Task 3 b) Environmental Documentation

This task consists of completing the required environmental compliance and environmental documentation as necessary.

Deliverables:

- Copy of environmental documents as required by CEQA

Task 3 c) Permitting

This task consists of acquisition of all identified federal, state, and local permits. Work includes coordinating and complying with requirements for issuance of a permit.

Deliverables:

- Copy of all required permits

Task 3 d) Project Monitoring Plan

A Project Monitoring Plan (PMP) shall be submitted to the State prior to disbursement of grant funds for construction or monitoring activities for this Project. Along with the Attachment 6 Project Performance Measures Tables requirements for the Project, the PMP will also include: a) Baseline conditions, b) Brief discussion of monitoring systems to be utilized, c) Methodology of monitoring, d) Frequency of monitoring, and e) Location of monitoring points.

The LPS will lead work for monitoring and performances measures verification after Project completion. Costs for monitoring and performance measures are not included in the budget (funding match or grant award).

Deliverables:

- Project Monitoring Plan

Task 4: Construction/Implementation – Budget Category (d)

Task 4 a) Construction Contracting

This task consists of construction contracting including solicitations for bids and awards of contracts.

Deliverables:

- Copy of bid package

Task 4 b) Mobilization and Site Preparation

This task consists of site staging, site security, temporary sanitary facilities, site BMPs, clearing and grubbing, stockpile and material storage designation, and traffic control.

Deliverables:

- Pre-construction photographs

Task 4 c) Project Construction

Attachment 3

Grant Agreement No. 4600010575
Page 17 of 103

This task consists of including installation of approximately 5,200 feet of pipeline, construction of the collection system, and connections to properties, treatment system, and disposal system that will deliver an additional estimated 50 acre-feet per year (AFY). This task also includes all construction equipment and supplies.

Deliverables:

- Construction photographs
- Certified engineer inspection completion report with final as-built drawings

Task 4 d) Performance Testing and Demobilization

This task consists of performance testing and demobilization including stormwater testing for contaminant and turbidity levels, and demobilization and removal of debris and construction spoils from the site, excess materials, temporary sanitary facilities, and equipment.

Deliverables:

- Post-construction photographs

Task 4 e) Environmental Compliance/ Mitigation/ Enhancement

This task consists of complying with general construction measures, and creating an erosion and sediment control plan, stormwater pollution prevention plan, traffic control plan, and a hazardous materials management plan.

Deliverables:

- A copy of the erosion and sediment control plan
- A copy of the stormwater pollution prevention plan
- A copy of the traffic control plan
- A copy of the hazardous materials management plan

Task 4 f) Construction Administration

This task consists of reviewing the contractor's schedule and recommendations, managing and coordinating the agencies and contractors involved with the project, and providing construction inspection and management oversight.

Deliverables:

- A copy of the inspection reports
- A copy of meeting minutes from construction management reports

Attachment 3

Grant Agreement No. 4600010575
Page 18 of 103

Project 3: Lagunitas Creek Watershed Sediment Reduction and Management Project

This project improves three stream crossings of the Cross Marin Trail, which runs parallel to Lagunitas Creek. The three sites are identified as, Big Bend, Jewell Creek, and Eucalyptus. The stream crossing improvements involve replacing old, failing, and undersized culverts with larger culverts or arch culverts. The Nicasio Transmission Line (NTL), a major water supply transmission pipeline, runs under the Cross Marin Trail, along its entire length, crossed by culverts at stream crossings, including the culverts to be replaced under this project. Construction includes excavating the fill at each crossing, removing the old culverts, draining a section of the water supply transmission pipeline, extracting the section of pipeline at the crossing section, installing the new culverts, and then replacing the removed Nicasio Transmission Pipeline section with a new piece of pipeline. This project also includes testing the pipeline, repaving the trail, and revegetating the face slopes of the crossings.

Task 1: Direct Project Administration – Budget Category (a)

Task 1 a) Project Administration

This task consists of the project administration responsibilities, which includes coordinating agency responsibilities and managing cost commitments. This task also includes providing other supporting documentation required for this grant agreement (e.g., financial statements, etc.).

Deliverables:

- Environmental Information Form (EIF)
- Financial Statements
- Other Applicable Project Deliverables

Task 1 b) Quarterly Progress Reports

This task consists of preparing progress reports detailing work completed in prior quarter as outlined in Exhibit (G) of this agreement and submitting to the Grantee for its submittal to DWR review.

Deliverables:

- Quarterly Project Progress Report

Task 1 c) Invoices

This task consists of preparing quarterly invoices including relevant supporting documentation for submittal to DWR via Grantee.

Deliverables:

- Quarterly Invoices and associated backup documentation

Task 1 d) Draft and Final Project Completion Report

This task consists of preparing draft Final Project Completion Report and submitting to DWR via Grantee for DWR Project Manager's comment and review no later than 90 days after project completion. This task also consists of preparing the Final Report addressing Grantee/DWRs comments. The report shall be prepared and presented in accordance with the provision of Exhibit G.

Deliverables:

Draft and Final Project Completion Report

Task 1 e) Labor Compliance Program

This task consists of completing the required implementation of a Labor Compliance Program (LCP), if applicable. The Labor Compliance Plan will be compliant with Department of Industrial Relations standards and needs to be in place prior to any construction activities covered under this grant agreement.

Deliverables:

- Proof of Labor Compliance Plans for each project component

Attachment 3

Grant Agreement No. 4600010575
Page 19 of 103

Task 2: Land Purchase/Easement – Budget Category (b)

Task 2 a) Land Acquisition

This task consists of working with California State Parks and the National Park Service to ensure that appropriate permissions and authorizations to conduct work on these parklands are in place prior to construction.

Deliverables:

- A Right-of-Entry Agreement from California State Parks and project authorization from the National Park Service.

Task 3: Planning/Design/Engineering/Environmental Documentation – Budget Category (c)

Task 3 a) Assessment and Evaluation

This task consists of performing assessments and documenting the site problems and determining the conceptual repair/improvement approaches, as the 10% design level.

Deliverables:

- A copy of the Lagunitas Creek Unpaved Roads Sediment Source Site Assessment

Task 3 b) Planning/Design/Engineering

This task consists of completing the design phases, including habitat assessments of tributary streams, topographic surveys of Big Bend and Eucalyptus stream crossings, geotechnical investigations of Big Bend and Eucalyptus stream crossings, 50% engineering designs and specs for Big Bend and Eucalyptus stream crossings and 100% engineering designs and specifications for three stream crossings.

Deliverables:

- Copies of 50% and 100% design drawings and specifications
- A copy of the final drawings and specifications

Task 3 c) Environmental Documentation

This task consists of completing the required environmental compliance and environmental documentation as necessary.

Deliverables:

- Copy of environmental documents as required by CEQA

Task 3 d) Permitting

This task consists of acquisition of all identified federal, state, and local permits. Work includes coordinating and complying with requirements for issuance of a permit.

Deliverables:

- Copy of all required permits

Task 3 e) Project Monitoring Plan

A Project Monitoring Plan (PMP) shall be submitted to the State prior to disbursement of grant funds for construction or monitoring activities for this Project. Along with the Attachment 6 Project Performance Measures Tables requirements for the Project, the PMP will also include: a) Baseline conditions, b) Brief discussion of monitoring systems to be utilized, c) Methodology of monitoring, d) Frequency of monitoring, and e) Location of monitoring points.

The LPS will lead work for monitoring and performances measures verification after Project completion. Costs for monitoring and performance measures are not included in the budget (funding match or grant award).

Deliverables:

- Project Monitoring Plan

Attachment 3

Grant Agreement No. 4600010575
Page 20 of 103

Task 4: Construction/Implementation – Budget Category (d)

Task 4 a) Construction Contracting

This task consists of construction contracting including solicitations for bids and awards of contracts.

Deliverables:

- Copy of bid package

Task 4 b) Mobilization and Site Preparation

This task includes purchasing project equipment and supplies, and mobilizing equipment to the site, staging the site, implementing site security measures, installing temporary sanitary facilities, implementing site BMPs, clearing and grubbing, stockpiling and storing materials, and conducting traffic control.

Deliverables:

- Pre-construction photographs

Task 4 c) Project Construction

This task includes improvements to three stream crossings on the Cross Marin Trail running parallel to Lagunitas Creek. This task consists of excavating the fill at each crossing, removing the old culverts, draining a section of the pipeline, extracting the crossing, installing the new culverts, and replacing the removed section of the water transmission pipeline with a new section of pipeline, and restoring and revegetating the trail and slope area. This task also includes all construction equipment and supplies.

Deliverables:

- Construction photographs
- Certified engineer inspection completion report with final as-built drawings

Task 4 d) Performance Testing and Demobilization

This task consists of performance testing and demobilization including testing the Nicasio Transmission Line, and demobilizing and removing all debris and construction spoils from the site, excess materials, temporary sanitary facilities and equipment.

Deliverables:

- Post-construction photographs

Task 4 e) Environmental Compliance/ Mitigation/ Enhancement

This task consists of complying with general construction measures, and preparing a plan that strictly minimizes storm water pollutants, recreational traffic during construction, and sediment and any environmental protection specifications.

Deliverables:

- A copy of the plan that strictly minimizes construction related erosion and sediment
- A copy of the plan that strictly minimizes storm water pollutants
- A copy of the plan that addresses recreational traffic during construction
- A copy of the plan that prevents and responds to hazardous material spills
- A copy of the environmental protection specifications

Task 4 f) Construction Administration

This task consists of reviewing the contractor's schedule and recommendations, managing and coordinating the agencies and contractors involved with the project, and providing construction inspection and management oversight.

Deliverables:

- A copy of the inspection reports
- A copy of meeting minutes from construction management reports

DWR Prop 84 - Local Project Sponsor Agreement - IRWM 2

Project 4: Marin/Sonoma Conserving our Watersheds: Agricultural BMP Projects

This project encourages collaboration with local ranchers and other natural resource management agencies to implement local and regional watershed projects within three-year program to improve water quality within the Tomales Bay, San Antonio, and Novato Creek watersheds. Approximately fifteen treatment sites will be evaluated by a technical advisory committee and implemented, representing approximately 20 environmental Best Management Practices (BMPs), on agricultural lands in Marin and Sonoma counties through the Conserving Our Watersheds (COW) Program.

Task 1: Direct Project Administration – Budget Category (a)

Task 1 a) Project Administration

This task consists of the project administration responsibilities, which includes coordinating agency responsibilities and managing cost commitments. This task also includes providing other supporting documentation required for this grant agreement (e.g., financial statements, etc.).

Deliverables:

- Environmental Information Form (EIF)
- Financial Statements
- Other Applicable Project Deliverables

Task 1b) Quarterly Progress Reports

This task consists of preparing progress reports detailing work completed in prior quarter as outlined in Exhibit (G) of this agreement and submitting to the Grantee for its submittal to DWR review.

Deliverables:

- Quarterly Project Progress Report

Task 1c) Invoices

This task consists of preparing quarterly invoices including relevant supporting documentation for submittal to DWR via Grantee.

Deliverables:

- Quarterly Invoices and associated backup documentation

Task 1d) Draft and Final Project Completion Report

This task consists of preparing draft Final Project Completion Report and submitting to DWR via Grantee for DWR Project Manager's comment and review no later than 90 days after project completion. This task also consists of preparing the Final Report addressing Grantee/DWRs comments. The report shall be prepared and presented in accordance with the provision of Exhibit G.

Deliverables:

Draft and Final Project Completion Report

Task 1 e) Labor Compliance Program

This task consists of completing the required implementation of a Labor Compliance Program (LCP), if applicable. The Labor Compliance Plan will be compliant with Department of Industrial Relations standards and needs to be in place prior to any construction activities covered under this grant agreement.

Deliverables:

- Proof of Labor Compliance Plans for each project component

Task 2: Land Purchase/Easement – Budget Category (b)

Not applicable. This project does not require land purchases or easements.

Attachment 3

Grant Agreement No. 4600010575
Page 22 of 103

Task 3: Planning/Design/Engineering/Environmental Documentation – Budget Category (c)

Task 3 a) Assessment and Evaluation

This task consists of selecting the Technical Advisory Committee (TAC) members, finalizing selection criteria for project sites, finalizing BMPS standards and specifications, and selecting treatment project sites, contacting landowners, and identifying BMPs. This task consists of meeting with landowners to finalize Landowner Authorization (LOA) Agreements. The LOA includes a description of the conservation goals and objectives, funding agencies, budgets, permitting authorities, schedule of activities and monitoring responsibilities.

Deliverables:

- A copy of the final list of project sites and identified BMPs
- An example copy of an LOA Agreement

Task 3 b) Planning/Design/Engineering

This task consists of finalizing project engineering designs for each of the selected projects. Finalized 100% design/ engineering plans and specifications will be submitted to DWR.

Deliverables:

- Copies 100% design drawings and specifications for each selected project

Task 3 c) Environmental Documentation

This task consists of completing the required environmental compliance, completing any tribal notification, and environmental documentation as necessary.

Deliverables:

- Copy of environmental documents as required by CEQA

Task 3 d) Permitting

This task consists of acquiring all identified federal, state, and local permits. Work includes coordinating and complying with requirements for issuance of a permit.

Deliverables:

- Copy of all required permits

Task 3 e) Project Monitoring Plan

A Project Monitoring Plan (PMP) shall be submitted to the State prior to disbursement of grant funds for construction or monitoring activities for this Project. Along with the Attachment 6 Project Performance Measures Tables requirements for the Project, the PMP will also include: a) Baseline conditions, b) Brief discussion of monitoring systems to be utilized, c) Methodology of monitoring, d) Frequency of monitoring, and e) Location of monitoring points.

The LPS will lead work for monitoring and performances measures verification after Project completion. Costs for monitoring and performance measures are not included in the budget (funding match or grant award).

Deliverables:

- Project Monitoring Plan

Task 4: Construction/Implementation – Budget Category (d)

Task 4 a) Construction Contracting

This task consists of construction contracting including solicitations for bids and awards of contracts.

Deliverables:

- Copy of bid package

Task 4 b) Mobilization and Site Preparation

Attachment 3

Grant Agreement No. 4600010575

Page 23 of 103

This task includes purchasing project equipment and supplies, and mobilizing equipment to the site, staging the site, implementing site security measures, installing temporary sanitary facilities, implementing site BMPs, clearing and grubbing, stockpiling and storing materials, and conducting animal traffic control.

Deliverables:

- Pre-construction photographs

Task 4 c) Project Construction

This task includes the collaboration with local ranchers and other natural resource management agencies to implement local and regional watershed projects. This task consists of selected project activities, including but not limited to access road improvements, animal trails and walkways, restoration plantings, fish stream improvements, grade stabilization structures, pipelines, sediment basins, stream channel stabilization, riparian fencing, and constructed water sources for grazing cattle. This task also includes all construction equipment and supplies.

Deliverables:

- Construction photographs
- Certified engineer inspection completion report with final as-built drawings

Task 4 d) Performance Testing and Demobilization

This task consists of performance monitoring including sediment load estimates, streambank and riparian line transects, and project assessment checklists.

Deliverables:

- Post-construction photographs

Task 4 e) Environmental Compliance/ Mitigation/ Enhancement

This task consists of complying with general construction measures, performing biological resources protection surveys during construction of BMPs where necessary, and post construction monitoring reports to permitting agencies where required. This task also includes contracting with restoration organizations to ensure successful implementation of restoration projects.

Deliverables:

- A copy of biological resource surveys, as required
- A copy of post construction monitoring reports, as necessary

Task 4 f) Construction Administration

This task consists of reviewing the contractor's schedule and recommendations, managing and coordinating the agencies and contractors involved with the project, and providing construction inspection and management oversight.

Deliverables:

- A copy of the inspection reports
- A copy of meeting minutes from construction management reports

Attachment 3

Grant Agreement No. 4600010575
Page 24 of 103

Project 5: Napa Milliken Creek Flood Damage Reduction and Fish Passage Barrier Removal

This project involves up to three integrated elements to reduce flooding in neighborhoods adjacent to Milliken Creek: 1) approximately 300 cubic yards of dam/fill materials removed and approximately 0.52 acres of stream restoration, 2) construction of a flood bypass/weir to ensure a flood detention area does not overflow into neighboring homes, and 3) minor grading and drainage improvements to further protect adjacent, low-lying properties. The additional post-project length of stream channel/spawning/rear grounds that will be made available year round to anadromous fish above the dam is approximately 2.56 stream miles, or approximately 13,541 linear feet. The bypass/weir, element 2, is designed to reduce floodwater elevations and reduce the occurrence of floodwater entering neighboring residential properties.

Task 1: Direct Project Administration – Budget Category (a)

Task 1 a) Project Administration

This task consists of the project administration responsibilities, which includes coordinating agency responsibilities and managing cost commitments. This task also includes providing other supporting documentation required for this grant agreement (e.g., financial statements, etc.).

Deliverables:

- Environmental Information Form (EIF)
- Financial Statements
- Other Applicable Project Deliverables

Task 1b) Quarterly Progress Reports

This task consists of preparing progress reports detailing work completed in prior quarter as outlined in Exhibit (G) of this agreement and submitting to the Grantee for its submittal to DWR review.

Deliverables:

- Quarterly Project Progress Report

Task 1c) Invoices

This task consists of preparing quarterly invoices including relevant supporting documentation for submittal to DWR via Grantee.

Deliverables:

- Quarterly Invoices and associated backup documentation

Task 1d) Draft and Final Project Completion Report

This task consists of preparing draft Final Project Completion Report and submitting to DWR via Grantee for DWR Project Manager's comment and review no later than 90 days after project completion. This task also consists of preparing the Final Report addressing Grantee/DWR's comments. The report shall be prepared and presented in accordance with the provision of Exhibit G.

Deliverables:

Draft and Final Project Completion Report

Task 1 e) Labor Compliance Program

This task consists of completing the required implementation of a Labor Compliance Program (LCP), if applicable. The Labor Compliance Plan will be compliant with Department of Industrial Relations standards and needs to be in place prior to any construction activities covered under this grant agreement.

Deliverables:

- Proof of Labor Compliance Plans for each project component

Attachment 3

Grant Agreement No. 4600010575
Page 25 of 103

Task 2: Land Purchase/Easement – Budget Category (b)

Task 2 a) Land Purchase/Easement Acquisition

This task consists of finalizing the negotiations for obtaining an easement for the work to be completed at the location of the bypass weir.

Deliverables:

- A copy of the recorded easement document

Task 3: Planning/Design/Engineering/Environmental Documentation – Budget Category (c)

Task 3 a) Assessment and Evaluation

This task consists of completing the planning assessment and feasibility studies prior to project development. This task also includes developing the 10%, 30% and 60% design plans and specifications.

Deliverables:

- A copy of the site assessment and feasibility studies
- A copy of the 60% design plans and specifications

Task 3 b) Planning/Design/Engineering

This task consists of finalizing project engineering designs (90% and 100%) for the project. Finalized 100% design/ engineering plans and specifications will be submitted to DWR.

Deliverables:

- A copy of the 100% complete design plans and specifications

Task 3 c) Environmental Documentation

This task consists of completing the required environmental compliance, completing any tribal notification, and environmental documentation as necessary.

Deliverables:

- Copy of environmental documents as required by CEQA

Task 3 d) Permitting

This task consists of acquiring all identified federal, state, and local permits. Work includes coordinating and complying with requirements for issuance of a permit.

Deliverables:

- Copy of all required permits

Task 3 e) Project Monitoring Plan

A Project Monitoring Plan (PMP) shall be submitted to the State prior to disbursement of grant funds for construction or monitoring activities for this Project. Along with the Attachment 6 Project Performance Measures Tables requirements for the Project, the PMP will also include: a) Baseline conditions, b) Brief discussion of monitoring systems to be utilized, c) Methodology of monitoring, d) Frequency of monitoring, and e) Location of monitoring points.

The LPS will lead work for monitoring and performances measures verification after Project completion. Costs for monitoring and performance measures are not included in the budget (funding match or grant award).

Deliverables:

- Project Monitoring Plan

Attachment 3

Grant Agreement No. 4600010575
Page 26 of 103

Task 4: Construction/Implementation – Budget Category (d)

Task 4 a) Construction Contracting

This task consists of construction contracting including solicitations for bids and awards of contracts.

Deliverables:

- Copy of bid package

Task 4 b) Project Construction

This task includes up to three integrated elements to reduce flooding in neighborhoods adjacent to Milliken Creek, through approximately 300 cubic yards of dam/fill materials removed, approximately 0.52 acres of stream restoration, construction of a flood bypass/weir, and minor grading and drainage improvements. This task consists of project construction activities, including but not limited to removal of in-stream dam, replacement of the bridge, installation of the bypass weir, and installation of property specific flood proofing. This task also includes all construction equipment and supplies.

Deliverables:

- Construction and post-construction photographs
- Certified engineer inspection completion report with final as-built drawings

Task 4 c) Environmental Compliance/ Mitigation/ Enhancement

This task consists of complying with general construction measures, pre-construction environmental assessments, development of Stormwater Pollution Prevention Plans compliance, and BMP inspections.

Deliverables:

- Example copies of the pre-construction environmental assessments and BMP inspection reports
- A copy of the NPDES compliance

Task 4 d) Construction Administration

This task consists of reviewing the contractor's schedule and recommendations, managing and coordinating the agencies and contractors involved with the project, and providing construction inspection tests and management oversight.

Deliverables:

- A copy of the inspection reports
- A copy of meeting minutes from construction management reports

Attachment 3

Grant Agreement No. 4600010575

Page 27 of 103

Project 6: Sonoma Valley CSD 5th Street East/McGill Road Recycled Water Project

This project is the second phase of the Sonoma Valley Recycled Water Project, extending existing recycled water pipelines from the Watmaugh Recycled Water pipeline to serve additional properties. Phase 2 will be implemented in two sub-projects, the 5th Street East Recycled Water Project and the McGill Recycled Water Project. The first sub-project constructs approximately 8,720 linear feet of new pipeline to connect to the exiting recycled water pipeline on Watmaugh Road. This pipeline provides recycled water to replace the current potable water used for landscape irrigation and irrigation of athletic fields and agricultural properties adjacent to the new pipeline at a later date. The 5th Street East Recycled Water Project will offset approximately 50 to 60 acre-feet of potable water annually. The second sub-project constructs approximately 700 linear feet of new pipeline to connect to an existing recycled water pipeline along McGill Road. This pipeline serves recycled water to agricultural properties on the east side of Highway 12 and will supply approximately 150 AFY of recycled water.

Task 1: Direct Project Administration – Budget Category (a)

Task 1 a) Project Administration

This task consists of the project administration responsibilities, which includes coordinating agency responsibilities and managing cost commitments. This task also includes providing other supporting documentation required for this grant agreement (e.g., financial statements, etc.).

Deliverables:

- Environmental Information Form (EIF)
- Financial Statements
- Other Applicable Project Deliverables

Task 1b) Quarterly Progress Reports

This task consists of preparing progress reports detailing work completed in prior quarter as outlined in Exhibit (G) of this agreement and submitting to the Grantee for its submittal to DWR review.

Deliverables:

- Quarterly Project Progress Report

Task 1c) Invoices

This task consists of preparing quarterly invoices including relevant supporting documentation for submittal to DWR via Grantee.

Deliverables:

- Quarterly Invoices and associated backup documentation

Task 1d) Draft and Final Project Completion Report

This task consists of preparing draft Final Project Completion Report and submitting to DWR via Grantee for DWR Project Manager's comment and review no later than 90 days after project completion. This task also consists of preparing the Final Report addressing Grantee/DWRs comments. The report shall be prepared and presented in accordance with the provision of Exhibit G.

Deliverables:

Draft and Final Project Completion Report

Task 1 e) Labor Compliance Program

This task consists of completing the required implementation of a Labor Compliance Program (LCP), if applicable. The Labor Compliance Plan will be compliant with Department of Industrial Relations standards and needs to be in place prior to any construction activities covered under this grant agreement.

Deliverables:

- Proof of Labor Compliance Plans for each project component

Attachment 3

Grant Agreement No. 4600010575
Page 28 of 103

Task 2: Land Purchase/Easement – Budget Category (b)

Task 2 a) Land Purchase/Easement Acquisition

This task consists of finalizing the negotiations for obtaining an easement for the work to be completed at the location of the recycled water sub-projects.

Deliverables:

- Copies of the recorded easement agreements

Task 3: Planning/Design/Engineering/Environmental Documentation – Budget Category (c)

Task 3 a) Assessment and Evaluation

This task consists of completing the planning assessment and feasibility studies prior to project development. This task also includes developing the 10%, 30% and 60% design plans and specifications.

Deliverables:

- A copy of the site assessment and feasibility studies
- A copy of the 60% design plans and specifications

Task 3 b) Planning/Design/Engineering

This task consists of finalizing project engineering designs (90% and 100%) for the project. Finalized 100% design/ engineering plans and specifications will be submitted to DWR.

Deliverables:

- A copy of the 100% complete design plans and specifications

Task 3 c) Environmental Documentation

This task consists of completing the required environmental compliance, completing any tribal notification, and environmental documentation as necessary.

Deliverables:

- Copy of environmental documents as required by CEQA

Task 3 d) Permitting

This task consists of acquiring all identified federal, state, and local permits. Work includes coordinating and complying with requirements for issuance of a permit.

Deliverables:

- Copy of all required permits

Task 3 e) Project Monitoring Plan

A Project Monitoring Plan (PMP) shall be submitted to the State prior to disbursement of grant funds for construction or monitoring activities for this Project. Along with the Attachment 6 Project Performance Measures Tables requirements for the Project, the PMP will also include: a) Baseline conditions, b) Brief discussion of monitoring systems to be utilized, c) Methodology of monitoring, d) Frequency of monitoring, and e) Location of monitoring points.

The LPS will lead work for monitoring and performances measures verification after Project completion. Costs for monitoring and performance measures are not included in the budget (funding match or grant award).

Deliverables:

- Project Monitoring Plan

Task 4: Construction/Implementation – Budget Category (d)

Task 4 a) Construction Contracting

DWR Prop 84 - Local Project Sponsor Agreement - IRWM 2

This task consists of construction contracting including solicitations for bids and awards of contracts.

Deliverables:

- Copy of bid package

Task 4 b) Mobilization and Site Preparation

This task consists of mobilization and site preparation including implementation of site security measures, installation of temporary sanitary facilities, implementation of site BMPs, clearing and grubbing, stockpile and material storage designation, and traffic control.

Deliverables:

- Pre-construction photographs

Task 4 c) Project Construction

This task includes constructing approximately 9,420 feet of new pipeline as an extension to two existing recycled water projects. This task consists of project construction activities, including the purchase and installation of pipeline, connection to existing pipelines and treatment facilities, and set up for future lateral connections. This task also includes all construction equipment and supplies.

Deliverables:

- Construction and post-construction photographs
- Certified engineer inspection completion report with final as-built drawings

Task 4 d) Performance Testing and Demobilization

This task consist of project performance testing and demobilization, including removal of all debris and construction spoils from the site, removal of excess materials, removal of temporary sanitary facilities, removal of equipment, transfer of site responsibility back to owner, and pipeline pressure testing, disinfection, pump tests, treatment performance testing, flow rate, and wastewater lab testing in compliance with National Pollutant Discharge Elimination System (NPDES) requirements.

Deliverables:

- Post-construction photographs

Task 4 e) Environmental Compliance/Mitigation/ Enhancement

This task consists of monitoring contractor compliance with general construction measures, environmental mitigation measures, and requirements of the biological opinion, as well as, contractor creation of a stormwater pollution prevention plan, traffic control plan, and hazardous materials management plan.

Deliverables:

- List of construction compliance measures, environmental mitigation measures, and requirements of the biological opinion
- Copies or links to the stormwater pollution prevention plan
- Copies or links to the traffic control plan
- Copies or links to the hazardous materials management plan

Task 4 f) Construction Administration

This task consists of reviewing the contractor's schedule and recommendations, managing and coordinating the agencies and contractors involved with the project, and providing construction inspection tests and management oversight.

Deliverables:

- A copy of the inspection reports
- A copy of meeting minutes from construction management reports

Attachment 3

Grant Agreement No. 4600010575
Page 30 of 103

Project 7: Oakland Sausal Creek Restoration Project

The Oakland Sausal Creek Restoration Project near Dimond Park in Oakland, California includes the removal of approximately 180 linear-feet of buried creek culvert and approximately 75 linear-feet of concrete spillway. The current culvert and concrete spillway create a barrier for fish passage as well as erosion problems. The project recreates a natural creek meander with pools and riffles, restores native vegetation and create approximately 47,000 square feet of new habitat, stabilizes creek banks, creates an ADA-accessible walking path adjacent to the creek with interpretive features to raise awareness of the creek, reduces erosion and downstream sedimentation, creates educational and recreational opportunities, and improves flood capacity, water quality, and fish habitat. The site will be revegetated with a diverse native plant palette that including approximately 79 trees, approximately 795 shrubs, and approximately 2,000 herbaceous perennials.

Task 1: Direct Project Administration – Budget Category (a)

Task 1 a) Project Administration

This task consists of the project administration responsibilities, which includes coordinating agency responsibilities and managing cost commitments. This task also includes providing other supporting documentation required for this grant agreement (e.g., financial statements, etc.).

Deliverables:

- Environmental Information Form (EIF)
- Financial Statements
- Other Applicable Project Deliverables

Task 1 b) Quarterly Progress Reports

This task consists of preparing progress reports detailing work completed in prior quarter as outlined in Exhibit (G) of this agreement and submitting to the Grantee for its submittal to DWR review.

Deliverables:

- Quarterly Project Progress Report

Task 1 c) Invoices

This task consists of preparing quarterly invoices including relevant supporting documentation for submittal to DWR via Grantee.

Deliverables:

- Quarterly Invoices and associated backup documentation

Task 1 d) Draft and Final Project Completion Report

This task consists of preparing draft Final Project Completion Report and submitting to DWR via Grantee for DWR Project Manager's comment and review no later than 90 days after project completion. This task also consists of preparing the Final Report addressing Grantee/DWRs comments. The report shall be prepared and presented in accordance with the provision of Exhibit G.

Deliverables:

Draft and Final Project Completion Report

Task 1 e) Labor Compliance Program

This task consists of completing the required implementation of a Labor Compliance Program (LCP), if applicable. The Labor Compliance Plan will be compliant with Department of Industrial Relations standards and needs to be in place prior to any construction activities covered under this grant agreement.

Deliverables:

- Proof of Labor Compliance Plans for each project component

Task 2: Land Purchase/Easement – Budget Category (b)

Task 2 a) Land Purchase/Easement Acquisition

This task consists of finalizing the negotiations for obtaining the final easement with the private property owner (12 out of 13 easements have been obtained) and with East Bay Municipal Utility district (EBMUD) for the work to be completed at the location of the recycled water sub-projects.

Deliverables:

- Copies of the recorded easement agreements
- Copy of EBMUD easement agreement

Task 3: Planning/Design/Engineering/Environmental Documentation – Budget Category (c)

Not applicable. Planning documents have been previously prepared to demonstrate the viability of the project. No further project planning studies are necessary.

Task 4: Construction/Implementation – Budget Category (d)

Task 4 a) Construction Contracting

This task consists of construction contracting including solicitations for bids and awards of contracts.

Deliverables:

- Copy of bid package

Task 4 b) Mobilization and Site Preparation

This task consists of mobilization and site preparation including implementation of site security measures, installation of temporary sanitary facilities, implementation of site BMPs, clearing and grubbing, stockpile and material storage designation, and traffic control.

Deliverables:

- Pre-construction photographs

Task 4 c) Project Construction

This task includes the physical restoration of Oakland Sausal Creek through removing approximately 180 linear-feet of buried creek culvert, removing approximately 75 linear-feet of concrete spillway, and revegetating approximately 47,000 square feet of new habitat. This task consists of project construction activities, including removal of the buried culvert and concrete spillway, creation of in-stream structures, restoration of native vegetation, stabilization of the creek banks, and creation of the education, ADA- certified walking path.

Deliverables:

- Construction photographs
- Certified engineer inspection completion report with final as-built drawings

Task 4 d) Performance Testing and Demobilization

This task consist of project performance testing and demobilization, including removal of all debris and construction spoils from the site, removal of excess materials, removal of temporary sanitary facilities, removal of equipment, transfer of site responsibility back to owner, and stormwater testing for contaminants and turbidity levels.

Deliverables:

- Post-construction photographs

Task 4 e) Environmental Compliance/ Mitigation/ Enhancement

Attachment 3

*Grant Agreement No. 4600010575
Page 32 of 103*

This task consists of complying with general construction measures, and creating an erosion and sediment control plan, stormwater pollution prevention plan, traffic control plan, a hazardous materials management plan, and any environmental restoration specifications.

Deliverables:

- A copy of the erosion and sediment control plan
- A copy of the stormwater pollution prevention plan
- A copy of the traffic control plan
- A copy of the hazardous materials management plan
- A copy of the environmental restoration specifications

Task 4 f) Construction Administration

This task consists of reviewing the contractor's schedule and recommendations, managing and coordinating the agencies and contractors involved with the project, and providing construction inspection tests and management oversight.

Deliverables:

- A copy of the inspection reports
- A copy of meeting minutes from construction management reports

Attachment 3

Grant Agreement No. 4600010575
Page 33 of 103**Project 8: Pescadero Water Supply and Sustainability Project**

This project constructs a new municipal groundwater well and approximately 140,000 gallon storage tank to provide adequate water supply, emergency response, water reliability, and groundwater improvement for the County Service Area 11 (CSA 11) Water System, which serves approximately 100 households within the Community of Pescadero. The new well and tank would be installed in close proximity to an existing water storage tank on a parcel currently owned by the County. The project provides a reliable water supply to the community without increasing the amount of extracted groundwater. The project also includes installation of a new alarm system, which will ensure that the operators are notified in the event of an emergency, pump shutdown, or low tank level. The project also includes implementing a water conservation program for the CSA 11 community by providing residents with low- or no-cost water-saving devices, such as high efficiency toilets/urinals and washers.

Task 1: Direct Project Administration – Budget Category (a)

Task 1 a) Project Administration

This task consists of the project administration responsibilities, which includes coordinating agency responsibilities and managing cost commitments. This task also includes providing other supporting documentation required for this grant agreement (e.g., financial statements, etc.).

Deliverables:

- Environmental Information Form (EIF)
- Financial Statements
- Other Applicable Project Deliverables

Task 1 b) Quarterly Progress Reports

This task consists of preparing progress reports detailing work completed in prior quarter as outlined in Exhibit (G) of this agreement and submitting to the Grantee for its submittal to DWR review.

Deliverables:

- Quarterly Project Progress Report

Task 1 c) Invoices

This task consists of preparing quarterly invoices including relevant supporting documentation for submittal to DWR via Grantee.

Deliverables:

- Quarterly Invoices and associated backup documentation

Task 1 d) Draft and Final Project Completion Report

This task consists of preparing draft Final Project Completion Report and submitting to DWR via Grantee for DWR Project Manager's comment and review no later than 90 days after project completion. This task also consists of preparing the Final Report addressing Grantee/DWRs comments. The report shall be prepared and presented in accordance with the provision of Exhibit G.

Deliverables:

Draft and Final Project Completion Report

Task 1 e) Labor Compliance Program

This task consists of completing the required implementation of a Labor Compliance Program (LCP), if applicable. The Labor Compliance Plan will be compliant with Department of Industrial Relations standards and needs to be in place prior to any construction activities covered under this grant agreement.

Deliverables:

- Proof of Labor Compliance Plans for each project component

DWR Prop 84 - Local Project Sponsor Agreement - IRWM 2

Attachment 3

Grant Agreement No. 4600010575
Page 34 of 103

Task 2: Land Purchase/Easement – Budget Category (b)

Not applicable. Land purchases and easements have already been completed.

Task 3: Planning/Design/Engineering/Environmental Documentation – Budget Category (c)

Task 3 a) Assessment and Evaluation

This task consists of completing a groundwater study for the project site, completing a disadvantaged community study, and completing 75% design plans and specifications.

Deliverables:

- A copy of the groundwater study
- A copy of the disadvantaged community study
- A copy of the 75% design plans and specifications

Task 3 b) Planning/Design/Engineering

This task consists of finalizing project designs (100%) with complete plans and specification for the well drilling, wells, and tanks designs. Finalized 100% design/ engineering plans and specifications will be submitted to DWR.

Deliverables:

- A copy of the 100% complete design plans and specifications

Task 3 c) Environmental Documentation

This task consists of completing the required environmental compliance, completing any tribal notification, and environmental documentation as necessary.

Deliverables:

- Copy of environmental documents as required by CEQA

Task 3 d) Permitting

This task consists of acquiring all identified federal, state, and local permits. Work includes coordinating and complying with requirements for issuance of a permit.

Deliverables:

- Copy of all required permits

Task 4: Construction/Implementation – Budget Category (d)

Task 4 a) Construction Contracting

This task consists of construction contracting including solicitations for bids and awards of contracts.

Deliverables:

- Copy of bid package

Task 4 b) Mobilization, Site Preparation, and Demobilization

This task consists of mobilization and site preparation including implementation of site security measures, installation of temporary sanitary facilities, implementation of site BMPs, clearing and grubbing, stockpile and material storage designation, and traffic control. This task also includes the removal of all mobilization efforts.

Deliverables:

- Pre-construction photographs and post-construction photographs

Task 4 c) Project Construction

This task includes the construction of a new municipal groundwater well and approximately 140,000 gallon storage tank. This task consists of project construction activities, including construction of a new groundwater well, construction of a storage tank, installation of a new alarm system and implementation of a water conservation program for the Pescadero community, which will consist of the distribution of water conservation educational materials and installation of water-saving devices, including high-efficiency toilets, urinals, and washers. This task also includes performance testing of the pump equipment, tank, alarm system and automatic shutoff.

Deliverables:

- Construction photographs
- Certified engineer inspection completion report with final as-built drawings
- List of completed device (toilet, urinal, and washer) installations

Task 4 d) Environmental Compliance/Mitigation/Enhancement

This task consists of complying with general construction standards, performing biological resources protection surveys and monitoring during construction, BMP implementation and monitoring, and post construction monitoring reports to permitting agencies where required.

Deliverables:

- A copy of biological resource surveys, as required
- A copy of the stormwater pollution prevention plan, as required
- A copy of post construction monitoring reports, as necessary

Task 4 e) Construction Administration

This task consists of reviewing the contractor's schedule and recommendations, managing and coordinating the agencies and contractors involved with the project, and providing construction inspection tests and management oversight.

Deliverables:

- A copy of the inspection reports
- A copy of meeting minutes from construction management reports

Attachment 3

Grant Agreement No. 4600010575
Page 36 of 103

Project 9: Petaluma Flood Impact Reduction, Water & Habitat Quality, Recreation for Capri Creek

This project consists of defined site treatments for approximately 1,400 linear feet of creek and approximately 3,200 linear feet of creek frontage along upland areas. This project consists of construction of flood terraces and channel reconfiguration to address flooding and water quality issues, increase groundwater recharge; improve upland and riparian habitat; increase recreational and public education opportunities; and sequester carbon in improved riparian and upland habitats. Approximately 11,000 cubic yards of excess cut will be removed from the site, the remodeled flood terrace, and the upper banks of the existing low flow channel; and new banks of the wider flood terrace, containing approximately five acres, will be planted with a combination of native grasses and mid- and tall-canopy trees. Clusters of native shrubs will be planted in relationship to the trail, benches, and educational kiosks.

Task 1: Direct Project Administration – Budget Category (a)

Task 1 a) Project Administration

This task consists of the project administration responsibilities, which includes coordinating agency responsibilities and managing cost commitments. This task also includes providing other supporting documentation required for this grant agreement (e.g., financial statements, etc.).

Deliverables:

- Environmental Information Form (EIF)
- Financial Statements
- Other Applicable Project Deliverables

Task 1 b) Quarterly Progress Reports

This task consists of preparing progress reports detailing work completed in prior quarter as outlined in Exhibit (G) of this agreement and submitting to the Grantee for its submittal to DWR review.

Deliverables:

- Quarterly Project Progress Report

Task 1 c) Invoices

This task consists of preparing quarterly invoices including relevant supporting documentation for submittal to DWR via Grantee.

Deliverables:

- Quarterly Invoices and associated backup documentation

Task 1 d) Draft and Final Project Completion Report

This task consists of preparing draft Final Project Completion Report and submitting to DWR via Grantee for DWR Project Manager's comment and review no later than 90 days after project completion. This task also consists of preparing the Final Report addressing Grantee/DWRs comments. The report shall be prepared and presented in accordance with the provision of Exhibit G.

Deliverables:

Draft and Final Project Completion Report

Task 1 e) Labor Compliance Program

This task consists of completing the required implementation of a Labor Compliance Program (LCP), if applicable. The Labor Compliance Plan will be compliant with Department of Industrial Relations standards and needs to be in place prior to any construction activities covered under this grant agreement.

Deliverables:

- Proof of Labor Compliance Plans for each project component

Task 2: Land Purchase/Easement – Budget Category (b)

Not applicable. The City currently owns the project sites.

Task 3: Planning/Design/Engineering/Environmental Documentation – Budget Category (c)

Task 3 a) Assessment and Evaluation

This task consists of completing the planning, environmental, and engineering assessments and feasibility studies prior to project development. This task also includes developing the 30% and 60% design plans and specifications.

Deliverables:

- A copy of the assessments and feasibility studies
- A copy of the 60% design plans and specifications

Task 3 b) Planning/Design/Engineering

This task consists of finalizing project engineering designs (90% and 100%) for the project. Finalized 100% design/ engineering plans and specifications will be submitted to DWR.

Deliverables:

- A copy of the 100% complete design plans and specifications

Task 3 c) Environmental Documentation

This task consists of completing the required environmental compliance, completing any tribal notification, and environmental documentation as necessary.

Deliverables:

- Copy of environmental documents as required by CEQA

Task 3 d) Permitting

This task consists of acquiring all identified federal, state, and local permits. Work includes coordinating and complying with requirements for issuance of a permit.

Deliverables:

- Copy of all required permits

Task 3 e) Project Monitoring Plan

A Project Monitoring Plan (PMP) shall be submitted to the State prior to disbursement of grant funds for construction or monitoring activities for this Project. Along with the Attachment 6 Project Performance Measures Tables requirements for the Project, the PMP will also include: a) Baseline conditions, b) Brief discussion of monitoring systems to be utilized, c) Methodology of monitoring, d) Frequency of monitoring, and e) Location of monitoring points.

The LPS will lead work for monitoring and performance measures verification after Project completion. Costs for monitoring and performance measures are not included in the budget (funding match or grant award).

Deliverables:

- Project Monitoring Plan

Task 4: Construction/Implementation – Budget Category (d)

Task 4 a) Construction Contracting

This task consists of construction contracting including solicitations for bids and awards of contracts.

Attachment 3

Grant Agreement No. 4600010575
Page 38 of 103

Deliverables:

- Copy of bid package

Task 4 b) Mobilization and Site Preparation

This task consists of mobilization and site preparation including implementation of site security measures, installation of temporary sanitary facilities, implementation of site BMPs, clearing and grubbing, stockpile and material storage designation, and traffic control.

Deliverables:

- Pre-construction photographs

Task 4 c) Project Construction

This task includes site treatment and stream restoration along approximately 1,400 linear feet of creek and approximately 3,200 linear feet of creek frontage along upland areas will be cut to remodel the flood terrace and upper banks of the existing channel along Capri Creek. This task consists of project construction activities, including construction of the flood terrace, upland habitat, trail, educational kiosks, and benches. This task includes the equipment and supplies costs for construction.

Deliverables:

- Construction photographs
- Certified engineer inspection completion report with final as-built drawings

Task 4 d) Performance Testing and Demobilization

This task consist of project performance testing and demobilization, including removal of all debris and construction spoils from the site, removal of excess materials, removal of temporary sanitary facilities, removal of equipment, transfer of site responsibility back to owner, and stormwater testing for contaminants and turbidity levels.

Deliverables:

- Post-construction photographs

Task 4 e) Environmental Compliance/ Mitigation/ Enhancement

This task consists of complying with general construction measures, and creating an erosion and sediment control plan, stormwater pollution prevention plan, traffic control plan, a hazardous materials management plan, and any environmental restoration specifications.

Deliverables:

- A copy of the erosion and sediment control plan
- A copy of the stormwater pollution prevention plan
- A copy of the traffic control plan
- A copy of the hazardous materials management plan
- A copy of the environmental restoration specifications

Task 4 f) Construction Administration

This task consists of reviewing the contractor's schedule and recommendations, managing and coordinating the agencies and contractors involved with the project, and providing construction inspection tests and management oversight.

Deliverables:

- A copy of the inspection reports
- A copy of meeting minutes from construction management reports

Attachment 3

Grant Agreement No. 4600010575

Page 39 of 103

Project 10: Redwood City Bayfront Canal and Atherton Channel Flood Improvement and Habitat Restoration Project

The Bayfront Canal/Atherton Channel Flood Improvement Project alleviates local flooding by routing flood flows from the Bayfront Canal and Atherton Channel into managed ponds that are part of the Ravenswood Pond Complex portion of the South Bay Salt Ponds Restoration Project. This project includes modification of the existing Cargill ditch for improved flow conveyance, and modifications to the Pond S5 forebay including excavation/deepening of this smaller portion of Pond S5 immediately adjacent to Flood Slough. Flood flows from the Bayfront Canal will bypass the Flood Slough tide gate and will be routed into Ponds R5 and S5 of the Ravenswood Pond Complex. The Bayfront Canal/Atherton Channel Flood Improvement Project supports habitat improvements of the seasonal freshwater wetlands locally within Ponds R5 and S5, and the larger South Bay Salt Ponds Restoration Project, while providing waterfowl habitat for special-status species such as the western snowy plover.

Task 1: Direct Project Administration – Budget Category (a)

Task 1 a) Project Administration

This task consists of the project administration responsibilities, which includes coordinating agency responsibilities and managing cost commitments. This task also includes providing other supporting documentation required for this grant agreement (e.g., financial statements, etc.).

Deliverables:

- Environmental Information Form (EIF)
- Financial Statements
- Other Applicable Project Deliverables

Task 1 b) Quarterly Progress Reports

This task consists of preparing progress reports detailing work completed in prior quarter as outlined in Exhibit (G) of this agreement and submitting to the Grantee for its submittal to DWR review.

Deliverables:

- Quarterly Project Progress Report

Task 1 c) Invoices

This task consists of preparing quarterly invoices including relevant supporting documentation for submittal to DWR via Grantee.

Deliverables:

- Quarterly Invoices and associated backup documentation

Task 1 d) Draft and Final Project Completion Report

This task consists of preparing draft Final Project Completion Report and submitting to DWR via Grantee for DWR Project Manager's comment and review no later than 90 days after project completion. This task also consists of preparing the Final Report addressing Grantee/DWR's comments. The report shall be prepared and presented in accordance with the provision of Exhibit G.

Deliverables:

- Draft and Final Project Completion Report

Task 1 e) Labor Compliance Program

This task consists of completing the required implementation of a Labor Compliance Program (LCP), if applicable. The Labor Compliance Plan will be compliant with Department of Industrial Relations standards and needs to be in place prior to any construction activities covered under this grant agreement.

Deliverables:

DWR Prop 84 - Local Project Sponsor Agreement - IRWM 2

Attachment 3

Grant Agreement No. 4600010575

Page 40 of 103

- Proof of Labor Compliance Plans for each project component

Task 2: Land Purchase/Easement – Budget Category (b)

Task 2 a) Land Purchase/Easement Acquisition

Not applicable. Land purchases and easements have already been completed.

Task 3: Planning/Design/Engineering/Environmental Documentation – Budget Category (c)

Task 3 a) Assessment and Evaluation

This task consists of completing the planning assessment and feasibility studies prior to project development. This task also includes developing the 10%, 30% and 60% design plans and specifications.

Deliverables:

- A copy of the site assessment and feasibility studies
- A copy of the 60% design plans and specifications

Task 3 b) Planning/Design/Engineering

This task consists of finalizing project engineering designs (90% and 100%) for the project. Finalized 100% design/engineering plans and specifications will be submitted to DWR.

Deliverables:

- A copy of the 100% complete design plans and specifications

Task 3 c) Environmental Documentation

This task consists of completing the required environmental compliance, completing any tribal notification, and environmental documentation as necessary.

Deliverables:

- Copy of environmental documents as required by CEQA

Task 3 d) Permitting

This task consists of acquiring all identified federal, state, and local permits. Work includes coordinating and complying with requirements for issuance of a permit.

Deliverables:

- Copy of all required permits

Task 3 e) Project Monitoring Plan

A Project Monitoring Plan (PMP) shall be submitted to the State prior to disbursement of grant funds for construction or monitoring activities for this Project. Along with the Attachment 6 Project Performance Measures Tables requirements for the Project, the PMP will also include: a) Baseline conditions, b) Brief discussion of monitoring systems to be utilized, c) Methodology of monitoring, d) Frequency of monitoring, and e) Location of monitoring points.

The LPS will lead work for monitoring and performance measures verification after Project completion. Costs for monitoring and performance measures are not included in the budget (funding match or grant award).

Deliverables:

- Project Monitoring Plan

Task 4: Construction/Implementation – Budget Category (d)

Task 4 a) Construction Contracting

DWR Prop 84 - Local Project Sponsor Agreement - IRWM 2

Attachment 3

*Grant Agreement No. 4600010575**Page 41 of 103*

This task consists of construction contracting including solicitations for bids and awards of contracts.

Deliverables:

- Copy of bid package

Task 4 b) Mobilization and Site Preparation

This task consists of mobilization and site preparation including implementation of site security measures, installation of temporary sanitary facilities, implementation of site BMPs, clearing and grubbing, stockpile and material storage designation, and traffic control.

Deliverables:

- Pre-construction photographs

Task 4 c) Project Construction

This task includes local flooding alleviation by routing flood flows from the Bayfront Canal and Atherton Channel into managed ponds that are part of the Ravenswood Pond Complex portion of the South Bay Salt Ponds Restoration Project. This task consists of modification of the existing Cargill ditch for improved flow conveyance, modifications to the Pond S5 forebay including excavation/deepening of this smaller portion of Pond S5 immediately adjacent to Flood Slough, and routing of flood flows from the Bayfront Canal into Ponds R5 and S5 of the Ravenswood Pond Complex, thereby bypassing the Flood Slough tide gate.

Deliverables:

- Construction photographs
- Certified engineer inspection completion report with final as-built drawings

Task 4 d) Performance Testing and Demobilization

This task consist of project performance testing and demobilization, including removal of all debris and construction spoils from the site, removal of excess materials, removal of temporary sanitary facilities, removal of equipment, transfer of site responsibility back to owner, and stormwater testing for contaminants and turbidity levels.

Deliverables:

- Post-construction photographs

Task 4 e) Environmental Compliance/ Mitigation/ Enhancement

This task consists of complying with general construction measures, and creating an erosion and sediment control plan, stormwater pollution prevention plan, traffic control plan, a hazardous materials management plan, and any environmental restoration specifications.

Deliverables:

- A copy of the erosion and sediment control plan
- A copy of the stormwater pollution prevention plan
- A copy of the traffic control plan
- A copy of the hazardous materials management plan
- A copy of the environmental restoration specifications

Task 4 f) Construction Administration

This task consists of reviewing the contractor's schedule and recommendations, managing and coordinating the agencies and contractors involved with the project, and providing construction inspection tests and management oversight.

Deliverables:

- A copy of the inspection reports
- A copy of meeting minutes from construction management reports

Attachment 3

Grant Agreement No. 4600010575

Page 42 of 103

Project 11: Regional Groundwater Storage and Recovery Project Phase 1A: South Westside Basin, Northern San Mateo County

This project constructs approximately five (5) groundwater wells located in Daly City, Colma, and South San Francisco. The wells will be drilled to approximately 550 and 750 feet deep. Phase 1A consists of well drilling, well construction, well development and pump testing. The Regional Groundwater Storage and Recovery (GSR) Project is part of San Francisco Public Utilities Commission's Water System Improvement Program (WSIP), with the goal of developing a local groundwater supply for use during drought conditions. When complete and operational, the project will store up to 60,500 acre-feet in the South Westside Groundwater Basin, a capacity that would provide approximately 7.5 years of dry year supply.

Task 1: Direct Project Administration – Budget Category (a)

Task 1 a) Project Administration

This task consists of the project administration responsibilities, which includes coordinating agency responsibilities and managing cost commitments. This task also includes providing other supporting documentation required for this grant agreement (e.g., financial statements, etc.).

Deliverables:

- Environmental Information Form (EIF)
- Financial Statements
- Other Applicable Project Deliverables

Task 1 b) Quarterly Progress Reports

This task consists of preparing progress reports detailing work completed in prior quarter as outlined in Exhibit (G) of this agreement and submitting to the Grantee for its submittal to DWR review.

Deliverables:

- Quarterly Project Progress Report

Task 1 c) Invoices

This task consists of preparing quarterly invoices including relevant supporting documentation for submittal to DWR via Grantee.

Deliverables:

- Quarterly Invoices and associated backup documentation

Task 1 d) Draft and Final Project Completion Report

This task consists of preparing draft Final Project Completion Report and submitting to DWR via Grantee for DWR Project Manager's comment and review no later than 90 days after project completion. This task also consists of preparing the Final Report addressing Grantee/DWR's comments. The report shall be prepared and presented in accordance with the provision of Exhibit G.

Deliverables:

- Draft and Final Project Completion Report

Task 1 e) Labor Compliance Program

This task consists of completing the required implementation of a Labor Compliance Program (LCP), if applicable. The Labor Compliance Plan will be compliant with Department of Industrial Relations standards and needs to be in place prior to any construction activities covered under this grant agreement.

Deliverables:

- Proof of Labor Compliance Plans for each project component

DWR Prop 84 - Local Project Sponsor Agreement - IRWM 2

Attachment 3

Grant Agreement No. 4600010575

Page 43 of 103

Task 2: Land Purchase/Easement – Budget Category (b)

Task 2 a) Land Purchase/Easement Acquisition

Not applicable. Land purchases and easements have already been completed.

Task 3: Planning/Design/Engineering/Environmental Documentation – Budget Category (c)

Not applicable. Planning/Design/Engineering/Environmental Documentation have already been completed.

Task 4: Construction/Implementation – Budget Category (d)

Task 4 a) Construction Contracting

This task consists of construction contracting including solicitations for bids and awards of contracts.

Deliverables:

- Copy of bid package

Task 4 b) Mobilization and Site Preparation

This task consists of mobilization and site preparation including implementation of site security measures, installation of temporary sanitary facilities, implementation of site BMPs, clearing and grubbing, stockpile and material storage designation, and traffic control.

Deliverables:

- Pre-construction photographs

Task 4 c) Project Construction

This project constructs approximately five (5) groundwater wells located in Daly City, Colma, and South San Francisco, each between approximately 550 and 750 feet deep. This task consists of project construction activities, including well drilling, well construction, well development and pump testing.

Deliverables:

- Construction photographs
- Certified engineer inspection completion report with final as-built drawings

Task 4 d) Performance Testing and Demobilization

This task consist of project performance testing and demobilization, including removal of all debris and construction spoils from the site, removal of excess materials, removal of temporary sanitary facilities, removal of equipment, transfer of site responsibility back to owner, and stormwater testing for contaminants and turbidity levels.

Deliverables:

- Post-construction photographs

Attachment 3

Grant Agreement No. 4600010575

Page 44 of 103

Project 12: Richmond Breuner Marsh Restoration Project

This project includes the restoration of approximately 164 acres of crucial habitat in Breuner Marsh at Point Pinole Regional Shoreline Park in the northwest part of the city of Richmond on the San Francisco Bay shoreline, Contra Costa County, California. The goal of this wetland restoration project is to provide long-term, self-sustaining tidal wetlands, seasonal wetlands, and coastal prairie to create valuable habitat for special-status species and for public access for compatible passive recreation and public education. Public access improvements will include interpretive exhibits and provide for new naturalist-lead tours of the restored marsh, as well as promote public health by increasing outdoor recreational opportunities for the adjacent under-served community of primarily low-income and minority residents.

Task 1: Direct Project Administration – Budget Category (a)

Task 1 a) Project Administration

This task consists of the project administration responsibilities, which includes coordinating agency responsibilities and managing cost commitments. This task also includes providing other supporting documentation required for this grant agreement (e.g., financial statements, etc.).

Deliverables:

- Environmental Information Form (EIF)
- Financial Statements
- Other Applicable Project Deliverables

Task 1 b) Quarterly Progress Reports

This task consists of preparing progress reports detailing work completed in prior quarter as outlined in Exhibit (G) of this agreement and submitting to the Grantee for its submittal to DWR review.

Deliverables:

- Quarterly Project Progress Report

Task 1 c) Invoices

This task consists of preparing quarterly invoices including relevant supporting documentation for submittal to DWR via Grantee.

Deliverables:

- Quarterly Invoices and associated backup documentation

Task 1 d) Draft and Final Project Completion Report

This task consists of preparing draft Final Project Completion Report and submitting to DWR via Grantee for DWR Project Manager's comment and review no later than 90 days after project completion. This task also consists of preparing the Final Report addressing Grantee/DWR's comments. The report shall be prepared and presented in accordance with the provision of Exhibit G.

Deliverables:

Draft and Final Project Completion Report

Task 1 e) Labor Compliance Program

This task consists of completing the required implementation of a Labor Compliance Program (LCP), if applicable. The Labor Compliance Plan will be compliant with Department of Industrial Relations standards and needs to be in place prior to any construction activities covered under this grant agreement.

Deliverables:

- Proof of Labor Compliance Plans for each project component

Task 2: Land Purchase/Easement – Budget Category (b)

Not applicable. Land purchases and easements have already been completed.

Task 3: Planning/Design/Engineering/Environmental Documentation – Budget Category (c)

Task 3 a) Assessment and Evaluation

This task consists of completing the planning assessment and feasibility studies prior to project development. This task also includes developing the 10%, 30% and 60% design plans and specifications.

Deliverables:

- A copy of the site assessment and feasibility studies
- A copy of the 60% design plans and specifications

Task 3 b) Planning/Design/Engineering

This task consists of finalizing project engineering designs (90% and 100%) for the project. Finalized 100% design/ engineering plans and specifications will be submitted to DWR.

Deliverables:

- A copy of the 100% complete design plans and specifications

Task 3 c) Environmental Documentation

This task consists of completing the required environmental compliance, completing any tribal notification, and environmental documentation as necessary.

Deliverables:

- Copy of environmental documents as required by CEQA

Task 3 d) Permitting

This task consists of acquiring all identified federal, state, and local permits. Work includes coordinating and complying with requirements for issuance of a permit.

Deliverables:

- Copy of all required permits

Task 3 e) Project Monitoring Plan

A Project Monitoring Plan (PMP) shall be submitted to the State prior to disbursement of grant funds for construction or monitoring activities for this Project. Along with the Attachment 6 Project Performance Measures Tables requirements for the Project, the PMP will also include: a) Baseline conditions, b) Brief discussion of monitoring systems to be utilized, c) Methodology of monitoring, d) Frequency of monitoring, and e) Location of monitoring points.

The LPS will lead work for monitoring and performances measures verification after Project completion. Costs for monitoring and performance measures are not included in the budget (funding match or grant award).

Deliverables:

- Project Monitoring Plan

Task 4: Construction/Implementation – Budget Category (d)

Task 4 a) Construction Contracting

This task consists of construction contracting including solicitations for bids and awards of contracts.

Deliverables:

- Copy of bid package

Task 4 b) Mobilization and Site Preparation

Attachment 3

*Grant Agreement No. 4600010575**Page 46 of 103*

This task consists of mobilization and site preparation including implementation of site security measures, installation of temporary sanitary facilities, implementation of site BMPs, clearing and grubbing, stockpile and material storage designation, and traffic control.

Deliverables:

- Pre-construction photographs

Task 4 c) Project Construction

This task includes the restoration of approximately 164 acres of crucial habitat in Breuner Marsh at Point Pinole Regional Shoreline Park. This task consists of project construction activities, including restoration of a approximately 61 acres of tidal wetland areas, 7 acres of seasonal wetland areas, and 96 coastal prairie/transitional/upland areas, and installation of interpretive exhibits along the shoreline.

Deliverables:

- Construction photographs
- Certified engineer inspection completion report with final as-built drawings

Task 4 d) Performance Testing and Demobilization

This task consist of project performance testing and demobilization, including removal of all debris and construction spoils from the site, removal of excess materials, removal of temporary sanitary facilities, removal of equipment, transfer of site responsibility back to owner, and stormwater testing for contaminants and turbidity levels.

Deliverables:

- Post-construction photographs

Task 4 e) Environmental Compliance/ Mitigation/ Enhancement

This task consists of complying with general construction measures, and creating an erosion and sediment control plan, stormwater pollution prevention plan, a hazardous materials management plan, and any environmental restoration specifications.

Deliverables:

- A copy of the erosion and sediment control plan
- A copy of the stormwater pollution prevention plan
- A copy of the hazardous materials management plan
- A copy of the environmental restoration specifications

Task 4 f) Construction Administration

This task consists of reviewing the contractor's schedule and recommendations, managing and coordinating the agencies and contractors involved with the project, and providing construction inspection tests and management oversight.

Deliverables:

- A copy of the inspection reports
- A copy of meeting minutes from construction management reports

Attachment 3

Grant Agreement No. 4600010575

Page 47 of 103

Project 13: Roseview Heights Infrastructure Upgrades for Water Supply and Quality Improvement**Project**

The Roseview Heights Infrastructure Upgrades for Water Supply and Quality Improvement Project involves replacing two aging redwood water tanks (a 70,000 gallon tank and a 10,000 gallon tank) with two bolted steel tanks (165,000 gallons and 50,000 gallons, respectively). The project also includes replacement of a galvanized water line with a high-density polyethylene (HDPE) water main and installation of an additional fire hydrant. The project will allow either tank to be taken offline for maintenance, while allowing for uninterrupted water supply delivery. The project includes multiple construction phases in order to maintain water supply and fire suppression capability during construction.

By eliminating the leaks associated with the old redwood tanks, the project will result in approximately 25% water savings throughout the entire system, an annual savings of approximately 3 million gallons/year. Energy savings will also be realized, as 25% less water will have to be pumped. Fire suppression capability will be enhanced with the increase in available stored water, increase in the water main size for fire flow, and the added fire hydrant. Additionally, smaller quantities of treatment chemicals will be required to store and distribute water supplies compared to existing conditions. Water quality will improve due to less debris in the water, and chlorine residuals will be easier to maintain at the furthest ends of the water system with the replacement of the redwood water tanks.

Task 1: Direct Project Administration – Budget Category (a)

Task 1 a) Project Administration

This task consists of the project administration responsibilities, which includes coordinating agency responsibilities and managing cost commitments. This task also includes providing other supporting documentation required for this grant agreement (e.g., financial statements, etc.).

Deliverables:

- Environmental Information Form (EIF)
- Financial Statements
- Other Applicable Project Deliverables

Task 1b) Quarterly Progress Reports

This task consists of preparing progress reports detailing work completed in prior quarter as outlined in Exhibit (G) of this agreement and submitting to the Grantee for its submittal to DWR review.

Deliverables:

- Quarterly Project Progress Report

Task 1c) Invoices

This task consists of preparing quarterly invoices including relevant supporting documentation for submittal to DWR via Grantee.

Deliverables:

- Quarterly Invoices and associated backup documentation

Task 1d) Draft and Final Project Completion Report

This task consists of preparing draft Final Project Completion Report and submitting to DWR via Grantee for DWR Project Manager's comment and review no later than 90 days after project completion. This task also consists of preparing the Final Report addressing Grantee/DWR's comments. The report shall be prepared and presented in accordance with the provision of Exhibit G.

Deliverables:

Draft and Final Project Completion Report

DWR Prop 84 - Local Project Sponsor Agreement - IRWM 2

Attachment 3

Grant Agreement No. 4600010575
Page 48 of 103

Task 1 e) Labor Compliance Program

This task consists of completing the required implementation of a Labor Compliance Program (LCP), if applicable. The Labor Compliance Plan will be compliant with Department of Industrial Relations standards and needs to be in place prior to any construction activities covered under this grant agreement.

Deliverables:

- Proof of Labor Compliance Plans for each project component

Task 2: Land Purchase/Easement – Budget Category (b)

Task 2 a) Land Purchase/Easement Acquisition

This task consists of finalizing the negotiations for obtaining an easement for the work to be completed at the location of the recycled water sub-projects.

Deliverables:

- Copies of the recorded easement agreements

Task 3: Planning/Design/Engineering/Environmental Documentation – Budget Category (c)

Task 3 a) Assessment and Evaluation

This task consists of completing the planning assessment and feasibility studies prior to project development. This task also includes developing the 10%, 30% and 60% design plans and specifications.

Deliverables:

- A copy of the site assessment and feasibility studies
- A copy of the 60% design plans and specifications

Task 3 b) Planning/Design/Engineering

This task consists of finalizing project engineering designs (90% and 100%) for the project. Finalized 100% design/engineering plans and specifications will be submitted to DWR.

Deliverables:

- A copy of the 100% complete design plans and specifications

Task 3 c) Environmental Documentation

This task consists of completing the required environmental compliance, completing any tribal notification, and environmental documentation as necessary.

Deliverables:

- Copy of environmental documents as required by CEQA

Task 3 d) Permitting

This task consists of acquiring all identified federal, state, and local permits. Work includes coordinating and complying with requirements for issuance of a permit.

Deliverables:

- Copy of all required permits

Task 3 e) Project Monitoring Plan

A Project Monitoring Plan (PMP) shall be submitted to the State prior to disbursement of grant funds for construction or monitoring activities for this Project. Along with the Attachment 6 Project Performance Measures Tables requirements for the Project, the PMP will also include: a) Baseline conditions, b) Brief discussion of monitoring systems to be utilized, c) Methodology of monitoring, d) Frequency of monitoring, and e) Location of monitoring points.

Attachment 3

Grant Agreement No. 4600010575
Page 49 of 103

The LPS will lead work for monitoring and performances measures verification after Project completion. Costs for monitoring and performance measures are not included in the budget (funding match or grant award).
Deliverables:

- Project Monitoring Plan

Task 4: Construction/Implementation – Budget Category (d)

Task 4 a) Construction Contracting

This task consists of construction contracting including solicitations for bids and awards of contracts.

Deliverables:

- Copy of bid package

Task 4 b) Mobilization and Site Preparation

This task consists of mobilization and site preparation including implementation of site security measures, installation of temporary sanitary facilities, implementation of site BMPs, clearing and grubbing, and stockpile and material storage designation.

Deliverables:

- Pre-construction photographs

Task 4 c) Project Construction

This task includes upgrading and increasing the capacity of two aging redwood water tanks with two bolted steel tanks, approximately (165,000 gallons and 50,000 gallons, respectively). This task consists of project construction activities, including installation of the temporary water storage tanks, adding the new water main, replacing the Crothers Road tank, and replacing the Bon Vista Court tank.

Deliverables:

- Construction photographs
- Certified engineer inspection completion report with final as-built drawings

Task 4 d) Performance Testing and Demobilization

This task consist of project performance testing and demobilization, including removal of all debris and construction spoils from the site, removal of excess materials, removal of temporary sanitary facilities, removal of equipment, transfer of site responsibility back to owner, and testing and approval of pressure, leakage, and disinfection.

Deliverables:

- Post-construction photographs

Task 4 e) Environmental Compliance/ Mitigation/ Enhancement

This task consists of complying with general construction measures, and creating an erosion and sediment control plan and a hazardous materials management plan.

Deliverables:

- A copy of the erosion and sediment control plan
- A copy of the hazardous materials management plan

Task 4 f) Construction Administration

This task consists of reviewing the contractor's schedule and recommendations, managing and coordinating the agencies and contractors involved with the project, and providing construction inspection tests and management oversight.

Attachment 3

*Grant Agreement No. 4600010575
Page 50 of 103*

Deliverables:

- A copy of the inspection reports
- A copy of meeting minutes from construction management reports

Project 14: San Francisco Bay Climate Change Pilot Projects Combining Ecosystem Adaptation, Flood Risk Management and Wastewater Effluent Polishing

The ecotone slope at the Oro Loma Sanitation District (OLSD)'s Water Pollution Control Facility in San Lorenzo, CA will be the first Bay Area project to replicate an engineered equivalent of moist grassland/bayland ecotone of broad, flat alluvial fans that were historically graded into the tidal marshes of most of South San Francisco Bay. This demonstration project creates a regional strategy to assist publically owned treatment works (POTWs) and populations around the Bay to recognize benefits of climate change adaptation strategies and implement large-scale ecotone slope projects around San Francisco Bay.

This project includes construction of an approximately 8 million gallon wet weather equalization facility, construction of approximately 700 feet of seepage ecotone slope, creation of approximately 2.4 acres of rare native moist grassland/baylands ecotone, establishment of a diverse palette of native plants, and mixing with more salt tolerant species near the upper tidal edges. The project will also incorporate a dual use - average flow wetland and a peak flow storage pond. These features will restore a historical moist grassland/baylands ecotone, while treating reclaimed wastewater from equalization facilities and increasing resilience to sea level rise. Lastly, this project includes the development, implementation and analysis of a robust monitoring program, development of design guidelines and implementation recommendations, publication and dissemination of a Final Report on the demonstration project, and publication of the results of outreach to POTWs and interested parties.

Task 1: Direct Project Administration – Budget Category (a)

Task 1 a) Project Administration

This task consists of the project administration responsibilities, which includes coordinating agency responsibilities and managing cost commitments. This task also includes providing other supporting documentation required for this grant agreement (e.g., financial statements, etc.).

Deliverables:

- Environmental Information Form (EIF)
- Financial Statements
- Other Applicable Project Deliverables

Task 1 b) Quarterly Progress Reports

This task consists of preparing progress reports detailing work completed in prior quarter as outlined in Exhibit (G) of this agreement and submitting to the Grantee for its submittal to DWR review.

Deliverables:

- Quarterly Project Progress Report

Task 1 c) Invoices

This task consists of preparing quarterly invoices including relevant supporting documentation for submittal to DWR via Grantee.

Deliverables:

- Quarterly Invoices and associated backup documentation

Task 1 d) Draft and Final Project Completion Report

This task consists of preparing draft Final Project Completion Report and submitting to DWR via Grantee for DWR Project Manager's comment and review no later than 90 days after project completion. This task also consists of preparing the Final Report addressing Grantee/DWR's comments. The report shall be prepared and presented in accordance with the provision of Exhibit G.

Deliverables:

Draft and Final Project Completion Report

Task 1 e) Labor Compliance Program

Attachment 3

Grant Agreement No. 4600010575
Page 52 of 103

This task consists of completing the required implementation of a Labor Compliance Program (LCP), if applicable. The Labor Compliance Plan will be compliant with Department of Industrial Relations standards and needs to be in place prior to any construction activities covered under this grant agreement.

Deliverables:

- Proof of Labor Compliance Plans for each project component

Task 2: Land Purchase/Easement – Budget Category (b)

Not applicable. The project will be implemented on land currently under control of the Project Proponent.

Task 3: Planning/Design/Engineering/Environmental Documentation – Budget Category (c)

Task 3 a) Assessment and Evaluation

This task consists of completing the planning assessment and feasibility studies prior to project development. This task also includes developing the 10%, 30% and 60% design plans and specifications.

Deliverables:

- A copy of the site assessment and feasibility studies
- A copy of the 60% design plans and specifications

Task 3 b) Planning/Design/Engineering

This task consists of finalizing project engineering designs (90% and 100%) for the project. Finalized 100% design/ engineering plans and specifications will be submitted to DWR.

Deliverables:

- A copy of the 100% complete design plans and specifications

Task 3 c) Environmental Documentation

This task consists of completing the required environmental compliance, completing any tribal notification, and environmental documentation as necessary.

Deliverables:

- Copy of environmental documents as required by CEQA

Task 3 d) Permitting

This task consists of acquiring all identified federal, state, and local permits. Work includes coordinating and complying with requirements for issuance of a permit.

Deliverables:

- Copy of all required permits

Task 3 e) Project Monitoring Plan

A Project Monitoring Plan (PMP) shall be submitted to the State prior to disbursement of grant funds for construction or monitoring activities for this Project. The PMP will also include: a) Baseline conditions, b) Brief discussion of monitoring systems to be utilized, c) Methodology of monitoring, d) Frequency of monitoring, and e) Location of monitoring points.

The LPS will lead work for monitoring and performances measures verification after Project completion. Costs for monitoring and performance measures are not included in the budget (funding match or grant award).

Deliverables:

- Project Monitoring Plan

Task 4: Construction/Implementation – Budget Category (d)

Task 4 a) Construction Contracting

This task consists of construction contracting including solicitations for bids and awards of contracts.

Deliverables:

- Copy of bid package

Task 4 b) Mobilization and Site Preparation

This task consists of mobilization and site preparation including implementation of site security measures, installation of temporary sanitary facilities, implementation of site BMPs, clearing and grubbing, and stockpile and material storage designation.

Deliverables:

- Pre-construction photographs

Task 4 c) Project Construction

This task consists of project construction activities, including construction of an approximately 8 million gallon wet weather equalization facility, construction of approximately 700 feet of seepage ecotone slope, creation of approximately 2.4 acres of grassland/baylands ecotone, development, implementation and analysis of a robust monitoring program, development of design guidelines and implementation recommendations, publication and dissemination of a Final Report on the demonstration project, and publication of the results of outreach to POTWs and interested parties.

Deliverables:

- Construction photographs
- A copy of the final demonstration report
- Copies of publication materials
- Certified engineer inspection completion report with final as-built drawings

Task 4 d) Performance Testing and Demobilization

This task consist of project performance testing and demobilization, including removal of all debris and construction spoils from the site, removal of excess materials, removal of temporary sanitary facilities, removal of equipment, transfer of site responsibility back to owner, and stormwater testing for contaminants and turbidity levels.

Deliverables:

- Post-construction photographs

Task 4 e) Environmental Compliance/ Mitigation/ Enhancement

This task consists of complying with general construction measures, and creating an erosion and sediment control plan and a stormwater pollution prevention plan (NPDES compliance).

Deliverables:

- A copy of the erosion and sediment control plan
- A copy of the stormwater pollution prevention plan

Task 4 f) Construction Administration

This task consists of reviewing the contractor's schedule and recommendations, managing and coordinating the agencies and contractors involved with the project, and providing construction inspection tests and management oversight.

Deliverables:

- A copy of the inspection reports
- A copy of meeting minutes from construction management reports

Attachment 3

Grant Agreement No. 4600010575
Page 54 of 103

Project 15: San Francisco International Airport Reclaimed Water Facility

This project includes upgrading the existing Mel Leong Tertiary Treatment Plant at the San Francisco International Airport (SFIA) to produce approximately 1.0 MGD of disinfected recycled water for unrestricted non-potable uses throughout the SFIA, including landscape irrigation and urban reuse. The treatment upgrade includes the combined use of membrane microfiltration and hypochlorite disinfection. The upgrade includes constructing new pipes, pumps, and water storage tanks in order to store the water onsite.

Task 1: Direct Project Administration – Budget Category (a)

Task 1 a) Project Administration

This task consists of the project administration responsibilities, which includes coordinating agency responsibilities and managing cost commitments. This task also includes providing other supporting documentation required for this grant agreement (e.g., financial statements, etc.).

Deliverables:

- Environmental Information Form (EIF)
- Financial Statements
- Other Applicable Project Deliverables

Task 1b) Quarterly Progress Reports

This task consists of preparing progress reports detailing work completed in prior quarter as outlined in Exhibit (G) of this agreement and submitting to the Grantee for its submittal to DWR review.

Deliverables:

- Quarterly Project Progress Report

Task 1c) Invoices

This task consists of preparing quarterly invoices including relevant supporting documentation for submittal to DWR via Grantee.

Deliverables:

- Quarterly Invoices and associated backup documentation

Task 1d) Draft and Final Project Completion Report

This task consists of preparing draft Final Project Completion Report and submitting to DWR via Grantee for DWR Project Manager's comment and review no later than 90 days after project completion. This task also consists of preparing the Final Report addressing Grantee/DWR's comments. The report shall be prepared and presented in accordance with the provision of Exhibit G.

Deliverables:

Draft and Final Project Completion Report

Task 1 e) Labor Compliance Program

This task consists of completing the required implementation of a Labor Compliance Program (LCP), if applicable. The Labor Compliance Plan will be compliant with Department of Industrial Relations standards and needs to be in place prior to any construction activities covered under this grant agreement.

Deliverables:

- Proof of Labor Compliance Plans for each project component

Task 2: Land Purchase/Easement – Budget Category (b)

Not applicable. The project will be constructed within existing Airport property.

Attachment 3

Grant Agreement No. 4600010575
Page 55 of 103

Task 3: Planning/Design/Engineering/Environmental Documentation – Budget Category (c)

Task 3 a) Assessment and Evaluation

This task consists of completing the planning assessment and feasibility studies prior to project development. This task also includes developing the 30% design plans and specifications.

Deliverables:

- A copy of the site assessment and feasibility studies
- A copy of the 30% design plans and specifications

Task 3 b) Planning/Design/Engineering

This task consists of finalizing project engineering designs (90% and 100%) for the project. Finalized 100% design/engineering plans and specifications will be submitted to DWR.

Deliverables:

- A copy of the 100% complete design plans and specifications

Task 3 c) Environmental Documentation

This task consists of completing the required environmental compliance, completing any tribal notification, and environmental documentation as necessary.

Deliverables:

- Copy of environmental documents as required by CEQA

Task 3 d) Permitting

This task consists of acquiring all identified federal, state, and local permits. Work includes coordinating and complying with requirements for issuance of a permit.

Deliverables:

- Copy of all required permits

Task 3 e) Project Monitoring Plan

A Project Monitoring Plan (PMP) shall be submitted to the State prior to disbursement of grant funds for construction or monitoring activities for this Project. The PMP will also include: a) Baseline conditions, b) Brief discussion of monitoring systems to be utilized, c) Methodology of monitoring, d) Frequency of monitoring, and e) Location of monitoring points.

The LPS will lead work for monitoring and performances measures verification after Project completion. Costs for monitoring and performance measures are not included in the budget (funding match or grant award).

Deliverables:

- Project Monitoring Plan

Task 4: Construction/Implementation – Budget Category (d)

Task 4 a) Construction Contracting

This task consists of construction contracting including solicitations for bids and awards of contracts.

Deliverables:

- Copy of bid package

Task 4 b) Mobilization and Site Preparation

Attachment 3

Grant Agreement No. 4600010575
Page 56 of 103

This task consists of mobilization and site preparation including implementation of site security measures, installation of temporary sanitary facilities, implementation of site BMPs, clearing and grubbing, and stockpile and material storage designation.

Deliverables:

- Pre-construction photographs

Task 4 c) Project Construction

This task includes upgrading an existing tertiary treatment plant at the San Francisco International Airport (SFIA) to produce approximately 1.0 MGD of disinfected recycled water for unrestricted non-potable uses throughout the SFIA, including landscape irrigation and urban reuse. This task consists of project construction activities, including upgrades to the treatment facility, installation of membrane microfiltration and hypochlorite disinfection, and construction of one 325,000 gallon recycled water storage tank on the treatment plant site. Recycled water distribution around the airport will be provided in subsequent projects.

Deliverables:

- Construction photographs
- Certified engineer inspection completion report with final as-built drawings

Task 4 d) Performance Testing and Demobilization

This task consist of project performance testing and demobilization, including removal of all debris and construction spoils from the site, removal of excess materials, removal of temporary sanitary facilities, removal of equipment, transfer of site responsibility back to owner, and stormwater testing for contaminants and turbidity levels.

Deliverables:

- Post-construction photographs

Task 4 e) Environmental Compliance/ Mitigation/ Enhancement

This task consists of complying with general construction measures, and creating an erosion and sediment control plan and a stormwater pollution prevention plan (NPDES compliance).

Deliverables:

- A copy of the erosion and sediment control plan
- A copy of the stormwater pollution prevention plan

Task 4 f) Construction Administration

This task consists of reviewing the contractor's schedule and recommendations, managing and coordinating the agencies and contractors involved with the project, and providing construction inspection tests and management oversight.

Deliverables:

- A copy of the inspection reports
- A copy of meeting minutes from construction management reports

Attachment 3

Grant Agreement No. 4600010575
Page 57 of 103

Project 16: San Jose Green Street Demonstration Project

The San José Green Street Demonstration Project will use Low Impact Development (LID) methods that have been proven to reduce the overall volume of runoff and to provide treatment to previously untreated flows. The Green Street Demonstration project area drains untreated runoff to storm drains that discharge to the Guadalupe River. This project includes improvements along a residential collector-type street to demonstrate a range of approaches for retrofitting existing urban streets with LID stormwater management features.

Task 1: Direct Project Administration – Budget Category (a)

Task 1 a) Project Administration

This task consists of the project administration responsibilities, which includes coordinating agency responsibilities and managing cost commitments. This task also includes providing other supporting documentation required for this grant agreement (e.g., financial statements, etc.).

Deliverables:

- Environmental Information Form (EIF)
- Financial Statements
- Other Applicable Project Deliverables

Task 1b) Quarterly Progress Reports

This task consists of preparing progress reports detailing work completed in prior quarter as outlined in Exhibit (G) of this agreement and submitting to the Grantee for its submittal to DWR review.

Deliverables:

- Quarterly Project Progress Report

Task 1c) Invoices

This task consists of preparing quarterly invoices including relevant supporting documentation for submittal to DWR via Grantee.

Deliverables:

- Quarterly Invoices and associated backup documentation

Task 1d) Draft and Final Project Completion Report

This task consists of preparing draft Final Project Completion Report and submitting to DWR via Grantee for DWR Project Manager's comment and review no later than 90 days after project completion. This task also consists of preparing the Final Report addressing Grantee/DWR's comments. The report shall be prepared and presented in accordance with the provision of Exhibit G.

Deliverables:

- Draft and Final Project Completion Report

Task 1 e) Labor Compliance Program

This task consists of completing the required implementation of a Labor Compliance Program (LCP), if applicable. The Labor Compliance Plan will be compliant with Department of Industrial Relations standards and needs to be in place prior to any construction activities covered under this grant agreement.

Deliverables:

- Proof of Labor Compliance Plans for each project component

Task 2: Land Purchase/ Easement – Budget Category (b)

Not applicable. All impacted land is public right-of-way.

Attachment 3

Grant Agreement No. 4600010575
Page 58 of 103

Task 3: Planning/Design/Engineering/Environmental Documentation – Budget Category (c)

Task 3 a) Assessment and Evaluation

This task consists of completing the planning assessment and feasibility studies prior to project development. This task also includes developing the 10%, 35% and 65% design plans and specifications.

Deliverables:

- A copy of the site assessment and feasibility studies
- A copy of the 65% design plans and specifications

Task 3 b) Planning/Design/Engineering

This task consists of finalizing project engineering designs (95% and 100%) for the project. Finalized 100% design/ engineering plans and specifications will be submitted to DWR.

Deliverables:

- A copy of the 100% complete design plans and specifications

Task 3 c) Environmental Documentation

This task consists of completing the required environmental compliance, completing any tribal notification, and environmental documentation as necessary.

Deliverables:

- Copy of environmental documents as required by CEQA

Task 3 d) Project Monitoring Plan

A Project Monitoring Plan (PMP) shall be submitted to the State prior to disbursement of grant funds for construction or monitoring activities for this Project. Along with the Attachment 6 Project Performance Measures Tables requirements for the Project, the PMP will also include: a) Baseline conditions, b) Brief discussion of monitoring systems to be utilized, c) Methodology of monitoring, d) Frequency of monitoring, and e) Location of monitoring points.

The LPS will lead work for monitoring and performances measures verification after Project completion. Costs for monitoring and performance measures are not included in the budget (funding match or grant award).

Deliverables:

- Project Monitoring Plan

Task 4: Construction/Implementation – Budget Category (d)

Task 4 a) Construction Contracting

This task consists of construction contracting including solicitations for bids and awards of contracts, as well as construction contingency based on 10% of the lowest responsible bid amount.

Deliverables:

- Copy of bid package

Task 4 b) Mobilization and Site Preparation

This task consists of mobilization and site preparation including implementation of site security measures, installation of temporary sanitary facilities, implementation of site BMPs, clearing and grubbing, and stockpile and material storage designation.

Deliverables:

- Pre-construction photographs

Task 4 c) Project Construction

This task includes using Low Impact Development (LID) methods along a residential collector-type street to demonstrate a range of approaches for retrofitting existing urban streets. This task consists of project construction activities, associated with construction of LID street retrofit improvements. This task includes inspection activities, testing, surveying and all equipment, supplies, and construction costs.

Deliverables:

- Construction photographs
- Certified engineer inspection completion report with final as-built drawings

Task 4 d) Performance Testing and Demobilization

This task consist of project performance testing and demobilization, including removal of all debris and construction spoils from the site, removal of excess materials, removal of temporary sanitary facilities, removal of equipment, transfer of site responsibility back to owner, and stormwater testing for contaminants and turbidity levels.

Deliverables:

- Post-construction photographs

Task 4 e) Environmental Compliance/ Mitigation/ Enhancement

This task consists of complying with general construction measures, and creating a water quality monitoring plan, a pre-construction wet season monitoring plan, a post-construction wet season monitoring plan, and a water monitoring report.

Deliverables:

- A copy of the final water quality monitoring report

Task 4 f) Construction Administration

This task consists of reviewing the contractor's schedule and recommendations, managing and coordinating the agencies and contractors involved with the project, and providing construction inspection tests and management oversight.

Deliverables:

- A copy of the inspection reports
- A copy of meeting minutes from construction management reports

Attachment 3

Grant Agreement No. 4600010575
Page 60 of 103

Project 17: San Pablo-Rheem Creek Wetland Restoration Project

The San Pablo-Rheem Creek Wetlands Restoration Project (Project) will create seasonal wetlands in the Richmond and San Pablo area near San Pablo Bay. The project establishes approximately 3.2 acres of seasonal wetlands adjacent to Rheem Creek. The project provides indirect improvements to stormwater quality when Rheem Creek overtops its banks, and also provides indirect benefits by minimizing potential stormwater and flood impacts from Rheem Creek in upstream neighborhoods in San Pablo and Richmond. The project should improve upstream flood protection in San Pablo by increasing the available flood plain downstream at the Rheem Creek project site.

Task 1: Direct Project Administration – Budget Category (a)

Task 1 a) Project Administration

This task consists of the project administration responsibilities, which includes coordinating agency responsibilities and managing cost commitments. This task also includes providing other supporting documentation required for this grant agreement (e.g., financial statements, etc.).

Deliverables:

- Environmental Information Form (EIF)
- Financial Statements
- Other Applicable Project Deliverables

Task 1b) Quarterly Progress Reports

This task consists of preparing progress reports detailing work completed in prior quarter as outlined in Exhibit (G) of this agreement and submitting to the Grantee for its submittal to DWR review.

Deliverables:

- Quarterly Project Progress Report

Task 1c) Invoices

This task consists of preparing quarterly invoices including relevant supporting documentation for submittal to DWR via Grantee.

Deliverables:

- Quarterly Invoices and associated backup documentation

Task 1d) Draft and Final Project Completion Report

This task consists of preparing draft Final Project Completion Report and submitting to DWR via Grantee for DWR Project Manager's comment and review no later than 90 days after project completion. This task also consists of preparing the Final Report addressing Grantee/DWR's comments. The report shall be prepared and presented in accordance with the provision of Exhibit G.

Deliverables:

Draft and Final Project Completion Report

Task 1 e) Labor Compliance Program

This task consists of completing the required implementation of a Labor Compliance Program (LCP), if applicable. The Labor Compliance Plan will be compliant with Department of Industrial Relations standards and needs to be in place prior to any construction activities covered under this grant agreement.

Deliverables:

- Proof of Labor Compliance Plans for each project component

Task 2: Land Purchase/Easement – Budget Category (b)

DWR Prop 84 - Local Project Sponsor Agreement - IRWM 2

Task 2 a) Land Purchase/Easement Acquisition

This task consists of providing compensation for finalizing the negotiations for obtaining an easement and to make various progress payments to the owner of the property where the wetland development will occur.

Deliverables:

- Copies of the recorded easement agreements

Task 3: Planning/Design/Engineering/Environmental Documentation – Budget Category (c)

Task 3 a) Assessment and Evaluation

This task consists of completing the planning assessment and feasibility studies prior to project development. This task also includes developing the Mitigation Monitoring and Management Plan that is approved by the Corps of Engineers and the Bay Area Regional Water Quality Control Boards as well as preparation of design plans and specifications.

Deliverables:

- A copy of the approved Mitigation Monitoring and Management plan
- A copy of the 60% design plans and specifications

Task 3 b) Planning/Design/Engineering

This task consists of finalizing project engineering designs (90% and 100%) for the project. Finalized 100% design/engineering plans and specifications will be submitted to DWR.

Deliverables:

- A copy of the 100% complete design plans and specifications

Task 3 c) Environmental Documentation

This task consists of completing the required environmental compliance, completing any tribal notification, and environmental documentation as necessary.

Deliverables:

- Copy of environmental documents as required by CEQA

Task 3 d) Permitting

This task consists of acquiring all identified federal, state, and local permits. Work includes coordinating and complying with requirements for issuance of a permit.

Deliverables:

- Copy of all required permits

Task 4: Construction/Implementation – Budget Category (d)

Task 4 a) Construction Contracting

This task consists of the developer's oversight on the implementation of the project and will consist of milestone payments before and after project construction.

Deliverables:

- Copy of the mitigation agreement
- Proof of milestone payments

Task 4 b) Mobilization and Site Preparation

Attachment 3

*Grant Agreement No. 4600010575
Page 62 of 103*

This task consists of mobilization and site preparation including implementation of site security measures, installation of temporary sanitary facilities, implementation of site BMPs, clearing and grubbing, and stockpile and material storage designation.

Deliverables:

- Pre-construction photographs

Task 4 c) Project Construction

The task includes the establishment of approximately 3.2 acres of seasonal wetlands adjacent to Rheem Creek. This task consists of project construction activities, including the creation of seasonal wetlands that can sustain ponding through mass grading of the site. The wetlands will be at least one foot deep and will include wetland vegetation. At least three wetland ponds will be created and all of these ponds will be interconnected. One of the ponds will be interconnected to Rheem Creek. This task includes all restoration equipment and supplies costs.

Deliverables:

- Construction photographs
- Certified engineer inspection completion report with final as-built drawings

Task 4 d) Performance Testing and Demobilization

This task consist of project performance testing and reporting, including preparing interim annual reports indicating that the wetlands are holding sufficient water for an adequate duration during medium water years, preparing reports after completion of initial success criteria.

Deliverables:

- Post-construction photographs
- A copy of any performance reports created during the duration of the grant

Task 4 e) Environmental Compliance/ Mitigation/ Enhancement

This task consists of complying with general construction measures, and creating an erosion and sediment control plan, stormwater pollution prevention plan, a hazardous materials management plan, and any environmental restoration specifications.

Deliverables:

- A copy of the erosion and sediment control plan
- A copy of the stormwater pollution prevention plan
- A copy of the hazardous materials management plan
- A copy of the environmental restoration specifications

Attachment 3

Grant Agreement No. 4600010575
Page 63 of 103

Project 18: St. Helena Upper York Creek Dam Removal and Ecosystem Restoration Project

This project includes removing a sufficient portion of the Upper St. Helena Dam and restoring the natural channel profile and bankfull width, to remove accumulated sediments within the reservoir, and to restore approximately 1,215 feet (0.23 miles) of natural channel through the embankment and reservoir footprint. The project restores steelhead passage to approximately 1.5 miles of high quality spawning and rearing habitat, restoring approximately 2 acres of riparian habitat; and restoring gravel yield from the watershed to the Napa River.

Task 1: Direct Project Administration – Budget Category (a)

Task 1 a) Project Administration

This task consists of the project administration responsibilities, which include coordinating agency responsibilities and managing cost commitments. This task also includes providing other supporting documentation required for this grant agreement (e.g., financial statements, etc.).

Deliverables:

- Environmental Information Form (EIF)
- Financial Statements
- Other Applicable Project Deliverables

Task 1 b) Quarterly Progress Reports

This task consists of preparing progress reports detailing work completed in prior quarter as outlined in Exhibit (G) of this agreement and submitting to the Grantee for its submittal to DWR review.

Deliverables:

- Quarterly Project Progress Reports

Task 1 c) Invoices

This task consists of preparing quarterly invoices including relevant supporting documentation for submittal to DWR via Grantee.

Deliverables:

- Quarterly invoices and associated backup documentation

Task 1 d) Draft and Final Project Completion Report

This task consists of preparing draft Final Project Completion Report and submitting to DWR via Grantee for DWR Project Manager's comment and review no later than 90 days after project completion. This task also consists of preparing the Final Report addressing Grantee/DWR's comments. The report shall be prepared and presented in accordance with the provision of Exhibit G.

Deliverables:

- Draft and Final Project Completion Report

Task 1 e) Labor Compliance Program

This task consists of completing the required implementation of a Labor Compliance Program (LCP), if applicable. The Labor Compliance Plan will be compliant with Department of Industrial Relations standards and needs to be in place prior to any construction activities covered under this grant agreement.

Deliverables:

- Proof of Labor Compliance Plans for each project component

Attachment 3

Grant Agreement No. 4600010575
Page 64 of 103

Task 2: Land Purchase/Easement – Budget Category (b)

Not applicable. Land easements and acquisitions for the project have already been secured.

Task 3: Planning/Design/Engineering/Environmental Documentation – Budget Category (c)

Task 3 a) Plans, Specifications, Engineer’s Cost Estimates

This task consists of finalizing engineering designs (90% and 100%) and specifications. Finalized 100% design/engineering plans and specifications will be submitted to DWR.

Deliverables:

- A copy of the 100% complete design plans and specifications

Task 3 b) Environmental Documentation

This task consists of completing the final Environmental Impact Report (EIR), Mitigation, Monitoring & Reporting (MMRP), and the Statement of Overriding Considerations (SOC), as well as submittal to the State Clearinghouse and the county clerk’s office.

Deliverables:

- Copy of final EIR, MMRP, and SOC with receipt for payment of fees to CDFW and the County Clerk as required by CEQA

Task 3 c) Permit Acquisition

This task consists of acquiring all identified federal, state, and local permits. Work includes coordinating and complying with requirements for issuance of a permit.

Deliverables:

- Copy of all required permits

Task 4: Construction/Implementation – Budget Category (d)

Task 4 a) Stormwater Pollution Prevention Plan (SWPPP)

This task consists of preparation of a Notice of Intent (NOI) and SWPPP documentation for project implementation, in accordance with NPDES requirements of the General Construction Permit and consistent with CalTrans’ guidelines as appropriate. Stormwater management will occur in accordance with the requirements of the SWPPP.

Deliverables:

- NOI and SWPPP
- SWPPP monitoring reports

Task 4 b) Construction Phase Administration and Engineering

This task consists of construction contracting, including solicitations for bids and awards of contract, overseeing the contractor’s schedule and recommendations, managing and coordinating regulatory agency requirements with contractors, and providing construction inspection and management oversight.

Deliverables:

- Construction bid package
- Construction contract with successful bidder
- Inspection reports

Attachment 3

*Grant Agreement No. 4600010575
Page 65 of 103*

Task 4 c) Project Construction

This task consists of providing biological oversight during construction. Services include bird nesting surveys as required by the Migratory Bird Treaty Act (MBTA); oversight of vegetation clearing; on-site meeting with the contractor and project designer to demarcate the project limits and discuss biological resources protection measures; biological sweep of the work area; and construction crew training. The project biologist will also oversee dewatering and species relocation in accordance with Corps and ESA permits, construction monitoring as needed, and removal of the dewatering system and will provide post-construction reporting.

Deliverables:

- Attendance log from preconstruction crew training
- Post-construction biological resources report

Task 4 d) Dam Removal and Channel Restoration

This task includes removing a sufficient portion of the Upper St. Helena Dam and restoring the natural channel profile and bankfull width and restoring approximately 1,215 feet of natural channel and aquatic access to approximately 1.5 miles of steelhead spawning and rearing habitat and approximately 2 acres of riparian habitat. This task consists of project construction activities, including mobilization and site preparation, dewatering, dam and accumulated sediment removal, road and bank stabilization, channel reconstruction, permanent erosion control (PEC), and native species revegetation.

Deliverables:

- Construction photographs, before and during
- Certified engineer inspection completion report with final as-built drawings

Task 4e) Post Construction Monitoring and Reporting

This task consists of monitoring channel form and native species revegetation success and providing annual reports for 3 years after project completion. Channel form will be evaluated in the winter/spring, and vegetation success monitoring will occur in the fall. Reports of findings with photographs will be submitted annually.

Deliverables:

- Post-construction photographs
- Geomorphic and vegetation monitoring reports prepared during the term of this contract re monitoring for channel functioning for fish passage

Attachment 3

Grant Agreement No. 4600010575
Page 66 of 103

Project 19: Student and Teachers Restoring A Watershed (STRAW) Project – North and East Bay Watersheds

STRAW implements professionally designed and installed habitat restoration projects, integrated with an innovative education program that provides water quality benefits, habitat improvement, and positive impacts on economic, social, and environmental sustainability. This project will provide teachers and students with the scientific, educational, and technical resources to create student-centered education and/or restoration projects to protect and restore the health of riparian and wetland ecosystems in Alameda, Contra Costa, Marin, Napa, San Francisco, Solano, and Sonoma counties. Restoration activities include invasive plant removal, native plant revegetation, stream bank stabilization, and erosion control projects. This project also includes intensive and sustained classroom support for teachers, with the goal of promoting environmental stewardship through hands-on restoration and field investigations of local watersheds, integration of environmental science programs to increase and improve the environmental knowledge, skills, attitudes, and behavior of students, and collaboration between agency, nonprofit partners, and STRAW students and teachers, working within riparian and wetland areas to study their ecological function, human impacts upon them, and the potential for restoration.

Task 1: Direct Project Administration – Budget Category (a)

Task 1 a) Project Administration

This task consists of the project administration responsibilities, which includes coordinating agency responsibilities and managing cost commitments. This task also includes providing other supporting documentation required for this grant agreement (e.g., financial statements, etc.).

Deliverables:

- Environmental Information Form (EIF)
- Financial Statements
- Other Applicable Project Deliverables

Task 1 b) Quarterly Progress Reports

This task consists of preparing progress reports detailing work completed in prior quarter as outlined in Exhibit (G) of this agreement and submitting to the Grantee for its submittal to DWR review.

Deliverables:

- Quarterly Project Progress Report

Task 1 c) Invoices

This task consists of preparing quarterly invoices including relevant supporting documentation for submittal to DWR via Grantee.

Deliverables:

- Quarterly Invoices and associated backup documentation

Task 1 d) Draft and Final Project Completion Report

This task consists of preparing draft Final Project Completion Report and submitting to DWR via Grantee for DWR Project Manager's comment and review no later than 90 days after project completion. This task also consists of preparing the Final Report addressing Grantee/DWRs comments. The report shall be prepared and presented in accordance with the provision of Exhibit G.

Deliverables:

Draft and Final Project Completion Report

Task 2: Land Purchase/Easement – Budget Category (b)

Task 2 a) Land Purchase/Easement Acquisition

This task is not applicable. All land purchase and easement activities are already complete.

DWR Prop 84 - Local Project Sponsor Agreement - IRWM 2

Task 3: Planning/Design/Engineering/Environmental Documentation – Budget Category (c)

Task 3 a) Planning and Design

This task consists of coordinating with the teachers at different schools to schedule professional development workshops, classroom education activities, and restoration workdays and coordinating with restoration design staff.

Deliverables:

- A copy of the schedule for workshops and classroom activities
- A copy of the work plan for restoration projects

Task 4: Construction/Implementation – Budget Category (d)

Task 4 a) Professional Development Workshops

This task consists of teachers participating in a three-day professional development workshop that focuses on the many aspects of watershed science, two network events throughout the school year.

Deliverables:

- A copy of the workshop materials
- A list of teachers attending the network events

Task 4 b) Classroom Activities

This task consists of students receiving a pre-planting presentation about restoration projects, receiving additional in-class and/or field activities as requested by their teacher.

Deliverables:

- Annual summary of activities by school year
- A copy of materials used for in-classroom lessons

Task 4 c) Restoration Project Construction

This task consists of preparing the site for student planting day, procuring all materials for the project, accompanying designer at site for layout, pin-flagging, and identification of hazards, marking hazards, implementing final design with students and community volunteers, overseeing the distribution of students, adult volunteers, and supervisors throughout the worksite to ensure project quality and success, and preparing and compiling project notes for recording the number and type of plantings installed at each site, as well as the length of area covered by the restoration

Deliverables:

- Before and after restoration photographs
- A copy of the notes for each restoration project

Task 4 d) Maintenance and Monitoring

This task consist of regularly inspect plantings from late spring through early fall for three years, including maintaining plantings by weeding and repairing browse protectors, irrigating plantings using practices that are most appropriate for the site, monitor plant survival by species in late summer/early fall to inform future planting designs, performing annual photo monitoring, coordinating additional monitoring activities with additional PRBO Conservation Science staff and appropriate partners if additional funding is available.

Deliverables:

- Post-construction photographs
- Annual plant establishment monitoring reports

Attachment 3

Grant Agreement No. 4600010575
Page 68 of 103

Project 20: Grant Administration

This project provides the oversight and coordination necessary in administering the grant agreement with DWR and the LPS of each project within the agreement. The grantee is responsible for submitting regular invoices and reports to DWR, coordinating with LPS on project status and monitoring, and communicating with DWR on tracking project status and implementing agreement changes.

Task 1: Project Administration – Budget Category (a)

Task 1 a) Direct Program Administration

This task consists of the project administration responsibilities, which includes coordinating the LPS participating agencies, developing interagency agreements, coordinating with DWR Grant Manager on agreement development and agreement amendments, and managing cost commitments. This task also includes providing other supporting documentation required for this grant agreement (e.g., financial statements, etc.).

Deliverables:

- A copy of the executed Grant Agreement
- Invoices and associated backup documentation
- Environmental Information Form (EIF)
- Financial Statements
- Other Applicable Project Deliverables

Task 1b) Reporting

This task consists of submitting progress reports detailing work completed in prior quarter as outlined in Exhibit (G) of this agreement and submitting to DWR for review. This task also includes submitting the Final Project Completion Reports no later than 90 days after project completion and preparing and submitting the final Grant Completion Report to DWR.

Reports will meet generally accepted professional standards for technical reporting and the requirements terms of the contract with DWR outlined in Exhibit G of this agreement. For example, Progress Reports will explain the status of the project and will include the following information: summary of the work completed for the project during the reporting period; activities and milestones achieved; and accomplishments and any problems encountered in the performance of work. Project Completion Reports will include: documentation of actual work done; changes and amendments to each project; a final schedule showing actual progress versus planned progress; and copies of final documents and reports generated during the project.

Deliverables:

- Quarterly Project Progress Reports
- Final Project Completion Reports
- Grant Completion Report

Task 1c) Invoices

This task consists of preparing invoices including relevant supporting documentation for submittal to DWR.

Deliverables:

- Quarterly Invoices and associated backup documentation

DWR Prop 84 - Local Project Sponsor Agreement - IRWA 2

EXHIBIT B BUDGET
Bay Area IRWA Implementation Budget - Round 2

Project Titles	(a)	(b)	(c)	(d)	(e)
	Grant Amount	Required Funding Match	Additional Cost Share	Total Project Costs	% of Funding Match
1 Bay Area Regional Conservation and Education Program	\$ 2,700,000.00	\$ 2,558,168.00	\$ -	\$ 5,258,168.00	49%
2 East Bayshore Recycled Water Project Phase 1A (Emeryville)	\$ 1,000,000.00	\$ 400,000.00	\$ 1,899,000.00	\$ 3,299,000.00	12%
3 Lagunitas Creek Watershed Sediment Reduction and Management Project	\$ 720,000.00	\$ 240,000.00	\$ -	\$ 960,000.00	25%
4 Marin/Sonoma Conserving Our Watersheds: Agricultural BMP Projects	\$ 600,000.00	\$ -	\$ 220,000.00	\$ 820,000.00	0%
5 Napa Miliken Creek Flood Damage Reduction and Fish Passage Barrier Removal	\$ 500,000.00	\$ 185,000.00	\$ 733,540.00	\$ 1,418,540.00	13%
6 North Bay Water Reuse Program - Sonoma Valley CSD 5th Street East/McGill Road Recycled Water Project	\$ 1,020,000.00	\$ 1,130,410.00	\$ 410,080.00	\$ 2,560,490.00	44%
7 Oakland Sausal Creek Restoration Project	\$ 500,000.00	\$ 924,700.00	\$ 1,451,800.00	\$ 2,876,500.00	32%
8 Pescadero Water Supply and Sustainability Project	\$ 700,000.00	\$ 125,000.00	\$ -	\$ 825,000.00	15%
9 Petaluma Flood Reduction, Water & Habitat Quality, and Recreation Project for Capri Creek	\$ 825,000.00	\$ 275,000.00	\$ -	\$ 1,100,000.00	25%
10 Redwood City Bayfront Canal and Atherton Channel Flood Improvement and Habitat Restoration Project	\$ 1,135,000.00	\$ 890,600.00	\$ 1,025,540.00	\$ 3,051,140.00	29%
11 Regional Groundwater Storage and Recovery Project Phase 1A - South Westside Basin, Northern San Mateo County	\$ 1,400,000.00	\$ 2,022,261.00	\$ 30,000.00	\$ 3,452,261.00	59%
12 Richmond Breuner Marsh Restoration Project	\$ 750,000.00	\$ 250,000.00	\$ 2,625,000.00	\$ 3,625,000.00	7%
13 Roseview Heights Infrastructure Upgrades for Water Supply and Quality Improvement, Santa Clara County	\$ 500,000.00	\$ 424,700.00	\$ 200,800.00	\$ 1,125,500.00	38%
14 San Francisco Bay Climate Change Pilot Projects Combining Ecosystem Adaptation, Flood Risk Management and Wastewater Effluent Polishing	\$ 2,100,000.00	\$ 416,280.00	\$ 2,848,845.00	\$ 5,365,125.00	8%
15 San Francisco International Airport Reclaimed Water Facility	\$ 750,000.00	\$ 1,964,847.00	\$ 3,321,000.00	\$ 6,035,847.00	33%
16 San José Green Streets & Alleys Demonstration Projects	\$ 2,000,000.00	\$ 250,000.00	\$ -	\$ 2,250,000.00	11%
17 San Pablo Rheem Creek Wetlands Restoration Project	\$ 750,000.00	\$ 1,197,912.00	\$ -	\$ 1,947,912.00	61%
18 St. Helena Upper York Creek Dam Removal and Ecosystem Restoration Project	\$ 800,000.00	\$ 1,174,119.00	\$ 3,631,866.00	\$ 5,605,985.00	21%
19 Students and Teachers Restoring a Watershed (STRAW) Project—North and East Bay Watersheds	\$ 500,000.00	\$ -	\$ 125,000.00	\$ 625,000.00	0%
20 ABAG Grant Administration	\$ 750,000.00	\$ -	\$ -	\$ 750,000.00	0%
Grant Total	\$ 20,000,000.00	\$ 14,428,997.00	\$ 18,522,471.00	\$ 52,951,468.00	27%

Attachment 3

Attachment 3

Grant Agreement No. 4600010575
Page 70 of 103

Project 1: Bay Area Regional Conservation and Education Program					
Category		(a)	(b)	(c)	(d)
		Grant Amount	Cost Share: Required Funding Match	Additional Cost Share	Total Cost
(a)	Direct Project Administration	\$ 150,000.00	\$ -	\$ -	\$ 150,000.00
(b)	Land Purchase/Easement	\$ -	\$ -	\$ -	\$ -
(c)	Planning/Design/ Engineering/ Environmental Documentation	\$ -	\$ -	\$ -	\$ -
(d)	Construction/ Implementation	\$ 2,550,000.00	\$ 2,558,168.00	\$ -	\$ 5,108,168.00
Grand Total		\$ 2,700,000.00	\$ 2,558,168.00	\$ -	\$ 5,258,168.00

Project 2: East Bayshore Recycled Water Project Phase 1A (Emeryville)					
Category		(a)	(b)	(c)	(d)
		Grant Amount	Cost Share: Required Funding Match	Additional Cost Share	Total Cost
(a)	Direct Project Administration	\$ -	\$ -	\$ 145,000.00	\$ 145,000.00
(b)	Land Purchase/Easement	\$ -	\$ -	\$ -	\$ -
(c)	Planning/Design/ Engineering/ Environmental Documentation	\$ -	\$ -	\$ 370,000.00	\$ 370,000.00
(d)	Construction/ Implementation	\$ 1,000,000.00	\$ 400,000.00	\$ 1,384,000.00	\$ 2,784,000.00
Grand Total		\$ 1,000,000.00	\$ 400,000.00	\$ 1,899,000.00	\$ 3,299,000.00

Project 3: Lagunitas Creek Watershed Sediment Reduction and Management Project					
Category		(a)	(b)	(c)	(d)
		Grant Amount	Cost Share: Required Funding Match	Additional Cost Share	Total Cost
(a)	Direct Project Administration	\$ 25,669.00	\$ 25,182.00	\$ -	\$ 50,851.00
(b)	Land Purchase/Easement	\$ -	\$ -	\$ -	\$ -
(c)	Planning/Design/ Engineering/ Environmental Documentation	\$ -	\$ 154,994.00	\$ -	\$ 154,994.00
(d)	Construction/ Implementation	\$ 694,331.00	\$ 59,824.00	\$ -	\$ 754,155.00
Grand Total		\$ 720,000.00	\$ 240,000.00	\$ -	\$ 960,000.00

Project 4: Marin/Sonoma Conserving Our Watersheds: Agricultural BMP Project					
Category		(a)	(b)	(c)	(d)
		Grant Amount	Cost Share: Required Funding Match	Additional Cost Share	Total Cost
(a)	Direct Project Administration	\$ 111,340.00	\$ -	\$ -	\$ 111,340.00
(b)	Land Purchase/Easement	\$ -	\$ -	\$ -	\$ -
(c)	Planning/Design/ Engineering/ Environmental Documentation	\$ 143,020.00	\$ -	\$ -	\$ 143,020.00
(d)	Construction/ Implementation	\$ 345,640.00	\$ -	\$ 220,000.00	\$ 565,640.00
Grand Total		\$ 600,000.00	\$ -	\$ 220,000.00	\$ 820,000.00

Project 5: Napa Milliken Creek Flood Damage Reduction and Fish Passage Barrier Removal Budget					
Category		(a)	(b)	(c)	(d)
		Grant Amount	Cost Share: Required Funding Match	Additional Cost Share	Total Cost
(a)	Direct Project Administration	\$ -	\$ -	\$ 25,120.00	\$ 25,120.00
(b)	Land Purchase/Easement	\$ -	\$ -	\$ 25,000.00	\$ 25,000.00
(c)	Planning/Design/ Engineering/ Environmental Documentation	\$ -	\$ 185,000.00	\$ 115,000.00	\$ 300,000.00
(d)	Construction/ Implementation	\$ 500,000.00	\$ -	\$ 568,420.00	\$ 1,068,420.00
Grand Total		\$ 500,000.00	\$ 185,000.00	\$ 733,540.00	\$ 1,418,540.00

Project 6: North Bay Water Reuse Program					
Category		(a)	(b)	(c)	(d)
		Grant Amount	Cost Share: Required Funding Match	Additional Cost Share	Total Cost
(a)	Direct Project Administration	\$ -	\$ -	\$ 128,720.00	\$ 128,720.00
(b)	Land Purchase/Easement	\$ -	\$ 88,000.00	\$ -	\$ 88,000.00
(c)	Planning/Design/ Engineering/ Environmental Documentation	\$ -	\$ 21,640.00	\$ 281,360.00	\$ 303,000.00
(d)	Construction/ Implementation	\$ 1,020,000.00	\$ 1,020,770.00	\$ -	\$ 2,040,770.00
Grand Total		\$ 1,020,000.00	\$ 1,130,410.00	\$ 410,080.00	\$ 2,560,490.00

Project 7: Oakland Sausal Creek Restoration Project					
Category		(a)	(b)	(c)	(d)
		Grant Amount	Cost Share: Required Funding Match	Additional Cost Share	Total Cost
(a)	Direct Project Administration	\$ 13,000.00	\$ 96,000.00	\$ 80,000.00	\$ 189,000.00
(b)	Land Purchase/Easement	\$ -	\$ 8,500.00	\$ -	\$ 8,500.00
(c)	Planning/Design/ Engineering/ Environmental Documentation	\$ -	\$ -	\$ -	\$ -
(d)	Construction/ Implementation	\$ 487,000.00	\$ 820,200.00	\$ 1,371,800.00	\$ 2,679,000.00
Grand Total		\$ 500,000.00	\$ 924,700.00	\$ 1,451,800.00	\$ 2,876,500.00

Project 8: Pescadero Water Supply and Sustainability Project					
Category		(a)	(b)	(c)	(d)
		Grant Amount	Cost Share: Required Funding Match	Additional Cost Share	Total Cost
(a)	Direct Project Administration	\$ 55,269.00	\$ -	\$ -	\$ 55,269.00
(b)	Land Purchase/Easement	\$ -	\$ -	\$ -	\$ -
(c)	Planning/Design/ Engineering/ Environmental Documentation	\$ 37,827.00	\$ 112,130.00	\$ -	\$ 149,957.00
(d)	Construction/ Implementation	\$ 606,904.00	\$ 12,870.00	\$ -	\$ 619,774.00
Grand Total		\$ 700,000.00	\$ 125,000.00	\$ -	\$ 825,000.00

Attachment 3

Grant Agreement No. 4600010575
Page 72 of 103

Project 9: Petaluma Flood Reduction, Water & Habitat Quality, and Recreation Project for Capri Creek					
Category		(a)	(b)	(c)	(d)
		Grant Amount	Cost Share: Required Funding Match	Additional Cost Share	Total Cost
(a)	Direct Project Administration	\$ -	\$ 59,784.00	\$ -	\$ 59,784.00
(b)	Land Purchase/Easement	\$ -	\$ -	\$ -	\$ -
(c)	Planning/Design/ Engineering/ Environmental Documentation	\$ -	\$ 120,768.00	\$ -	\$ 120,768.00
(d)	Construction/ Implementation	\$ 825,000.00	\$ 94,448.00	\$ -	\$ 919,448.00
Grand Total		\$ 825,000.00	\$ 275,000.00	\$ -	\$ 1,100,000.00

Project 10: Redwood City Bayfront Canal and Atherton Channel Flood Improvement and Habitat Restoration Project					
Category		(a)	(b)	(c)	(d)
		Grant Amount	Cost Share: Required Funding Match	Additional Cost Share	Total Cost
(a)	Direct Project Administration	\$ -	\$ -	\$ 303,850.00	\$ 303,850.00
(b)	Land Purchase/Easement	\$ -	\$ -	\$ -	\$ -
(c)	Planning/Design/ Engineering/ Environmental Documentation	\$ -	\$ -	\$ 403,120.00	\$ 403,120.00
(d)	Construction/ Implementation	\$ 1,135,000.00	\$ 890,600.00	\$ 318,570.00	\$ 2,344,170.00
Grand Total		\$ 1,135,000.00	\$ 890,600.00	\$ 1,025,540.00	\$ 3,051,140.00

Project 11: Regional Groundwater Storage and Recovery Project Phase 1A - South Westside Basin					
Category		(a)	(b)	(c)	(d)
		Grant Amount	Cost Share: Required Funding Match	Additional Cost Share	Total Cost
(a)	Direct Project Administration	\$ -	\$ -	\$ 30,000.00	\$ 30,000.00
(b)	Land Purchase/Easement	\$ -	\$ -	\$ -	\$ -
(c)	Planning/Design/ Engineering/ Environmental Documentation	\$ -	\$ -	\$ -	\$ -
(d)	Construction/ Implementation	\$ 1,400,000.00	\$ 2,022,261.00	\$ -	\$ 3,422,261.00
Grand Total		\$ 1,400,000.00	\$ 2,022,261.00	\$ 30,000.00	\$ 3,452,261.00

Project 12: Richmond Breuner Marsh Restoration Project					
Category		(a)	(b)	(c)	(d)
		Grant Amount	Cost Share: Required Funding Match	Additional Cost Share	Total Cost
(a)	Direct Project Administration	\$ 10,000.00	\$ -	\$ 30,000.00	\$ 40,000.00
(b)	Land Purchase/Easement	\$ -	\$ -	\$ -	\$ -
(c)	Planning/Design/ Engineering/ Environmental Documentation	\$ -	\$ -	\$ -	\$ -
(d)	Construction/ Implementation	\$ 740,000.00	\$ 250,000.00	\$ 2,595,000.00	\$ 3,585,000.00
Grand Total		\$ 750,000.00	\$ 250,000.00	\$ 2,625,000.00	\$ 3,625,000.00

Project 13: Roseview Heights Infrastructure Upgrades for Water Supply and Quality Improvement					
Category		(a)	(b)	(c)	(d)
		Grant Amount	Cost Share: Required Funding Match	Additional Cost Share	Total Cost
(a)	Direct Project Administration	\$ -	\$ -	\$ 26,000.00	\$ 26,000.00
(b)	Land Purchase/Easement	\$ -	\$ -	\$ 12,000.00	\$ 12,000.00
(c)	Planning/Design/ Engineering/ Environmental Documentation	\$ -	\$ -	\$ 88,000.00	\$ 88,000.00
(d)	Construction/ Implementation	\$ 500,000.00	\$ 424,700.00	\$ 74,800.00	\$ 999,500.00
Grand Total		\$ 500,000.00	\$ 424,700.00	\$ 200,800.00	\$ 1,125,500.00

Project 14: San Francisco Bay Climate Change Pilot Projects Combining Ecosystem Adaptation, Flood Risk Management and Wastewater Effluent Polishing					
Category		(a)	(b)	(c)	(d)
		Grant Amount	Cost Share: Required Funding Match	Additional Cost Share	Total Cost
(a)	Direct Project Administration	\$ 101,575.00	\$ -	\$ -	\$ 101,575.00
(b)	Land Purchase/Easement	\$ -	\$ -	\$ -	\$ -
(c)	Planning/Design/ Engineering/ Environmental Documentation	\$ -	\$ 416,280.00	\$ 78,560.00	\$ 494,840.00
(d)	Construction/ Implementation	\$ 1,998,425.00	\$ -	\$ 2,770,285.00	\$ 4,768,710.00
Grand Total		\$ 2,100,000.00	\$ 416,280.00	\$ 2,848,845.00	\$ 5,365,125.00

Project 15: San Francisco International Airport Reclaimed Water Facility					
Category		(a)	(b)	(c)	(d)
		Grant Amount	Cost Share: Required Funding Match	Additional Cost Share	Total Cost
(a)	Direct Project Administration	\$ -	\$ 53,800.00		\$ 53,800.00
(b)	Land Purchase/Easement	\$ -	\$ -		\$ -
(c)	Planning/Design/ Engineering/ Environmental Documentation	\$ -	\$ 43,600.00		\$ 43,600.00
(d)	Construction/ Implementation	\$ 750,000.00	\$ 1,867,447.00	\$ 3,321,000.00	\$ 5,938,447.00
Grand Total		\$ 750,000.00	\$ 1,964,847.00	\$ 3,321,000.00	\$ 6,035,847.00

Attachment 3

Grant Agreement No. 4600010575
Page 74 of 103

Project 16: San Jose Green Streets and Alleys Demonstration Project					
Category		(a)	(b)	(c)	(d)
		Grant Amount	Cost Share: Required Funding Match	Additional Cost Share	Total Cost
(a)	Direct Project Administration	\$ -	\$ 36,278.00	\$ -	\$ 36,278.00
(b)	Land Purchase/Easement	\$ -	\$ -	\$ -	\$ -
(c)	Planning/Design/ Engineering/ Environmental Documentation	\$ 221,099.00	\$ 153,121.00	\$ -	\$ 374,220.00
(d)	Construction/ Implementation	\$ 1,778,901.00	\$ 60,601.00	\$ -	\$ 1,839,502.00
Grand Total		\$ 2,000,000.00	\$ 250,000.00	\$ -	\$ 2,250,000.00

Project 17: San Pablo Rheem Creek Wetlands Restoration Project					
Category		(a)	(b)	(c)	(d)
		Grant Amount	Cost Share: Required Funding Match	Additional Cost Share	Total Cost
(a)	Direct Project Administration	\$ -	\$ 99,688.00	\$ -	\$ 99,688.00
(b)	Land Purchase/Easement	\$ 750,000.00	\$ 15,152.00	\$ -	\$ 765,152.00
(c)	Planning/Design/ Engineering/ Environmental Documentation	\$ -	\$ 83,072.00	\$ -	\$ 83,072.00
(d)	Construction/ Implementation	\$ -	\$ 1,000,000.00	\$ -	\$ 1,000,000.00
Grand Total		\$ 750,000.00	\$ 1,197,912.00	\$ -	\$ 1,947,912.00

Project 18: St. Helena Upper York Creek Dam Removal and Ecosystem Restoration Project					
Category		(a)	(b)	(c)	(d)
		Grant Amount	Cost Share: Required Funding Match	Additional Cost Share	Total Cost
(a)	Direct Project Administration	\$ -	\$ 113,925.00		\$ 113,925.00
(b)	Land Purchase/Easement	\$ -	\$ -	\$ -	\$ -
(c)	Planning/Design/ Engineering/ Environmental Documentation	\$ -	\$ 460,194.00		\$ 460,194.00
(d)	Construction/ Implementation	\$ 800,000.00	\$ 600,000.00	\$ 3,631,866.00	\$ 5,031,866.00
Grand Total		\$ 800,000.00	\$ 1,174,119.00	\$ 3,631,866.00	\$ 5,605,985.00

Project 19: Students and Teachers Restoring a Watershed (STRAW) Project					
Category		(a)	(b)	(c)	(d)
		Grant Amount	Cost Share: Required Funding Match	Additional Cost Share	Total Cost
(a)	Direct Project Administration	\$ 28,233.00	\$ -	\$ -	\$ 28,233.00
(b)	Land Purchase/Easement	\$ -	\$ -	\$ -	\$ -
(c)	Planning/Design/ Engineering/ Environmental Documentation	\$ 35,378.00	\$ -	\$ -	\$ 35,378.00
(d)	Construction/ Implementation	\$ 436,389.00	\$ -	\$ 125,000.00	\$ 561,389.00
Grand Total		\$ 500,000.00	\$ -	\$ 125,000.00	\$ 625,000.00

Attachment 3

Grant Agreement No. 4600010575
Page 75 of 103

Project 20: Grant Administration					
Category		(a)	(b)	(c)	(d)
		Grant Amount	Cost Share: Required Funding Match	Additional Cost Share	Total Cost
(a)	Direct Project Administration	\$ 750,000.00	\$ -	\$ -	\$ 750,000.00
(b)	Land Purchase/Easement	\$ -	\$ -	\$ -	\$ -
(c)	Planning/Design/ Engineering/ Environmental Documentation	\$ -	\$ -	\$ -	\$ -
(d)	Construction/ Implementation	\$ -	\$ -	\$ -	\$ -
Grand Total		\$ 750,000.00	\$ -	\$ -	\$ 750,000.00

Attachment 3

Grant Agreement No. 4600010575
Page 76 of 103

**EXHIBIT C
SCHEDULE**

Project 1: Bay Area Regional Conservation and Education Program			
Category		Start Date	End Date
Task 1	(a) Direct Project Administration	October-13	April-18
Task 1 a	Project Administration	October-13	April-18
Task 1 b	Quarterly Progress Report	October-13	April-18
Task 1 c	Invoices	October-13	April-18
Task 1 d	Draft and Final Project Completion Report	October-13	April-18
Task 2	(b) Land Purchase/ Easement	N/A	N/A
Task 3	(c) Planning/ Design/ Engineering/ Environmental Documentation	N/A	N/A
Task 4	(d) Construction/ Implementation	October-13	September-16
Task 4.1 a	High-efficiency Toilet Rebates	October-13	September-16
Task 4.2 a	High-efficiency Washer Rebates	October-13	September-16
Task 4.3 a	Water-efficient Sustainable Landscape Education Program	October-13	September-16
Task 4.4 a	Water-efficient Landscape and Weather-based Irrigation Controller Rebate	October-13	September-16
Task 4.5 a	Large Landscape Irrigation System Retrofit Program	October-13	September-16
Task 4.6 a	Home Water Reports	October-13	September-16
Task 4.7 a	Water Conservation and Mobile Water Lab Project	October-13	September-16

Project 2: East Bayshore Recycled Water Project Phase 1A (Emeryville)			
Category		Start Date	End Date
Task 1	(a) Direct Project Administration	October-13	March-16
Task 1 a	Project Administration	October-13	March-16
Task 1 b	Quarterly Progress Report	July-14	March-16
Task 1 c	Invoices	January-15	March-16
Task 1 d	Draft and Final Project Completion Report	December-15	March-16
Task 1 e	Labor Compliance Plan	January-15	December-15
Task 2	(b) Land Purchase/ Easement	N/A	N/A
Task 3	(c) Planning/ Design/ Engineering/ Environmental Documentation	April-13	December-14
Task 3 a	Planning/ Design/ Engineering	April-13	June-14
Task 3 b	Environmental Documentation	April-14	June-14
Task 3 c	Permitting	March-14	August-14
Task 3 d	Project Monitoring Plan	June-14	December-14
Task 4	(d) Construction/ Implementation	January-15	December-15
Task 4 a	Construction Contracting	January-15	May-15
Task 4 b	Mobilization and Site Preparation	June-15	July-15
Task 4 c	Project Construction	July-15	December-15
Task 4 d	Environmental Compliance/ Mitigation/ Enhancement	July-15	December-15
Task 4 e	Construction Administration	January-15	December-15

DWR Prop 84 - Local Project Sponsor Agreement - IRWM 2

Project 2: Lagunitas Creek Watershed Sediment Reduction and Management Project			
Category		Start Date	End Date
Task 1	(a) Direct Project Administration	January-12	October-17
Task 1 a	Project Administration	January-12	October-17
Task 1 b	Quarterly Progress Report	January-12	October-17
Task 1 c	Invoices	January-12	October-17
Task 1 d	Draft and Final Project Completion Report	January-12	October-17
Task 1 e	Labor Compliance Plan	January-12	June-17
Task 2	(b) Land Purchase/ Easement	N/A	N/A
Task 3	(c) Planning/ Design/ Engineering/ Environmental Documentation	January-12	June-15
Task 3 a	Assessment and Evaluation	January-12	March-15
Task 3 b	Planning/ Design/ Engineering	January-12	March-15
Task 3 c	Environmental Documentation	January-12	June-15
Task 3 d	Permitting	January-12	June-15
Task 3 e	Project Monitoring Plan	June-14	December-14
Task 4	(d) Construction/ Implementation	January-15	March-17
Task 4 a	Construction Contracting	January-15	June-15
Task 4 b	Mobilization and Site Preparation	July-15	August-15
Task 4 c	Project Construction	September-15	November-15
Task 4 d	Performance Testing and Demobilization	December-16	January-16
Task 4 e	Environmental Compliance/ Mitigation/ Enhancement	July-15	December-16
Task 4 f	Construction Administration	July-15	March-17

Project 4: Marin/Sonoma Conserving Our Watersheds: Agricultural BMP Project			
Category		Start Date	End Date
Task 1	(a) Direct Project Administration	October-13	December-16
Task 1 a	Project Administration	October-13	December-16
Task 1 b	Quarterly Progress Report	October-13	December-16
Task 1 c	Invoices	October-13	December-16
Task 1 d	Draft and Final Project Completion Report	October-13	December-16
Task 1 e	Labor Compliance Plan	October-13	December-13
Task 2	(b) Land Purchase/ Easement	N/A	N/A
Task 3	(c) Planning/ Design/ Engineering/ Environmental Documentation	January-12	July-15
Task 3 a	Assessment and Evaluation	October-13	May-15
Task 3 b	Planning/ Design/ Engineering	May-15	July-15
Task 3 c	Environmental Documentation	July-14	June-15
Task 3 d	Permitting	May-14	July-15
Task 3 e	Project Monitoring Plan	June-14	December-14
Task 4	(d) Construction/ Implementation	May-15	September-16
Task 4 a	Construction Contracting	May-15	September-15
Task 4 b	Mobilization and Site Preparation	June-15	October-15
Task 4 c	Project Construction	October-15	October-15
Task 4 d	Performance Testing and Demobilization	November-15	September-16
Task 4 e	Environmental Compliance/ Mitigation/ Enhancement	June-15	September-16
Task 4 f	Construction Administration	May-15	July-16

Attachment 3

Grant Agreement No. 4600010575
Page 78 of 103

Project 5: Napa Milliken Creek Flood Damage Reduction and Fish Passage Barrier Removal			
Category		(a)	(b)
		Start Date	End Date
Task 1	(a) Direct Project Administration	October-13	April-17
Task 1 a	Project Administration	October-13	April-17
Task 1 b	Quarterly Progress Report	October-13	April-17
Task 1 c	Invoices	October-13	April-17
Task 1 d	Draft and Final Project Completion Report	October-13	April-17
Task 1 e	Labor Compliance Plan	February-15	December-15
Task 2	(b) Land Purchase/ Easement	October-14	January-16
Task 3	(c) Planning/ Design/ Engineering/ Environmental Documentation	April-14	January-16
Task 3 a	Assessment and Evaluation	April-14	December-15
Task 3 b	Planning/ Design/ Engineering	October-14	January-16
Task 3 c	Environmental Documentation	April-14	May-15
Task 3 d	Permitting	October-14	January-16
Task 3 e	Project Monitoring Plan	June-14	December-15
Task 4	(d) Construction/ Implementation	February-15	December-15
Task 4 a	Construction Contracting	February-16	April-17
Task 4 b	Project Construction	May-16	October-16
Task 4 c	Environmental Compliance/ Mitigation/ Enhancement	May-16	November-16
Task 4 d	Construction Administration	May-16	December-16

Project 6: North Bay Water Reuse Program			
Category		Start Date	End Date
Task 1	(a) Direct Project Administration	January-12	April-18
Task 1 a	Project Administration	January-12	April-18
Task 1 b	Quarterly Progress Report	January-12	April-18
Task 1 c	Invoices	January-12	April-18
Task 1 d	Draft and Final Project Completion Report	January-12	April-18
Task 1 e	Labor Compliance Plan	July-14	June-16
Task 2	(b) Land Purchase/ Easement	November-12	July-15
Task 3	(c) Planning/ Design/ Engineering/ Environmental Documentation	December-12	July-15
Task 3 a	Assessment and Evaluation	January-12	June-14
Task 3 b	Planning/ Design/ Engineering	January-12	July-15
Task 3 c	Environmental Documentation	January-12	December-13
Task 3 d	Permitting	December-12	December-14
Task 3 e	Project Monitoring Plan	June-14	December-14
Task 4	(d) Construction/ Implementation	May-14	July-16
Task 4 a	Construction Contracting	May-14	Feb-16
Task 4 b	Mobilization and Site Preparation	Jul-14	Jun-16
Task 4 c	Project Construction	Jul-14	Jun-16
Task 4 d	Performance Testing and Demobilization	Jul-14	Jun-16
Task 4 e	Environmental Compliance/ Mitigation/ Enhancement	Jul-14	Jun-16
Task 4 f	Construction Administration	May-14	Jul-16

DWR Prop 84 - Local Project Sponsor Agreement - IRWM 2

Project 7. Oakland Sausal Creek Restoration Project			
Category		Start Date	End Date
Task 1	(a) Direct Project Administration	October-13	April-16
Task 1 a	Project Administration	October-13	April-16
Task 1 b	Quarterly Progress Report	October-13	April-16
Task 1 c	Invoices	October-13	April-16
Task 1 d	Draft and Final Project Completion Report	October-13	April-16
Task 1 e	Labor Compliance Plan	October 2013	January-16
Task 2	(b) Land Purchase/ Easement	N/A	N/A
Task 3	(c) Planning/ Design/ Engineering/ Environmental Documentation	N/A	N/A
Task 4	(d) Construction/ Implementation	December-13	March-15
Task 4 a	Construction Contracting	December-13	May-14
Task 4 b	Mobilization and Site Preparation	May-14	July-14
Task 4 c	Project Construction	August-14	October-14
Task 4 d	Performance Testing and Demobilization	August-14	October-14
Task 4 e	Environmental Compliance/ Mitigation/ Enhancement	May-14	March-14
Task 4 f	Construction Administration	October-13	March-15

Project 8. Pescadero Water Supply and Sustainability Project			
Category		Start Date	End Date
Task 1	(a) Direct Project Administration	October-13	December-15
Task 1 a	Project Administration	October-13	December-15
Task 1 b	Quarterly Progress Report	August-14	December-15
Task 1 c	Invoices	August-14	December-15
Task 1 d	Draft and Final Project Completion Report	May-15	January-16
Task 1 e	Labor Compliance Plan	January-15	December-15
Task 2	(b) Land Purchase/ Easement	N/A	N/A
Task 3	(c) Planning/ Design/ Engineering/ Environmental Documentation	November-12	January-15
Task 3 a	Assessment and Evaluation	November-12	September-13
Task 3 b	Planning/ Design/ Engineering	February-14	August-14
Task 3 c	Environmental Documentation	August-12	January-15
Task 3 d	Permitting	August-12	January-15
Task 4	(d) Construction/ Implementation	January-15	October-15
Task 4 a	Construction Contracting	January-15	April-15
Task 4 b	Mobilization and Site Preparation	May-15	June-15
Task 4 c	Project Construction	July-15	October-15
Task 4 d	Environmental Compliance/ Mitigation/ Enhancement	May-15	October-15
Task 4 e	Construction Administration	May-15	October-15

Attachment 3

Grant Agreement No. 4600010575
Page 80 of 103

Project 9: Petaluma Flood Reduction, Water & Habitat Quality, and Recreation Project for Capri Creek			
Category		Start Date	End Date
Task 1	(a) Direct Project Administration	October-13	January-16
Task 1 a	Project Administration	October-13	January-16
Task 1 b	Quarterly Progress Report	October-13	January-16
Task 1 c	Invoices	October-13	January-16
Task 1 d	Draft and Final Project Completion Report	October-13	January-16
Task 1 e	Labor Compliance Plan	March-14	October-15
Task 2	(b) Land Purchase/ Easement	N/A	N/A
Task 3	(c) Planning/ Design/ Engineering/ Environmental Documentation	January-13	December-14
Task 3 a	Assessment and Evaluation	October-13	January-14
Task 3 b	Planning/ Design/ Engineering	February-14	August-14
Task 3 c	Environmental Documentation	February-13	May-14
Task 3 d	Permitting	August-13	December-14
Task 3 e	Project Monitoring Plan	June-14	December-14
Task 4	(d) Construction/ Implementation	February-14	December-14
Task 4 a	Construction Contracting	February-14	January-15
Task 4 b	Mobilization and Site Preparation	April-14	March-15
Task 4 c	Project Construction	August-14	October-15
Task 4 d	Performance Testing and Demobilization	November-14	November-15
Task 4 e	Environmental Compliance/ Mitigation/ Enhancement	April-14	December-15
Task 4 f	Construction Administration	April-14	January-16

Project 10: Redwood City Bayfront Canal and Atherton Channel Flood Improvement and Habitat Restoration Project			
Category		Start Date	End Date
Task 1	(a) Direct Project Administration	October-13	October-16
Task 1 a	Project Administration	October-13	October-16
Task 1 b	Quarterly Progress Report	October-13	October-16
Task 1 c	Invoices	October-13	October-16
Task 1 d	Draft and Final Project Completion Report	October-13	October-16
Task 1 e	Labor Compliance Plan	October-13	October-15
Task 2	(b) Land Purchase/ Easement	January-13	March-15
Task 3	(c) Planning/ Design/ Engineering/ Environmental Documentation	January-13	June-15
Task 3 a	Assessment and Evaluation	January-13	December-13
Task 3 b	Planning/ Design/ Engineering	January-14	March-15
Task 3 c	Environmental Documentation	February-13	March-15
Task 3 d	Permitting	January-15	June-15
Task 3 e	Project Monitoring Plan	January-15	March-15
Task 4	(d) Construction/ Implementation	June-15	October-16
Task 4 a	Construction Contracting	June-15	September-15
Task 4 b	Mobilization and Site Preparation	September-15	October-15
Task 4 c	Project Construction	October-15	October-16
Task 4 d	Performance Testing and Demobilization	October-15	October-16
Task 4 e	Environmental Compliance/ Mitigation/ Enhancement	October-15	November-15
Task 4 f	Construction Administration	October-15	October-16

DWR Prop 84 - Local Project Sponsor Agreement - IRWM 2

Project 11: Regional Groundwater Storage and Recovery Project Phase 1A - South Westside Basin			
	Category	Start Date	End Date
Task 1	(a) Direct Project Administration	June-14	December-16
Task 1 a	Project Administration	June-14	January-16
Task 1 b	Quarterly Progress Report	June-14	January-16
Task 1 c	Invoices	June-14	January-16
Task 1 d	Draft and Final Project Completion Report	June-14	January-16
Task 1 e	Labor Compliance Plan	June-14	October-15
Task 2	(b) Land Purchase/ Easement	June-14	March-15
Task 3	(c) Planning/ Design/ Engineering/ Environmental Documentation	December-12	July-15
Task 3 a	Assessment and Evaluation	May-13	September-14
Task 3 b	Planning/ Design/ Engineering	May-13	September-14
Task 3 c	Environmental Documentation	December-12	September-14
Task 3 d	Permitting	Jan-15	May-15
Task 3 e	Project Monitoring Plan	Jun-14	Jul-15
Task 4	(d) Construction/ Implementation	May-14	Jun-16
Task 4 a	Construction Contracting	May-14	Jul-15
Task 4 b	Mobilization and Site Preparation	Jul-14	Jul-16
Task 4 c	Project Construction	Jul-14	Jul-16
Task 4 d	Performance Testing and Demobilization	Jul-14	Jul-16
Task 4 e	Environmental Compliance/ Mitigation/ Enhancement	Jul-14	Jul-16
Task 4 f	Construction Administration	Jul-14	Jul-16

Project 12: Richmond Breuner Marsh Restoration Project			
	Category	Start Date	End Date
Task 1	(a) Direct Project Administration	October-13	August-16
Task 1 a	Project Administration	October-13	August-16
Task 1 b	Quarterly Progress Report	October-13	August-16
Task 1 c	Invoices	October-13	August-16
Task 1 d	Draft and Final Project Completion Report	October-13	August-16
Task 1 e	Labor Compliance Plan	October-13	December-13
Task 2	(b) Land Purchase/ Easement	N/A	N/A
Task 3	(c) Planning/ Design/ Engineering/ Environmental Documentation	December-12	April-16
Task 3 a	Assessment and Evaluation	October-13	April-14
Task 3 b	Planning/ Design/ Engineering	October-13	April-14
Task 3 c	Environmental Documentation	January-13	April-14
Task 3 d	Permitting	December-12	April-16
Task 3 e	Project Monitoring Plan	Jun-14	Dec-14
Task 4	(d) Construction/ Implementation	Apr-14	Apr-16
Task 4 a	Construction Contracting	Apr-14	May-14
Task 4 b	Mobilization and Site Preparation	Jun-14	Aug-14
Task 4 c	Project Construction	Sep-14	Jan-16
Task 4 d	Performance Testing and Demobilization	Jan-16	Jan-16
Task 4 e	Environmental Compliance/ Mitigation/ Enhancement	Jun-14	Apr-16

Attachment 3

Grant Agreement No. 4600010575
Page 82 of 103

Project 13: Roseview Heights Infrastructure Upgrades for Water Supply and Quality Improvement			
	Category	Start Date	End Date
Task 1	(a) Direct Project Administration	October-13	July-16
Task 1 a	Project Administration	October-13	July-16
Task 1 b	Quarterly Progress Report	October-13	July-16
Task 1 c	Invoices	October-13	November-16
Task 1 d	Draft and Final Project Completion Report	October-13	November-16
Task 1 e	Labor Compliance Plan	October-13	January-16
Task 2	(b) Land Purchase/ Easement	January-12	August-14
Task 3	(c) Planning/ Design/ Engineering/ Environmental Documentation	November-10	September-13
Task 3 a	Assessment and Evaluation	November-10	January-12
Task 3 b	Planning/ Design/ Engineering	November-10	September-13
Task 3 c	Environmental Documentation	January-13	December-14
Task 3 d	Permitting	May-14	November-16
Task 3 e	Project Monitoring Plan	June-14	November-16
Task 4	(d) Construction/ Implementation	Jul-14	Jul-16
Task 4 a	Construction Contracting	Jul-14	Nov-14
Task 4 b	Mobilization and Site Preparation	Dec-14	Jul-15
Task 4 c	Project Construction	Feb-15	Jun-16
Task 4 d	Performance Testing and Demobilization	Nov-15	Jul-16
Task 4 e	Environmental Compliance/ Mitigation/ Enhancement	Dec-14	Jul-16
Task 4 f	Construction Administration	Dec-13	Jul-16

Project 14: San Francisco Bay Climate Change Pilot Projects Combining Ecosystem Adaptation, Flood Risk Management and Wastewater Effluent Polishing			
	Category	Start Date	End Date
Task 1	(a) Direct Project Administration	October-13	September-17
Task 1 a	Project Administration	October-13	September-17
Task 1 b	Quarterly Progress Report	October-13	September-17
Task 1 c	Invoices	October-13	September-17
Task 1 d	Draft and Final Project Completion Report	October-13	September-17
Task 1 e	Labor Compliance Plan	October-13	September-15
Task 2	(b) Land Purchase/ Easement	N/A	N/A
Task 3	(c) Planning/ Design/ Engineering/ Environmental Documentation	October-13	December-14
Task 3 a	Assessment and Evaluation	October-13	March-14
Task 3 b	Planning/ Design/ Engineering	April-14	September-14
Task 3 c	Environmental Documentation	January-14	October-14
Task 3 d	Permitting	April-14	October-14
Task 3 e	Project Monitoring Plan	June-14	December-14
Task 4	(d) Construction/ Implementation	August-14	September-17
Task 4 a	Construction Contracting	Aug-14	Sep-14
Task 4 b	Mobilization and Site Preparation	Nov-14	Nov-14
Task 4 c	Project Construction	Dec-14	Apr-15
Task 4 d	Performance Testing and Demobilization	May-15	Sep-17
Task 4 e	Environmental Compliance/ Mitigation/ Enhancement	Oct-14	Apr-15
Task 4 f	Construction Administration	Oct-14	Apr-15

DWR Prop 84 - Local Project Sponsor Agreement - IRWM 2

Project 15: San Francisco International Airport Reclaimed Water Facility			
	Category	Start Date	End Date
Task 1	(a) Direct Project Administration	October-13	January-17
Task 1 a	Project Administration	October-13	January-17
Task 1 b	Quarterly Progress Report	October-13	January-17
Task 1 c	Invoices	October-13	January-17
Task 1 d	Draft and Final Project Completion Report	October-13	January-17
Task 1 e	Labor Compliance Plan	October-13	August-16
Task 2	(b) Land Purchase/ Easement	N/A	N/A
Task 3	(c) Planning/ Design/ Engineering/ Environmental Documentation	October-13	July-16
Task 3 a	Assessment and Evaluation	October-13	July-16
Task 3 b	Planning/ Design/ Engineering	October-13	July-16
Task 3 c	Environmental Documentation	January-14	July-14
Task 3 d	Permitting	January-16	June-16
Task 3 e	Project Monitoring Plan	June-14	December-14
Task 4	(d) Construction/ Implementation	July-14	August-16
Task 4 a	Construction Contracting	Jul-14	Aug-16
Task 4 b	Mobilization and Site Preparation	Jul-14	Aug-16
Task 4 c	Project Construction	Jul-14	Aug-16
Task 4 d	Performance Testing and Demobilization	Jul-14	Aug-16
Task 4 e	Environmental Compliance/ Mitigation/ Enhancement	Jul-14	Aug-16
Task 4 f	Construction Administration	Jul-14	Aug-16
Project 16: San Jose Green Streets and Alleys Demonstration Project			
	Category	Start Date	End Date
Task 1	(a) Direct Project Administration	October-13	August-17
Task 1 a	Project Administration	October-13	August-17
Task 1 b	Quarterly Progress Report	October-13	August-17
Task 1 c	Invoices	October-13	August-17
Task 1 d	Draft and Final Project Completion Report	October-13	August-17
Task 1 e	Labor Compliance Plan	October-13	June-17
Task 2	(b) Land Purchase/ Easement	N/A	N/A
Task 3	(c) Planning/ Design/ Engineering/ Environmental Documentation	October-13	August-16
Task 3 a	Assessment and Evaluation	October-14	May-15
Task 3 b	Planning/ Design/ Engineering	June-15	October-15
Task 3 c	Environmental Documentation	May-15	August-15
Task 3 d	Permitting	N/A	N/A
Task 3 e	Project Monitoring Plan	July-14	April-15
Task 4	(d) Construction/ Implementation	May-15	Jun-17
Task 4 a	Construction Contracting	Jan-16	Apr-16
Task 4 b	Mobilization and Site Preparation	May-16	Sep-16
Task 4 c	Project Construction	Aug-16	Sep-16
Task 4 d	Performance Testing and Demobilization	May-15	Sep-16
Task 4 e	Environmental Compliance/ Mitigation/ Enhancement	May-15	May-17
Task 4 f	Construction Administration	Jan-16	Sep-16

DWR Prop 84 - Local Project Sponsor Agreement - IRWM 2

Attachment 3

Grant Agreement No. 4600010575
Page 84 of 103

Project 17: San Pablo Rheem Creek Wetlands Restoration Project			
Category		Start Date	End Date
Task 1	(a) Direct Project Administration	October-13	December-17
Task 1 a	Project Administration	October-13	December-17
Task 1 b	Quarterly Progress Report	October-13	December-17
Task 1 c	Invoices	October-13	December-17
Task 1 d	Draft and Final Project Completion Report	October-13	December-17
Task 1 e	Labor Compliance Plan	October-13	September-15
Task 2	(b) Land Purchase/ Easement	October-13	March-14
Task 3	(c) Planning/ Design/ Engineering/ Environmental Documentation	January-12	July-15
Task 3 a	Assessment and Evaluation	August-13	October-13
Task 3 b	Planning/ Design/ Engineering	October-13	July-15
Task 3 c	Environmental Documentation	January-13	July-14
Task 3 d	Permitting	January-12	July-15
Task 4	(d) Construction/ Implementation	June-15	December-17
Task 4 a	Construction Contracting	Jun-15	Jul-15
Task 4 b	Mobilization and Site Preparation	Aug-15	Aug-15
Task 4 c	Project Construction	Sep-15	Oct-15
Task 4 d	Performance Testing and Demobilization	Dec-15	Dec-17
Task 4 e	Environmental Compliance/ Mitigation/ Enhancement	Jul-15	Dec-17
Task 4 f	Construction Administration	Jul-15	Dec-17

Project 18: St. Helena Upper York Creek Dam Removal and Ecosystem Restoration Project			
Category		Start Date	End Date
Task 1	(a) Direct Project Administration	February-14	March-18
Task 1 a	Project Administration	February-14	March-18
Task 1 b	Quarterly Progress Report	October-14	January-18
Task 1 c	Invoices	October-14	March-18
Task 1 d	Draft and Final Project Completion Report	November-16	March-18
Task 1 e	Labor Compliance Plan	March-15	March-18
Task 2	(b) Land Purchase/ Easement	N/A	N/A
Task 3	(c) Planning/ Design/ Engineering/ Environmental Documentation	September-08	May-16
Task 3 a	Plans, Specifications, Engineer's Cost Estimates	September-08	March-16
Task 3 b	Environmental Documentation	September-08	March-15
Task 3 c	Permit Acquisition	October-14	May-16
Task 4	(d) Construction/ Implementation	March-15	March-18
Task 4 a	SWPPP	Mar-15	Jan-18
Task 4 b	Construction Phase Administration and Engineering	May-15	Jun-17
Task 4 c	Project Construction	May-15	Jan-18
Task 4 d	Dam Removal and Channel Restoration	Oct-15	Jan-18
Task 4 e	Post Construction Monitoring and Reporting	Mar-15	Mar-18

DWR Prop 84 - Local Project Sponsor Agreement - IRWM 2

Attachment 3

Grant Agreement No. 4600010575
Page 85 of 103

Project 19: Students and Teachers Restoring a Watershed (STRAW) Project			
Category		Start Date	End Date
Task 1	(a) Direct Project Administration	September-08	December-18
Task 1 a	Project Administration	September-08	December-18
Task 1 b	Quarterly Progress Report	September-08	December-18
Task 1 c	Invoices	September-08	December-18
Task 1 d	Draft and Final Project Completion Report	September-08	December-18
Task 2	(b) Land Purchase/ Easement	N/A	N/A
Task 3	(c) Planning/ Design/ Engineering/ Environmental Documentation	September-08	September-18
Task 4	(d) Construction/ Implementation	September-08	September-18
Task 4 a	Professional Development Workshops	September-08	September-18
Task 4 b	Classroom Activities	September-08	September-18
Task 4 c	Restoration Project Construction	September-08	September-18
Task 4 d	Maintenance and Monitoring	September-08	September-18

Project 20: Grant Administration			
Category		Start Date	End Date
Task 1	(a) Direct Project Administration	February-14	December-18
Task 1 a	Direct Program Administration	February-14	December-18
Task 1 b	Reporting	February-14	December-18
Task 1 c	Invoices	February-14	December-18

Attachment 3

Grant Agreement No. 4600010575
Page 86 of 103

EXHIBIT D
STANDARD CONDITIONS

D.1) ACCOUNTING AND DEPOSIT OF FUNDING DISBURSEMENT:

- a) **Separate Accounting of Funding Disbursements and Interest Records:** Grantee shall account for the money disbursed pursuant to this Grant Agreement separately from all other Grantee funds. Grantee shall maintain audit and accounting procedures that are in accordance with generally accepted accounting principles and practices, consistently applied. Grantee shall keep complete and accurate records of all receipts, disbursements, and interest earned on expenditures of such funds. Grantee shall require its contractors or subcontractors to maintain books, records, and other documents pertinent to their work in accordance with generally accepted accounting principles and practices. Records are subject to inspection by State at any and all reasonable times.
- b) **Fiscal Management Systems and Accounting Standards:** The Grantee agrees that, at a minimum, its fiscal control and accounting procedures will be sufficient to permit tracing of grant funds to a level of expenditure adequate to establish that such funds have not been used in violation of state law or this Grant Agreement.
- c) **Disposition of Money Disbursed:** All money disbursed pursuant to this Grant Agreement shall be deposited, administered, and accounted for pursuant to the provisions of applicable law.
- d) **Remittance of Unexpended Funds:** Grantee shall remit to State any unexpended funds that were disbursed to Grantee under this Grant Agreement and were not used to pay Eligible Project Costs within a period of sixty (60) calendar days from the final disbursement from State to Grantee of funds or, within thirty (30) calendar days of the expiration of the Grant Agreement, whichever comes first.

D.2) ACKNOWLEDGEMENT OF CREDIT: Grantee shall include appropriate acknowledgement of credit to the State and to all cost-sharing partners for their support when promoting the Projects or using any data and/or information developed under this Grant Agreement. During construction of each project, Grantee shall install a sign at a prominent location, which shall include a statement that the project is financed under the Safe Drinking Water, Water Quality and Supply, Flood Control, River and Coastal Protection Bond Act of 2006, administered by State of California, Department of Water Resources. Grantee shall notify State that the sign has been erected by providing them with a site map with the sign location noted and a photograph of the sign.

D.3) AIR OR WATER POLLUTION VIOLATION: Under State laws, the Grantee shall not be: (1) in violation of any order or resolution not subject to review promulgated by the State Air Resources Board or an air pollution control district; (2) subject to cease and desist order not subject to review issued pursuant to Section 13301 of the Water Code for violation of waste discharge requirements or discharge prohibitions; or (3) finally determined to be in violation of provisions of federal law relating to air or water pollution.

D.4) AMENDMENT: This Grant Agreement may be amended at any time by mutual agreement of the Parties, except insofar as any proposed amendments are in any way contrary to applicable law. Requests by the Grantee for amendments must be in writing stating the amendment request and the reason for the request. State shall have no obligation to agree to an amendment.

D.5) AMERICANS WITH DISABILITIES ACT: By signing this Grant Agreement, Grantee assures State that it complies with the Americans with Disabilities Act (ADA) of 1990, (42 U.S.C., 12101 et seq.), which prohibits discrimination on the basis of disability, as well as all applicable regulations and guidelines issued pursuant to the ADA.

D.6) APPROVAL: This Agreement is of no force or effect until signed by all parties to the agreement. Grantee may not submit invoices or receive payment until all required signatures have been obtained.

D.7) AUDITS: State reserves the right to conduct an audit at any time between the execution of this Grant Agreement and the completion of Projects, with the costs of such audit borne by State. After completion of the Projects, State may require Grantee to conduct a final audit to State's specifications,

Attachment 3

Grant Agreement No. 4600010575

Page 87 of 103

at Grantee's expense, such audit to be conducted by and a report prepared by an independent Certified Public Accountant. Failure or refusal by Grantee to comply with this provision shall be considered a breach of this Grant Agreement, and State may elect to pursue any remedies provided in Paragraph 14 or take any other action it deems necessary to protect its interests.

Pursuant to Government Code Section 8546.7, the Grantee shall be subject to the examination and audit by the State for a period of three years after final payment under this Grant Agreement with respect to all matters connected with this Grant Agreement, including but not limited to, the cost of administering this Grant Agreement. All records of Grantee or its contractor or subcontractors shall be preserved for this purpose for at least three (3) years after project completion or final billing, whichever comes later.

- D.8) BUDGET CONTINGENCY:** If the Budget Act of the current year covered under this Grant Agreement does not appropriate sufficient funds for the Proposition 84 Implementation Grant Program, this Grant Agreement shall be of no force and effect. This provision shall be construed as a condition precedent to the obligation of State to make any payments under this Grant Agreement. In this event, State shall have no liability to pay any funds whatsoever to Grantee or to furnish any other considerations under this Grant Agreement and Grantee shall not be obligated to perform any provisions of this Grant Agreement. Nothing in this Grant Agreement shall be construed to provide Grantee with a right of priority for payment over any other Grantee. If funding for any fiscal year after the current year covered by this Grant Agreement is reduced or deleted by the Budget Act for purposes of this program, State shall have the option to either cancel this Grant Agreement with no liability occurring to State, or offer a Grant Agreement amendment to Grantee to reflect the reduced amount.
- D.9) CALIFORNIA CONSERVATION CORPS:** As required in Water Code section 79038(b), Grantee shall examine the feasibility of using the California Conservation Corps or community conservation corps to accomplish the habitat restoration, enhancement and protection activities listed in the Exhibit A, Work Plan, and shall use the services of one of these organizations whenever feasible.
- D.10) CEQA:** Activities funded under this Grant Agreement, regardless of funding source, must be in compliance with the California Environmental Quality Act (CEQA) (Public Resources Code §21000 et seq.). Information on CEQA may be found at the following links:
 Environmental Information: <http://ceres.ca.gov/ceqa/>
 California State Clearinghouse Handbook: <http://ceres.ca.gov/planning/sch/>
- D.11) CHILD SUPPORT COMPLIANCE ACT:** For any Grant Agreement in excess of \$100,000, the Grantee acknowledges in accordance with Public Contract Code 7110, that:
- a) The Grantee recognizes the importance of child and family support obligations and shall fully comply with all applicable state and federal laws relating to child and family support enforcement, including, but not limited to, disclosure of information and compliance with earnings assignment orders, as provided in Chapter 8 (commencing with section 5200) of Part 5 of Division 9 of the Family Code; and
 - b) The Grantee, to the best of its knowledge is fully complying with the earnings assignment orders of all employees and is providing the names of all new employees to the New Hire Registry maintained by the California Employment Development Department.
- D.12) CLAIMS DISPUTE:** Any claim that the Grantee may have regarding performance of this agreement including, but not limited to, claims for additional compensation or extension of time, shall be submitted to the State's Project Manager, within thirty (30) days of the Grantee's knowledge of the claim. State and Grantee shall then attempt to negotiate a resolution of such claim and process an amendment to this Agreement to implement the terms of any such resolution.
- D.13) COMPETITIVE BIDDING AND PROCUREMENTS:** Grantee shall comply with all applicable laws and regulations regarding securing competitive bids and undertaking competitive negotiations in Grantee's contracts with other entities for acquisition of goods and services and construction of public works with funds provided by State under this Grant Agreement.

DWR Prop 84 - Local Project Sponsor Agreement - IRWM 2

Attachment 3

Grant Agreement No. 4600010575

Page 88 of 103

- D.14) COMPUTER SOFTWARE:** Grantee certifies that it has appropriate systems and controls in place to ensure that state funds will not be used in the performance of this Grant Agreement for the acquisition, operation, or maintenance of computer software in violation of copyright laws.
- D.15) CONFLICT OF INTEREST:** All participants are subject to State and Federal conflict of interest laws. Failure to comply with these laws, including business and financial disclosure provisions, will result in the application being rejected and any subsequent contract being declared void. Other legal action may also be taken. Applicable statutes include, but are not limited to, Government Code, Section 1090 and Public Contract Code, Sections 10410 and 10411, for State conflict of interest requirements.
- a) **Current State Employees:** No State officer or employee shall engage in any employment, activity, or enterprise from which the officer or employee receives compensation or has a financial interest and which is sponsored or funded by any State agency, unless the employment, activity, or enterprise is required as a condition of regular State employment. No State officer or employee shall contract on his or her own behalf as an independent contractor with any State agency to provide goods or services.
 - b) **Former State Employees:** For the two-year period from the date he or she left State employment, no former State officer or employee may enter into a contract in which he or she engaged in any of the negotiations, transactions, planning, arrangements, or any part of the decision-making process relevant to the contract while employed in any capacity by any State agency. For the twelve-month period from the date he or she left State employment, no former State officer or employee may enter into a contract with any State agency if he or she was employed by that State agency in a policy-making position in the same general subject area as the proposed contract within the twelve-month period prior to his or her leaving State service.
 - c) **Employees of the Grantee:** Employees of the Grantee shall comply with all applicable provisions of law pertaining to conflicts of interest, including but not limited to any applicable conflict of interest provisions of the California Political Reform Act, Cal. Gov't Code § 87100 et seq.
 - d) **Employees and Consultants to the Grantee:** Individuals working on behalf of a Grantee may be required by the Department to file a Statement of Economic Interests (Fair Political Practices Commission Form 700) if it is determined that an individual is a consultant for Political Reform Act purposes.
- D.16) DELIVERY OF INFORMATION, REPORTS, AND DATA:** Grantee agrees to expeditiously provide throughout the term of this Grant Agreement, such reports, data, information, and certifications as may be reasonably required by State.
- D.17) DISPOSITION OF EQUIPMENT:** Grantee shall provide to State, not less than 30 calendar days prior to submission of the final invoice, an itemized inventory of equipment purchased with funds provided by State. The inventory shall include all items with a current estimated fair market value of more than \$5,000.00 per item. Within 60 calendar days of receipt of such inventory State shall provide Grantee with a list of the items on the inventory that State will take title to. All other items shall become the property of Grantee. State shall arrange for delivery from Grantee of items that it takes title to. Cost of transportation, if any, shall be borne by State.
- D.18) DRUG-FREE WORKPLACE CERTIFICATION:** Certification of Compliance: By signing this Grant Agreement, Grantee, its contractors or subcontractors hereby certify, under penalty of perjury under the laws of State of California, compliance with the requirements of the Drug-Free Workplace Act of 1990 (Government Code 8350 et seq.) and have or will provide a drug-free workplace by taking the following actions:
- a) Publish a statement notifying employees, contractors, and subcontractors that unlawful manufacture, distribution, dispensation, possession, or use of a controlled substance is prohibited and specifying actions to be taken against employees, contractors, or subcontractors for violations, as required by Government Code Section 8355(a)(1).

Attachment 3

Grant Agreement No. 4600010575
Page 89 of 103

- b) Establish a Drug-Free Awareness Program, as required by Government Code Section 8355(a)(2) to inform employees, contractors, or subcontractors about all of the following:
 - i) The dangers of drug abuse in the workplace,
 - ii) Grantee's policy of maintaining a drug-free workplace,
 - iii) Any available counseling, rehabilitation, and employee assistance programs, and
 - iv) Penalties that may be imposed upon employees, contractors, and subcontractors for drug abuse violations.
- c) Provide, as required by Government Code Sections 8355(a)(3), that every employee, contractor, and/or subcontractor who works under this Grant Agreement:
 - i) Will receive a copy of Grantee's drug-free policy statement, and
 - ii) Will agree to abide by terms of Grantee's condition of employment, contract or subcontract.
- D.19) FINAL INSPECTIONS AND CERTIFICATION OF REGISTERED PROFESSIONAL:** Upon completion of the Project, Grantee shall provide for a final inspection and certification by the appropriate registered professional (California Registered Civil Engineer or Geologist) that the Project has been completed in accordance with submitted final plans and specifications and any modifications thereto and in accordance with this Grant Agreement. Grantee shall notify the State's Project Manager of the inspection date at least 14 calendar days prior to the inspection in order to provide State the opportunity to participate in the inspection.
- D.20) GRANTEE COMMITMENTS:** Grantee accepts and agrees to comply with all terms, provisions, conditions and commitments of this Grant Agreement, including all incorporated documents, and to fulfill all assurances, declarations, representations, and statements made by the Grantee in the application, documents, amendments, and communications filed in support of its request for funding.
- D.21) GRANTEE NAME CHANGE:** Approval of the State's Program Manager is required to change the Grantee's name as listed on this Grant Agreement. Upon receipt of legal documentation of the name change the State will process an amendment. Payment of invoices presented with a new name cannot be paid prior to approval of said amendment.
- D.22) GOVERNING LAW:** This Grant Agreement is governed by and shall be interpreted in accordance with the laws of the State of California.
- D.23) INDEMNIFICATION:** Grantee shall indemnify and hold and save the State, its officers, agents, and employees, free and harmless from any and all liabilities for any claims and damages (including inverse condemnation) that may arise out of the Projects and this Agreement, including, but not limited to any claims or damages arising from planning, design, construction, maintenance and/or operation of levee rehabilitation measures for this Project and any breach of this Agreement. Grantee shall require its contractors or subcontractors to name the State, its officers, agents and employees as additional insured on their liability insurance for activities undertaken pursuant to this Agreement.
- D.24) INDEPENDENT CAPACITY:** Grantee, and the agents and employees of Grantees, in the performance of the Grant Agreement, shall act in an independent capacity and not as officers, employees, or agents of the State.
- D.25) INSPECTION OF BOOKS, RECORDS, AND REPORTS:** During regular office hours, each of the parties hereto and their duly authorized representatives shall have the right to inspect and to make copies of any books, records, or reports of either party pertaining to this Grant Agreement or matters related hereto. Each of the parties hereto shall maintain and shall make available at all times for such inspection accurate records of all its costs, disbursements, and receipts with respect to its activities under this Grant Agreement. Failure or refusal by Grantee to comply with this provision shall be considered a breach of this Grant Agreement, and State may withhold disbursements to Grantee or take any other action it deems necessary to protect its interests.
- D.26) INSPECTIONS OF PROJECT BY STATE:** State shall have the right to inspect the work being performed at any and all reasonable times during the term of the Grant Agreement. This right shall extend to any subcontracts, and Grantee shall include provisions ensuring such access in all its contracts or subcontracts entered into pursuant to its Grant Agreement with State.

Attachment 3

Grant Agreement No. 4600010575
Page 90 of 103

- D.27) INVOICE DISPUTES:** In the event of an invoice dispute, payment will not be made until the dispute is resolved and a corrected invoice submitted. Failure to use the address exactly as provided may result in return of the invoice to the Grantee. Payment shall be deemed complete upon deposit of the payment, properly addressed, postage prepaid, in the United States mail. Any claim that Grantee may have regarding the performance of this Grant Agreement including, but not limited to claims for additional compensation or extension of time, shall be submitted to the DWR Project Manager within thirty (30) calendar days of Grantee's knowledge of the claim. State and Grantee shall then attempt to negotiate a resolution of such claim and process an amendment to the Grant Agreement to implement the terms of any such resolution.
- D.28) LABOR CODE COMPLIANCE:** The Grantee will be required to keep informed of and take all measures necessary to ensure compliance with applicable California Labor Code requirements, including, but not limited to, Section 1720 *et seq.* of the California Labor Code regarding public works, limitations on use of volunteer labor (California Labor Code Section 1720.4), labor compliance programs (California Labor Code Section 1771.5) and payment of prevailing wages for work done and funded pursuant to these Guidelines, including any payments to the Department of Industrial Relations under Labor Code Section 1771.3.
- D.29) MODIFICATION OF OVERALL WORK PLAN:** At the request of the Grantee, the State may at its sole discretion approve non-material changes to the portions of Exhibit A which concern the budget and schedule without formally amending this Grant Agreement. Non-material changes with respect to the budget are changes that only result in reallocation of the budget and will not result in an increase in the amount of the State Grant Agreement. Non-material changes with respect to each Project schedule are changes that will not extend the term of this Grant Agreement. Requests for non-material changes to the budget and schedule must be submitted by the Grantee to the State in writing and are not effective unless and until specifically approved by the State's Project Manager in writing.
- D.30) NONDISCRIMINATION:** During the performance of this Grant Agreement, Grantee and its contractors or subcontractors shall not unlawfully discriminate, harass, or allow harassment against any employee or applicant for employment because of sex (gender), sexual orientation, race, color, ancestry, religion, creed, national origin (including language use restriction), pregnancy, physical disability (including HIV and AIDS), mental disability, medical condition (cancer/genetic characteristics), age (over 40), marital status, and denial of medial and family care leave or pregnancy disability leave. Grantee and its contractors or subcontractors shall ensure that the evaluation and treatment of their employees and applicants for employment are free from such discrimination and harassment. Grantee and its contractors or subcontractors shall comply with the provisions of the Fair Employment and Housing Act (Gov. Code § 12990 (a-f) *et seq.*) and the applicable regulations promulgated there under (California Code of Regulations, Title 2, Section 7285 *et seq.*). The applicable regulations of the Fair Employment and Housing Commission implementing Government Code Section 12990 (a-f), set forth in Chapter 5 of Division 4 of Title 2 of the California Code of Regulations, are incorporated into this Agreement by reference and made a part hereof as if set forth in full. Grantee and its contractors or subcontractors shall give written notice of their obligations under this clause to labor organizations with which they have a collective bargaining or other agreement.
- Grantee shall include the nondiscrimination and compliance provisions of this clause in all subcontracts to perform work under the Grant Agreement.
- D.31) NO DISCRIMINATION AGAINST DOMESTIC PARTNERS:** For contracts over \$100,000 executed or amended after January 1, 2007, the Grantee certifies by signing this Grant Agreement, under penalty of perjury under the laws of State of California that Grantee is in compliance with Public Contract Code section 10295.3.
- D.32) OPINIONS AND DETERMINATIONS:** Where the terms of this Grant Agreement provide for action to be based upon, judgment, approval, review, or determination of either party hereto, such terms are not intended to be and shall never be construed as permitting such opinion, judgment, approval, review, or determination to be arbitrary, capricious, or unreasonable.

Attachment 3

Grant Agreement No. 4600010575
Page 91 of 103

- D.33) PERFORMANCE AND ASSURANCES:** Grantee agrees to faithfully and expeditiously perform or cause to be performed all Project work as described in Exhibit A, "Scope of Work Plan" and to apply State funds received only to Eligible Project Costs in accordance with applicable provisions of the law.
- D.34) PRIORITY HIRING CONSIDERATIONS:** If this Grant Agreement includes services in excess of \$200,000, the Grantee shall give priority consideration in filling vacancies in positions funded by the Grant Agreement to qualified recipients of aid under Welfare and Institutions Code Section 11200 in accordance with Pub. Contract Code §10353.
- D.35) PROHIBITION AGAINST DISPOSAL OF PROJECT WITHOUT STATE PERMISSION:** The Grantee shall not sell, abandon, lease, transfer, exchange, mortgage, hypothecate, or encumber in any manner whatsoever all or any portion of any real or other property necessarily connected or used in conjunction with the Projects, or with Grantee's service of water, without prior permission of State. Grantee shall not take any action, including but not limited to actions relating to user fees, charges, and assessments that could adversely affect the ability of Grantee to meet its obligations under this Grant Agreement, without prior written permission of State. State may require that the proceeds from the disposition of any real or personal property be remitted to State.
- D.36) REMEDIES NOT EXCLUSIVE:** The use by either party of any remedy specified herein for the enforcement of this Grant Agreement is not exclusive and shall not deprive the party using such remedy of, or limit the application of, any other remedy provided by law.
- D.37) RETENTION:** Notwithstanding any other provision of this Grant Agreement, State shall, for each project, withhold five percent (5.0%) until January 1, 2016 and ten percent (10.0%), thereafter, of the funds requested by Grantee for reimbursement of Eligible Costs. Each project in this Grant Agreement will be eligible to release its respective retention when that project is completed and Grantee has met requirements of Paragraph 19, "Submissions of Reports" as follows: At such time as the "Project Completion Report" required under Paragraph 19 is submitted to and approved by State, State shall disburse the retained funds as to that project to Grantee, except in the case of the last project to be completed under this Grant Agreement, in which case retention for such project will not be disbursed until the "Grant Completion Report" is submitted to and approved by State.
- D.38) RIGHTS IN DATA:** Grantee agrees that all data, plans, drawings, specifications, reports, computer programs, operating manuals, notes and other written or graphic work produced in the performance of this Grant Agreement shall be made available to the State and shall be in the public domain to the extent to which release of such materials is required under the California Public Records Act., Cal. Gov't Code §6250 et seq. Grantee may disclose, disseminate and use in whole or in part, any final form data and information received, collected and developed under this Grant Agreement, subject to appropriate acknowledgement of credit to State for financial support. Grantee shall not utilize the materials for any profit-making venture or sell or grant rights to a third party who intends to do so. The State shall have the right to use any data described in this paragraph for any public purpose.
- D.39) SEVERABILITY:** Should any portion of this Grant Agreement be determined to be void or unenforceable, such shall be severed from the whole and the Grant Agreement shall continue as modified.
- D.40) STATE REVIEWS:** The parties agree that review or approval of projects applications, documents, permits, plans, and specifications or other project information by the State is for administrative purposes only and does not relieve the Grantee of their responsibility to properly plan, design, construct, operate, maintain, implement, or otherwise carry out the projects.
- D.41) SUSPENSION OF PAYMENTS:** This Grant Agreement may be subject to suspension of payments or termination, or both, and Grantee may be subject to debarment if the State determines that:
- a) Grantee, its contractors, or subcontractors have made a false certification, or
 - b) Grantee, its contractors, or subcontractors violates the certification by failing to carry out the requirements noted in this Grant Agreement.
- D.42) SUCCESSORS AND ASSIGNS:** This Grant Agreement and all of its provisions shall apply to and bind the successors and assigns of the parties. No assignment or transfer of this Grant Agreement or any part

Attachment 3

Grant Agreement No. 4600010575
Page 92 of 103

thereof, rights hereunder, or interest herein by the Grantee shall be valid unless and until it is approved by State and made subject to such reasonable terms and conditions as State may impose.

- D.43) TERMINATION BY GRANTEE:** Subject to State approval which may be reasonably withheld, Grantee may terminate this Agreement and be relieved of contractual obligations. In doing so, Grantee must provide a reason(s) for termination. Grantee must submit all progress reports summarizing accomplishments up until termination date.
- D.44) TERMINATION FOR CAUSE:** Subject to the right to cure under Paragraph 14, the State may terminate this Grant Agreement and be relieved of any payments should Grantee fail to perform the requirements of this Grant Agreement at the time and in the manner herein, provided including but not limited to reasons of default under Paragraph 14.
- D.45) TERMINATION WITHOUT CAUSE:** The State may terminate this Agreement without cause on 30 days advance written notice. The Grantee shall be reimbursed for all reasonable expenses incurred up to the date of termination.
- D.46) THIRD PARTY BENEFICIARIES:** The parties to this Agreement do not intend to create rights in, or grant remedies to, any third party as a beneficiary of this Agreement, or any duty, covenant, obligation or understanding established herein.
- D.47) TIMELINESS:** Time is of the essence in this Grant Agreement.
- D.48) TRAVEL:** Grantee agrees that travel and per diem costs shall NOT be eligible for reimbursement with State funds, and shall NOT be eligible for computing Grantee cost match. Travel includes the costs of transportation, subsistence, and other associated costs incurred by personnel during the term of this Grant Agreement.
- D.49) WAIVER OF RIGHTS:** None of the provisions of this Grant Agreement shall be deemed waived unless expressly waived in writing. It is the intention of the parties here to that from time to time either party may waive any of its rights under this Grant Agreement unless contrary to law. Any waiver by either party of rights arising in connection with the Grant Agreement shall not be deemed to be a waiver with respect to any other rights or matters, and such provisions shall continue in full force and effect.
- D.50) WORKERS' COMPENSATION:** Grantee affirms that it is aware of the provisions of Section 3700 of the California Labor Code, which requires every employer to be insured against liability for workers' compensation or to undertake self-insurance in accordance with the provisions of that code, and Grantee affirms that it will comply with such provisions before commencing the performance of the work under this Grant Agreement and will make its contractors and subcontractors aware of this provision.

**EXHIBIT E
AUTHORIZING RESOLUTION**

**ASSOCIATION OF BAY AREA GOVERNMENTS
EXECUTIVE BOARD**

RESOLUTION NO. 2013 01-13

**AUTHORIZING THE EXECUTIVE DIRECTOR OR DESIGNEE, TO SUBMIT AN
APPLICATION AND EXECUTE AN AGREEMENT WITH THE CALIFORNIA
DEPARTMENT OF WATER RESOURCES ON BEHALF OF THE SAN FRANCISCO
BAY REGION IRWMP PROJECT PROPONENTS**

WHEREAS, the Association of Bay Area Governments (ABAG) is the home agency for the San Francisco Estuary Partnership SFEP, a coalition of resource agencies, non-profits, citizens, and scientists working to protect, restore, and enhance water quality and fish and wildlife habitat in and around the San Francisco Bay Delta Estuary, and

WHEREAS, ABAG is eligible to apply to the California Department of Water Resources to obtain an Integrated Regional Water Management Implementation Grant pursuant to the Safe Drinking Water, Water Quality and Supply, Flood Control, River and Coastal Protection Bond Act of 2006 (Public Resource Code Section 75001 *et seq.*), and

WHEREAS, the ABAG Executive Board adopted the San Francisco Bay Integrated Regional Water Management Plan to encourage integrated regional strategies for management of water resources and to provide funding for implementation projects that support the plan by Resolution No. 11-06; and

WHEREAS, the Coordinating Committee (CC), the Regional Water Management Group for the Bay Area IRWMP selected ABAG/SFEP to be the Applicant for the next round of IRWMP Proposition 84 Round 2 funding and selected 20 regionally located projects for this application; and

WHEREAS, the total amount of state funding requested under the grant application is \$20,000,000 and \$5,000,000 in project match will be met by project partners and SFEP from compatible grants or in-kind services.

Resolved by the Executive Board of the Association of Bay Area Governments (ABAG), that application be made to the California Department of Water Resources to obtain an Integrated Regional Water Management Implementation Grant pursuant to the Safe Drinking Water, Water Quality and Supply, Flood Control, River and Coastal Protection Bond Act of 2006 (Public Resource Code Section 75001 *et seq.*), and to enter into an agreement to receive a grant for the San Francisco Bay IRWM Prop 84 Round 2 Implementation Projects Initiative. The Executive Director, or designee, of the Association of Bay Area Governments is hereby authorized and directed to prepare the necessary data, conduct investigations, file such application, and execute a grant agreement with the California Department of Water Resources.

Attachment 3

Grant Agreement No. 4600010575
Page 94 of 103

**ASSOCIATION OF BAY AREA GOVERNMENTS
RESOLUTION NO. 01-13**

NOW THEREFORE BE IT RESOLVED, by the Executive Board of the Association of Bay Area Governments that application be made to the California Department of Water Resources to obtain an Integrated Regional Water Management Implementation Grant pursuant to the Safe Drinking Water, Water Quality and Supply, Flood Control, River and Coastal Protection Bond Act of 2006 (Public Resource Code Section 75001 et/seq.), and to enter into an agreement to receive a grant for the San Francisco Bay IRWM Prop 84 Round 2 Implementation Projects Initiative. The Executive Director, or designee, of the Association of Bay Area Governments is hereby authorized and directed to prepare the necessary data, conduct investigations, file such application, and execute a grant agreement with the California Department of Water Resources.

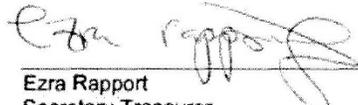
The foregoing was adopted by the Executive Board this 17th day of January, 2013.



Mark Luce
President

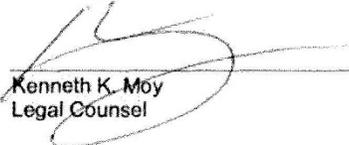
Certification of Executive Board Approval

I, the undersigned, the appointed and qualified Secretary-Treasurer of the Association of Bay Area Governments (Association), do hereby certify that the foregoing resolution was adopted by the Executive Board of the Association at a duly called meeting held on the 17th day of January, 2013.



Ezra Rapport
Secretary-Treasurer

Approved as To Legal Form



Kenneth K. Moy
Legal Counsel

**EXHIBIT F
LOCAL PROJECT SPONSORS**

Grantee has assigned, for each project, a Local Project Sponsor according to the roles of the participating agencies identified in the IRWM Plan. Local Project Sponsors may act on behalf of Grantee for the purposes of individual project management, oversight, compliance, and operations and maintenance. Local Project Sponsors are identified for each Sponsored Project below:

Local Sponsor Agency Designations		
Sponsored Project	Sponsor Agency	Agency Address
1	Bay Area Regional Conservation and Education Program	Solano County Water Agency 810 Vaca Valley Parkway, Ste. 203, Vacaville, CA 95688
2	East Bayshore Recycled Water Project Phase 1A (Emeryville)	East Bay Municipal Utility District Office of Water Recycling 375 11th Street, MS 804 Oakland, CA 94607-4240
3	Lagunitas Creek Watershed Sediment Reduction and Management Project	Marin Municipal Water District 220 Nellen Avenue Corte Madera, CA 94925-1169
4	Marin/Sonoma Conserving Our Watersheds: Agricultural BMP Projects	Marin Resource Conservation District 80 Fourth St. Suite 202 P.O. Box 1146 Point Reyes Station, CA 94956
5	Napa Milliken Creek Flood Damage Reduction and Fish Passage Barrier Removal	Napa County Napa County, 804 First Street, Napa, CA 94559 Attn: Richard Thomasser
6	North Bay Water Reuse Program – Sonoma Valley CSD 5th Street East/McGill Road Recycled Water Project	Sonoma Valley County Sanitation District Sonoma Valley County Sanitation District 404 Aviation Blvd. Santa Rosa, CA 95403
7	Oakland Sausal Creek Restoration Project	City of Oakland Oakland Public Works Department Watershed and Stormwater Program 250 Frank Ogawa Plaza Suite 4314 Oakland, CA 94612
8	Pescadero Water Supply and Sustainability Project	San Mateo County Dept. of Public Works & Parks 555 County Center, 5th Floor Redwood City, CA 94063-1665
9	Petaluma Flood Reduction, Water & Habitat Quality, and Recreation Project for Capri Creek	City of Petaluma 202 North McDowell Boulevard, Petaluma, CA 94954
10	Redwood City Bayfront Canal and Atherton Channel Flood Improvement and Habitat Restoration Project	City of Redwood City 1017 Middlefield Road Redwood City, CA 94063
11	Regional Groundwater Storage and Recovery Project Phase 1A – South Westside Basin, Northern San Mateo County	San Francisco Public Utilities Commission Water Resources Division 525 Golden Gate Ave, 10th Flr San Francisco, CA 94102
12	Richmond Breuner Marsh Restoration Project	East Bay Regional Park District East Bay Regional Park District P.O. Box 5381 Oakland, CA 94605
13	Roseview Heights Infrastructure Upgrades for Water Supply and Quality Improvement, Santa Clara County	Roseview Mutual Water Company 302F Toyon Ave, #270 San Jose, CA 95127

Attachment 3

Grant Agreement No. 4600010575
 Page 96 of 103

14	San Francisco Bay Climate Change Pilot Projects Combining Ecosystem Adaptation, Flood Risk Management and Wastewater Effluent Polishing	Association of Bay Area Governments	101-8th Street Oakland, CA 94604-2050
15	San Francisco International Airport Reclaimed Water Facility	San Francisco International Airport	P.O. Box 8097 San Francisco, CA 94128
16	San José Green Streets & Alleys Demonstration Projects	City of San Jose	200 E. Santa Clara Street San Jose, CA 95113
17	San Pablo Rheem Creek Wetlands Restoration Project	Contra Costa Water District	2411 Bisso Lane Concord, CA 94520
18	St. Helena Upper York Creek Dam Removal and Ecosystem Restoration Project	City of St. Helena	1480 Main Street St. Helena, CA 94574
19	Students and Teachers Restoring a Watershed (STRAW) Project—North and East Bay Watersheds	Students and Teachers Restoring a Watershed (STRAW)	3820 Cypress Dr. #11 Petaluma, CA 94954
20	ABAG Grant Administration	Association of Bay Area Governments	1515 Clay Street, Suite 1400 Oakland, CA 94612

**EXHIBIT G
REPORT FORMATS AND REQUIREMENTS**

The following reporting formats should be utilized. Please obtain State approval prior to submitting a report in an alternative format.

PROGRESS REPORTS

Progress reports shall generally use the following format. This format may be modified as necessary to effectively communicate information. For each project, describe the work performed including:

Project Status

Describe the work performed during the time period covered by the report, organized by Exhibit A, "Work Plan" tasks/subtasks/categories, including but not limited to:

- Updates on all ongoing tasks.
- Estimates of the percent (%) complete.
- Discussion of any project related work completed this reporting period.
- Milestones or deliverables completed/submitted.
- Impediments to completion of any task.
- Photos documenting progress.

Cost Information

For each project provide the following:

- A comparison of project task(s) percent complete with percent invoiced.
- A list of any changes approved to the budget in accordance with Grant Agreement and a revised budget, by task, if changed from latest budget in the Overall Work Plan.

Schedule Information

A list of any changes approved to the Schedule in accordance with Grant Agreement and a revised schedule, by task, if changed from latest reported schedule.

Anticipated Activities Next Quarter

Provide a description of anticipated activities for the next quarterly reporting period.

PROJECT COMPLETION REPORT

Project Completion Reports shall generally use the following format.

Executive Summary

Should include a brief summary of project information and include the following items:

- Brief description of work proposed to be done in the original Grant application.
- Description of actual work completed and any deviations from Exhibit A. List any official amendments to this Grant Agreement, with a short description of the amendment.

Reports and/or Products

The following items should be provided:

- Final Evaluation report
- Electronic copies of any data collected, not previously submitted
- As-built drawings
- Final geodetic survey information
- Self-Certification that the Project meets the stated goal of the Grant Agreement (e.g. 100-year level of flood protection, HMP standard, PI-84-99, etc.)

Attachment 3

Grant Agreement No. 4600010575
Page 98 of 103

- Project photos
- Discussion of problems that occurred during the work and how those problems were resolved
- A final project schedule showing actual progress versus planned progress

Costs and Dispositions of Funds

A list of showing:

- The date each invoice was submitted to State
- The amount of the invoice
- The date the check was received
- The amount of the check (If a check has not been received for the final invoice, then state this in this section.)
- A summary of the payments made by the Grantee for meeting its cost sharing obligations under this Grant Agreement.
- A summary of final funds disbursement including:
 - Labor cost of personnel of agency/ major consultant /sub-consultants. Indicate personnel, hours, rates, type of profession and reason for consultant, i.e., design, CEQA work, etc.
 - Project cost information, shown by material, equipment, labor costs, and any change orders
 - Any other incurred cost detail
 - A statement verifying separate accounting of funding disbursements
- Summary of project cost including the following items:
 - Accounting of the cost of project expenditure;
 - Include all internal and external costs not previously disclosed; and
 - A discussion of factors that positively or negatively affected the project cost and any deviation from the original project cost estimate.

Additional Information

- Benefits derived from the project, with quantification of such benefits provided, if applicable.
- A final project schedule showing actual progress verse planned progress as shown in Exhibit B.
- Certification from a California Registered Professional (Civil Engineer or Geologist, as appropriate) that the project was conducted in accordance with the approved work plan and any approved modifications thereto.
- Submittal schedule for the Post Performance Report and an outline of the proposed reporting format.

GRANT COMPLETION REPORT

The Grant Completion Report shall generally use the following format. This format may be modified as necessary to effectively communicate information on the various projects in the IRWM Program funded by this Grant Agreement, and includes the following:

Executive Summary

The Executive Summary consists of a maximum of twenty (20) pages summarizing information for the grant as well as the individual projects.

Reports and/or products

- Summary of the regional priorities, objectives, and water management strategies of the IRWM Plan.
- Brief comparison of work proposed in the original Safe Drinking Water, Water Quality and Supply, Flood Control, River and Coastal Protection Bond Act of 2006 IRWM Implementation Grant application and actual work done.
- Brief description of the projects completed and how they will further the goals identified in the Agency's final approved IRWM Plan.
- Describe how the implemented projects will meet the regional priorities identified in the final approved IRWM Plan and how the projects contribute to regional integration.
- Identify remaining work and mechanism for their implementation.

Attachment 3

Grant Agreement No. 4600010575
Page 99 of 103

- Identify any changes to the IRWM Plan as result of project implementation.
- Short description of the two year IRWM Plan update and the date when the updated Plan was submitted to DWR.
- If applicable, a short discussion on how the IRWM Plan will assist in reducing dependence on Delta water supplies.
- If applicable, a discussion of the critical water supply or water quality benefits to DAC as part of this Grant Agreement.

Cost & Disposition of Funds Information

- A summary of final funds disbursement for each project.

Additional Information

- A final schedule showing individual project's actual progress duration verse planned progress.
- Certification from a California Registered Professional (Civil Engineer or Geologist, as appropriate) that the Program was conducted in accordance with the approved work plan and any approved modifications thereto. Discussion of the synergies of the completed projects, including the integration of project benefits and a comparison of actual benefits versus those discussed in the original proposal.
- Submittal schedule for the Post Performance Reports for each of the projects in this Grant Agreement.

POST-PERFORMANCE REPORT

Report should be concise, and focus on how (each/the) project is actually performing compared to its expected performance; whether the project is being operated and maintained, and providing intended benefits as proposed.

Reports and/or products

- Time period of the annual report (i.e., Oct 2014 through September 2015)
- Short project description
- Discussion of the project benefits
- An assessment of any explanations for any differences between the expected versus actual project benefits in meeting IRWM priorities as stated in the original IRWM Implementation Grant application. Where applicable, the reporting should include quantitative metrics, i.e., new acre-feet of water produced that year, acres of wildlife habitat added, etc.
- Summary of any additional costs and/or benefits deriving from the project since its completion, if applicable
- Continued reporting on meeting the Output Indicators and Targets discussed in the Project Monitoring Plan discussed in Paragraph 21 of this Grant Agreement
- Any additional information relevant to or generated by the continued operation of the project

Attachment 3

*Grant Agreement No. 4600010575
Page 100 of 103*

**EXHIBIT H
REQUIREMENTS FOR STATEWIDE MONITORING AND DATA SUBMITTAL**

Surface and Groundwater Quality Data

Groundwater quality and ambient surface water quality monitoring data that include chemical, physical, or biological data shall be submitted to the State as described below, with a narrative description of data submittal activities included in project reports, as described in Exhibit G.

Surface water quality monitoring data shall be prepared for submission to the California Environmental Data Exchange Network (CEDEN). The CEDEN data templates are available on the CEDEN website. Inclusion of additional data elements described on the data templates is desirable. Data ready for submission should be uploaded to your CEDEN Regional Data Center via the CEDEN website. CEDEN website: <http://www.ceden.org>.

If a project's Work Plan contains a groundwater ambient monitoring element, groundwater quality monitoring data shall be submitted to the State for inclusion in the State Water Resources Control Board's Groundwater Ambient Monitoring and Assessment (GAMA) Program Information on the GAMA Program can be obtained at: http://www.waterboards.ca.gov/water_issues/programs/gama/. If further information is required, the Grantee can contact the State Water Resources Control Board (SWRCB) GAMA Program. A listing of SWRCB staff involved in the GAMA program can be found at: http://www.swrcb.ca.gov/water_issues/programs/gama/contact.shtml

Groundwater Level Data

Grantee shall submit to DWR groundwater level data collected as part of this grant. Water level data must be submitted using the California Statewide Groundwater Elevation Monitoring (CASGEM) online data submission system. Grantee should use their official CASGEM Monitoring Entity or Cooperating Agency status to gain access to the online submittal tool and submit data. If the data is from wells that are not part of the monitoring network, the water level measurements should be classified as voluntary measurements in the CASGEM system. If the grantee is not a Monitoring Entity or Cooperating Agency, please contact your DWR grant project manager for further assistance with data submittal. The activity of data submittal should be documented in appropriate progress or final project reports, as described in Exhibit G. Information regarding the CASGEM program can be found at <http://www.water.ca.gov/groundwater/casgem/>.

Attachment 3

Grant Agreement No. 4600010575
Page 101 of 103

EXHIBIT I
STATE AUDIT DOCUMENT REQUIREMENTS AND FUNDING MATCH GUIDELINES
FOR GRANTEES

State Audit Document Requirements

The list below details the documents/records that State Auditors typically reviewed in the event of a Grant Agreement being audited. Grantees should ensure that such records are maintained for each State funded Program/Project. Where applicable, this list of documents also includes documents relating to the Grantee's funding match which will be required for audit purposes.

Internal Controls:

1. Organization chart (e.g., Agency's overall organization chart and organization chart for this Grant Agreement's funded project).
2. Written internal procedures and flowcharts for the following:
 - a) Receipts and deposits
 - b) Disbursements
 - c) State reimbursement requests
 - d) State funding expenditure tracking
 - e) Guidelines, policy(ies), and procedures on State funded Program/Project
3. Audit reports of the Grantee's internal control structure and/or financial statements within the last two years.
4. Prior audit reports on State funded Program/Project.

State Funding:

1. Original Grant Agreement, any amendment(s) and budget modification documents.
2. A list of all bond-funded grants, loans or subventions received from the State.
3. A list of all other funding sources for each Program/Project.

Contracts:

1. All subcontractor and consultant contracts and related, if applicable.
2. Contracts between the Grantee, member agencies, and project partners as related to the State funded Program/Project.

Invoices:

1. Invoices from vendors and subcontractors for expenditures submitted to the State for payments under the Grant Agreement.
2. Documentation linking subcontractor invoices to State reimbursement requests and related Grant Agreement budget line items.
3. Reimbursement requests submitted to the State for the Grant Agreement.

Cash Documents:

1. Receipts (copies of warrants) showing payments received from the State.
2. Deposit slips or bank statements showing deposit of the payments received from the State.
3. Cancelled checks or disbursement documents showing payments made to vendors, subcontractors, consultants, and/or agents under the Grant Agreement.

Accounting Records:

1. Ledgers showing receipts and cash disbursement entries for State funding.
2. Ledgers showing receipts and cash disbursement entries of other funding sources.
3. Bridging documents that tie the general ledger to reimbursement requests submitted to the State for the Grant Agreement

Administration Costs:

1. Supporting documents showing the calculation of administration costs.

DWR Prop 84 - Local Project Sponsor Agreement - IRWM 2

01415A - 125

Attachment 3

Grant Agreement No. 4600010575
Page 102 of 103

Personnel:

1. List of all contractors and Grantee staff that worked on the State funded Program/Project.
2. Payroll records including timesheets for contractor staff and the Grantee's

Project Files:

1. All supporting documentation maintained in the Program/Project files.
2. All Grant Agreement related correspondence.

Funding Match Guidelines

Funding Match consists of non-State funds including in-kind services. In-kind services are defined as work performed or items contributed (i.e., dollar value of non-cash contributions) by the Grantee (and potentially other parties involved) directly related to the execution of Exhibit A "Work Plan" (examples: volunteer services, equipment use, and facilities). The cost of in-kind service can be counted as funding match in-lieu of actual funds (or revenue) provided by the Grantee. Other funding match and in-kind service eligibility conditions may apply. Provided below is guidance for documenting funding match with and without in-kind services.

1. Although tracked separately, in-kind services shall be documented and, to the extent feasible, supported by the same methods used by the Grantee for its own employees. Such documentation should include the following:
 - a. Detailed description of the contributed item(s) or service(s)
 - b. Purpose for which the contribution was made (tied to Grant Agreement Exhibit A "Work Plan")
 - c. Name of contributing organization and date of contribution
 - d. Real or approximate value of contribution. Who valued the contribution and how the value was determined? (e.g., actual, appraisal, fair market value, etc.). Justification of rate. (See item #2, below)
 - e. For contributed labor, the person's name, the work performed, the number of hours contributed, and the pay rate applied
 - f. If multiple sources exist, these should be summarized on a table with summed charges
 - g. Source of contribution and whether it was provided by, obtained with, or supported by government funds
2. Rates for volunteer or in-kind services shall be consistent with those paid for similar work in the Grantee's organization. For example, volunteer service of clearing vegetation performed by an attorney shall be valued at a fair market value for this service, not the rate for professional legal services. In those instances in which the required skills are not found in the recipient organization, rates shall be consistent with those paid for similar work in the labor market. Paid fringe benefits that are reasonable, allowable and allocable may be included in the valuation.
3. Funding match contribution (including in kind services) shall be for costs and services directly attributed to activities included in the Grant Agreement Work Plan. These services, furnished by professional and technical personnel, consultants, and other skilled and unskilled labor may be counted as in-kind if the activities are an integral and necessary part of the State funded Program/Project under the Grant Agreement.
4. Cash contributions made to a Program/Project shall be documented as revenue and in-kind services as expenditure. These costs should be tracked separately in the Grantee's accounting systems.

Attachment 3

Grant Agreement No. 4600010575
Page 103 of 103

EXHIBIT J
PROJECT MONITORING PLAN COMPONENTS

Introduction

- Goals and objectives of projects
- Site location and history
- Improvements implemented

Project Monitoring Plan

- Monitoring Metrics (ex: Plant establishment, bank erosion, hydraulic characteristics, habitat expansion)
- Maintenance Metrics (ex: irrigation, pest management, weed abatement, continuous invasive species removal until natives established)
- Special Environmental Considerations (e.g., resource agency requirements, permit requirements, CEQA/NEPA mitigation measures)
- Performance Measures, or success/failure criteria monitoring results measured against (ex: percent canopy cover after 1, 5, 10 years, water temperature decrease, site specific sediment scour or retention)
- Method of Reporting (ex: paper reports, online databases, public meetings)
- Frequency of Duration Monitoring and Reporting (daily, weekly, monthly, yearly)
- Frequency and Duration of Maintenance Activities
- Responsible Party (who is conducting monitoring and/or maintenance) Implementing responsibility (i.e., who is responsible for monitoring and maintenance)
- Adaptive Management Strategies (i.e., what happens when routine monitoring or maintenance encounters a problem)

Bureau of Reclamation Form, 7-2279
01-2013

**UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF RECLAMATION
ASSISTANCE AGREEMENT**

1A. AGREEMENT NUMBER R14AC00018 (formally R10AC20093)		1B. MOD NUMBER 0008		2. TYPE OF AGREEMENT <input type="checkbox"/> GRANT <input checked="" type="checkbox"/> COOPERATIVE AGREEMENT		3. CLASS OF RECIPIENT Special District Government	
4. ISSUING OFFICE U. S. Department of Interior Bureau of Reclamation Mid-Pacific Region 2800 Cottage Way Sacramento, California 95825-1898 DUNS: 098-86-5801 EIN: 84-1024566				5. RECIPIENT Sonoma County Water Agency 404 Aviation Blvd. Santa Rosa, California 95403 Phone: (707) 547-1911			
				EIN #:		946000539	
				County:		Sonoma	
				DUNS #:		074662503	
				Congress. Dist.:		01, 06	
6. GRANTS MANAGEMENT SPECIALIST Beverly S. Breen, MP-3828 U. S. Department of Interior Bureau of Reclamation Mid-Pacific Region 2800 Cottage Way Sacramento, California 95825-1898 Phone: (916) 978-5146 Email: bbreen@usbr.gov				7. RECIPIENT PROJECT MANAGER Grant Davis Sonoma County Water Agency 404 Aviation Blvd. Santa Rosa, California 95403 Phone: (707) 547-1911			
8. GRANTS OFFICER TECHNICAL REPRESENTATIVE Nicole Johnson, MP-730 Bureau of Reclamation Mid-Pacific Region 2800 Cottage Way Sacramento, California 95825-1898 Phone: (916) 978-5085 Email: njohnson@usbr.gov				9A. INITIAL AGREEMENT EFFECTIVE DATE: September 27, 2010		9B. MODIFICATION EFFECTIVE DATE: See Block 17a	
				10. COMPLETION DATE September 30, 2018			
11A. PROGRAM STATUTORY AUTHORITY Reclamation Wastewater and Groundwater Study and Facilities Act (Public Law 102-575, Title XVI; 43 USC 390h et seq and Basic Agreement, Section 7.6. Modifications.						11B. CFDA Number 15.504	
12. FUNDING INFORMATION		RECIPIENT/OTHER		RECLAMATION		13. REQUISITION NUMBER 20074615	
Total Estimated Amount of Agreement		\$53,016,000.00		\$17,672,000.00		14A. ACCOUNTING AND APPROPRIATION DATA	
This Obligation		\$0.00		\$1,788,225.00		Cost Center: RR02030000	
Previous Obligation		\$53,016,000.00		\$11,036,625.00		WBS: RN.19932000.0000000	
Total Obligation		\$53,016,000.00		\$12,824,850.00		14B. TREASURY ACCOUNT FUNDING SYMBOL	
Cost-Share %		75%		25%		15XR0680B1	
15. PROJECT TITLE North San Pablo Bay Restoration and Reuse Project							
16a. Acceptance of this Assistance Agreement in accordance with the terms and conditions contained herein is hereby made on behalf of the above-named recipient Administrative Modification No Signature Required				17a. Award of this Assistance Agreement in accordance with the terms and conditions contained herein is hereby made on behalf of the United States of America, Department of the Interior, Bureau of Reclamation BY <u>Beverly S. Breen</u> DATE <u>7-9-2015</u>			
16b. NAME, TITLE, AND TELEPHONE NUMBER OF SIGNER <input type="checkbox"/> Additional signatures are attached				17b. NAME OF GRANTS OFFICER Beverly S. Breen			

R14AC00018

Bureau of Reclamation Form, 7-2279
01-2013

A. PURPOSE OF THIS MODIFICATION:

The purpose of this modification is to add Fiscal Year 2015 funds in the amount of \$1,788,225.00, to continue work on the North San Pablo Bay Restoration and Reuse project.

B. ADJUSTMENT OF AGREEMENT SCOPE OF WORK AND/OR BUDGET:

There are no changes to the scope of work or budget.

C. ADJUSTMENT OF THE TOTAL ESTIMATED AMOUNT:

The total estimated amount of the Agreement is unchanged and remains \$17,672,000.00.

D. NOTICE OF CHANGE IN FUNDS OBLIGATED:

As a result of this modification, the total amount of funding obligated for this Agreement is increased by \$1,788,225.00 from \$11,036,625 to \$12,824,850.00.

E. ADJUSTMENT IN THE PERIOD OF PERFORMANCE:

The performance period is unchanged and remains September 27, 2010 through September 30, 2018.

R14AC00018

Bureau of Reclamation Form, 7-2279
01-2013

**UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF RECLAMATION
ASSISTANCE AGREEMENT**

1A. AGREEMENT NUMBER R14AC00018 (formally R10AC20093)		1B. MOD NUMBER 0007		2. TYPE OF AGREEMENT <input type="checkbox"/> GRANT <input checked="" type="checkbox"/> COOPERATIVE AGREEMENT		3. CLASS OF RECIPIENT Special District Government	
4. ISSUING OFFICE U. S. Department of Interior Bureau of Reclamation Mid-Pacific Region 2800 Cottage Way Sacramento, California 95825-1898 DUNS: 098-86-5801 EIN: 84-1024566				5. RECIPIENT Sonoma County Water Agency 404 Aviation Blvd. Santa Rosa, California 95403 Phone: (707) 547-1911			
				EIN #:		946000539	
				County:		Sonoma	
				DUNS #:		074662503	
				Congress. Dist:		01, 06	
6. GRANTS MANAGEMENT SPECIALIST Beverly S. Breen, MP-3828 U. S. Department of Interior Bureau of Reclamation Mid-Pacific Region 2800 Cottage Way Sacramento, California 95825-1898 Phone: (916) 978-5146 Email: bbreen@usbr.gov				7. RECIPIENT PROJECT MANAGER Grant Davis Sonoma County Water Agency 404 Aviation Blvd. Santa Rosa, California 95403 Phone: (707) 547-1911			
8. GRANTS OFFICER TECHNICAL REPRESENTATIVE Nicole Johnson, MP-730 Bureau of Reclamation Mid-Pacific Region 2800 Cottage Way Sacramento, California 95825-1898 Phone: (916) 978-5085 Email: njohnson@usbr.gov				9A. INITIAL AGREEMENT EFFECTIVE DATE: September 27, 2010		9B. MODIFICATION EFFECTIVE DATE: See Block 17a	
				10. COMPLETION DATE September 30, 2018			
11A. PROGRAM STATUTORY AUTHORITY Reclamation Wastewater and Groundwater Study and Facilities Act (Public Law 102-575, Title XVI; 43 USC 390h et seq and Basic Agreement, Section 7.6, Modifications.						11B. CFDA Number 15.504	
12. FUNDING INFORMATION		RECIPIENT/OTHER		RECLAMATION		13. REQUISITION NUMBER 20052037	
Total Estimated Amount of Agreement		\$53,016,000.00		\$17,672,000.00		14A. ACCOUNTING AND APPROPRIATION DATA Cost Center: RR02030000 Fund: 14XR0680B1 WBS: RN.19932000.0000000	
This Obligation		\$ 0.00		\$1,495,000.00			
Previous Obligation		\$53,016,000.00		\$9,541,625.00			
Total Obligation		\$53,016,000.00		\$11,036,625.00		14B. TREASURY ACCOUNT FUNDING SYMBOL 14XR0680B1	
Cost-Share %		75%		25%			
15. PROJECT TITLE North San Pablo Bay Restoration and Reuse Project							
16a. Acceptance of this Assistance Agreement in accordance with the terms and conditions contained herein is hereby made on behalf of the above-named recipient Administrative Modification No Signature Required				17a. Award of this Assistance Agreement in accordance with the terms and conditions contained herein is hereby made on behalf of the United States of America, Department of the Interior, Bureau of Reclamation BY: <u>Judy A. Hudson</u> DATE: <u>7/16/2014</u>			
16b. NAME, TITLE, AND TELEPHONE NUMBER OF SIGNER <input type="checkbox"/> Additional signatures are attached				17b. NAME OF GRANTS OFFICER Judy A. Hudson			

R14AC00018

Bureau of Reclamation Form, 7-2279
01-2013

A. PURPOSE OF THIS MODIFICATION:

The purpose of this modification is to add Fiscal Year 2014 funding in the amount of \$1,495,000.00, to continue the work on the North San Pablo Bay Restoration and Reuse project.

B. ADJUSTMENT OF AGREEMENT SCOPE OF WORK AND/OR BUDGET:

There are no changes to the scope of work or budget.

C. ADJUSTMENT OF THE TOTAL ESTIMATED AMOUNT:

The total estimated amount of the Agreement is unchanged and remains \$17,672,000.00.

D. NOTICE OF CHANGE IN FUNDS OBLIGATED:

As a result of this modification, the total amount of funding obligated for this Agreement is increased by \$1,495,000.00 from \$9,541,625.00 to \$11,036,625.00.

E. ADJUSTMENT IN THE PERIOD OF PERFORMANCE:

The performance period is unchanged and remains September 27, 2010 through September 30, 2018.

R14AC00018



IN REPLY REFER TO:

United States Department of the Interior

BUREAU OF RECLAMATION

2800 Cottage Way
MP-3800, Room E-1815
Sacramento, CA 95825

June 27, 2014

MP-3828

VIA ELECTRONIC MAIL ONLY

Mr. Grant Davis
Sonoma County Water Agency
404 Aviation Blvd.
Santa Rosa, California 95403

Subject: Modification No. 0005 and No. 0006 to Cooperative Agreement R12AC20093 – North San Pablo Bay Restoration and Reuse Project

Dear Mr. Davis,

Enclosed for your record is an executed original copy of the subject modification. This modification closes out this agreement number and replaces it with the new agreement number of R14AC00018.

All payments will be made through Electronic Funds Transfers (EFT). To ensure you receive proper payment via EFT, your registration with System for Award Management (SAM) must remain active. Please check SAM at <http://www.sam.gov>.

If you have any questions, please contact Beverly S. Breen at (916) 978-5146, or email bbreen@usbr.gov.

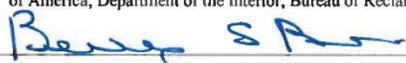
Sincerely,

Sharon Santos (Cox)
Procurement Technician

Enclosure

Bureau of Reclamation Form, 7-2279
01-2013

**UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF RECLAMATION
ASSISTANCE AGREEMENT**

1A. AGREEMENT NUMBER R14AC00018 (formerly R10AC20093)		1B. MOD NUMBER N/A		2. TYPE OF AGREEMENT <input type="checkbox"/> GRANT <input checked="" type="checkbox"/> COOPERATIVE AGREEMENT		3. CLASS OF RECIPIENT Special District Government (04)	
4. ISSUING OFFICE U.S. Department of the Interior Bureau of Reclamation Mid-Pacific Region 2800 Cottage Way, Room E-1815 Sacramento, California 95825-1898 DUNS: 098865801 / EIN: 84-1024566				5. RECIPIENT Sonoma County Water Agency 404 Aviation Blvd. Santa Rosa, California 95403 Phone: (707) 547-1911 EIN #: 94-6000539 County: Sonoma DUNS #: 074-66-2503 Congress. Dist: 01, 06			
6. GRANTS MANAGEMENT SPECIALIST Beverly S. Breen, MP-3828 Bureau of Reclamation Mid-Pacific Region 2800 Cottage Way, Room E-1815 Sacramento, California 95825-1898 Email: bbreen@usbr.gov Phone: (916) 978-5146 Fax: (916) 978-5175				7. RECIPIENT PROJECT MANAGER Mr. Grant Davis Sonoma County Water Agency 404 Aviation Blvd. Santa Rosa, California 95403 Phone: (707) 547-1911 E-mail: grant.davis@scwa.ca.gov			
8. GRANTS OFFICER TECHNICAL REPRESENTATIVE David T. White, MP-720 Bureau of Reclamation Mid-Pacific Regional Office 2800 Cottage Way Sacramento, California 95825 Phone: (916) 978-5074 E-mail: dwhite@usbr.gov				9A. INITIAL AGREEMENT EFFECTIVE DATE: September 27, 2010		9B. MODIFICATION EFFECTIVE DATE: See Block 17a	
10. COMPLETION DATE September 30, 2018							
11A. PROGRAM STATUTORY AUTHORITY Reclamation Wastewater and Groundwater Study and Facilities Act (Public Law 102-575, Title XVI; 43 UJSC 390h et seq and Basic Agreement, Section 7.6, Modifications							11B. CFDA Number 15.504
12. FUNDING INFORMATION		RECIPIENT/OTHER	RECLAMATION	13. REQUISITION NUMBER 20048642			
Total Estimated Amount of Agreement		\$ 0.00	\$ 0.00	14A. ACCOUNTING AND APPROPRIATION DATA Functional: R19930000.000000 Cost Center: RR02030000 WBS: RN.19932000.0000000 Item: 411C			
This Obligation		\$ 0.00	\$ 0.00				
Previous Obligation		\$ 0.00	\$ 0.00				
Total Obligation		\$ 0.00	\$ 0.00	14B. TREASURY ACCOUNT FUNDING SYMBOL XXXR0680B1			
Cost-Share %		0%	0%				
15. PROJECT TITLE North San Pablo Bay Restoration and Reuse Project							
16a. Acceptance of this Assistance Agreement in accordance with the terms and conditions contained herein is hereby made on behalf of the above-named recipient BY: ADMINISTRATIVE MODIFICATION DATE: SIGNATURE NOT REQUIRED				17a. Award of this Assistance Agreement in accordance with the terms and conditions contained herein is hereby made on behalf of the United States of America, Department of the Interior, Bureau of Reclamation BY:  DATE: <u>6.20.14</u>			
16b. NAME, TITLE, AND TELEPHONE NUMBER OF SIGNER <input type="checkbox"/> Additional signatures are attached				17b. NAME OF GRANTS OFFICER Beverly Breen			

THE PURPOSE OF THIS AWARD IS TO DOCUMENT THE ADMINISTRATIVE CHANGE OF THE BUSINESS INSTRUMENT NUMBER TO ACCOMMODATE THE TRANSITION TO THE NEW FINANCIAL BUSINESS MANAGEMENT SYSTEM.

THIS GRANT AGREEMENT R14AC00018 REPLACES R10AC20093.

All remaining funds are being de-obligated from the original agreement number and will be re-obligated on the new agreement number with no net changes.

00030 R10AC20093-0003-0000	\$ 1,273,184.38
00040 R10AC20093-0004-0000	\$ 4,000,000.00

Total: \$ 5,273,184.38

ALL TERMS AND CONDITIONS OF COOPERATIVE AGREEMENT R14AC00018 SHALL BE IN ACCORDANCE WITH COOPERATIVE AGREEMENT R10AC20093.

THE RECIPIENT MUST REFERENCE THE NEW AGREEMENT NUMBER R14AC00018 ON ANY FUTURE CORRESPONDENCE AND INVOICES.



IN REPLY REFER TO:

United States Department of the Interior

BUREAU OF RECLAMATION

2800 Cottage Way
MP-3800, Room E-1815
Sacramento, CA 95825

June 27, 2014

MP-3828

VIA ELECTRONIC MAIL ONLY

Mr. Grant Davis
Sonoma County Water Agency
404 Aviation Blvd.
Santa Rosa, California 95403

Subject: Modification No. 0005 and No. 0006 to Cooperative Agreement R12AC20093 – North San Pablo Bay Restoration and Reuse Project

Dear Mr. Davis,

Enclosed for your record is an executed original copy of the subject modification. This modification closes out this agreement number and replaces it with the new agreement number of R14AC00018.

All payments will be made through Electronic Funds Transfers (EFT). To ensure you receive proper payment via EFT, your registration with System for Award Management (SAM) must remain active. Please check SAM at <http://www.sam.gov>.

If you have any questions, please contact Beverly S. Breen at (916) 978-5146, or email bbreen@usbr.gov.

Sincerely,

Sharon Santos (Cox)
Procurement Technician

Enclosure

Bureau of Reclamation Form, 7-2279
01-2013

**UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF RECLAMATION
ASSISTANCE AGREEMENT**

1A. AGREEMENT NUMBER R10AC20093		1B. MOD NUMBER 0005		2. TYPE OF AGREEMENT <input type="checkbox"/> GRANT <input checked="" type="checkbox"/> COOPERATIVE AGREEMENT		3. CLASS OF RECIPIENT Special District Government	
4. ISSUING OFFICE U.S. Department of the Interior Bureau of Reclamation Mid-Pacific Region 2800 Cottage Way, Room E-1815 Sacramento, California 95825-1898 DUNS: 098865801 / EIN: 84-1024566				5. RECIPIENT Sonoma County Water Agency 404 Aviation Blvd. Santa Rosa, California 95403 Phone: (707) 547-1911 EIN #: 94-6000539 County: Yolo DUNS #: 074-66-2503 Congress. Dist: 03			
6. GRANTS MANAGEMENT SPECIALIST Beverly S. Breen, MP-3828 Phone: (916) 978-5146 Bureau of Reclamation Fax: (916) 978-5175 Mid-Pacific Region 2800 Cottage Way, Room E-1815 Sacramento, California 95825-1898 Email: bbreen@usbr.gov				7. RECIPIENT PROJECT MANAGER Mr. Grant Davis Sonoma County Water Agency 404 Aviation Blvd. Santa Rosa, California 95403 Phone: (707) 547-1911 E-mail: grant.davis@scwa.ca.gov			
8. GRANTS OFFICER TECHNICAL REPRESENTATIVE David T. White, MP-720 Phone: (916) 978-5074 Bureau of Reclamation Mid-Pacific Regional Office 2800 Cottage Way Sacramento, California 95825 E-mail: dwhite@usbr.gov				9A. INITIAL AGREEMENT EFFECTIVE DATE: September 27, 2010		9B. MODIFICATION EFFECTIVE DATE: See Block 17a	
10. COMPLETION DATE September 30, 2018							
11A. PROGRAM STATUTORY AUTHORITY Reclamation Wastewater and Groundwater Study and Facilities Act (Public Law 102-575, Title XVI; 43 UJSC 390h et seq and Basic Agreement, Section 7.6, Modifications							11B. CFDA Number 15.504
12. FUNDING INFORMATION		RECIPIENT/OTHER	RECLAMATION	13. REQUISITION NUMBER N/A			
Total Estimated Amount of Agreement		\$ 0.00	\$ 0.00	14A. ACCOUNTING AND APPROPRIATION DATA			
This Obligation		\$ 0.00	\$ 0.00	Functional: R19930000.000000 Cost Center: RR02030000			
Previous Obligation		\$ 0.00	\$ 0.00	WBS: RN.19932000.00000000 Item: 411C			
Total Obligation		\$ 0.00	\$ 0.00	14B. TREASURY ACCOUNT FUNDING SYMBOL XXXXR0680B1			
Cost-Share %		0%	0%				
15. PROJECT TITLE North San Pablo Bay Restoration and Reuse Project							
16a. Acceptance of this Assistance Agreement in accordance with the terms and conditions contained herein is hereby made on behalf of the above-named recipient BY: ADMINISTRATIVE MODIFICATION DATE: SIGNATURE NOT REQUIRED				17a. Award of this Assistance Agreement in accordance with the terms and conditions contained herein is hereby made on behalf of the United States of America, Department of the Interior, Bureau of Reclamation BY: <u>Beverly S Breen</u> DATE: <u>5/20/2014</u>			
16b. NAME, TITLE, AND TELEPHONE NUMBER OF SIGNER <input type="checkbox"/> Additional signatures are attached				17b. NAME OF GRANTS OFFICER Beverly Breen			

A. PURPOSE OF THIS MODIFICATION:

The purpose of this administrative modification is to change the business instrument number due to the implementation of the new Financial Business Management System.

B. DESCRIPTION:

Subject agreement number is hereby re-numbered as follows:

FROM: R10AC20093 TO: R14AC00018

C. NOTICE OF CHANGE IN FUNDS OBLIGATED:

All remaining funds are being de-obligated from the original agreement number and will be re-obligated on the new agreement number with no net changes.

00030 R10AC20093-0003-0000	<\$ 1,273,184.38>
00040 R10AC20093-0004-0000	<\$ 4,000,000.00>

Total: <\$ 5,273,184.38>

D. IMPORTANT NOTICE REGARDING FUTURE PAYMENTS:

The recipient must reference the new agreement number R14AC00018 on any future correspondence and invoices.

E. TERMS AND CONDITIONS:

The terms and conditions of the original agreement shall remain unchanged.



United States Department of the Interior

BUREAU OF RECLAMATION
Mid-Pacific Regional Office
2800 Cottage Way
Sacramento, California 95825-1898

IN REPLY REFER TO:

MP-3828
ADM-13

JUN 20 2013

VIA ELECTRONIC MAIL ONLY

Mr. Grant Davis
Sonoma County Water Agency
404 Aviation Blvd.
Santa Rosa, California 95403

Subject: Modification 0004 to Grant Agreement R10AC20093 - North San Pablo Bay Restoration and Reuse Project

Dear Mr. Davis:

Enclosed is an executed copy of subject modification. In accordance with Section B.7.6., Modifications, of the Agreement, *Reclamation may make changes to the agreement by means of a unilateral modification to deal with administrative matters, such as changes in address, no-cost time extensions, the addition of previously agreed upon funding, or de-obligation of excess funds at the end of the agreement.*

An authorized signature from your organization is not required on the modification. If you have any questions, please contact Beverly S. Breen at 916-978-5146 or e-mail bbreen@usbr.gov.

Sincerely,

Mary F. Sims
Grants Officer

Enclosure

**UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF RECLAMATION
ASSISTANCE AGREEMENT**

1A. AGREEMENT NUMBER R10AC20093		1B. MOD NUMBER 0004		2. TYPE OF AGREEMENT <input type="checkbox"/> GRANT <input checked="" type="checkbox"/> COOPERATIVE AGREEMENT		3. CLASS OF RECIPIENT Special District Government (04)	
4. ISSUING OFFICE U. S. Department of Interior Bureau of Reclamation Mid-Pacific Region 2800 Cottage Way Sacramento, California 95825-1898 DUNS: 098-86-5801 EIN: 84-1024566				5. RECIPIENT Sonoma County Water Agency 404 Aviation Blvd. Santa Rosa, California 95403 Phone: (707) 547-1911			
				EIN #: 94-6000539		County: Sonoma	
				DUNS #: 074-66-2503		Congress. Dist: 01, 06	
6. GRANTS MANAGEMENT SPECIALIST Beverly S. Breen, MP-3828 U. S. Department of Interior Bureau of Reclamation Mid-Pacific Region 2800 Cottage Way Sacramento, California 95825-1898 Phone: (916) 978-5146 Email: bbreen@usbr.gov				7. RECIPIENT PROJECT MANAGER Mr. Grant Davis Sonoma County Water Agency 404 Aviation Blvd. Santa Rosa, California 95403 Phone: (707) 547-1911			
8. GRANTS OFFICER TECHNICAL REPRESENTATIVE David T. White, MP-720 Bureau of Reclamation Mid-Pacific Region 2800 Cottage Way Sacramento, California 95825-1898 Phone: (916) 978-5074 Email: dwhite@usbr.gov				9A. INITIAL AGREEMENT EFFECTIVE DATE: September 27, 2010		9B. MODIFICATION EFFECTIVE DATE: See Block 17a	
				10. COMPLETION DATE September 30, 2018			
11A. PROGRAM STATUTORY AUTHORITY Reclamation Wastewater and Groundwater Study and Facilities Act (Public Law 102-575, Title XVI; 43 USC 390h et seq and Basic Agreement, Section 7.6, Modifications						11B. CFDA Number 15.504	
12. FUNDING INFORMATION		RECIPIENT/OTHER		RECLAMATION		13. REQUISITION NUMBER 13203000089	
Total Estimated Amount of Agreement		\$53,016,000.00		\$17,672,000.00		14A. ACCOUNTING AND APPROPRIATION DATA A1A-1993-2000-000-00-0-0 2030000 411C	
This Obligation		\$ 0.00		\$4,000,000.00			
Previous Obligation		\$53,016,000.00		\$ 5,541,625.00			
Total Obligation		\$53,016,000.00		\$ 9,541,625.00			
Cost-Share %		75%		25%			
						14B. TREASURY ACCOUNT FUNDING SYMBOL 14X0680	
15. PROJECT TITLE North San Pablo Bay Restoration and Reuse Project							
16a. Acceptance of this Assistance Agreement in accordance with the terms and conditions contained herein is hereby made on behalf of the above-named recipient Administrative Modification No Signature Required				17a. Award of this Assistance Agreement in accordance with the terms and conditions contained herein is hereby made on behalf of the United States of America, Department of the Interior, Bureau of Reclamation BY: <u>Mary F. Sims</u> DATE: <u>JUN 20 2013</u>			
16b. NAME, TITLE, AND TELEPHONE NUMBER OF SIGNER <input type="checkbox"/> Additional signatures are attached				17b. NAME OF GRANTS OFFICER Mary F. Sims			

Agreement Number R10AC20093

A. PURPOSE OF THIS MODIFICATION:

The purpose of this modification is to add Fiscal Year 2013 funding in the amount of \$4,000,000.00, to continue the work on the North San Pablo Bay Restoration and Reuse project.

B. ADJUSTMENT OF AGREEMENT SCOPE OF WORK AND/OR BUDGET:

There are no changes to the scope of work and/or budget.

C. ADJUSTMENT OF THE TOTAL ESTIMATED AMOUNT:

The total estimated amount of the Agreement is unchanged and remains \$17,672,000.00.

D. NOTICE OF CHANGE IN FUNDS OBLIGATED:

As a result of this modification, the total amount of funding obligated for this Agreement is increased by \$4,000,000.00 from \$5,541,625.00 to \$9,541,625.00.

E. ADJUSTMENT IN THE PERIOD OF PERFORMANCE:

The performance period is unchanged and remains September 27, 2010 through September 30, 2018.

Agreement Number R10AC20093



United States Department of the Interior

BUREAU OF RECLAMATION
Mid-Pacific Regional Office
2800 Cottage Way
Sacramento, California 95825-1898

IN REPLY
REFER TO:

MP-3813
ADM-13

JUL 31 2012

ORIGINAL DOCUMENT
SONOMA COUNTY WATER AGENCY

AUG - 2 2012

To: Booker; cc: Rosselli

Mr. Grant Davis
Sonoma County Water Agency
404 Aviation Blvd.
Santa Rosa, California 95403

CF/71-700-16 US Bureau of Reclamation (Coop Agree for North Bay Water Reuse Program) TW No (ID 3247)

Subject: Modification No. 0003, Cooperative Agreement R10AC20093 for North San Pablo Bay Restoration and Reuse Project

Dear Mr. Davis:

Enclosed for your record is an executed original copy of the subject modification adding funding to Basic Agreement.

All payments will be made through Electronic Funds Transfers (EFT). To ensure you receive proper payment via EFT, your Central Contractor Registration (CCR) must remain active. Please check CCR at <http://www.ccr.gov>

If you have any questions, please contact the undersigned at (916) 978-5148, or email mcastaneda@usbr.gov.

Sincerely,


Maria E. Castaneda
Grants Officer

7-2279 (04-2011)
Bureau of Reclamation

**-UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF RECLAMATION
ASSISTANCE AGREEMENT**

1A. AGREEMENT NUMBER R10AC20093		1B. MOD NUMBER 0003		2. TYPE OF AGREEMENT <input type="checkbox"/> GRANT <input checked="" type="checkbox"/> COOPERATIVE AGREEMENT		3. CLASS OF RECIPIENT Special District Government (04)	
4. ISSUING OFFICE U. S. Department of Interior Bureau of Reclamation Mid-Pacific Region 2800 Cottage Way Sacramento, California 95825-1898 DUNS: 098-86-5801 EIN: 84-1024566				5. RECIPIENT Sonoma County Water Agency 404 Aviation Blvd. Santa Rosa, California 95403 Phone: (707) 547-1911			
				EIN #: 94-6000539		County: Sonoma	
				DUNS #: 074-66-2503		Congress. Dist: 01, 06	
6. ADMINISTRATIVE POINT OF CONTACT Maria E. Castaneda, MP-3813 U. S. Department of Interior Bureau of Reclamation Mid-Pacific Region 2800 Cottage Way Sacramento, California 95825-1898 Phone: (916) 978-5148 Email: mcastaneda@usbr.gov				7. RECIPIENT PROJECT MANAGER Mr. Grant Davis Sonoma County Water Agency 404 Aviation Blvd. Santa Rosa, California 95403 Phone: (707) 547-1911			
8. GRANTS OFFICER TECHNICAL REPRESENTATIVE David T. White, MP-720 Bureau of Reclamation Mid-Pacific Region 2800 Cottage Way Sacramento, California 95825-1898 Phone: (916) 978-5074 Email: dwhite@usbr.gov				9A. INITIAL AGREEMENT EFFECTIVE DATE: September 27, 2010		9B. MODIFICATION EFFECTIVE DATE: See Block 17a	
				10. COMPLETION DATE September 30, 2018			
11A. PROGRAM STATUTORY AUTHORITY Reclamation Wastewater and Groundwater Study and Facilities Act (Public Law 102-575, Title XVI; 43 USC 390h et seq and Basic Agreement, Section 7.6, Modifications						11B. CFDA Number 15.504	
12. FUNDING INFORMATION		RECIPIENT/OTHER		RECLAMATION		13. REQUISITION NUMBER 12203000099	
Total Estimated Amount of Agreement		\$53,016,000.00		\$17,672,000.00		14A. ACCOUNTING AND APPROPRIATION DATA A1A 1993 1000 000 00 0 0 2030000 411C	
This Obligation		\$ 0.00		\$ 3,836,750.00			
Previous Obligation		\$53,016,000.00		\$ 1,704,875.00			
Total Obligation		\$53,016,000.00		\$ 5,541,625.00			
Cost-Share %		75%		25%		14B. TREASURY ACCOUNT FUNDING SYMBOL 14X0680	
15. PROJECT TITLE AND BRIEF SUMMARY OF PURPOSE AND OBJECTIVES OF PROJECT A. TITLE: North San Pablo Bay Restoration and Reuse Project – The proposed Project would build on commitments to long-term inter-agency cooperation to address common needs related to reliable water supplies and enhanced environmental restoration. (Continued on Page 2)							
16a. Acceptance of this Assistance Agreement in accordance with the terms and conditions contained herein is hereby made on behalf of the above-named recipient BY: <u>Pamela Jeanne for GD</u> DATE: <u>7/30/12</u>				17a. Award of this Assistance Agreement in accordance with the terms and conditions contained herein is hereby made on behalf of the United States of America, Department of the Interior, Bureau of Reclamation BY: <u>M. E. Castaneda</u> DATE: <u>JUL 31 2012</u>			
16b. NAME, TITLE, AND TELEPHONE NUMBER OF SIGNER Pamela Jeanne Assistant General Manager (707) 521-1864 <input type="checkbox"/> Additional signatures are attached				17b. NAME OF GRANTS OFFICER Maria E. Castaneda			

Bureau of Reclamation Form, RF-131
04-2011

(Continued from page 1, block 15)

B. PURPOSE:

The purpose of this modification is to add funding (previously projected) to agreement to continue the work on the Restoration and Reuse project. Also, the following revisions are made to the agreement:

1. Page 7, Section 1.5, Scope of Work, header 'Napa-Sonoma Salt Marsh Pipeline' should read '**Sonoma Valley County Sanitation District Projects**'.
2. Page 7, Section 1.5, insert '**Napa-Sonoma Salt Marsh Pipeline**' header above construction of pumping improvements at the wastewater treatment plant.....'.

C. ADJUSTMENT OF AGREEMENT AMOUNT:

The total estimated amount of the Agreement is unchanged and remains \$17,672,000.00.

D. NOTICE OF CHANGE IN FUNDS OBLIGATED:

As a result of this modification, the total amount of funding obligated for this Agreement is increased by \$3,836,750.00 from \$1,704,875.00 to \$5,541,625.00.

E. ADJUSTMENT IN AGREEMENT TIME:

The performance period is unchanged and remains September 27, 2010 through September 30, 2018.

Agreement No. R10AC20093
Modification No. 0003



United States Department of the Interior

BUREAU OF RECLAMATION
Mid-Pacific Regional Office
2800 Cottage Way
Sacramento, CA 95825-1898

IN REPLY REFER TO:

MP-3813
ADM-13

SEP 29 2011

Mr. Grant Davis
Sonoma County Water Agency
404 Aviation Blvd.
Santa Rosa, California 95403

Subject: Modification No. 0002, Cooperative Agreement R10AC20093 for North San Pablo Bay
Restoration and Reuse Project

Dear Mr. Davis:

Enclosed for your record is an executed original copy of the subject modification adding additional
funding to Basic Agreement.

All payments will be made through Electronic Funds Transfers (EFT). To ensure you receive proper
payment via EFT, your Central Contractor Registration (CCR) must remains active. Please check
CCR at <http://www.ccr.gov>

If you have any questions, please contact the undersigned at (916) 978-5148, or email
mcastaneda@usbr.gov.

Sincerely,

Maria E. Castaneda
Grants Officer

ORIGINAL DOCUMENT
SONOMA COUNTY WATER AGENCY

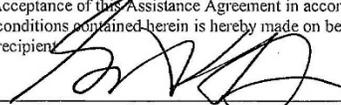
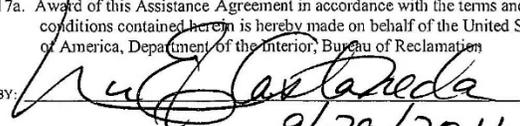
OCT - 3 2011

To: Rosselli

CF/71-700-16 US Bureau of Reclamation (Coop Agree for North Bay Water
Reuse Program) TW No

7-2279 (04-2011)
Bureau of Reclamation

**-UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF RECLAMATION
ASSISTANCE AGREEMENT**

1A. AGREEMENT NUMBER R10AC20093		1B. MOD NUMBER 0002		2. TYPE OF AGREEMENT <input type="checkbox"/> GRANT <input checked="" type="checkbox"/> COOPERATIVE AGREEMENT		3. CLASS OF RECIPIENT Special District Government (04)	
4. ISSUING OFFICE U. S. Department of Interior Bureau of Reclamation Mid-Pacific Region 2800 Cottage Way Sacramento, California 95825-1898 DUNS: 098-86-5801 EIN: 84-1024566				5. RECIPIENT Sonoma County Water Agency 404 Aviation Blvd. Santa Rosa, California 95403 Phone: (707) 547-1911 EIN #: 94-6000539 County: Sonoma DUNS #: 074-66-2503 Congress. Dist: 01, 06			
6. ADMINISTRATIVE POINT OF CONTACT Maria E. Castaneda, MP-3813 U. S. Department of Interior Bureau of Reclamation Mid-Pacific Region 2800 Cottage Way Sacramento, California 95825-1898 Phone: (916) 978-5148 Email: mcastaneda@usbr.gov				7. RECIPIENT PROJECT MANAGER Mr. Grant Davis Sonoma County Water Agency 404 Aviation Blvd. Santa Rosa, California 95403 Phone: (707) 547-1911			
8. GRANTS OFFICER TECHNICAL REPRESENTATIVE David T. White, MP-720 Bureau of Reclamation Mid-Pacific Region 2800 Cottage Way Sacramento, California 95825-1898 Phone: (916) 978-5074 Email: dwhite@usbr.gov				9A. INITIAL AGREEMENT EFFECTIVE DATE: September 27, 2010		9B. MODIFICATION EFFECTIVE DATE: See Block 17a	
10. COMPLETION DATE September 30, 2018							
11A. PROGRAM STATUTORY AUTHORITY Reclamation Wastewater and Groundwater Study and Facilities Act (Public Law 102-575, Title XVI; 43 USC 390h et seq and Basic Agreement, Section 7.6, Modifications						11B. CFDA Number 15.504	
12. FUNDING INFORMATION		RECIPIENT/OTHER		RECLAMATION		13. REQUISITION NUMBER 11203000106	
Total Estimated Amount of Agreement		\$53,016,000.00		\$17,672,000.00		14A. ACCOUNTING AND APPROPRIATION DATA A1A 1993 2000 000 00 0 0 2030000 411C	
This Obligation		\$ 0.00		\$ 1,661,175.00		14B. TREASURY ACCOUNT FUNDING SYMBOL 14X0680	
Previous Obligation		\$53,016,000.00		\$ 43,700.00			
Total Obligation		\$53,016,000.00		\$ 1,704,875.00			
Cost-Share %		75%		25%			
15. PROJECT TITLE AND BRIEF SUMMARY OF PURPOSE AND OBJECTIVES OF PROJECT A. TITLE: North San Pablo Bay Restoration and Reuse Project – The proposed Project would build on commitments to long-term inter-agency cooperation to address common needs related to reliable water supplies and enhanced environmental restoration. (Continued on Page 2)							
16a. Acceptance of this Assistance Agreement in accordance with the terms and conditions contained herein is hereby made on behalf of the above-named recipient BY:  DATE: 10-12-11				17a. Award of this Assistance Agreement in accordance with the terms and conditions contained herein is hereby made on behalf of the United States of America, Department of the Interior, Bureau of Reclamation BY:  DATE: 9/29/2011			
16b. NAME, TITLE, AND TELEPHONE NUMBER OF SIGNER <input type="checkbox"/> Additional signatures are attached				17b. NAME OF GRANTS OFFICER Maria E. Castaneda			

Bureau of Reclamation Form, RF-131
04-2011

(Continued from page 1, block 15)

B. PURPOSE:

The purpose of this modification is to add additional funding (previously projected) to agreement to continue the work on the Basic Agreement.

C. ADJUSTMENT OF AGREEMENT AMOUNT:

The total estimated amount of the Agreement is unchanged and remains \$17,672,000.00.

D. NOTICE OF CHANGE IN FUNDS OBLIGATED:

As a result of this modification, the total amount of funding obligated for this Agreement is increased by \$1,661,175.00 from \$43,700.00 to \$1,704,875.00.

E. ADJUSTMENT IN AGREEMENT TIME:

The performance period is unchanged and remains September 27, 2010 through September 30, 2018.

Agreement No. R10AC20093
Modification No. 0002



United States Department of the Interior

BUREAU OF RECLAMATION
Mid-Pacific Regional Office
2800 Cottage Way
Sacramento, CA 95825-1898

IN REPLY REFER TO:

MP-3813
ADM-13

SEP 14 2011

Mr. Grant Davis
Sonoma County Water Agency
404 Aviation Blvd.
Santa Rosa, California 95403

Subject: Modification No. 0001, Cooperative Agreement R10AC20093 for North San Pablo Bay
Restoration and Reuse Project

Dear Mr. Davis:

Enclosed for your record is an executed original copy of the subject modification de-obligating funds.

All payments will be made through Electronic Funds Transfers (EFT). To ensure you receive proper payment via EFT, your Central Contractor Registration (CCR) must remain active. Please check CCR at <http://www.ccr.gov>

If you have any questions, please contact the undersigned at (916) 978-5148, or email mcastaneda@usbr.gov.

Sincerely,

Maria E. Castaneda
Grants Officer

ORIGINAL DOCUMENT
SONOMA COUNTY WATER AGENCY

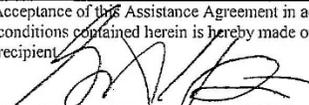
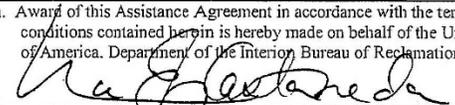
SEP 19 2011

To: Rosselli, Booker

CF/71-700-16 US Bureau of Reclamation
(Coop Agree for North Bay Water Reuse Program) TW No

7-2279 (04-2011)
Bureau of Reclamation

-UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF RECLAMATION
ASSISTANCE AGREEMENT

1A. AGREEMENT NUMBER R10AC20093		1B. MOD NUMBER 0001		2. TYPE OF AGREEMENT <input type="checkbox"/> GRANT <input checked="" type="checkbox"/> COOPERATIVE AGREEMENT		3. CLASS OF RECIPIENT Special District	
4. ISSUING OFFICE U. S. Department of Interior Bureau of Reclamation Mid-Pacific Region 2800 Cottage Way Sacramento, California 95825-1898 DUNS: 098-86-5801 EIN: 84-1024566				5. RECIPIENT Sonoma County Water Agency 404 Aviation Blvd. Santa Rosa, California 95403 Phone: (707) 547-1911			
				EIN #: 94-6000539		County: Sonoma	
				DUNS #: 074-66-2503		Congress. Dist: 01, 06	
6. ADMINISTRATIVE POINT OF CONTACT Maria E. Castaneda, MP-3813 U. S. Department of Interior Bureau of Reclamation Mid-Pacific Region 2800 Cottage Way Sacramento, California 95825-1898 Phone: (916) 978-5148 Email: mcastaneda@usbr.gov				7. RECIPIENT PROJECT MANAGER Mr. Grant Davis Sonoma County Water Agency 404 Aviation Blvd. Santa Rosa, California 95403 Phone: (707) 547-1911			
8. GRANTS OFFICER TECHNICAL REPRESENTATIVE David T. White, MP-720 Bureau of Reclamation Mid-Pacific Region 2800 Cottage Way Sacramento, California 95825-1898 Phone: (916) 978-5074 Email: dwhite@usbr.gov				9A. INITIAL AGREEMENT EFFECTIVE DATE: September 27, 2010		9B. MODIFICATION EFFECTIVE DATE: See Block 17a	
				10. COMPLETION DATE September 30, 2018			
11A. PROGRAM STATUTORY AUTHORITY Reclamation Wastewater and Groundwater Study and Facilities Act (Public Law 102-575, Title XVI, 43 USC 390h et seq and Basic Agreement, Section 7.6, Modifications						11B. CFDA Number 15.504	
12. FUNDING INFORMATION		RECIPIENT/OTHER		RECLAMATION		13. REQUISITION NUMBER 11203000068	
Total Estimated Amount of Agreement		\$53,016,000.00		\$17,672,000.00		14A. ACCOUNTING AND APPROPRIATION DATA	
This Obligation		\$ 0.00		-\$ 146,300.00		A10-1993-1000-000-00-0-0 2030000 411C (-\$146,300.00)	
Previous Obligation		\$53,016,000.00		\$ 190,000.00		14B. TREASURY ACCOUNT FUNDING SYMBOL	
Total Obligation		\$53,016,000.00		\$ 43,700.00		14X0680	
Cost-Share %		75%		25%			
15. PROJECT TITLE AND BRIEF SUMMARY OF PURPOSE AND OBJECTIVES OF PROJECT A. TITLE: North San Pablo Bay Restoration and Reuse Project (Continued on Page 2)							
16a. Acceptance of this Assistance Agreement in accordance with the terms and conditions contained herein is hereby made on behalf of the above-named recipient BY:  DATE: 9-12-11				17a. Award of this Assistance Agreement in accordance with the terms and conditions contained herein is hereby made on behalf of the United States of America, Department of the Interior, Bureau of Reclamation BY:  DATE: 9/14/2011			
16b. NAME, TITLE, AND TELEPHONE NUMBER OF SIGNER <input type="checkbox"/> Additional signatures are attached				17b. NAME OF GRANTS OFFICER Maria E. Castaneda			

Bureau of Reclamation Form. RF-131
04-2011

(Continued from page 1, block 15)

B. PURPOSE:

The purpose of this modification is to de-obligate funds from the Basic Agreement.

C. DESCRIPTION: This modification de-obligates funding in the amount of \$146,300.00 in order to partially fund a new pre-construction planning agreement for Phase 2 of the North Bay Water Reuse Program.

In Section 9110 of Public Law 111-11, Congress authorized for construction two phases of the North Bay Water Reuse Program. Phase 1 has been fully studied and is under construction. Phase 2 was authorized prior to a determination of feasibility. That determination is still mandatory before the project proponent can begin construction. The Scoping Study on the new agreement will assist the project proponent in determining whether to proceed with a feasibility study and whether to construct Phase 2.

D. ADJUSTMENT OF AGREEMENT AMOUNT:

The total estimated amount of the Agreement is unchanged and remains \$17,672,000.00.

E. NOTICE OF CHANGE IN FUNDS OBLIGATED:

As a result of this modification, the total amount of funding obligated for this Agreement is ~~decreased by \$146,300.00 from \$190,000.00 to \$43,700.00.~~

F. ADJUSTMENT IN AGREEMENT TIME:

The performance period is unchanged and remains September 30, 2018.

Agreement No. R10AC20093
Modification No. 0001



United States Department of the Interior

COPY

BUREAU OF RECLAMATION
Mid-Pacific Regional Office
2800 Cottage Way
Sacramento, California 95825-1898

IN REPLY
REFER TO:

MP-3813
ADM-13

SEP 27 2010

Mr. Grant Davis
Sonoma County Water Agency
404 Aviation Blvd.
Santa Rosa, California 95403

Subject: Cooperative Agreement **R10AC20093**, North Bay Water Reuse Program

Dear Mr. Davis:

Enclosed for your records is an executed original of subject agreement in the amount of \$190,000.00.

All payments will be made through Electronic Funds Transfers (EFT). To ensure you receive proper payment via Electronic Funds Transfer (EFT), please check Central Contractor Registration (CCR) at <http://www.ccr.gov> ensuring Sonoma County Water Agency has an active status.

If you have any questions, please contact the undersigned at (916) 978-5148 or email at mcastaneda@usbr.gov.

Sincerely,

Maria E. Castaneda
Grants Officer

Enclosures

ORIGINAL DOCUMENT
SONOMA COUNTY WATER AGENCY
TW: L. ROSSELL

OCT 07 2010

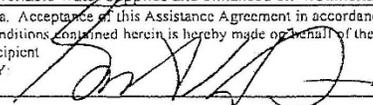
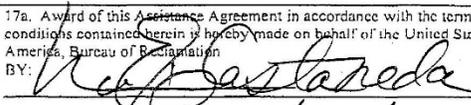
CF/71-0-16 US Bureau of Reclamation
(Cooperative Agreement for North Bay Water Reuse Program)
TW No

COPY

7-2279 (05-22-09)
Bureau of Reclamation

UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF RECLAMATION
ASSISTANCE AGREEMENT

Page 1 of 37

1A. AGREEMENT NUMBER R10AC20093		1B. MOD NUMBER		2. TYPE OF AGREEMENT <input type="checkbox"/> GRANT <input checked="" type="checkbox"/> COOPERATIVE AGREEMENT		3. CLASS OF RECIPIENT Special District	
4. ISSUING OFFICE (NAME, ADDRESS) U.S. Department of the Interior Bureau of Reclamation Mid-Pacific Region 2800 Cottage Way, Room E-1815v Sacramento, California 95825-1898 DUNS: 098-86-5801/EIN: 84-1024566				5. RECIPIENT (NAME, ADDRESS, TELEPHONE) Sonoma County Water Agency 404 Aviation Blvd. Santa Rosa, California 95403 Phone: (707) 547-1911 EIN #: 94-6000539 County: Sonoma DUNS #: 074-66-2503 Congress. Dist: 01, 06			
6. ADMINISTRATIVE POINT OF CONTACT (NAME, ADDRESS, TELEPHONE, E-MAIL) Ms. Maria E. Castaneda, MP-3813 Ph: 916 978-5148 U.S. Department of the Interior Bureau of Reclamation Mid-Pacific Region 2800 Cottage Way, Room E-1815 Sacramento, California 95825-1898 Email: mcastaneda@usbr.gov				7. RECIPIENT PROJECT MANAGER (NAME, ADDRESS, TELEPHONE, E-MAIL) Mr. Grant Davis Sonoma County Water Agency 404 Aviation Blvd. Santa Rosa, California 95403 Phone: (707) 547-1911 Fax: (707) 524-3782 Email: grant.davis@scwra.ca.gov			
8. GRANTS OFFICER TECHNICAL REPRESENTATIVE (NAME, ADDRESS, TELEPHONE, E-MAIL) Mr. David White, MP 720 Ph: 916 978-5074 U.S. Department of the Interior Bureau of Reclamation Mid-Pacific Region 2800 Cottage Way, Room E-1815 Sacramento, California 95825-1898 Email: dwhite@usbr.gov				9A. INITIAL AGREEMENT EFFECTIVE DATE: See block 17a		9B. MODIFICATION EFFECTIVE DATE:	
				10. COMPLETION DATE September 30, 2018			
11. PROGRAM STATUTORY AUTHORITY Reclamation Wastewater and Groundwater Study and Facilities Act (Public Law 102-575, Title XVI; 43 USC 390h et seq)						CFDA 15.504	
12. FUNDING INFORMATION		RECIPIENT/OTHER		RECLAMATION		13. REQUISITION NUMBER 10203000085	
Total Estimated Amount of Agreement		\$53,016,000.00		\$17,672,000.00		14A. ACCOUNTING AND APPROPRIATION DATA A10 1993 1000 000 00 0 0 2030000 411C	
This Obligation				\$ 190,000.00			
Previous Obligation							
Total Obligation		\$53,016,000.00		\$ 190,000.00			
Cost-Share %		75%		25%		14B. TREASURY ACCOUNT FUNDING SYMBOL 14X0680	
15. PROJECT TITLE AND BRIEF SUMMARY OF PURPOSE AND OBJECTIVES OF PROJECT Title: North San Pablo Bay Restoration and Reuse Project Project Description: The proposed Project would build on commitments to long-term inter-agency cooperation to address common needs related to reliable water supplies and enhanced environmental restoration.							
16a. Acceptance of this Assistance Agreement in accordance with the terms and conditions contained herein is hereby made on behalf of the above-named recipient BY:  DATE: 9-26-10				17a. Award of this Assistance Agreement in accordance with the terms and conditions contained herein is hereby made on behalf of the United States of America, Bureau of Reclamation BY:  DATE: 9/27/2010			
16b. NAME, TITLE, AND TELEPHONE NUMBER OF SIGNER				17b. NAME OF GRANTS OFFICER Maria E. Castaneda			

Additional signatures are attached
DOCUMENTS INCORPORATED HEREIN BY REFERENCE:



TABLE OF CONTENTS

I. OVERVIEW AND SCHEDULE 3

1. AUTHORITY 3

2. PUBLIC PURPOSE 4

3. BACKGROUND AND OBJECTIVES 4

4. PERIOD OF PERFORMANCE AND FUNDS AVAILABILITY 5

5. SCOPE OF WORK 6

6. RESPONSIBILITY OF THE PARTIES 7

7. BUDGET 7

8. KEY PERSONNEL 10

9. REPORTING REQUIREMENTS AND DISTRIBUTION 12

10. REGULATORY COMPLIANCE 14

II. RECLAMATION STANDARD TERMS AND CONDITIONS - STATES, LOCAL GOVERNMENTS, AND FEDERALLY RECOGNIZED INDIAN TRIBAL GOVERNMENTS 16

1. REGULATIONS 16

2. PAYMENT 17

3. PROCUREMENT STANDARDS (43 CFR §12.76) 19

4. EQUIPMENT (43 CFR §12.72) 28

5. SUPPLIES (43 CFR §12.73) 30

6. INSPECTION 31

7. AUDIT (31 U.S.C. 7501-7507) 31

8. ENFORCEMENT (43 CFR §12.83) 31

9. TERMINATION FOR CONVENIENCE (43 CFR §12.84) 32

10. DEBARMENT AND SUSPENSION (2 CFR §1400) 32

11. DRUG-FREE WORKPLACE (43 CFR §43) 33

12. ASSURANCES AND CERTIFICATIONS INCORPORATED BY REFERENCE 33

13. COVENANT AGAINST CONTINGENT FEES 33

14. TRAFFICKING VICTIMS PROTECTION ACT OF 2000 (2 CFR §175.15) 34

15. NEW RESTRICTIONS ON LOBBYING (43 CFR §18) 36

**Cooperative Agreement
Between
Bureau of Reclamation
And
Sonoma County Water Agency
For
North Bay Water Reuse Program**

I. OVERVIEW AND SCHEDULE

1. AUTHORITY

This Grant Agreement (Agreement) is entered into between the United States of America, acting through the Department of Interior, Bureau of Reclamation, hereinafter referred to as "Reclamation", and **Sonoma County Water Agency**, hereinafter referred to as the "Recipient" or "Grantee", pursuant to *The Reclamation Wastewater and Groundwater Study and Facilities Act (Public Law 102-575, Title XVI; 43 USC 390h et seq) is amended by Public Law 111-11, Title IX, Section 9110(a) as follows:*

SECTION 1651- NORTH BAY WATER REUSE PROGRAM (43 USC 390h-34)

(a) DEFINITIONS - In this section:

(1) ELIGIBLE ENTITY.—The term 'eligible entity' means a member agency of the North Bay Water Reuse Authority of the State located in the North San Pablo Bay watershed in - (A) Marin County; (B) Napa County; (C) Solano County; or (D) Sonoma County.

(2) WATER RECLAMATION AND REUSE PROJECT - The term 'water reclamation and reuse project' means a project carried out by the Secretary and an eligible entity in the North San Pablo Bay watershed relating to—

(A) water quality improvement; (B) wastewater treatment; (C) water reclamation and reuse; (D) groundwater recharge and protection; (E) surface water augmentation; or (F) other related improvements.

(3) STATE - The term 'State' means the State of California.

(b) NORTH BAY WATER REUSE PROGRAM -

(1) IN GENERAL.—Contingent upon a finding of feasibility, the Secretary, acting through a cooperative agreement with the State or a subdivision of the State, is authorized to enter into cooperative agreements with eligible entities for the planning, design, and construction of water reclamation and reuse facilities and recycled water conveyance and distribution systems.

(2) COORDINATION WITH OTHER FEDERAL AGENCIES - In carrying out this section, the Secretary and the eligible entity shall, to the maximum extent practicable, use the design work and environmental evaluations initiated by -

(A) non-Federal entities; and (B) the Corps of Engineers in the San Pablo Bay Watershed of the State.

(3) PHASED PROJECT - A cooperative agreement described in paragraph (1) shall require that the North Bay Water Reuse Program carried out under this section shall consist of 2 phases as follows:

(A) FIRST PHASE - During the first phase, the Secretary and an eligible entity shall complete the planning, design, and construction of the main treatment and main conveyance systems. (B) SECOND PHASE - During the second phase, the Secretary and an eligible entity shall complete the planning, design, and construction of the sub-regional distribution systems.

(4) COST SHARING - (A) FEDERAL SHARE - The Federal share of the cost of the first phase of the project authorized by this section shall not exceed 25 percent of the total cost of the first phase of the project.

(B) FORM OF NON-FEDERAL SHARE - The non-Federal share may be in the form of any in-kind services that the Secretary determines would contribute substantially toward the completion of the water reclamation and reuse project, including - (i) reasonable costs incurred by the eligible entity relating to the planning, design, and construction of the water reclamation and reuse project; and (ii) the acquisition costs of land acquired for the project that is - (I) used for planning, design, and construction of the water reclamation and reuse project facilities; and (II) owned by an eligible entity and directly related to the project.

(C) LIMITATION - The Secretary shall not provide funds for the operation and maintenance of the project authorized by this section.

(5) EFFECT.—Nothing in this section - (A) affects or preempts - (i) State water law; or (ii) an interstate compact relating to the allocation of water; or (B) confers on any non-Federal entity the ability to exercise any Federal right to - (i) the water of a stream; or (ii) any groundwater resource.

(6) AUTHORIZATION OF APPROPRIATIONS - There is authorized to be appropriated for the Federal share of the total cost of the first phase of the project authorized by this section \$25,000,000, to remain available until expended.

2. PUBLIC PURPOSE

The Project will diversify the types of water available to the North Bay area, for by using non-potable water for non-potable uses, potable water is made available for potable-only uses.

3. BACKGROUND AND OBJECTIVES

The objective of this cooperative agreement will be to reimburse Recipient for the appropriate Federal cost share associated with the Project, which, when combined with their ARRA-funded agreement, will be the lesser of 25% of the total project cost or \$25,000,000. Based on documents submitted to Reclamation, the total project cost for the non-ARRA agreement is \$70,688,000 and the associated Federal Cost Share is \$17,672,000.

Recipient administers the Project on behalf of the North Bay Water Reuse Authority (NBWRA), which is comprised of multiple members. Recipient submitted documents that represent the totality of the Project while showing the costs for each member agency's specific project. The Project consists in the planning, design, and construction of multi-county activities that will provide recycled water for agricultural, ban, and environmental uses and to expand the recycled water system region-wide. The Project will include upgrades of treatment processes and construction of storage, pipelines, and pump station facilities to distribute recycled water for use in compliance with Article 4 in Title 22 of the California Code of Regulations. The Project will also reduce reliance on local and imported surface water and groundwater supplies and reduce the amount treated effluent releases to San Pablo Bay and its tributaries. NBWRA Member Agencies collectively prioritized the projects within their individual service areas to establish an Implementation Plan identifying the order in which projects will be constructed. Phase 1

projects are defined to a level of detail that allows project-level environmental review. These projects are collectively referred to as Phase I Projects. The Phase I Projects will include approximately 46.3 miles of new pipeline, will annually recycle approximately 3,943 acre-feet (AF), will increase the regional system capacity of 7.4 mgd, will include 1,978 horse-power (HP) new pumps, will create an additional 65 AF of storage, will rehabilitate an existing reservoir, and will construct multiple new water service connections and rehabilitate multiple existing water service connections.

As required by Reclamation Manual Directive and Standard WTR 11-01, SCWA conducted a Feasibility Study and detailed the study and its findings in a Feasibility Report. Upon review of the Feasibility Report, Reclamation gave the Project a positive determination of feasibility; subsequent to that, Congress authorized the Project for construction through Section 9110 of Public Law 111-11, "North Bay Water Reuse Authority", which amends Title XVI, the Wastewater and Groundwater Study and Facilities Act of 1992, of Public Law 102-575 to add Section 1651, "North Bay Water Reuse Program".

Details of the Project may be found in the Feasibility Report. The Project's objectives were rigorously reviewed by Reclamation and are clearly defined and feasible. Furthermore, in a separate analysis, Reclamation will determine that the Project complies with all applicable Federal environmental and cultural resources rules and regulations.

4. PERIOD OF PERFORMANCE AND FUNDS AVAILABILITY

This Agreement becomes effective on the date shown in Block 17a of Form 7-2279, United States of America, Department of the Interior, Bureau of Reclamation, Assistance Agreement. The Agreement shall remain in effect until the date shown in Block 10 of Form 7-2279, United States of America, Department of the Interior, Bureau of Reclamation, Assistance Agreement. The period of performance for this Agreement may only be modified through written modification of the Agreement by a Reclamation Grants Officer (GO).

Funds for payment under this Agreement are included in *Public Law 111-85 – Energy and Water Development and Related Agencies Appropriation Act, 2010*. Funding for any optional year of the Agreement is contingent upon subsequent Congressional funding.

Reclamation has \$216,000.00 funding available (\$26,000.00 set aside for post award monitoring and oversight) for this Agreement. The Government's obligation under this Agreement is contingent upon the availability of appropriated funds from which payment for Agreement purposes can be made. No legal liability on the part of the Government for any payment may arise until funds are made available to the GO for this Agreement, and until the Recipient receives notice of such availability through formal modification of this Agreement by the GO.

It is recognized and agreed that all costs incurred by Reclamation related to the development and administration of this Agreement and all costs associated with carrying out Reclamation's responsibilities as provided in Section I.6.2 of this agreement, are considered part of the total costs of the Project, and therefore the Recipient is responsible for 75 percent of these costs.

These costs include, but are not limited to, salary, overhead, travel, and other costs directly or indirectly related to the Agreement, as determined by Reclamation. Following the completion of each quarter of the federal fiscal year, Reclamation shall provide the Recipient with a statement of Reclamation's costs for the previous quarter. The Recipient may request explanations or a review of the costs included in the statement; however, Reclamation's determination as to the validity of the costs is final. The Recipient's 75 percent share of Reclamation's costs will be deducted from payments processed by Reclamation under this Agreement for the previous quarter.

5. SCOPE OF WORK

The Scope of Work for this non-ARRA funded project is to:

Novato South Service Area – Hamilton Field:

Complete planning and other pre-construction activities, environmental review, engineering design, and permitting.

Complete construction activities, to upgrade WWTP to tertiary level of treatment or expand existing tertiary plant.

Complete Phase 2 construction activities for recycled water distribution and storage system to serve the remaining Hamilton Field area, including approximately 2.5 miles of additional pipelines (when combined, Phase's 1 and 2 result in a total finished conveyance system length of approximately 5.9 miles).

Novato North Service Area/Novato Central Service Area:

- *Under the Recycled Water System Expansion Project, Novato SD and NMWD would complete planning and other pre-construction activities, environmental review, engineering design, and permitting.*
- *Implement a reuse project in the Novato Central Service Area through construction of a recycled water distribution system from the Novato SD RWF at Davidson WWTP south to Rowland Boulevard and the Vintage Oaks shopping center, and across Highway 101 to serve urban users west of Highway 101. From the RWF at Davidson WWTP, an 18-inch pipeline would be installed along Novato SD's existing easement, with a jack and bore crossing of US 101 from Rowland Boulevard to Redwood Boulevard. An 18-inch recycled trunk line would then extend north through Novato to deliver recycled water to Novato High School and other irrigated playing fields, with a 10-inch line extending south along Redwood Boulevard.*
- *As applicable, the treatment facilities at the Recycled Water Treatment Facility would be decommissioned and relocated to the Novato SD WWTP. A new pipeline would connect the WWTP with the North Service Area pipeline in Olive Drive via Lea Drive or McClelland Drive.*

Napa-Sonoma Salt Marsh Pipeline:

- *Complete planning and other pre-construction activities, environmental review, engineering design, and permitting.*
- *Initiate construction for distribution pipeline from the Sonoma Valley County Sanitation District wastewater treatment plant north.*

- Construction of pumping improvements at the wastewater treatment plant, and construction of approximately 7.5 miles of 18- to 24-inch pipe between the District wastewater treatment plant and the salt ponds.

Miliken-Sarco-Tulocay Area Project:

- Complete planning environmental review, and design activities, including surveying, right-of-way work, preliminary and final designs and permitting for remainder of project.
- Complete procuring materials and begin pipeline installation for remainder of project.
- Complete bid/award phase for remainder of project.
- Complete pipeline installation, new pump station construction, and existing pump station and filtration improvements for the remainder of the project.

6. RESPONSIBILITY OF THE PARTIES

6.1 Recipient Responsibilities

6.1.1 The Recipient shall be responsible for carrying out the Scope of Work as provided in Section 5. The Recipient shall adhere to Federal, state, and local laws, regulations, and codes, as applicable, and shall obtain all required approvals and permits. If applicable, the Recipient shall also coordinate and obtain approvals from site owners and operators.

6.2 Reclamation Responsibilities

6.2.1 Reclamation will provide scientific or administrative advice on the development of the project. Such advice will take into consideration factors such as: (1) the scientific complexities of the project; (2) the Recipient's progress in meeting project goals; and (3) the Recipient's ability to meet the proposed time schedule.

6.2.2 Reclamation will also monitor the performance progress of the Recipient, review reporting requirements, ensure that project is completed and all reports are submitted and acceptable.

6.2.3 Reclamation will confirm project compliance with the National Environmental Policy Act and endangered Species Act. However, it is the ultimate responsibility of the Recipient for obtaining all applicable Federal, State, and local permits for work to be performed under this Agreement.

7. BUDGET

7.1 Approved Budget

Project Phase	Non-Federal Cost Share	Federal Cost Share	Total Phase Cost
Program Oversight and Administration	\$750,000	\$250,000	\$1,000,000
Novato South Service Area—Hamilton Field	\$3,192,798	\$1,064,266	\$4,257,064
Novato Central Service Area and Novato North Service Area	\$6,933,617	\$2,311,206	\$9,244,823
Sonoma Valley Project and Napa-Sonoma Salt Marsh Pipeline	\$18,635,561	\$6,211,854	\$24,847,414

Miliken-Sarco-Tulocay Area Project	\$23,504,023	\$7,834,674	\$31,338,698
Total	\$53,015,999	\$17,672,000	\$70,687,999

7.2 Cost Sharing Requirement

The Recipient will provide cost-share for this project equal to but not less than 75%.

7.3 Pre-Award Incurrence of Costs

The Recipient shall be entitled to have incurred costs for this Agreement for allowable costs incurred on or after May 1, 2009, which if had been incurred after this Agreement was entered into, would have been allowable, allocable, and reasonable under the terms and conditions of this Agreement.

7.4 Allowable Costs (2 CFR Part §225)

Costs incurred for the performance of this Agreement must be allowable, allocable to the project, and reasonable. The following Office of Management and Budget (OMB) Circular, codified within the Code of Federal Regulations (CFR), governs the allowability of costs for Federal financial assistance:

2 CFR Part 225 (OMB Circular A-87), "Cost Principles for State, Local, and Indian Tribal Governments"

Expenditures for the performance of this Agreement must conform to the requirements within this Circular. The Recipient must maintain sufficient documentation to support these expenditures. Questions on the allowability of costs should be directed to the GO responsible for this Agreement.

The Recipient shall not incur costs or obligate funds for any purpose pertaining to operation of the program or activities beyond the expiration date stated in the Agreement. The only costs which are authorized for a period of up to 90 days following the project performance period are those strictly associated with closeout activities for preparation of the final report.

7.5 Changes (43 CFR §12.70).

(a) *General.* Grantees and sub-grantees are permitted to re-budget within the approved direct cost budget to meet unanticipated requirements and may make limited program changes to the approved project. However, unless waived by the awarding agency, certain types of post-award changes in budgets and projects shall require the prior written approval of the awarding agency.

(b) *Relation to cost principles.* The applicable cost principles (see 43 §12.62) contain requirements for prior approval of certain types of costs. Except where waived, those requirements apply to all grants and sub-grants even if paragraphs (c) through (f) of this section do not.

(c) *Budget changes.*

(1) *Non-construction projects.* Except as stated in other regulations or an award document, grantees or sub-grantees shall obtain the prior approval of the awarding agency whenever any of the following changes is anticipated under a non-construction award:

(i) Any revision which would result in the need for additional funding.

(ii) Unless waived by the awarding agency, cumulative transfers among direct cost categories, or, if applicable, among separately budgeted programs, projects, functions, or activities which exceed or are expected to exceed ten percent of the current total approved budget, whenever the awarding agency's share exceeds \$100,000.

(iii) Transfer of funds allotted for training allowances (i.e., from direct payments to trainees to other expense categories).

(2) *Construction projects.* Grantees and sub-grantees shall obtain prior written approval for any budget revision which would result in the need for additional funds.

(3) *Combined construction and non-construction projects.* When a grant or sub-grant provides funding for both construction and non-construction activities, the grantee or sub-grantee must obtain prior written approval from the awarding agency before making any fund or budget transfer from non-construction to construction or vice versa.

(d) *Programmatic changes.* Grantees or sub-grantees must obtain the prior approval of the awarding agency whenever any of the following actions is anticipated:

(1) Any revision of the scope or objectives of the project (regardless of whether there is an associated budget revision requiring prior approval).

(2) Need to extend the period of availability of funds.

(3) Changes in key persons in cases where specified in an application or a grant award. In research projects, a change in the project director or principal investigator shall always require approval unless waived by the awarding agency.

(4) Under non-construction projects, contracting out, sub-granting (if authorized by law) or otherwise obtaining the services of a third party to perform activities which are central to the purposes of the award, *unless included in the initial funding proposal.* This approval requirement is in addition to the approval requirements of 43 §12.76 but does not apply to the procurement of equipment, supplies, and general support services.

(e) *Additional prior approval requirements.* The awarding agency may not require prior approval for any budget revision which is not described in paragraph (c) of this section.

(f) *Requesting prior approval.*

(1) A request for prior approval of any budget revision will be in the same budget format the grantee used in its application and shall be accompanied by a narrative justification for the proposed revision.

(2) A request for a prior approval under the applicable Federal cost principles (see §12.62) may be made by letter.

(3) A request by a sub-grantee for prior approval will be addressed in writing to the grantee. The grantee will promptly review such request and shall approve or disapprove the request in writing. A grantee will not approve any budget or project revision which is inconsistent with the purpose or terms and conditions of the Federal grant to the grantee. If the revision, requested by the sub-grantee would result in a change to the grantee's approved project which requires Federal prior approval, the grantee will obtain the Federal agency's approval before approving the sub-grantee's request.

7.6 Modifications

Any changes to this Agreement shall be made by means of a written modification. Reclamation may make changes to the Agreement by means of a unilateral modification to address administrative matters, such as changes in address, no-cost time extensions, the addition of previously agreed upon funding, or de-obligation of excess funds at the end of the Agreement. Additionally, a unilateral modification may be utilized by Reclamation if it should become necessary to suspend or terminate the Agreement in accordance with 43 CFR 12.83.

All other changes shall be made by means of a bilateral modification to the Agreement. No oral statement made by any person, or written statement by any person other than the GO, shall be allowed in any manner or degree to modify or otherwise effect the terms of the Agreement.

All requests for modification of the Agreement shall be made in writing, provide a full description of the reason for the request, and be sent to the attention of the GO. Any request for project extension shall be made at least 45 days prior to the expiration date of the Agreement or the expiration date of any extension period that may have been previously granted. Any determination to extend the period of performance or to provide follow-on funding for continuation of a project is solely at the discretion of Reclamation.

8. KEY PERSONNEL

8.1 Recipient's Key Personnel

The Recipient's Project Manager for this Agreement shall be:

Sonoma County Water Agency
Attn: Mr. Grant Davis
404 Aviation Blvd.
Santa Rosa, California 95403
Ph: (707) 547-1911
Fax: (707) 524-3782
Email: grant.davis@scwa.ca.gov

Changes to Key Personnel require compliance with 43 CFR 12.70(d)(3).

8.2 Reclamation’s Key Personnel

8.2.1 Grants Officer (GO):

Bureau of Reclamation
Attn: Ms. Maria E. Castaneda
2800 Cottage Way
Sacramento, CA 95825
Ph: (916) 978-5148
Fax: (916) 978-5175
Email: mcastaneda@usbr.gov

The GO is the only official with legal delegated authority to represent Reclamation. The GO’s responsibilities include, but are not limited to, the following:

- a) Formally obligate Reclamation to expend funds or change the funding level of the Agreement;
- b) Approve through formal modification changes in the scope of work and/or budget;
- c) Approve through formal modification any increase or decrease in the period of performance of the Agreement;
- d) Approve through formal modification changes in any of the expressed terms, conditions, or specifications of the Agreement;
- e) Be responsible for the overall administration, management, and other non-programmatic aspects of the Agreement including, but not limited to, interpretation of financial assistance statutes, regulations, circulars, policies, and terms of the Agreement;
- f) Where applicable, ensures that Reclamation complies with the administrative requirements required by statutes, regulations, circulars, policies, and terms of the Agreement.

8.2.2 Grants Officer Technical Representative (GOTR):

Bureau of Reclamation
Attn: Mr. David White
2800 Cottage Way
Sacramento, CA 95825
Ph: (916) 978-5074
E-mail: dwhite@usbr.gov

The GOTR’s authority is limited to technical and programmatic aspects of the Agreement. The GOTR’s responsibilities include, but are not limited to, the following:

- a) Assist the Recipient, as necessary, in interpreting and carrying out the scope of work in the Agreement;
- b) Review, and where required, approve Recipient reports and submittals as required by the Agreement;
- c) Where applicable, monitor the Recipient to ensure compliance with the technical requirements of the Agreement;
- d) Where applicable, ensure that Reclamation complies with the technical requirements of the Agreement;

The GOTR does not have the authority to and may not issue any technical assistance which:

- a) Constitutes an assignment of additional work outside the scope of work of the Agreement;
- b) In any manner causes an increase or decrease in the total estimated cost or the time required for performance; or
- c) Changes any of the expressed terms, conditions, or specifications of the Agreement.

9. REPORTING REQUIREMENTS AND DISTRIBUTION

9.1 Non-compliance. Failure to comply with the reporting requirements contained in this Agreement may be considered a material non-compliance with the terms and conditions of the award. Non compliance may result in withholding of payments pending receipt of required reports, denying both the use of funds and matching credit for all or part of the cost of the activity or action not in compliance, whole or partial suspension or termination of the Agreement, recovery of funds paid under the Agreement, withholding of future awards, or other legal remedies in accordance with 43 CFR §12.83.

9.2 Financial Reports. Financial Status Reports shall be submitted by means of the SF-425 and shall be submitted according to the Report Frequency and Distribution schedule below. All financial reports shall be signed by an Authorized Certifying Official for the Recipient's organization.

9.3 Monitoring and reporting program performance (43 CFR §12.80)

(a) *Monitoring by grantees.* Grantees are responsible for managing the day-to-day operations of grant and sub-grant supported activities. Grantees must monitor grant and sub-grant supported activities to assure compliance with applicable Federal requirements and that performance goals are being achieved. Grantee monitoring must cover each program, function or activity.

(b) *Non-construction performance reports.* The Federal agency may, if it decides that performance information available from subsequent applications contains sufficient information to meet its programmatic needs, require the grantee to submit a performance report only upon

expiration or termination of grant support. Unless waived by the Federal agency, this report will be due on the same date as the final Financial Status Report.

(1) Grantees shall submit annual performance reports unless the awarding agency requires quarterly or semi-annual reports. However, performance reports will not be required more frequently than quarterly. Annual reports shall be due 90 days after the grant year, quarterly or semi-annual reports shall be due 30 days after the reporting period. The final performance report will be due 90 days after the expiration or termination of grant support. If a justified request is submitted by a grantee, the Federal agency may extend the due date for any performance report. Additionally, requirements for unnecessary performance reports may be waived by the Federal agency.

(2) Performance reports will contain, for each grant, brief information on the following:

(i) A comparison of actual accomplishments to the objectives established for the period. Where the output of the project can be quantified, a computation of the cost per unit of output may be required if that information will be useful.

(ii) The reasons for slippage if established objectives were not met.

(iii) Additional pertinent information including, when appropriate, analysis and explanation of cost overruns or high unit costs.

(3) Grantees will not be required to submit more than the original and two copies of performance reports.

(4) Grantees will adhere to the standards in this section in prescribing performance reporting requirements for sub-grantees.

(c) *Construction performance reports.* For the most part, on-site technical inspections and certified percentage-of-completion data are relied on heavily by Federal agencies to monitor progress under construction grants and sub-grants. The Federal agency will require additional formal performance reports only when considered necessary, and never more frequently than quarterly.

(d) *Significant developments.* Events may occur between the scheduled performance-reporting dates which have significant impact upon the grant or sub-grant supported activity. In such cases, the grantee must inform the Federal agency as soon as the following types of conditions become known:

(1) Problems, delays, or adverse conditions which will materially impair the ability to meet the objective of the award. This disclosure must include a statement of the action taken, or contemplated, and any assistance needed to resolve the situation.

(2) Favorable developments which enable meeting time schedules and objectives sooner or at less cost than anticipated or producing more beneficial results than originally planned.

(e) Federal agencies may make site visits as warranted by program needs.

(f) *Waivers, extensions.*

(1) Federal agencies may waive any performance report required by this part if not needed.

(2) The grantee may waive any performance report from a sub-grantee when not needed. The grantee may extend the due date for any performance report from a sub-grantee if the grantee will still be able to meet its performance reporting obligations to the Federal agency.

9.4 Report Frequency and Distribution. The following table sets forth the reporting requirements for this Agreement.

REQUIRED REPORTS	Interim Reports	Final Report
Program Performance Report		
Format	No specific format required. See content requirements within Section 9.3 (43 CFR 12.80) above.	No specific format required. See content requirements within Section 9.3 (43 CFR 12.80) above.
Reporting Frequency	Semi-Annual	Final Report due upon completion of Agreement's period of performance
Reporting Period	October 1 through March 31 and April 1 through September 30	Entire period of performance
Due Date	Within 30 days after the end of the Reporting Period	Within 90 days after the completion date of the Agreement
Submit to:	GO and GOTR	GO and GOTR
Financial Status Report		
Format	SF-425	SF-425
Reporting Frequency	Semi-Annual	Final Report due upon completion of Agreement's period of performance
Reporting Period	October 1 through March 31 and April 1 through September 30	Entire period of performance
Due Date	Within 30 days after the end of the Reporting Period	Within 90 days after the completion date of the Agreement
Submit to:	GO and GOTR	GO and GOTR

10. REGULATORY COMPLIANCE

The Recipient agrees to comply with or assist Reclamation in compliance with all regulatory compliance requirements and all applicable state, Federal, and local environmental and cultural and paleontological resource protection laws and regulations as applicable to this project. These may include, but are not limited to, the National Environmental Policy Act (NEPA) including the Council on Environmental Quality and Department of the Interior regulations implementing

NEPA, the Clean Water Act, the Endangered Species Act, consultation with potentially affected Tribes, and consultation with the State Historic Preservation Office.

Certain environmental and other associated compliance are Federal responsibilities, and will occur as appropriate Reclamation will identify the need for, and complete any environmental compliance requirements, as identified above, pertinent to Reclamation, pursuant to activities specific to this assisted activity. Environmental and other associated compliance shall be completed prior to the start of this project. As such, notwithstanding any other provision of this Agreement, Reclamation shall not provide any funds to the recipient for Agreement purposes, and the Recipient shall not begin implementation of the assisted activity described in this Agreement, unless and until Reclamation provides written notice to the recipient that all applicable environmental and regulatory compliance analyses and clearances have been completed, and the Recipient may begin implementation of the assisted activity.

II. RECLAMATION STANDARD TERMS AND CONDITIONS - STATES, LOCAL GOVERNMENTS, AND FEDERALLY RECOGNIZED INDIAN TRIBAL GOVERNMENTS

1. REGULATIONS

The regulations at 43 CFR, Part 12, Subparts A, C, E, and F, are hereby incorporated by reference as though set forth in full text. The following Office of Management and Budget (OMB) Circulars, as applicable, and as implemented by 43 CFR Part 12, are also incorporated by reference and made a part of this Agreement. Failure of a Recipient to comply with any applicable regulation or circular may be the basis for withholding payments for proper charges, made by the Recipient and/or for termination of support.

1.1 Colleges and Universities that are Recipients or sub-recipients shall use the following:

2 CFR Parts 215 and 220 (Circular A 21), "Cost Principles for Educational Institutions"

Circular A 110, as amended September 30, 1999, "Uniform Administrative Requirements for Grants and Agreements with Institutions of Higher Education, Hospitals, and Other Non-Profit Organizations" (Codification by Department of Interior, 43 CFR 12, Subpart F)

Circular A-133, revised June 27, 2003, "Audits of States, Local Governments, and Non-Profit Organizations"

1.2 State, Local and Tribal Governments that are Recipients or sub-recipients shall use the following:

2 CFR Part 225 (Circular A 87), "Cost Principles for State, Local, and Indian Tribal Governments"

Circular A 102, as amended August 29, 1997, "Grants and Cooperative Agreements with State and Local Governments" (Grants Management Common Rule, Codification by Department of Interior, 43 CFR 12, Subpart C)

Circular A-133, revised June 27, 2003, Audits of States, Local Governments, and Non-Profit Organizations"

1.3 Non-profit Organizations that are Recipients or sub-recipients shall use the following:

2 CFR Part 230 (Circular A 122), "Cost Principles for Non-Profit Organizations"

Circular A 110, as amended September 30, 1999, "Uniform Administrative Requirements for Grants and Agreements With Institutions of Higher Education, Hospitals, and Other Non-Profit Organizations" (Codification by Department of Interior, 43 CFR 12, Subpart F)

Circular A-133, revised June 27, 2003, "Audits of States, Local Governments, and Non-Profit Organizations"

1.4 Organizations other than those indicated above that are Recipients or sub-recipients shall use the basic principles of OMB Circular A-110 (Codification by Department of Interior, 43 CFR 12, Subpart F), and cost principles shall be in accordance with 48 CFR Subpart 31.2.

1.5 43 CFR 12.77 sets forth further regulations that govern the award and administration of sub-awards by State governments.

2. PAYMENT

2.1 Payment Standards. (43 CFR §12.61)

(a) *Scope.* This section prescribes the basic standard and the methods under which a Federal agency will make payments to grantees, and grantees will make payments to sub-grantees and contractors.

(b) *Basic standard.* Methods and procedures for payment shall minimize the time elapsing between the transfer of funds and disbursement by the grantee or sub-grantee, in accordance with Treasury regulations at 31 CFR Part 205.

(c) *Advances.* Grantees and sub-grantees shall be paid in advance, provided they maintain or demonstrate the willingness and ability to maintain procedures to minimize the time elapsing between the transfer of the funds and their disbursement by the grantee or sub-grantee.

(d) *Reimbursement.* Reimbursement shall be the preferred method when the requirements in paragraph (c) of this section are not met. Grantees and sub-grantees may also be paid by reimbursement for any construction grant. Except as otherwise specified in regulation, Federal agencies shall not use the percentage of completion method to pay construction grants. The grantee or sub-grantee may use that method to pay its construction contractor, and if it does, the awarding agency's payments to the grantee or sub-grantee will be based on the grantee's or sub-grantee's actual rate of disbursement.

(e) *Working capital advances.* If a grantee cannot meet the criteria for advance payments described in paragraph (c) of this section, and the Federal agency has determined that reimbursement is not feasible because the grantee lacks sufficient working capital, the awarding agency may provide cash or a working capital advance basis. Under this procedure the awarding agency shall advance cash to the grantee to cover its estimated disbursement needs for an initial period generally geared to the grantee's disbursing cycle. Thereafter, the awarding agency shall reimburse the grantee for its actual cash disbursements. The working capital advance method of payment shall not be used by grantees or sub-grantees if the reason for using such method is the unwillingness or inability of the grantee to provide timely advances to the sub-grantee to meet the sub-grantee's actual cash disbursements.

(f) *Effect of program income, refunds, and audit recoveries on payment.*

(1) Grantees and sub-grantees shall disburse repayments to and interest earned on a revolving fund before requesting additional cash payments for the same activity.

(2) Except as provided in paragraph (f)(1) of this section, grantees and sub-grantees shall disburse program income, rebates, refunds, contract settlements, audit recoveries and interest earned on such funds before requesting additional cash payments.

(g) *Withholding payments.*

(1) Unless otherwise required by Federal statute, awarding agencies shall not withhold payments for proper charges incurred by grantees or sub-grantees unless—

(i) The grantee or sub-grantee has failed to comply with grant award conditions, or

(ii) The grantee or sub-grantee is indebted to the United States.

(2) Cash withheld for failure to comply with grant award condition, but without suspension of the grant, shall be released to the grantee upon subsequent compliance. When a grant is suspended, payment adjustments will be made in accordance with §12.83(c).

(3) A Federal agency shall not make payment to grantees for amounts that are withheld by grantees or sub-grantees from payment to contractors to assure satisfactory completion of work. Payments shall be made by the Federal agency when the grantees or sub-grantees actually disburse the withheld funds to the contractors or to escrow accounts established to assure satisfactory completion of work.

(h) *Cash depositories.*

(1) Consistent with the national goal of expanding the opportunities for minority business enterprises, grantees and sub-grantees are encouraged to use minority banks (a bank which is owned at least 50 percent by minority group members). A list of minority owned banks can be obtained from the Minority Business Development Agency, Department of Commerce, Washington, DC 20230.

(2) A grantee or sub-grantee shall maintain a separate bank account only when required by Federal-State Agreement.

(i) *Interest earned on advances.* Except for interest earned on advances of funds exempt under the Intergovernmental Cooperation Act (31 U.S.C. 6501 et seq.) and the Indian Self-Determination Act (23 U.S.C. 450), grantees and sub-grantees shall promptly, but at least quarterly, remit interest earned on advances to the Federal agency. The grantee or sub-grantee may keep interest amounts up to \$100 per year for administrative expenses.

2.2 Payment Method

Requesting Payments -- Requests for advance or reimbursement may be made by the following methods:

(1) **SF-270, Request for Advance or Reimbursement** - Recipients may submit an original and properly certified SF-270 form to the GO. For advance payments, this form may be submitted on a monthly basis, at least two weeks prior to the date on which funds are required; and on the basis of expected disbursements for the succeeding month and the amount of Federal funds already on hand. Requests for reimbursement may be submitted on a monthly basis, or more frequently if authorized by the (GO).

(2) **SF-271, Outlay Report and Request for Reimbursement for Construction Programs** - The SF-271 shall be used for construction Agreements paid by the reimbursement method, letter of credit, electronic funds transfer, or Treasury check advance, except where the advance is based on periodic requests from the Recipient, in which case the SF-270 shall be used. This request may be submitted on a quarterly basis, but no less frequently than on an annual basis. Recipients may submit an original, properly certified SF-271 form to the GO.

(3) **Automated Standard Application for Payments (ASAP)** - Recipients may utilize the Department of Treasury ASAP payment system to request advances or reimbursements. ASAP is a Recipient-initiated payment and information system designed to provide a single point of contact for the request and delivery of Federal funds.

Recipients interested in enrolling in the ASAP system, please contact Dee Devillier at 303-445-3461 or Sheri Oren at 303-445-3448.

3. PROCUREMENT STANDARDS (43 CFR §12.76)

(a) *States.* When procuring property and services under a grant, a State will follow the same policies and procedures it uses for procurements from its non-Federal funds. The State will ensure that every purchase order or other contract includes any clauses required by Federal statutes and executive orders and their implementing regulations. Other grantees and sub-grantees will follow paragraphs (b) through (i) in this section.

(b) *Procurement standards.*

(1) Grantees and sub-grantees will use their own procurement procedures which reflect applicable State and local laws and regulations, provided that the procurements conform to applicable Federal law and the standards identified in this section.

(2) Grantees and sub-grantees will maintain a contract administration system which ensures that contractors perform in accordance with the terms, conditions, and specifications of their contracts or purchase orders.

(3) Grantees and sub-grantees will maintain a written code of standards of conduct governing the performance of their employees engaged in the award and administration of contracts. No employee, officer or agent of the grantee or sub-grantee shall participate in selection, or in the award or administration of a contract supported by Federal funds if a conflict of interest, real or apparent, would be involved. Such a conflict would arise when:

- (i) The employee, officer or agent.
- (ii) Any member of his immediate family.

(iii) His or her partner, or

(iv) An organization which employs, or is about to employ, any of the above, has a financial or other interest in the firm selected for award. The grantee's or sub-grantee's officers, employees or agents will neither solicit nor accept gratuities, favors or anything of monetary value from contractors, potential contractors, or parties to sub-agreements. Grantee and sub-grantees may set minimum rules where the financial interest is not substantial or the gift is an unsolicited item of nominal intrinsic value. To the extent permitted by State or local law or regulations, such standards or conduct will provide for penalties, sanctions, or other disciplinary actions for violations of such standards by the grantee's and sub-grantee's officers, employees, or agents, or by contractors or their agents. The awarding agency may in regulation provide additional prohibitions relative to real, apparent, or potential conflicts of interest.

(4) Grantee and sub-grantee procedures will provide for a review of proposed procurements to avoid purchase of unnecessary or duplicative items. Consideration should be given to consolidating or breaking out procurements to obtain a more economical purchase. Where appropriate, an analysis will be made of lease versus purchase alternatives, and any other appropriate analysis to determine the most economical approach.

(5) To foster greater economy and efficiency, grantees and sub-grantees are encouraged to enter into State and local intergovernmental agreements for procurement or use of common goods and services.

(6) Grantees and sub-grantees are encouraged to use Federal excess and surplus property in lieu of purchasing new equipment and property whenever such use is feasible and reduces project costs.

(7) Grantees and sub-grantees are encouraged to use value engineering clauses in contracts for construction projects of sufficient size to offer reasonable opportunities for cost reductions. Value engineering is a systematic and creative analysis of each contract item or task to ensure that its essential function is provided at the overall lower cost.

(8) Grantees and sub-grantees will make awards only to responsible contractors possessing the ability to perform successfully under the terms and conditions of a proposed procurement. Consideration will be given to such matters as contractor integrity, compliance with public policy, record of past performance, and financial and technical resources.

(9) Grantees and sub-grantees will maintain records sufficient to detail the significant history of a procurement. These records will include, but are not necessarily limited to the following: rationale for the method of procurement, selection of contract type, contractor selection or rejection, and the basis for the contract price.

(10) Grantees and sub-grantees will use time and material type contracts only—

- (i) After a determination that no other contract is suitable, and
- (ii) If the contract includes a ceiling price that the contractor exceeds at its own risk.

(11) Grantees and sub-grantees alone will be responsible, in accordance with good administrative practice and sound business judgment, for the settlement of all contractual and administrative issues arising out of procurements. These issues include, but are not limited to, source evaluation, protests, disputes, and claims. These standards do not relieve the grantee or sub-grantee of any contractual responsibilities under its contracts. Federal agencies will not substitute their judgment for that of the grantee or sub-grantee unless the matter is primarily a Federal concern. Violations of law will be referred to the local, State, or Federal authority having proper jurisdiction.

(12) Grantees and sub-grantees will have protest procedures to handle and resolve disputes relating to their procurements and shall in all instances disclose information regarding the protest to the awarding agency. A protestor must exhaust all administrative remedies with the grantee and sub-grantee before pursuing a protest with the Federal agency. Reviews of protests by the Federal agency will be limited to:

- (i) Violations of Federal law or regulations and the standards of this section (violations of State or local law will be under the jurisdiction of State or local authorities) and
- (ii) Violations of the grantee's or sub-grantee's protest procedures for failure to review a complaint or protest. Protests received by the Federal agency other than those specified above will be referred to the grantee or sub-grantee.

(c) *Competition.*

(1) All procurement transactions will be conducted in a manner providing full and open competition consistent with the standards of §12.76. Some of the situations considered to be restrictive of competition include but are not limited to:

- (i) Placing unreasonable requirements on firms in order for them to qualify to do business,
- (ii) Requiring unnecessary experience and excessive bonding,
- (iii) Noncompetitive pricing practices between firms or between affiliated companies,
- (iv) Non-competitive awards to consultants that are on retainer contracts,
- (v) Organizational conflicts of interest,

- (vi) Specifying only a "brand name" product instead of allowing "an equal" product to be offered and describing the performance of other relevant requirements of the procurement, and
- (vii) Any arbitrary action in the procurement process.

(2) Grantees and sub-grantees will conduct procurements in a manner that prohibits the use of statutorily or administratively imposed in-State or local geographical preferences in the evaluation of bids or proposals, except in those cases where applicable Federal statutes expressly mandate or encourage geographic preference. Nothing in this section preempts State licensing laws. When contracting for architectural and engineering (A/E) services, geographic location may be a selection criteria provided its application leaves an appropriate number of qualified firms, given the nature and size of the project, to compete for the contract.

(3) Grantees will have written selection procedures for procurement transactions. These procedures will ensure that all solicitations:

- (i) Incorporate a clear and accurate description of the technical requirements for the material, product, or service to be procured. Such description shall not, in competitive procurements, contain features which unduly restrict competition. The description may include a statement of the qualitative nature of the material, product or service to be procured, and when necessary, shall set forth those minimum essential characteristics and standards to which it must conform if it is to satisfy its intended use. Detailed product specifications should be avoided if at all possible. When it is impractical or uneconomical to make a clear and accurate description of the technical requirements, a "brand name or equal" description may be used as a means to define the performance or other salient requirements of a procurement. The specific features of the named brand which must be met by offerors shall be clearly stated; and
- (ii) Identify all requirements which the offerors must fulfill and all other factors to be used in evaluating bids or proposals.

(4) Grantees and sub-grantees will ensure that all prequalified lists of persons, firms, or products which are used in acquiring goods and services are current and include enough qualified sources to ensure maximum open and free competition. Also, grantees and sub-grantees will not preclude potential bidders from qualifying during the solicitation period.

(d) *Methods of procurement to be followed - (1) Procurement by small purchase procedures.* Small purchase procedures are those relatively simple and informal procurement methods for securing services, supplies, or other property that do not cost more than the simplified acquisition threshold fixed at 41 U.S.C. 403(11) (currently set at \$100,000). If small purchase procedures are used, price or rate quotations shall be obtained from an adequate number of qualified sources.

(2) Procurement by *sealed bids* (formal advertising). Bids are publicly solicited and a firm-fixed-price contract (lump sum or unit price) is awarded to the responsible bidder whose bid, conforming with all the material terms and conditions of the invitation for bids, is the lowest

in price. The sealed bid method is the preferred method for procuring construction, if the conditions in §12.76(d)(2)(i) apply.

(i) In order for sealed bidding to be feasible, the following conditions should be present:

- (A) A complete, adequate, and realistic specification or purchase description is available;
- (B) Two or more responsible bidders are willing and able to compete effectively and for the business; and
- (C) The procurement lends itself to a firm fixed price contract and the selection of the successful bidder can be made principally on the basis of price.

(ii) If sealed bids are used, the following requirements apply:

- (A) The invitation for bids will be publicly advertised and bids shall be solicited from an adequate number of known suppliers, providing them sufficient time prior to the date set for opening the bids;
- (B) The invitation for bids, which will include any specifications and pertinent attachments, shall define the items or services in order for the bidder to properly respond;
- (C) All bids will be publicly opened at the time and place prescribed in the invitation for bids;
- (D) A firm fixed-price contract award will be made in writing to the lowest responsive and responsible bidder. Where specified in bidding documents, factors such as discounts, transportation cost, and life cycle costs shall be considered in determining which bid is lowest. Payment discounts will only be used to determine the low bid when prior experience indicates that such discounts are usually taken advantage of; and
- (E) Any or all bids may be rejected if there is a sound documented reason.

(3) Procurement by *competitive proposals*. The technique of competitive proposals is normally conducted with more than one source submitting an offer, and either a fixed-price or cost-reimbursement type contract is awarded. It is generally used when conditions are not appropriate for the use of sealed bids. If this method is used, the following requirements apply:

- (i) Requests for proposals will be publicized and identify all evaluation factors and their relative importance. Any response to publicized requests for proposals shall be honored to the maximum extent practical;

(ii) Proposals will be solicited from an adequate number of qualified sources;

(iii) Grantees and sub-grantees will have a method for conducting technical evaluations of the proposals received and for selecting awardees;

(iv) Awards will be made to the responsible firm whose proposal is most advantageous to the program, with price and other factors considered; and

(v) Grantees and sub-grantees may use competitive proposal procedures for qualifications-based procurement of architectural/engineering (A/E) professional services whereby competitors' qualifications are evaluated and the most qualified competitor is selected, subject to negotiation of fair and reasonable compensation. The method, where price is not used as a selection factor, can only be used in procurement of A/E professional services. It cannot be used to purchase other types of services though A/E firms are a potential source to perform the proposed effort.

(4) Procurement by *noncompetitive proposals* is procurement through solicitation of a proposal from only one source, or after solicitation of a number of sources, competition is determined inadequate.

(i) Procurement by noncompetitive proposals may be used only when the award of a contract is infeasible under small purchase procedures, sealed bids or competitive proposals and one of the following circumstances applies:

(A) The item is available only from a single source;

(B) The public exigency or emergency for the requirement will not permit a delay resulting from competitive solicitation;

(C) The awarding agency authorizes noncompetitive proposals; or

(D) After solicitation of a number of sources, competition is determined inadequate.

(ii) Cost analysis, i.e., verifying the proposed cost data, the projections of the data, and the evaluation of the specific elements of costs and profits, is required.

(iii) Grantees and sub-grantees may be required to submit the proposed procurement to the awarding agency for pre-award review in accordance with paragraph (g) of this section.

(e) *Contracting with small and minority firms, women's business enterprise and labor surplus area firms.* (1) The grantee and sub-grantee will take all necessary affirmative steps to assure that minority firms, women's business enterprises, and labor surplus area firms are used when possible.

(2) Affirmative steps shall include:

(i) Placing qualified small and minority businesses and women's business enterprises on solicitation lists;

(ii) Assuring that small and minority businesses, and women's business enterprises are solicited whenever they are potential sources;

(iii) Dividing total requirements, when economically feasible, into smaller tasks or quantities to permit maximum participation by small and minority business, and women's business enterprises;

(iv) Establishing delivery schedules, where the requirement permits, which encourage participation by small and minority business, and women's business enterprises;

(v) Using the services and assistance of the Small Business Administration, and the Minority Business Development Agency of the Department of Commerce; and

(vi) Requiring the prime contractor, if subcontracts are to be let, to take the affirmative steps listed in paragraphs (e)(2) (i) through (v) of this section.

(f) *Contract cost and price.*

(1) Grantees and sub-grantees must perform a cost or price analysis in connection with every procurement action including contract modifications. The method and degree of analysis is dependent on the facts surrounding the particular procurement situation, but as a starting point, grantees must make independent estimates before receiving bids or proposals. A cost analysis must be performed when the offeror is required to submit the elements of his estimated cost, e.g., under professional, consulting, and architectural engineering services contracts. A cost analysis will be necessary when adequate price competition is lacking, and for sole source procurements, including contract modifications or change orders, unless price reasonableness can be established on the basis of a catalog or market price of a commercial product sold in substantial quantities to the general public or based on prices set by law or regulation. A price analysis will be used in all other instances to determine the reasonableness of the proposed contract price.

(2) Grantees and sub-grantees will negotiate profit as a separate element of the price for each contract in which there is no price competition and in all cases where cost analysis is performed. To establish a fair and reasonable profit, consideration will be given to the complexity of the work to be performed, the risk borne by the contractor, the contractor's investment, the amount of subcontracting, the quality of its record of past performance, and industry profit rates in the surrounding geographical area for similar work.

(3) Costs or prices based on estimated costs for contracts under grants will be allowable only to the extent that costs incurred or cost estimates included in negotiated prices are consistent with Federal cost principles (see §12.62). Grantees may reference their own cost principles that comply with the applicable Federal cost principles.

(4) The cost plus a percentage of cost and percentage of construction cost methods of contracting shall not be used.

(g) Awarding agency review:

(1) Grantees and sub-grantees must make available, upon request of the awarding agency, technical specifications on proposed procurements where the awarding agency believes such review is needed to ensure that the item and/or service specified is the one being proposed for purchase. This review generally will take place prior to the time the specification is incorporated into a solicitation document. However, if the grantee or sub-grantee desires to have the review accomplished after a solicitation has been developed, the awarding agency may still review the specifications, with such review usually limited to the technical aspects of the proposed purchase.

(2) Grantees and sub-grantees must on request make available for awarding agency pre-award review procurement documents, such as requests for proposals or invitations for bids, independent cost estimates, etc. when:

(i) A grantee's or sub-grantee's procurement procedures or operation fails to comply with the procurement standards in this section; or

(ii) The procurement is expected to exceed the simplified acquisition threshold and is to be awarded without competition or only one bid or offer is received in response to a solicitation; or

(iii) The procurement, which is expected to exceed the simplified acquisition threshold, specifies a "brand name" product; or

(iv) The proposed award is more than the simplified acquisition threshold and is to be awarded to other than the apparent low bidder under a sealed bid procurement; or

(v) A proposed contract modification changes the scope of a contract or increases the contract amount by more than the simplified acquisition threshold.

(3) A grantee or sub-grantee will be exempt from the pre-award review in paragraph (g)(2) of this section if the awarding agency determines that its procurement systems comply with the standards of this section.

(i) A grantee or sub-grantee may request that its procurement system be reviewed by the awarding agency to determine whether its system meets these standards in order for its system to be certified. Generally, these reviews shall occur where there is a continuous high-dollar funding, and third-party contracts are awarded on a regular basis.

(ii) A grantee or sub-grantee may self-certify its procurement system. Such self-certification shall not limit the awarding agency's right to survey the system. Under a self-certification procedure, awarding agencies may wish to rely on written assurances

from the grantee or sub-grantee that it is complying with these standards. A grantee or sub-grantee will cite specific procedures, regulations, standards, etc., as being in compliance with these requirements and have its system available for review.

(h) *Bonding requirements.* For construction or facility improvement contracts or subcontracts exceeding the simplified acquisition threshold, the awarding agency may accept the bonding policy and requirements of the grantee or sub-grantee provided the awarding agency has made a determination that the awarding agency's interest is adequately protected. If such a determination has not been made, the minimum requirements shall be as follows:

(1) *A bid guarantee from each bidder equivalent to five percent of the bid price.* The "bid guarantee" shall consist of a firm commitment such as a bid bond, certified check, or other negotiable instrument accompanying a bid as assurance that the bidder will, upon acceptance of his bid, execute such contractual documents as may be required within the time specified.

(2) *A performance bond on the part of the contractor for 100 percent of the contract price.* A "performance bond" is one executed in connection with a contract to secure fulfillment of all the contractor's obligations under such contract.

(3) *A payment bond on the part of the contractor for 100 percent of the contract price.* A "payment bond" is one executed in connection with a contract to assure payment as required by law of all persons supplying labor and material in the execution of the work provided for in the contract.

(i) *Contract provisions.* A grantee's and sub-grantee's contracts must contain provisions in paragraph (i) of this section. Federal agencies are permitted to require changes, remedies, changed conditions, access and records retention, suspension of work, and other clauses approved by the Office of Federal Procurement Policy.

(1) Administrative, contractual, or legal remedies in instances where contractors violate or breach contract terms, and provide for such sanctions and penalties as may be appropriate. (Contracts more than the simplified acquisition threshold)

(2) Termination for cause and for convenience by the grantee or sub-grantee including the manner by which it will be effected and the basis for settlement. (All contracts in excess of \$10,000)

(3) Compliance with Executive Order 11246 of September 24, 1965, entitled "Equal Employment Opportunity," as amended by Executive Order 11375 of October 13, 1967, and as supplemented in Department of Labor regulations (41 CFR Chapter 60). (All construction contracts awarded in excess of \$10,000 by grantees and their contractors or sub-grantees)

(4) Compliance with the Copeland "Anti-Kickback" Act (18 U.S.C. 874) as supplemented in Department of Labor regulations (29 CFR Part 3). (All contracts and sub-grants for construction or repair)

(5) Compliance with the Davis-Bacon Act (40 U.S.C. 276a to 276a-7) as supplemented by Department of Labor regulations (29 CFR Part 5). (Construction contracts in excess of \$2000 awarded by grantees and sub-grantees when required by Federal grant program legislation)

(6) Compliance with Sections 103 and 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 327-330) as supplemented by Department of Labor regulations (29 CFR Part 5). (Construction contracts awarded by grantees and sub-grantees in excess of \$2000, and in excess of \$2500 for other contracts which involve the employment of mechanics or laborers)

(7) Notice of awarding agency requirements and regulations pertaining to reporting.

~~(8) Notice of awarding agency requirements and regulations pertaining to patent rights with respect to any discovery or invention which arises or is developed in the course of or under such contract.~~

(9) Awarding agency requirements and regulations pertaining to copyrights and rights in data.

(10) Access by the grantee, the sub-grantee, the Federal grantor agency, the Comptroller General of the United States, or any of their duly authorized representatives to any books, documents, papers, and records of the contractor which are directly pertinent to that specific contract for the purpose of making audit, examination, excerpts, and transcriptions.

(11) Retention of all required records for three years after grantees or sub-grantees make final payments and all other pending matters are closed.

(12) Compliance with all applicable standards, orders, or requirements issued under section 306 of the Clean Air Act (42 U.S.C. 1857(h)), section 508 of the Clean Water Act (33 U.S.C. 1368), Executive Order 11738, and Environmental Protection Agency regulations (40 CFR part 15). (Contracts, subcontracts, and sub-grants of amounts in excess of \$100,000)

(13) Mandatory standards and policies relating to energy efficiency which are contained in the State energy conservation plan issued in compliance with the Energy Policy and Conservation Act (Pub. L. 94-163, 89 Stat. 871)

4. EQUIPMENT (43 CFR §12.72)

(a) *Title.* Subject to the obligations and conditions set forth in this section, title to equipment acquired under a grant or sub-grant will vest upon acquisition in the grantee or sub-grantee respectively.

(b) *States.* A State will use, manage, and dispose of equipment acquired under a grant by the State in accordance with State laws and procedures. Other grantees and sub-grantees will follow paragraphs (c) through (e) of this section.

(c) *Use.*

(1) Equipment shall be used by the grantee or sub-grantee in the program or project for which it was acquired as long as needed, whether or not the project or program continues to be supported by Federal funds. When no longer needed for the original program or project, the equipment may be used in other activities currently or previously supported by a Federal agency.

(2) The grantee or sub-grantee shall also make equipment available for use on other projects or programs currently or previously supported by the Federal Government, providing such use will not interfere with the work on the projects or program for which it was originally acquired. First preference for other use shall be given to other programs or projects supported by the awarding agency. User fees should be considered if appropriate.

(3) Notwithstanding the encouragement in §12.65(a) to earn program income, the grantee or sub-grantee must not use equipment acquired with grant funds to provide services for a fee to compete unfairly with private companies that provide equivalent services, unless specifically permitted or contemplated by Federal statute.

(4) When acquiring replacement equipment, the grantee or sub-grantee may use the equipment to be replaced as a trade-in or sell the property and use the proceeds to offset the cost of the replacement property, subject to the approval of the awarding agency.

(d) *Management requirements.* Procedures for managing equipment (including replacement equipment), whether acquired in whole or in part with grant funds, until disposition takes place will, as a minimum, meet the following requirements:

(1) Property records must be maintained that include a description of the property, a serial number or other identification number, the source of property, who holds title, the acquisition date, and cost of the property, percentage of Federal participation in the cost of the property, the location, use and condition of the property, and any ultimate disposition data including the date of disposal and sale price of the property.

(2) A physical inventory of the property must be taken and the results reconciled with the property records at least once every two years.

(3) A control system must be developed to ensure adequate safeguards to prevent loss, damage, or theft of the property. Any loss, damage, or theft shall be investigated.

(4) Adequate maintenance procedures must be developed to keep the property in good condition.

(5) If the grantee or sub-grantee is authorized or required to sell the property, proper sales procedures must be established to ensure the highest possible return.

(e) *Disposition.* When original or replacement equipment acquired under a grant or sub-grant is no longer needed for the original project or program or for other activities currently or previously supported by a Federal agency, disposition of the equipment will be made as follows:

(1) Items of equipment with a current per-unit fair market value of less than \$5,000 may be retained, sold or otherwise disposed of with no further obligation to the awarding agency.

(2) Items of equipment with a current per unit fair market value in excess of \$5,000 may be retained or sold and the awarding agency shall have a right to an amount calculated by multiplying the current market value or proceeds from sale by the awarding agency's share of the equipment.

(3) In cases where a grantee or sub-grantee fails to take appropriate disposition actions, the awarding agency may direct the grantee or sub-grantee to take excess and disposition actions.

(f) *Federal equipment.* In the event a grantee or sub-grantee is provided Federally-owned equipment:

(1) Title will remain vested in the Federal Government.

(2) Grantees or sub-grantees will manage the equipment in accordance with Federal agency rules and procedures, and submit an annual inventory listing.

(3) When the equipment is no longer needed, the grantee or sub-grantee will request disposition instructions from the Federal agency.

(g) *Right to transfer title.* The Federal awarding agency may reserve the right to transfer title to the Federal Government or a third part named by the awarding agency when such a third party is otherwise eligible under existing statutes. Such transfers shall be subject to the following standards:

(1) The property shall be identified in the grant or otherwise made known to the grantee in writing.

(2) The Federal awarding agency shall issue disposition instruction within 120 calendar days after the end of the Federal support of the project for which it was acquired. If the Federal awarding agency fails to issue disposition instructions within the 120 calendar-day period the grantee shall follow 12.72(e).

(3) When title to equipment is transferred, the grantee shall be paid an amount calculated by applying the percentage of participation in the purchase to the current fair market value of the property.

5. SUPPLIES (43 CFR §12.73)

(a) *Title.* Title to supplies acquired under a grant or sub-grant will vest, upon acquisition, in the grantee or sub-grantee respectively.

(b) *Disposition.* If there is a residual inventory of unused supplies exceeding \$5,000 in total aggregate fair market value upon termination or completion of the award, and if the supplies are not needed for any other federally sponsored programs or projects, the grantee or sub-grantee shall compensate the awarding agency for its share.

6. INSPECTION

Reclamation has the right to inspect and evaluate the work performed or being performed under this Agreement, and the premises where the work is being performed, at all reasonable times and in a manner that will not unduly delay the work. If Reclamation performs inspection or evaluation on the premises of the Recipient or a sub-Recipient, the Recipient shall furnish and shall require sub-recipients to furnish all reasonable facilities and assistance for the safe and convenient performance of these duties.

7. AUDIT (31 U.S.C. 7501-7507)

Non-Federal entities that expend \$500,000 or more in a year in Federal awards shall have a single or program-specific audit conducted for that year in accordance with the Single Audit Act Amendments of 1996 (31 U.S.C. 7501-7507) and revised OMB Circular A-133. Federal awards are defined as Federal financial assistance and Federal cost-reimbursement contracts that non-Federal entities receive directly from Federal awarding agencies or indirectly from pass-through entities. They do not include procurement contracts, under grants or contracts, used to buy goods or services from vendors. Non-Federal entities that expend less than \$500,000 a year in Federal awards are exempt from Federal audit requirements for that year, except as noted in A-133, § 2.15(a), but records must be available for review or audit by appropriate officials of the Federal agency, pass-through entity, and General Accounting Office (GAO).

8. ENFORCEMENT (43 CFR §12.83)

(a) *Remedies for noncompliance.* If a grantee or sub-grantee materially fails to comply with any term of an award, whether stated in a Federal statute or regulation, an assurance, in a State plan or application, a notice of award, or elsewhere, the awarding agency may take one or more of the following actions, as appropriate in the circumstances:

- (1) Temporarily withhold cash payments pending correction of the deficiency by the grantee or sub-grantee or more severe enforcement action by the awarding agency,
- (2) Disallow (that is, deny both use of funds and matching credit for) all or part of the cost of the activity or action not in compliance,
- (3) Wholly or partly suspend or terminate the current award for the grantee's or sub-grantee's program,
- (4) Withhold further awards for the program, or
- (5) Take other remedies that may be legally available.

(b) *Hearings, appeals.* In taking an enforcement action, the awarding agency will provide the grantee or sub-grantee an opportunity for such hearing, appeal, or other administrative proceeding to which the grantee or sub-grantee is entitled under any statute or regulation applicable to the action involved.

(c) *Effects of suspension and termination.* Costs of grantee or sub-grantee resulting from obligations incurred by the grantee or sub-grantee during a suspension or after termination of an award are not allowable unless the awarding agency expressly authorizes them in the notice of suspension or termination or subsequently. Other grantee or sub-grantee costs during suspension or after termination which are necessary and not reasonably avoidable are allowable if:

(1) The costs result from obligations which were properly incurred by the grantee or sub-grantee before the effective date of suspension or termination, are not in anticipation of it, and, in the case of a termination, are non-cancellable, and.

(2) The costs would be allowable if the award were not suspended or expired normally at the end of the funding period in which the termination takes effect.

(d) *Relationship to Debarment and Suspension.* The enforcement remedies identified in this section, including suspension and termination, do not preclude grantee or sub-grantee from being subject to "Debarment and Suspension" under E.O. 12549 ((2 CFR 29.5.12 and 2 CFR 1400, Subpart C).

9. TERMINATION FOR CONVENIENCE (43 CFR §12.84)

Except as provided in 43 CFR §12.83 awards may be terminated in whole or in part only as follows:

(a) By the awarding agency with the consent of the grantee or sub-grantee in which case the two parties shall agree upon the termination conditions, including the effective date and in the case of partial termination, the portion to be terminated, or

(b) By the grantee or sub-grantee upon written notification to the awarding agency, setting forth the reasons for such termination, the effective date, and in the case of partial termination, the portion to be terminated. However, if, in the case of a partial termination, the awarding agency determines that the remaining portion of the award will not accomplish the purposes for which the award was made, the awarding agency may terminate the award in its entirety under either §12.83 or paragraph (a) of this section.

10. DEBARMENT AND SUSPENSION (2 CFR §1400)

The Department of the Interior regulations at 2 CFR 1400—Governmentwide Debarment and Suspension (Non-procurement), which adopt the common rule for the government-wide system of debarment and suspension for non-procurement activities, are hereby incorporated by reference and made a part of this Agreement. By entering into this grant or cooperative Agreement with the Bureau of Reclamation, the Recipient agrees to comply with 2 CFR 1400,

Subpart C, and agrees to include a similar term or condition in all lower-tier covered transactions. These regulations are available at <http://www.gpoaccess.gov/ecfr/>.

11. DRUG-FREE WORKPLACE (43 CFR §43)

The Department of the Interior regulations at 43 CFR 43—Governmentwide Requirements for Drug-Free Workplace (Financial Assistance), which adopt the portion of the Drug-Free Workplace Act of 1988 (41 U.S.C. 701 et seq, as amended) applicable to grants and cooperative Agreements, are hereby incorporated by reference and made a part of this Agreement. By entering into this grant or cooperative Agreement with the Bureau of Reclamation, the Recipient agrees to comply with 43 CFR 43, Subpart B, if the Recipient is not an individual, or with 43 CFR 43, Subpart C, if the Recipient is an individual. These regulations are available at <http://www.gpoaccess.gov/ecfr/>.

12. ASSURANCES AND CERTIFICATIONS INCORPORATED BY REFERENCE

The provisions of the Assurances, SF 424B or SF 424D as applicable, executed by the Recipient in connection with this Agreement shall apply with full force and effect to this Agreement. All anti-discrimination and equal opportunity statutes, regulations, and Executive Orders that apply to the expenditure of funds under Federal contracts, grants, and cooperative Agreements, loans, and other forms of Federal assistance. The Recipient shall comply with Title VI or the Civil Rights Act of 1964, Title IX of the Education Amendments of 1972, Section 504 of the Rehabilitation Act of 1973, the Age Discrimination Act of 1975, and any program-specific statutes with anti-discrimination requirements. The Recipient shall comply with civil rights laws including, but not limited to, the Fair Housing Act, the Fair Credit Reporting Act, the Americans with Disabilities Act, Title VII of the Civil Rights Act of 1964, the Equal Educational Opportunities Act, the Age Discrimination in Employment Act, and the Uniform Relocation Act.

Such Assurances also include, but are not limited to, the promise to comply with all applicable Federal statutes and orders relating to nondiscrimination in employment, assistance, and housing; the Hatch Act; Federal wage and hour laws and regulations and work place safety standards; Federal environmental laws and regulations and the Endangered Species Act; and Federal protection of rivers and waterways and historic and archeological preservation.

13. COVENANT AGAINST CONTINGENT FEES

The Recipient warrants that no person or agency has been employed or retained to solicit or secure this Agreement upon an Agreement or understanding for a commission, percentage, brokerage, or contingent fee, excepting bona fide employees or bona fide offices established and maintained by the Recipient for the purpose of securing Agreements or business. For breach or violation of this warranty, the Government shall have the right to annul this Agreement without liability or, in its discretion, to deduct from the Agreement amount, or otherwise recover, the full amount of such commission, percentage, brokerage, or contingent fee

14. TRAFFICKING VICTIMS PROTECTION ACT OF 2000 (2 CFR §175.15)

(a) To implement the trafficking in persons requirement in section 106(g) of the TVPA, as amended, a Federal awarding agency must include the award term in paragraph (b) of this section in—

- (1) A grant or cooperative agreement to a private entity, as defined in §175.25(d); and
- (2) A grant or cooperative agreement to a State, local government, Indian tribe or foreign public entity, if funding could be provided under the award to a private entity as a sub-recipient.

(b) The award term that an agency must include, as described in paragraph (a) of this section, is:

I. Trafficking in persons.

a. *Provisions applicable to a recipient that is a private entity.*

1. You as the recipient, your employees, sub-recipients under this award, and sub-recipients' employees may not—

- i. Engage in severe forms of trafficking in persons during the period of time that the award is in effect;
- ii. Procure a commercial sex act during the period of time that the award is in effect; or
- iii. Use forced labor in the performance of the award or sub-awards under the award.

2. We as the Federal awarding agency may unilaterally terminate this award, without penalty, if you or a sub-recipient that is a private entity —

- i. Is determined to have violated a prohibition in paragraph a.1 of this award term; or
- ii. Has an employee who is determined by the agency official authorized to terminate the award to have violated a prohibition in paragraph a.1 of this award term through conduct that is either—
 - A. Associated with performance under this award; or
 - B. Imputed to you or the sub-recipient using the standards and due process for imputing the conduct of an individual to an organization that are provided in 2 CFR part 180, "OMB Guidelines to Agencies on Government-wide Debarment and Suspension (Non-procurement)," as implemented by our agency at 2 CFR part 1400.

b. *Provision applicable to a recipient other than a private entity.* We as the Federal awarding agency may unilaterally terminate this award, without penalty, if a sub-recipient that is a private entity—

1. Is determined to have violated an applicable prohibition in paragraph a.1 of this award term; or
2. Has an employee who is determined by the agency official authorized to terminate the award to have violated an applicable prohibition in paragraph a.1 of this award term through conduct that is either -
 - i. Associated with performance under this award; or
 - ii. Imputed to the sub-recipient using the standards and due process for imputing the conduct of an individual to an organization that are provided in 2 CFR part 180, "OMB Guidelines to Agencies on Government-wide Debarment and Suspension (Non-procurement)," as implemented by our agency at 2 CFR part 1400.

c. *Provisions applicable to any recipient.*

1. You must inform us immediately of any information you receive from any source alleging a violation of a prohibition in paragraph a.1 of this award term.
2. Our right to terminate unilaterally that is described in paragraph a.2 or b of this section:
 - i. Implements section 106(g) of the Trafficking Victims Protection Act of 2000 (TVPA), as amended (22 U.S.C. 7104(g)), and
 - ii. Is in addition to all other remedies for noncompliance that are available to us under this award.
3. You must include the requirements of paragraph a.1 of this award term in any sub-award you make to a private entity.

d. *Definitions.* For purposes of this award term:

1. "Employee" means either:
 - i. An individual employed by you or a sub-recipient who is engaged in the performance of the project or program under this award; or
 - ii. Another person engaged in the performance of the project or program under this award and not compensated by you including, but not limited to, a volunteer or individual whose services are contributed by a third party as an in-kind contribution toward cost sharing or matching requirements.

2. "Forced labor" means labor obtained by any of the following methods: the recruitment, harboring, transportation, provision, or obtaining of a person for labor or services, through the use of force, fraud, or coercion for the purpose of subjection to involuntary servitude, peonage, debt bondage, or slavery.

3. "Private entity":

i. Means any entity other than a State, local government, Indian tribe, or foreign public entity, as those terms are defined in 2 CFR 175.25.

ii. Includes:

A. A nonprofit organization, including any nonprofit institution of higher education, hospital, or tribal organization other than one included in the definition of Indian tribe at 2 CFR 175.25(b).

B. A for-profit organization.

4. "Severe forms of trafficking in persons," "commercial sex act," and "coercion" have the meanings given at section 103 of the TVPA, as amended (22 U.S.C. 7102).

(c) An agency may use different letters and numbers to designate the paragraphs of the award term in paragraph (b) of this section, if necessary, to conform the system of paragraph designations with the one used in other terms and conditions in the agency's awards

15. NEW RESTRICTIONS ON LOBBYING (43 CFR §18)

The Recipient agrees to comply with 43 CFR 18, New Restrictions on Lobbying, including the following certification:

(1) No Federal appropriated funds have been paid or will be paid, by or on behalf of the Recipient, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, and officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

(2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying" in accordance with its instructions.

(3) The Recipient shall require that the language of this certification be included in the award documents for all sub-awards at all tiers (including subcontracts, sub-grants, and contracts under grants, loans, and cooperative agreements) and that all sub-recipients shall certify accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by Section 1352, title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

ATTACHMENT B

DAVIS BACON

Contract and Subcontract Provisions.

- (a) The Recipient shall insert in full in any contract in excess of \$2,000 which is entered into for the actual construction, alteration and/or repair, including painting and decorating, of a public building or public work, or building or work financed in whole or in part from Federal funds or in accordance with guarantees of a Federal agency or financed from funds obtained by pledge of any contract of a Federal agency to make a loan, grant or annual contribution (except where a different meaning is expressly indicated), and which is subject to the labor standards provisions of any of the acts listed in § 5.1, the following clauses:

(1) Minimum wages.

- (i) All laborers and mechanics employed or working upon the site of the work will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR part 3)), the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics.

Contributions made or costs reasonably anticipated for bona fide fringe benefits under section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of paragraph (a)(1)(iv) of this section; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in § 5.5(a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: Provided, that the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classification and wage rates conformed under paragraph (a)(1)(ii) of this section) and the Davis-Bacon poster (WH-1321) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.

The **Recipient** may obtain wage determinations from the U.S. Department of Labor's web site, www.wdol.gov.

- (ii)(A) The **Recipient**, on behalf of EPA, shall require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. The EPA award official shall approve an additional classification and wage rate and fringe benefits therefore only when the following criteria have been met:
- (1) The work to be performed by the classification requested is not performed by a classification in the wage determination; and
 - (2) The classification is utilized in the area by the construction industry; and

DAVIS BACON

- (3) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.
- (B) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the **Recipient** agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by the **Recipient** to the State Water Board. The State Water Board will transmit the report, to the Administrator of the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, Washington, DC 20210. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the State Water Board or will notify the State Water Board within the 30-day period that additional time is necessary.
- (C) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and the **Recipient** do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), USEPA will refer the questions, including the views of all interested parties and the recommendation of the State Water Board, to the Administrator for determination. The Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.
- (D) The wage rate (including fringe benefits where appropriate) determined pursuant to paragraphs (a)(1)(ii)(B) or (C) of this section, shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.
- (iii) Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.
- (iv) If the contractor does not make payments to a trustee or other third person, the contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, provided, that the Secretary of Labor has found, upon the written request of the contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.
- (2) Withholding.

The **Recipient**, shall upon written request of the EPA Award Official or an authorized representative of the Department of Labor, withhold or cause to be withheld from the contractor under this contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same prime contractor, so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees, and helpers, employed by the contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of the work, all or part of the wages required by the contract, the (Agency) may, after written notice to the contractor, sponsor, applicant, or owner, take such action as may be necessary to

DAVIS BACON

cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

- (3) Payrolls and basic records.
- (i) Payrolls and basic records relating thereto shall be maintained by the contractor during the course of the work and preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work. Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in section 1(b)(2)(B) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR 5.5(a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in section 1(b)(2)(B) of the Davis-Bacon Act, the contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.
- (ii)(A) The contractor shall submit weekly, for each week in which any contract work is performed, a copy of all payrolls to the **Recipient**, that is, the entity that receives the sub-grant or loan from the State capitalization grant recipient. Such documentation shall be available on request of the State Water Board or EPA. As to each payroll copy received, the **Recipient** shall provide written confirmation in a form satisfactory to the State indicating whether or not the project is in compliance with the requirements of 29 CFR 5.5(a)(1) based on the most recent payroll copies for the specified week. The payrolls shall set out accurately and completely all of the information required to be maintained under 29 CFR 5.5(a)(3)(i), except that full social security numbers and home addresses shall not be included on the weekly payrolls. Instead the payrolls shall only need to include an individually identifying number for each employee (e.g., the last four digits of the employee's social security number). The required weekly payroll information may be submitted in any form desired. Optional Form WH-347 is available for this purpose from the Wage and Hour Division Web site at <http://www.dol.gov/esa/whd/forms/wh347instr.htm> or its successor site. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors. Contractors and subcontractors shall maintain the full social security number and current address of each covered worker, and shall provide them upon request to the **Recipient** for transmission to the State or EPA if requested by EPA, the State, the contractor, or the Wage and Hour Division of the Department of Labor for purposes of an investigation or audit of compliance with prevailing wage requirements. It is not a violation of this section for a prime contractor to require a subcontractor to provide addresses and social security numbers to the prime contractor for its own records, without weekly submission to the **Recipient**.
- (B) Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:

DAVIS BACON

- (1) That the payroll for the payroll period contains the information required to be provided under § 5.5 (a)(3)(ii) of Regulations, 29 CFR part 5, the appropriate information is being maintained under § 5.5 (a)(3)(i) of Regulations, 29 CFR part 5, and that such information is correct and complete;
 - (2) That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in Regulations, 29 CFR part 3;
 - (3) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.
- (C) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph (a)(3)(ii)(B) of this section.
- (D) The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under section 1001 of title 18 and section 231 of title 31 of the United States Code.
- (iii) The contractor or subcontractor shall make the records required under paragraph (a)(3)(i) of this section available for inspection, copying, or transcription by authorized representatives of the State, EPA or the Department of Labor, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, the Federal agency or State may, after written notice to the contractor, sponsor, applicant, or owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.
- (4) Apprentices and Trainees
- (i) Apprentices. Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship Training, Employer and Labor Services, or with a State Apprenticeship Agency recognized by the Office, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Office of Apprenticeship Training, Employer and Labor Services or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice. The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage

DAVIS BACON

determination for the work actually performed. Where a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the contractor's or subcontractor's registered program shall be observed. Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymen hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination. In the event the Office of Apprenticeship Training, Employer and Labor Services, or a State Apprenticeship Agency recognized by the Office, withdraws approval of an apprenticeship program, the contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

- (ii) Trainees. Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration. The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration. Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. In the event the Employment and Training Administration withdraws approval of a training program, the contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.
- (iii) Equal employment opportunity. The utilization of apprentices, trainees and journeymen under this part shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR part 30.

(5) Compliance with Copeland Act Requirements.

The contractor shall comply with the requirements of 29 CFR part 3, which are incorporated by reference in this contract.

DAVIS BACON

(6) Subcontracts.

The contractor or subcontractor shall insert in any subcontracts the clauses contained in 29 CFR 5.5(a)(1) through (10) and such other clauses as the EPA determines may be appropriate, and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in 29 CFR 5.5.

(7) Contract Termination: Debarment.

A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract, and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.

(8) Compliance with Davis-Bacon and Related Act Requirements.

All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR parts 1, 3, and 5 are herein incorporated by reference in this contract.

(9) Disputes Concerning Labor Standards.

Disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and the **Recipient**, State, EPA, the U.S. Department of Labor, or the employees or their representatives.

(10) Certification of Eligibility.

- (i) By entering into this contract, the contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).
- (ii) No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).
- (iii) The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001.

4. **Contract Provision for Contracts in Excess of \$100,000.**

(a) Contract Work Hours and Safety Standards Act.

The **Recipient** shall insert the following clauses set forth in paragraphs (a)(1), (2), (3), and (4) of this section in full in any contract in an amount in excess of \$100,000 and subject to the overtime provisions of the Contract Work Hours and Safety Standards Act. These clauses shall be inserted in addition to the clauses required by Item 3, above or 29 CFR 4.6. As used in this paragraph, the terms laborers and mechanics include watchmen and guards.

(1) Overtime requirements.

DAVIS BACON

No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.

- (2) Violation; liability for unpaid wages; liquidated damages.

In the event of any violation of the clause set forth in paragraph (a)(1) of this section the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (a)(1) of this section, in the sum of \$10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (a)(1) of this section.

- (3) Withholding for unpaid wages and liquidated damages.

The **Recipient**, upon written request of the EPA Award Official or an authorized representative of the Department of Labor, shall withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (a)(2) of this section.

- (4) Subcontracts.

The contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraph (a)(1) through (4) of this section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (a)(1) through (4) of this section.

- (b) In addition to the clauses contained in Item 3, above, in any contract subject only to the Contract Work Hours and Safety Standards Act and not to any of the other statutes cited in 29 CFR 5.1, the **Recipient** shall insert a clause requiring that the contractor or subcontractor shall maintain payrolls and basic payroll records during the course of the work and shall preserve them for a period of three years from the completion of the contract for all laborers and mechanics, including guards and watchmen, working on the contract. Such records shall contain the name and address of each such employee, social security number, correct classifications, hourly rates of wages paid, daily and weekly number of hours worked, deductions made, and actual wages paid. Further, the **Recipient** shall insert in any such contract a clause providing that the records to be maintained under this paragraph shall be made available by the contractor or subcontractor for inspection, copying, or transcription by authorized representatives of the USEPA, State Water Resources Control Board, and the Department of Labor, and the contractor or subcontractor will permit such representatives to interview employees during working hours on the job.

ATTACHMENT C

Federal Wage Decision
(03/03/2016)

General Decision Number: CA160009 02/26/2016 CA9

Superseded General Decision Number: CA20150009

State: California

Construction Types: Building, Heavy (Heavy and Dredging) and Highway

Counties: Alpine, Amador, Butte, Colusa, El Dorado, Glenn, Lassen, Marin, Modoc, Napa, Nevada, Placer, Plumas, Sacramento, Shasta, Sierra, Siskiyou, Solano, Sonoma, Sutter, Tehama, Trinity, Yolo and Yuba Counties in California.

BUILDING CONSTRUCTION PROJECTS (excluding Amador County only); DREDGING CONSTRUCTION PROJECTS (does not include hopper dredge work); HEAVY CONSTRUCTION PROJECTS (does not include water well drilling); AND HIGHWAY CONSTRUCTION PROJECTS

Note: Under Executive Order (EO) 13658, an hourly minimum wage of \$10.15 for calendar year 2016 applies to all contracts subject to the Davis-Bacon Act for which the solicitation was issued on or after January 1, 2015. If this contract is covered by the EO, the contractor must pay all workers in any classification listed on this wage determination at least \$10.15 (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in calendar year 2016. The EO minimum wage rate will be adjusted annually. Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

Modification Number	Publication Date
0	01/08/2016
1	01/15/2016
2	01/29/2016
3	02/19/2016
4	02/26/2016

ASBE0016-001 01/01/2014

AREA 1: MARIN, NAPA, SAN BENITO, SAN FRANCISCO, SOLANO, & SONOMA COUNTIES

AREA 2: ALPINE, AMADOR, BUTTE, COLUSA, EL DORADO, GLENN, MODOC, NEVADA, PLACER, PLUMAS, SACRAMENTO, SHASTA, SIERRA, SISKIYOU, SUTTER, TEHEMA, TRINITY, YOLO, & YUBA COUNTIES

Rates Fringes

Asbestos Workers/Insulator
{Includes the application of all insulating materials, Protective Coverings, Coatings, and Finishes to all

types of mechanical systems)		
Area 1.....	\$ 57.15	18.72
Area 2.....	\$ 44.05	18.62

 ASBE0016-007 01/01/2015

AREA 1 : ALPINE, AMADOR, BUTTE, COLUSA, EL DORADO, GLENN,
 LASSEN, MODOC, NEVADA, PLACER, PLUMAS, SACRAMENTO, SHASTA,
 SIERRA, SISKIYOU, SOLANO, SONOMA, SUTTER, TEHAMA, TRINITY, YOLO
 & YUBA COUNTIES

AREA 2: MARIN & NAPA COUNTIES

	Rates	Fringes
Asbestos Removal worker/hazardous material handler (Includes preparation, wetting, stripping, removal, scrapping, vacuuming, bagging and disposing of all insulation materials from mechanical systems, whether they contain asbestos or not)		
AREA 1.....	\$ 28.30	7.75
AREA 2.....	\$ 32.38	7.75

 BOIL0549-002 01/01/2013

	Rates	Fringes
BOILERMAKER		
(1) Marin & Solano Counties.	\$ 42.06	33.43
(2) Remaining Counties.....	\$ 38.37	31.32

 BRCA0003-001 08/01/2013

	Rates	Fringes
MARBLE FINISHER.....	\$ 28.05	14.01

 BRCA0003-004 05/01/2015

AREA 1: ALPINE, AMADOR, BUTTE, COLUSA, EL DORADO, GLENN,
 LASSEN, MODOC, NEVADA, PLACER, PLUMAS, SACRAMENTO, SHASTA,
 SIERRA, SUTTER, TEHAMA, YOLO AND YUBA COUNTIES

AREA 2: MARIN, NAPA, SISKIYOU, SOLANO, SONOMA AND TRINITY
 COUNTIES

	Rates	Fringes
BRICKLAYER		
AREA 1.....	\$ 37.31	19.73
AREA 2.....	\$ 39.99	24.75

SPECIALTY PAY:

(A) Underground work such as tunnel work, sewer work, manholes, catch basins, sewer pipes and telephone conduit shall be paid \$1.25 per hour above the regular rate. Work in direct contact with raw sewage shall receive \$1.25 per hour in addition to the above.
 (B) Operating a saw or grinder shall receive \$1.25 per hour above the regular rate.
 (C) Guniting nozzle person shall receive \$1.25 per hour above the regular rate.

 BRCA0003-008 07/01/2013

	Rates	Fringes
TERRAZZO FINISHER.....	\$ 33.15	13.93
TERRAZZO WORKER/SETTER.....	\$ 39.95	24.39

 BRCA0003-010 04/01/2015

	Rates	Fringes
TILE FINISHER		
Area 1.....	\$ 23.32	10.43
Area 2.....	\$ 23.31	12.90
Area 3.....	\$ 23.49	12.77
Area 4.....	\$ 22.99	12.25
Tile Layer		
Area 1.....	\$ 39.42	12.42
Area 2.....	\$ 37.31	14.19
Area 3.....	\$ 41.87	14.24
Area 4.....	\$ 38.74	14.19

AREA 1: Butte, Colusa, El Dorado, Glenn, Lassen, Modoc, Nevada, Placer, Plumas, Sacramento, Shasta, Sierra, Sutter, Tehama, Yolo, Yuba
 AREA 2: Alpine, Amador
 AREA 3: Marin, Napa, Solano, Siskiyou
 AREA 4: Sonoma

 BRCA0003-014 08/01/2013

	Rates	Fringes
MARBLE MASON.....	\$ 39.30	22.48

 CARP0034-001 07/01/2014

	Rates	Fringes
Diver		
Assistant Tender, ROV		
Tender/Technician.....	\$ 39.60	30.73
Diver standby.....	\$ 44.56	30.73
Diver Tender.....	\$ 43.56	30.73
Diver wet.....	\$ 89.12	30.73
Manifold Operator (mixed gas).....	\$ 48.56	30.73
Manifold Operator (Standby).....	\$ 43.56	30.73

DEPTH PAY (Surface Diving):
 050 to 100 ft \$2.00 per foot
 101 to 150 ft \$3.00 per foot
 151 to 220 ft \$4.00 per foot

SATURATION DIVING:
 The standby rate shall apply until saturation starts. The saturation diving rate applies when divers are under pressure continuously until work task and decompression are complete. The diver rate shall be paid for all saturation hours.

DIVING IN ENCLOSURES:
 Where it is necessary for Divers to enter pipes or tunnels, or other enclosures where there is no vertical ascent, the following premium shall be paid: Distance traveled from entrance 26 feet to 300 feet: \$1.00 per foot. When it is necessary for a diver to enter any pipe, tunnel or other enclosure less than 48" in height, the premium will be \$1.00 per foot.

WORK IN COMBINATION OF CLASSIFICATIONS:
 Employees working in any combination of classifications within the diving crew (except dive supervisor) in a shift are paid in the classification with the highest rate for that shift.

 CARP0034-003 07/01/2014

	Rates	Fringes
Filedriver.....	\$ 40.60	30.73

 CARP0035-001 08/01/2015

AREA 1: MARIN, NAPA, SOLANO & SONOMA

AREA 3: SACRAMENTO, WESTERN EL DORADO (Territory west of an including highway 49 and the territory inside the city limits of Placerville), WESTERN PLACER (Territory west of and including highway 49), & YOLO

AREA 4: ALPINE, BUTTE, COLUSA, EASTERN EL DORADO, GLENN, LASSEN, MODOC, NEVADA, EASTERN PLACER, PLUMAS, SHASTA, SIERRA, SISKIYOU, SUTTER, TEHAMA, TRINITY, & YUBA

	Rates	Fringes
Drywall Installers/Lathers:		
Area 1.....	\$ 42.40	26.42
Area 3.....	\$ 37.02	26.42
Area 4.....	\$ 35.67	26.42
Drywall Stocker/Scrapper		
Area 1.....	\$ 21.20	14.60
Area 3.....	\$ 18.51	14.60
Area 4.....	\$ 17.84	14.60

CARP0035-009 07/01/2015

Marin County

	Rates	Fringes
CARPENTER		
Bridge Builder/Highway Carpenter.....	\$ 42.40	25.98
Hardwood Floorlayer, Shingler, Power Saw Operator, Steel Scaffold & Steel Shoring Erector, Saw Filer.....	\$ 42.55	25.98
Journeyman Carpenter.....	\$ 42.40	25.98
Millwright.....	\$ 42.50	27.38

 CARP0035-010 07/01/2014

AREA 1: Marin, Napa, Solano & Sonoma Counties

AREA 2: Monterey, San Benito and Santa Cruz

AREA 3: Alpine, Butte, Colusa, El Dorado, Glenn, Lassen, Modoc,
 Nevada, Placer, Plumas, Sacramento, Shasta, Sierra, Siskiyou,
 Sutter, Tehama, Trinity, Yolo & Yuba counties

	Rates	Fringes
Modular Furniture Installer		
Area 1		
Installer I.....	\$ 23.36	18.31
Installer II.....	\$ 19.93	18.31
Lead Installer.....	\$ 26.81	18.81
Master Installer.....	\$ 31.03	18.81
Area 2		
Installer I.....	\$ 20.71	18.31
Installer II.....	\$ 17.76	18.31
Lead Installer.....	\$ 23.68	18.81
Master Installer.....	\$ 27.31	18.81
Area 3		
Installer I.....	\$ 19.76	18.31
Installer II.....	\$ 16.99	18.31
Lead Installer.....	\$ 22.56	18.81
Master Installer.....	\$ 29.58	18.81

 CARP0046-001 07/01/2015

El Dorado (West), Placer (West), Sacramento and Yolo Counties

	Rates	Fringes
Carpenters		
Bridge Builder/Highway Carpenter.....	\$ 42.40	25.98
Hardwood Floorlayer, Shingler, Power Saw Operator, Steel Scaffold & Steel Shoring Erector, Saw		

Filer.....	\$ 36.67	25.98
Journeyman Carpenter.....	\$ 36.52	25.98
Millwright.....	\$ 39.02	27.38

Footnote: Placer County (West) includes territory West of and including Highway 49 and El Dorado County (West) includes territory West of and including Highway 49 and territory inside the city limits of Placerville.

 CARP0046-002 07/01/2015

Alpine, Colusa, El Dorado (East), Nevada, Placer (East),
 Sierra, Sutter and Yuba Counties

	Rates	Fringes
Carpenters		
Bridge Builder/Highway Carpenter.....	\$ 42.40	25.98
Hardwood Floorlayer, Shingler, Power Saw Operator, Steel Scaffold & Steel Shoring Erector, Saw Filer.....	\$ 35.32	25.98
Journeyman Carpenter.....	\$ 35.17	25.98
Millwright.....	\$ 37.67	27.38

 CARP0152-003 07/01/2014

Amador County

	Rates	Fringes
Carpenters		
Bridge Builder/Highway Carpenter.....	\$ 40.35	27.53
Hardwood Floorlayer, Shingler, Power Saw Operator, Steel Scaffold & Steel Shoring Erector, Saw Filer.....	\$ 33.27	27.53
Journeyman Carpenter.....	\$ 33.12	27.53
Millwright.....	\$ 35.62	29.12

 CARP0180-001 07/01/2015

Solano County

	Rates	Fringes
Carpenters		
Bridge Builder/Highway Carpenter.....	\$ 42.40	25.98
Hardwood Floorlayer, Shingler, Power Saw Operator, Steel Scaffold & Steel Shoring Erector, Saw Filer.....	\$ 42.55	25.98

Journeyman Carpenter.....	\$ 42.40	25.98
Millwright.....	\$ 42.50	27.38

CARP0751-001 07/01/2015

Napa and Sonoma Counties

	Rates	Fringes
Carpenters		
Bridge Builder/Highway Carpenter.....	\$ 42.40	25.98
Hardwood Floorlayer, Shingler, Power Saw Operator, Steel Scaffold & Steel Shoring Erector, Saw Filer.....	\$ 42.55	25.98
Journeyman Carpenter.....	\$ 42.40	25.98
Millwright.....	\$ 42.50	27.38

CARP1599-001 07/01/2015

Butte, Glenn, Lassen, Modoc, Plumas, Shasta, Siskiyou, Tehama
and Trinity Counties

	Rates	Fringes
Carpenters		
Bridge Builder/Highway Carpenter.....	\$ 42.40	25.98
Hardwood Floorlayer, Shingler, Power Saw Operator, Steel Scaffold & Steel Shoring Erector, Saw Filer.....	\$ 35.32	25.98
Journeyman Carpenter.....	\$ 35.17	25.98
Millwright.....	\$ 37.67	27.38

ELEC0180-001 06/01/2015

NAPA AND SOLANO COUNTIES

	Rates	Fringes
CABLE SPLICER.....	\$ 50.97	3%+20.13
ELECTRICIAN.....	\$ 45.31	21.98

ELEC0180-003 12/01/2015

NAPA AND SOLANO COUNTIES

	Rates	Fringes
Sound & Communications		
Installer.....	\$ 33.32	16.29
Technician.....	\$ 34.32	17.33

SCOPE OF WORK INCLUDES-
SOUND & VOICE TRANSMISSION (Music, Intercom, Nurse Call,

Telephone); FIRE ALARM SYSTEMS [excluding fire alarm work when installed in raceways (including wire and cable pulling) and when performed on new or major remodel building projects or jobs], TELEVISION & VIDEO SYSTEMS, SECURITY SYSTEMS, COMMUNICATIONS SYSTEMS that transmit or receive information and/or control systems that are intrinsic to the above.

EXCLUDES-

Excludes all other data systems or multiple systems which include control function or power supply; excludes installation of raceway systems, line voltage work, industrial work, life-safety systems (all buildings having floors located more than 75' above the lowest floor level having building access); excludes energy management systems.

ELEC0340-002 12/01/2015

ALPINE, AMADOR, BUTTE, COLUSA, EL DORADO, GLENN, LASSEN, NEVADA, PLACER, PLUMAS, SACRAMENTO, TRINITY, YOLO, YUBA COUNTIES

	Rates	Fringes
Communications System		
Sound & Communications		
Installer.....	\$ 27.85	14.80
Sound & Communications		
Technician.....	\$ 32.03	14.92

SCOPE OF WORK

Includes the installation testing, service and maintenance, of the following systems which utilize the transmission and/or transference of voice, sound, vision and digital for commercial, education, security and entertainment purposes for the following TV monitoring and surveillance, background-foreground music, intercom and telephone interconnect, inventory control systems, microwave transmission, multi-media, multiplex, nurse call system, radio page, school intercom and sound, burglar alarms, and low voltage master clock systems.

A. SOUND AND VOICE TRANSMISSION/TRANSPERANCE SYSTEMS
Background foreground music Intercom and telephone interconnect systems, Telephone systems, Nurse call systems, Radio page systems, School intercom and sound systems, Burglar alarm systems, Low voltage master clock systems, Multi-media/multiplex systems, Sound and musical entertainment systems, RF systems, Antennas and Wave Guide.

B. FIRE ALARM SYSTEMS
Installation, wire pulling and testing

C. TELEVISION AND VIDEO SYSTEMS Television monitoring and surveillance systems, Video security systems, Video entertainment systems, Video educational systems, Microwave transmission systems, CATV and CCTV

D. SECURITY SYSTEMS Perimeter security systems
 Vibration sensor systems Card access systems Access
 control systems Sonar/infrared monitoring equipment

E. COMMUNICATIONS SYSTEMS THAT TRANSMIT OR RECEIVE
 INFORMATION AND/OR CONTROL SYSTEMS THAT ARE INTRINSIC TO
 THE ABOVE LISTED SYSTEMS SCADA (Supervisory Control and
 Data Acquisition) PCM (Pulse Code Modulation)
 Inventory Control Systems Digital Data Systems
 Broadband and Baseband and Carriers Point of Sale
 Systems VSAT Data Systems Data Communication
 Systems RF and Remote Control Systems Fiber Optic
 Data Systems WORK EXCLUDED Raceway systems are not covered
 (excluding Ladder-Rack for the purpose of the above listed
 systems). Chases and/or nipples (not to exceed 10 feet)
 may be installed on open wiring systems. Energy management
 systems. SCADA (Supervisory Control and Data Acquisition)
 when not intrinsic to the above listed systems (in the
 scope). Fire alarm systems when installed in raceways
 (including wire and cable pulling) shall be performed at
 the electrician wage rate, when either of the following two
 (2) conditions apply:
 1. The project involves new or major remodel building trades
 construction.
 2. The conductors for the fire alarm system are installed in
 conduit.

 ELEC0340-003 02/01/2016

ALPINE (West of Sierra Mt. Watershed), AMADOR, BUTTE, COLUSA,
 EL DORADO (West of Sierra Mt. Watershed), GLENN, LASSEN, NEVADA
 (West of Sierra Mt. Watershed), PLACER, PLUMAS, SACRAMENTO,
 SHASTA, SIERRA (West of Sierra Mt. Watershed), SUTTER, TEHAMA,
 TRINITY, YOLO & YUBA COUNTIES

	Rates	Fringes
ELECTRICIAN		
Remaining area.....	\$ 39.06	24.51
Sierra Army Depot, Herlong..	\$ 48.83	18.54
Tunnel work.....	\$ 41.01	18.54

CABLE SPLICER: Receives 110% of the Electrician basic hourly
 rate.

 ELEC0401-005 11/01/2014

ALPINE (east of the main watershed divide), EL DORADO (east of
 the main watershed divide), NEVADA (east of the main
 watershed), PLACER (east of the main watershed divide) and
 SIERRA (east of the main watershed divide) COUNTIES:

	Rates	Fringes
ELECTRICIAN.....	\$ 37.50	15.14

ELEC0551-004 12/01/2015

MARIN AND SONOMA COUNTIES

	Rates	Fringes
ELECTRICIAN.....	\$ 47.40	17.78

ELEC0551-005 12/01/2015

MARIN & SONOMA COUNTIES

	Rates	Fringes
Sound & Communications		
Installer.....	\$ 34.32	17.33
Technician.....	\$ 39.08	17.21

SCOPE OF WORK INCLUDES-

SOUND & VOICE TRANSMISSION (Music, Intercom, Nurse Call, Telephone); FIRE ALARM SYSTEMS [excluding fire alarm work when installed in raceways (including wire and cable pulling) and when performed on new or major remodel building projects or jobs], TELEVISION & VIDEO SYSTEMS, SECURITY SYSTEMS, COMMUNICATIONS SYSTEMS that transmit or receive information and/or control systems that are intrinsic to the above.

EXCLUDES-

Excludes all other data systems or multiple systems which include control function or power supply; excludes installation of raceway systems, line voltage work, industrial work, life-safety systems (all buildings having floors located more than 75' above the lowest floor level having building access); excludes energy management systems.

ELEC0659-006 01/01/2016

DEL NORTE, MODOC and SISKIYOU COUNTIES

	Rates	Fringes
ELECTRICIAN.....	\$ 30.44	16.40

ELEC0659-008 02/01/2013

DEL NORTE, MODOC & SISKIYOU COUNTIES

	Rates	Fringes
Line Construction		
(1) Cable Splicer.....	\$ 51.09	4%+13.30
(2) Lineman, Pole Sprayer, Heavy Line Equipment Man....	\$ 45.62	4%+13.30
(3) Tree Trimmer.....	\$ 32.07	4%+9.80
(4) Line Equipment Man.....	\$ 45.62	4%+9.80
(5) Powdermen,		

Jackhammermen.....\$ 34.22 4%+9.80
 (6) Groundman.....\$ 31.31 4%+9.80

 ELEC1245-004 06/01/2015

ALL COUNTIES EXCEPT DEL NORTE, MODOC & SISKIYOU

	Rates	Fringes
LINE CONSTRUCTION		
(1) Lineman; Cable splicer..	\$ 52.85	15.53
(2) Equipment specialist (operates crawler tractors, commercial motor vehicles, backhoes, trenchers, cranes (50 tons and below), overhead & underground distribution line equipment).....	\$ 42.21	14.32
(3) Groundman.....	\$ 32.28	14.03
(4) Powderman.....	\$ 47.19	14.06

HOLIDAYS: New Year's Day, M.L. King Day, Memorial Day,
 Independence Day, Labor Day, Veterans Day, Thanksgiving Day
 and day after Thanksgiving, Christmas Day

 ELEV0008-001 01/01/2015

	Rates	Fringes
ELEVATOR MECHANIC.....	\$ 60.39	28.38

FOOTNOTE:

PAID VACATION: Employer contributes 8% of regular hourly
 rate as vacation pay credit for employees with more than 5
 years of service, and 6% for 6 months to 5 years of service.
 PAID HOLIDAYS: New Years Day, Memorial Day, Independence Day,
 Labor Day, Veterans Day, Thanksgiving Day, Friday after
 Thanksgiving, and Christmas Day.

 ENGI0003-008 07/01/2013

	Rates	Fringes
Dredging: (DREDGING: CLAMSHELL & DIPPER DREDGING; HYDRAULIC SUCTION DREDGING:)		
AREA 1:		
(1) Leverman.....	\$ 40.53	27.81
(2) Dredge Dozer; Heavy duty repairman.....	\$ 35.57	27.81
(3) Booster Pump Operator; Deck Engineer; Deck mate; Dredge Tender; Winch Operator.....	\$ 34.45	27.81
(4) Bargeman; Deckhand; Fireman; Leveehand; Oiler..	\$ 31.15	27.81

AREA 2:		
(1) Leverman.....	\$ 42.53	27.81
(2) Dredge Dozer; Heavy duty repairman.....	\$ 37.57	27.81
(3) Booster Pump Operator; Deck Engineer; Deck mate; Dredge Tender; Winch Operator.....	\$ 36.45	27.81
(4) Bargeman; Deckhand; Fireman; Leveehand; Oiler..	\$ 33.15	27.81

AREA DESCRIPTIONS

AREA 1: ALAMEDA, BUTTE, CONTRA COSTA, KINGS, MARIN, MERCED, NAPA, SACRAMENTO, SAN BENITO, SAN FRANCISCO, SAN JOAQUIN, SAN MATEO, SANTA CLARA, SANTA CRUZ, SOLANO, STANISLAUS, SUTTER, YOLO, AND YUBA COUNTIES

AREA 2: MODOC COUNTY

THE REMAINING COUNTIES ARE SPLIT BETWEEN AREA 1 AND AREA 2 AS NOTED BELOW:

ALPINE COUNTY:

Area 1: Northernmost part
Area 2: Remainder

CALAVERAS COUNTY:

Area 1: Remainder
Area 2: Eastern part

COLUSA COUNTY:

Area 1: Eastern part
Area 2: Remainder

ELDORADO COUNTY:

Area 1: North Central part
Area 2: Remainder

FRESNO COUNTY:

Area 1: Remainder
Area 2: Eastern part

GLENN COUNTY:

Area 1: Eastern part
Area 2: Remainder

LASSEN COUNTY:

Area 1: Western part along the Southern portion of border with Shasta County
Area 2: Remainder

MADERA COUNTY:

Area 1: Except Eastern part
Area 2: Eastern part

MARIPOSA COUNTY

Area 1: Except Eastern part
Area 2: Eastern part

MONTERREY COUNTY
Area 1: Except Southwestern part
Area 2: Southwestern part

NEVADA COUNTY:
Area 1: All but the Northern portion along the border of
Sierra County
Area 2: Remainder

PLACER COUNTY:
Area 1: Al but the Central portion
Area 2: Remainder

PLUMAS COUNTY:
Area 1: Western portion
Area 2: Remainder

SHASTA COUNTY:
Area 1: All but the Northeastern corner
Area 2: Remainder

SIERRA COUNTY:
Area 1: Western part
Area 2: Remainder

SISKIYOU COUNTY:
Area 1: Central part
Area 2: Remainder

SONOMA COUNTY:
Area 1: All but the Northwestern corner
Area 2: Remainder

TEHAMA COUNTY:
Area 1: All but the Western border with Mendocino & Trinity
Counties
Area 2: Remainder

TRINITY COUNTY:
Area 1: East Central part and the Northeastern border with
Shasta County
Area 2: Remainder

TUOLUMNE COUNTY:
Area 1: Except Eastern part
Area 2: Eastern part

ENGI0003-018 06/30/2014

"AREA 1" WAGE RATES ARE LISTED BELOW

"AREA 2" RECEIVES AN ADDITIONAL \$2.00 PER HOUR ABOVE AREA 1
RATES.

SEE AREA DEFINITIONS BELOW

Rates Fringes

OPERATOR: Power Equipment		
(AREA 1:)		
GROUP 1.....	\$ 39.85	27.44
GROUP 2.....	\$ 38.32	27.44
GROUP 3.....	\$ 36.84	27.44
GROUP 4.....	\$ 35.46	27.44
GROUP 5.....	\$ 34.19	27.44
GROUP 6.....	\$ 32.87	27.44
GROUP 7.....	\$ 31.73	27.44
GROUP 8.....	\$ 30.59	27.44
GROUP 8-A.....	\$ 28.38	27.44
OPERATOR: Power Equipment		
(Cranes and Attachments -		
AREA 1:)		
GROUP 1		
Cranes.....	\$ 40.73	27.44
Oiler.....	\$ 33.76	27.44
Truck crane oiler.....	\$ 37.33	27.44
GROUP 2		
Cranes.....	\$ 38.97	27.44
Oiler.....	\$ 33.50	27.44
Truck crane oiler.....	\$ 37.04	27.44
GROUP 3		
Cranes.....	\$ 37.23	27.44
Hydraulic.....	\$ 32.87	27.44
Oiler.....	\$ 33.26	27.44
Truck Crane Oiler.....	\$ 36.77	27.44
GROUP 4		
Cranes.....	\$ 34.19	27.44
OPERATOR: Power Equipment		
(Piledriving - AREA 1:)		
GROUP 1		
Lifting devices.....	\$ 41.07	27.44
Oiler.....	\$ 31.81	27.44
Truck crane oiler.....	\$ 34.09	27.44
GROUP 2		
Lifting devices.....	\$ 39.25	27.44
Oiler.....	\$ 31.54	27.44
Truck Crane Oiler.....	\$ 33.84	27.44
GROUP 3		
Lifting devices.....	\$ 37.57	27.44
Oiler.....	\$ 31.32	27.44
Truck Crane Oiler.....	\$ 33.55	27.44
GROUP 4		
Lifting devices.....	\$ 35.80	27.44
GROUP 5		
Lifting devices.....	\$ 34.50	27.44
GROUP 6		
Lifting devices.....	\$ 33.16	27.44
OPERATOR: Power Equipment		
(Steel Erection - AREA 1:)		
GROUP 1		
Cranes.....	\$ 41.70	27.44
Oiler.....	\$ 32.15	27.44
Truck Crane Oiler.....	\$ 34.38	27.44
GROUP 2		
Cranes.....	\$ 39.93	27.44
Oiler.....	\$ 31.88	27.44
Truck Crane Oiler.....	\$ 34.16	27.44

GROUP 3		
Cranes.....	\$ 38.45	27.44
Hydraulic.....	\$ 32.67	27.44
Oiler.....	\$ 31.66	27.44
Truck Crane Oiler.....	\$ 33.89	27.44
GROUP 4		
Cranes.....	\$ 36.43	27.44
GROUP 5		
Cranes.....	\$ 35.13	27.44
OPERATOR: Power Equipment (Tunnel and Underground Work - AREA 1:)		
SHAFTS, STOPES, RAISES:		
GROUP 1.....	\$ 35.95	27.44
GROUP 1-A.....	\$ 38.32	27.44
GROUP 2.....	\$ 34.59	27.44
GROUP 3.....	\$ 33.36	27.44
GROUP 4.....	\$ 32.22	27.44
GROUP 5.....	\$ 31.08	27.44
UNDERGROUND:		
GROUP 1.....	\$ 35.85	27.44
GROUP 1-A.....	\$ 38.32	27.44
GROUP 2.....	\$ 34.59	27.44
GROUP 3.....	\$ 33.26	27.44
GROUP 4.....	\$ 32.12	27.44
GROUP 5.....	\$ 30.98	27.44

FOOTNOTE: Work suspended by ropes or cables, or work on a Yo-Yo Cat: \$.60 per hour additional.

POWER EQUIPMENT OPERATOR CLASSIFICATIONS

GROUP 1: Operator of helicopter (when used in erection work); Hydraulic excavator, 7 cu. yds. and over; Power shovels, over 7 cu. yds.

GROUP 2: Highline cableway; Hydraulic excavator, 3-1/2 cu. yds. up to 7 cu. yds.; Licensed construction work boat operator, on site; Power blade operator (finish); Power shovels, over 1 cu. yd. up to and including 7 cu. yds. m.r.c.

GROUP 3: Asphalt milling machine; Cable backhoe; Combination backhoe and loader over 3/4 cu. yds.; Continuous flight tie back machine assistant to engineer or mechanic; Crane mounted continuous flight tie back machine, tonnage to apply; Crane mounted drill attachment, tonnage to apply; Dozer, slope brd; Gradall; Hydraulic excavator, up to 3 1/2 cu. yds.; Loader 4 cu. yds. and over; Long reach excavator; Multiple engine scraper (when used as push pull); Power shovels, up to and including 1 cu. yd.; Pre-stress wire wrapping machine; Side boom cat, 572 or larger; Track loader 4 cu. yds. and over; Wheel excavator (up to and including 750 cu. yds. per hour)

GROUP 4: Asphalt plant engineer/box person; Chicago boom; Combination backhoe and loader up to and including 3/4 cu. yd.; Concrete batch plant (wet or dry); Dozer and/or push cat; Pull-type elevating loader; Gradesetter, grade

checker (GPS, mechanical or otherwise); Grooving and grinding machine; Heading shield operator; Heavy-duty drilling equipment, Hughes, LDH, Watson 3000 or similar; Heavy-duty repairperson and/or welder; Lime spreader; Loader under 4 cu. yds.; Lubrication and service engineer (mobile and grease rack); Mechanical finishers or spreader machine (asphalt, Barber-Greene and similar); Miller Formless M-9000 slope paver or similar; Portable crushing and screening plants; Power blade support; Roller operator, asphalt; Rubber-tired scraper, self-loading (paddle-wheels, etc.); Rubber-tired earthmoving equipment (scrapers); Slip form paver (concrete); Small tractor with drag; Soil stabilizer (P & H or equal); Spider plow and spider puller; Tubex pile rig; Unlicensed construction work boat operator, on site; Timber skidder; Track loader up to 4 yds.; Tractor-drawn scraper; Tractor, compressor drill combination; Welder; Woods-Mixer (and other similar Pugmill equipment)

GROUP 5: Cast-in-place pipe laying machine; Combination slusher and motor operator; Concrete conveyor or concrete pump, truck or equipment mounted; Concrete conveyor, building site; Concrete pump or pumpcrete gun; Drilling equipment, Watson 2000, Texoma 700 or similar; Drilling and boring machinery, horizontal (not to apply to waterliners, wagon drills or jackhammers); Concrete mixer/all; Person and/or material hoist; Mechanical finishers (concrete) (Clary, Johnson, Bidwell Bridge Deck or similar types); Mechanical burm, curb and/or curb and gutter machine, concrete or asphalt; Mine or shaft hoist; Portable crusher; Power jumbo operator (setting slip-forms, etc., in tunnels); Screed (automatic or manual); Self-propelled compactor with dozer; Tractor with boom D6 or smaller; Trenching machine, maximum digging capacity over 5 ft. depth; Vermeer T-600B rock cutter or similar

GROUP 6: Armor-Coater (or similar); Ballast jack tamper; Boom-type backfilling machine; Assistant plant engineer; Bridge and/or gantry crane; Chemical grouting machine, truck-mounted; Chip spreading machine operator; Concrete saw (self-propelled unit on streets, highways, airports and canals); Deck engineer; Drilling equipment Texoma 600, Hughes 200 Series or similar up to and including 30 ft. m.r.c.; Drill doctor; Helicopter radio operator; Hydro-hammer or similar; Line master; Skidsteer loader, Bobcat larger than 743 series or similar (with attachments); Locomotive; Lull hi-lift or similar; Oiler, truck mounted equipment; Pavement breaker, truck-mounted, with compressor combination; Paving fabric installation and/or laying machine; Pipe bending machine (pipelines only); Pipe wrapping machine (tractor propelled and supported); Screed (except asphaltic concrete paving); Self-propelled pipeline wrapping machine; Tractor; Self-loading chipper; Concrete barrier moving machine

GROUP 7: Ballast regulator; Boom truck or dual-purpose A-frame truck, non-rotating - under 15 tons; Cary lift or similar; Combination slurry mixer and/or cleaner; Drilling equipment, 20 ft. and under m.r.c.; Firetender (hot plant); Grouting machine operator; Highline cableway signalperson;

Stationary belt loader (Kolman or similar); Lift slab machine (Vagtborg and similar types); Maginnes internal full slab vibrator; Material hoist (1 drum); Mechanical trench shield; Pavement breaker with or without compressor combination); Pipe cleaning machine (tractor propelled and supported); Post driver; Roller (except asphalt); Chip Seal; Self-propelled automatically applied concrete curing machine (on streets, highways, airports and canals); Self-propelled compactor (without dozer); Signalperson; Slip-form pumps (lifting device for concrete forms); Tie spacer; Tower mobile; Trenching machine, maximum digging capacity up to and including 5 ft. depth; Truck- type loader

GROUP 8: Bit sharpener; Boiler tender; Box operator; Brakeperson; Combination mixer and compressor (shotcrete/gunite); Compressor operator; Deckhand; Fire tender; Forklift (under 20 ft.); Generator; Gunite/shotcrete equipment operator; Hydraulic monitor; Ken seal machine (or similar); Mixermobile; Oiler; Pump operator; Refrigeration plant; Reservoir-debris tug (self-propelled floating); Ross Carrier (construction site); Rotomist operator; Self-propelled tape machine; Shuttlecar; Self-propelled power sweeper operator (includes vacuum sweeper); Slusher operator; Surface heater; Switchperson; Tar pot firetender; Tugger hoist, single drum; Vacuum cooling plant; Welding machine (powered other than by electricity)

GROUP 8-A: Elevator operator; Skidsteer loader-Bobcat 743 series or smaller, and similar (without attachments); Mini excavator under 25 H.P. (backhoe-trencher); Tub grinder wood chipper

 ALL CRANES AND ATTACHMENTS

GROUP 1: Clamshell and dragline over 7 cu. yds.; Crane, over 100 tons; Derrick, over 100 tons; Derrick barge pedestal-mounted, over 100 tons; Self-propelled boom-type lifting device, over 100 tons

GROUP 2: Clamshell and dragline over 1 cu. yd. up to and including 7 cu. yds.; Crane, over 45 tons up to and including 100 tons; Derrick barge, 100 tons and under; Self-propelled boom-type lifting device, over 45 tons; Tower crane

GROUP 3: Clamshell and dragline up to and including 1 cu. yd.; Cranes 45 tons and under; Self-propelled boom-type lifting device 45 tons and under;

GROUP 4: Boom Truck or dual purpose A-frame truck, non-rotating over 15 tons; Truck-mounted rotating telescopic boom type lifting device, Manitex or similar (boom truck) over 15 tons; Truck-mounted rotating telescopic boom type lifting device, Manitex or similar (boom truck) - under 15 tons;

PILEDRIVERS

GROUP 1: Derrick barge pedestal mounted over 100 tons; Clamshell over 7 cu. yds.; Self-propelled boom-type lifting device over 100 tons; Truck crane or crawler, land or barge mounted over 100 tons

GROUP 2: Derrick barge pedestal mounted 45 tons to and including 100 tons; Clamshell up to and including 7 cu. yds.; Self-propelled boom-type lifting device over 45 tons; Truck crane or crawler, land or barge mounted, over 45 tons up to and including 100 tons; Fundex F-12 hydraulic pile rig

GROUP 3: Derrick barge pedestal mounted under 45 tons; Self-propelled boom-type lifting device 45 tons and under; Skid/scow piledriver, any tonnage; Truck crane or crawler, land or barge mounted 45 tons and under

GROUP 4: Assistant operator in lieu of assistant to engineer; Forklift, 10 tons and over; Heavy-duty repairperson/welder

GROUP 5: Deck engineer

GROUP 6: Deckhand; Fire tender

STEEL ERECTORS

GROUP 1: Crane over 100 tons; Derrick over 100 tons; Self-propelled boom-type lifting device over 100 tons

GROUP 2: Crane over 45 tons to 100 tons; Derrick under 100 tons; Self-propelled boom-type lifting device over 45 tons to 100 tons; Tower crane

GROUP 3: Crane, 45 tons and under; Self-propelled boom-type lifting device, 45 tons and under

GROUP 4: Chicago boom; Forklift, 10 tons and over; Heavy-duty repair person/welder

GROUP 5: Boom cat

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TUNNEL AND UNDERGROUND WORK

GROUP 1-A: Tunnel bore machine operator, 20' diameter or more

GROUP 1: Heading shield operator; Heavy-duty repairperson; Mucking machine (rubber tired, rail or track type); Raised bore operator (tunnels); Tunnel mole bore operator

GROUP 2: Combination slusher and motor operator; Concrete pump or pumpcrete gun; Power jumbo operator

GROUP 3: Drill doctor; Mine or shaft hoist

GROUP 4: Combination slurry mixer cleaner; Grouting Machine operator; Motorman

GROUP 5: Bit Sharpener; Brakeman; Combination mixer and compressor (gunite); Compressor operator; Oiler; Pump operator; Slusher operator

AREA DESCRIPTIONS:

POWER EQUIPMENT OPERATORS, CRANES AND ATTACHMENTS, TUNNEL AND UNDERGROUND [These areas do not apply to Piledrivers and Steel Erectors]

AREA 1: ALAMEDA, BUTTE, CONTRA COSTA, KINGS, MARIN, MERCED, NAPA, SACRAMENTO, SAN BENITO, SAN FRANCISCO, SAN JOAQUIN, SAN MATEO, SANTA CLARA, SANTA CRUZ, SOLANO, STANISLAUS, SUTTER, YOLO, AND YUBA COUNTIES

AREA 2 - MODOC COUNTY

THE REMAINING COUNTIES ARE SPLIT BETWEEN AREA 1 AND AREA 2 AS NOTED BELOW:

ALPINE COUNTY:

Area 1: Northernmost part
Area 2: Remainder

CALAVERAS COUNTY:

Area 1: Except Eastern part
Area 2: Eastern part

COLUSA COUNTY:

Area 1: Eastern part
Area 2: Remainder

DEL NORTE COUNTY:

Area 1: Extreme Southwestern corner
Area 2: Remainder

ELDORADO COUNTY:

Area 1: North Central part
Area 2: Remainder

FRESNO COUNTY

Area 1: Except Eastern part
Area 2: Eastern part

GLENN COUNTY:

Area 1: Eastern part
Area 2: Remainder

HUMBOLDT COUNTY:

Area 1: Except Eastern and Southwestern parts
Area 2: Remainder

LAKE COUNTY:

Area 1: Southern part

Area 2: Remainder

LASSEN COUNTY:

Area 1: Western part along the Southern portion of border
with Shasta County
Area 2: Remainder

MADERA COUNTY

Area 1: Remainder
Area 2: Eastern part

MARIPOSA COUNTY

Area 1: Remainder
Area 2: Eastern part

MENDOCINO COUNTY:

Area 1: Central and Southeastern parts
Area 2: Remainder

MONTEREY COUNTY

Area 1: Remainder
Area 2: Southwestern part

NEVADA COUNTY:

Area 1: All but the Northern portion along the border of
Sierra County
Area 2: Remainder

PLACER COUNTY:

Area 1: All but the Central portion
Area 2: Remainder

PLUMAS COUNTY:

Area 1: Western portion
Area 2: Remainder

SHASTA COUNTY:

Area 1: All but the Northeastern corner
Area 2: Remainder

SIERRA COUNTY:

Area 1: Western part
Area 2: Remainder

SISKIYOU COUNTY:

Area 1: Central part
Area 2: Remainder

SONOMA COUNTY:

Area 1: All but the Northwestern corner
Area 2: Remainder

TEHAMA COUNTY:

Area 1: All but the Western border with Mendocino & Trinity
Counties
Area 2: Remainder

TRINITY COUNTY:

Area 1: East Central part and the Northeast border with
Shasta County

Area 2: Remainder

TULARE COUNTY;

Area 1: Remainder

Area 2: Eastern part

TUOLUMNE COUNTY;

Area 1: Remainder

Area 2: Eastern Part

ENGI0003-019 07/01/2013

SEE AREA DESCRIPTIONS BELOW

	Rates	Fringes
OPERATOR: Power Equipment (LANDSCAPE WORK ONLY)		
GROUP 1		
AREA 1.....	\$ 29.64	25.71
AREA 2.....	\$ 31.64	25.71
GROUP 2		
AREA 1.....	\$ 26.04	25.71
AREA 2.....	\$ 28.04	25.71
GROUP 3		
AREA 1.....	\$ 21.43	25.71
AREA 2.....	\$ 23.43	25.71

GROUP DESCRIPTIONS:

GROUP 1: Landscape Finish Grade Operator: All finish grade work regardless of equipment used, and all equipment with a rating more than 65 HP.

GROUP 2: Landscape Operator up to 65 HP: All equipment with a manufacturer's rating of 65 HP or less except equipment covered by Group 1 or Group 3. The following equipment shall be included except when used for finish work as long as manufacturer's rating is 65 HP or less: A-Frame and Winch Truck, Backhoe, Forklift, Hydragraphic Seeder Machine, Roller, Rubber-Tired and Track Earthmoving Equipment, Skiploader, Straw Blowers, and Trencher 31 HP up to 65 HP.

GROUP 3: Landscae Utility Operator: Small Rubber-Tired Tractor, Trencher Under 31 HP.

AREA DESCRIPTIONS:

AREA 1: ALAMEDA, BUTTE, CONTRA COSTA, KINGS, MARIN, MERCED, NAPA, SACRAMENTO, SAN BENITO, SAN FRANCISCO, SAN JOAQUIN, SAN MATEO, SANTA CLARA, SANTA CRUZ, SOLANO, STANISLAUS, SUTTER, YOLO, AND YUBA COUNTIES

AREA 2 - MODOC COUNTY

THE REMAINING COUNTIES ARE SPLIT BETWEEN AREA 1 AND AREA 2 AS NOTED BELOW:

ALPINE COUNTY:

Area 1: Northernmost part
Area 2: Remainder

CALAVERAS COUNTY:

Area 1: Except Eastern part
Area 2: Eastern part

COLUSA COUNTY:

Area 1: Eastern part
Area 2: Remainder

DEL NORTE COUNTY:

Area 1: Extreme Southwestern corner
Area 2: Remainder

ELDORADO COUNTY:

Area 1: North Central part
Area 2: Remainder

FRESNO COUNTY

Area 1: Except Eastern part
Area 2: Eastern part

GLENN COUNTY:

Area 1: Eastern part
Area 2: Remainder

HUMBOLDT COUNTY:

Area 1: Except Eastern and Southwestern parts
Area 2: Remainder

LAKE COUNTY:

Area 1: Southern part
Area 2: Remainder

LASSEN COUNTY:

Area 1: Western part along the Southern portion of border
with Shasta County
Area 2: Remainder

MADERA COUNTY

Area 1: Remainder
Area 2: Eastern part

MARIPOSA COUNTY

Area 1: Remainder
Area 2: Eastern part

MENDOCINO COUNTY:

Area 1: Central and Southeastern parts
Area 2: Remainder

MONTEREY COUNTY

Area 1: Remainder
Area 2: Southwestern part

NEVADA COUNTY:

Area 1: All but the Northern portion along the border of
Sierra County

Area 2: Remainder

PLACER COUNTY:

Area 1: All but the Central portion

Area 2: Remainder

PLUMAS COUNTY:

Area 1: Western portion

Area 2: Remainder

SHASTA COUNTY:

Area 1: All but the Northeastern corner

Area 2: Remainder

SIERRA COUNTY:

Area 1: Western part

Area 2: Remainder

SISKIYOU COUNTY:

Area 1: Central part

Area 2: Remainder

SONOMA COUNTY:

Area 1: All but the Northwestern corner

Area 2: Reaminder

TEHAMA COUNTY:

Area 1: All but the Western border with mendocino & Trinity Counties

Area 2: Remainder

TRINITY COUNTY:

Area 1: East Central part and the Northeaster border with Shasta County

Area 2: Remainder

TULARE COUNTY;

Area 1: Remainder

Area 2: Eastern part

TUOLUMNE COUNTY:

Area 1: Remainder

Area 2: Eastern Part

* IRON0377-002 01/01/2016

	Rates	Fringes
Ironworkers:		
Fence Erector.....	\$ 27.58	20.64
Ornamental, Reinforcing and Structural.....	\$ 34.00	29.20

PREMIUM PAY:

\$6.00 additional per hour at the following locations:

China Lake Naval Test Station, Chocolate Mountains Naval Reserve-Niland,

Edwards AFB, Fort Irwin Military Station, Fort Irwin Training Center-Goldstone, San Clemente Island, San Nicholas Island, Susanville Federal Prison, 29 Palms - Marine Corps, U.S. Marine Base - Barstow, U.S. Naval Air Facility - Sealey, Vandenberg AFB

\$4.00 additional per hour at the following locations:

Army Defense Language Institute - Monterey, Fallon Air Base, Naval Post Graduate School - Monterey, Yermo Marine Corps Logistics Center

\$2.00 additional per hour at the following locations:

Port Hueneme, Port Mugu, U.S. Coast Guard Station - Two Rock

LAB00067-002 12/01/2015

AREA "A" - ALAMEDA, CONTRA COSTA, MARIN, SAN FRANCISCO, SAN MATEO AND SANTA CLARA COUNTIES

AREA "B" - ALPINE, AMADOR, BUTTE, CALAVERAS, COLUSA, DEL NORTE, EL DORADO, FRESNO, GLENN, HUMBOLDT, KINGS, LAKE, LASSEN, MADERA, MARIPOSA, MENDOCINO, MERCED, MODOC, MONTEREY, NAPA, NEVADA, PLACER, PLUMAS, SACRAMENTO, SAN BENITO, SAN JOAQUIN, SANTA CRUZ, SHASTA, SIERRA, SISKIYOU, SOLANO, SONOMA, STANISLAUS, SUTTER, TEHAMA, TRINITY, TULARE, TUOLUMNE, YOLO AND YUBA COUNTIES

	Rates	Fringes
Asbestos Removal Laborer		
Areas A & B.....	\$ 20.66	10.02
LABORER (Lead Removal)		
Area A.....	\$ 29.02	20.82
Area B.....	\$ 28.02	20.82

ASBESTOS REMOVAL-SCOPE OF WORK: Site mobilization; initial site clean-up; site preparation; removal of asbestos-containing materials from walls and ceilings; or from pipes, boilers and mechanical systems only if they are being scrapped; encapsulation, enclosure and disposal of asbestos-containing materials by hand or with equipment or machinery; scaffolding; fabrication of temporary wooden barriers; and assembly of decontamination stations.

LAB00067-006 06/30/2014

AREA "A" - ALAMEDA, CONTRA COSTA, MARIN, SAN FRANCISCO, SAN MATEO AND SANTA CLARA COUNTIES

AREA "B" - ALPINE, AMADOR, BUTTE, CALAVERAS, COLUSA, EL DORADO, FRESNO, GLENN, KINGS, LASSEN, MADERA, MARIPOSA, MERCED, MODOC, MONTEREY, NAPA, NEVADA, PLACER, PLUMAS, SACRAMENTO, SAN BENITO, SAN JOAQUIN, SANTA CRUZ, SHASTA, SIERRA, SISKIYOU, SOLANO, SONOMA, STANISLAUS, SUTTER, TEHAMA, TRINITY, TULARE, TUOLUMNE, YOLO AND YUBA COUNTIES

	Rates	Fringes
Laborers: (CONSTRUCTION CRAFT		
LABORERS - AREA A:)		
Construction Specialist		
Group.....	\$ 29.09	18.66
GROUP 1.....	\$ 28.39	18.66
GROUP 1-a.....	\$ 28.61	18.66
GROUP 1-c.....	\$ 28.44	18.66
GROUP 1-e.....	\$ 28.94	18.66
GROUP 1-f.....	\$ 28.97	18.66
GROUP 1-g (Contra Costa County).....	\$ 28.59	18.66
GROUP 2.....	\$ 28.24	18.66
GROUP 3.....	\$ 28.14	18.66
GROUP 4.....	\$ 21.83	18.66
See groups 1-b and 1-d under laborer classifications.		
Laborers: (CONSTRUCTION CRAFT		
LABORERS - AREA B:)		
Construction Specialist		
Group.....	\$ 28.09	18.66
GROUP 1.....	\$ 27.39	18.66
GROUP 1-a.....	\$ 27.61	18.66
GROUP 1-c.....	\$ 27.44	18.66
GROUP 1-e.....	\$ 27.94	18.66
GROUP 1-f.....	\$ 27.97	18.66
GROUP 2.....	\$ 27.24	18.66
GROUP 3.....	\$ 27.14	18.66
GROUP 4.....	\$ 20.83	18.66
See groups 1-b and 1-d under laborer classifications.		
Laborers: (GUNITE - AREA A:)		
GROUP 1.....	\$ 29.35	18.66
GROUP 2.....	\$ 28.85	18.66
GROUP 3.....	\$ 28.26	18.66
GROUP 4.....	\$ 28.14	18.66
Laborers: (GUNITE - AREA B:)		
GROUP 1.....	\$ 28.35	18.66
GROUP 2.....	\$ 27.85	18.66
GROUP 3.....	\$ 27.26	18.66
GROUP 4.....	\$ 27.14	18.66
Laborers: (WRECKING - AREA A:)		
GROUP 1.....	\$ 28.39	18.66
GROUP 2.....	\$ 28.24	18.66
Laborers: (WRECKING - AREA B:)		
GROUP 1.....	\$ 27.39	18.66
GROUP 2.....	\$ 27.24	18.66
Landscape Laborer (GARDENERS, HORTICULTURAL & LANDSCAPE		
LABORERS - AREA A:)		
(1) New Construction.....	\$ 28.14	18.66
(2) Establishment Warranty Period.....	\$ 21.83	18.66
Landscape Laborer (GARDENERS, HORTICULTURAL & LANDSCAPE		
LABORERS - AREA B:)		
(1) New Construction.....	\$ 27.14	18.66
(2) Establishment Warranty Period.....	\$ 20.83	18.66

FOOTNOTES:

Laborers working off or with or from bos'n chairs, swinging scaffolds, belts shall receive \$0.25 per hour above the applicable wage rate. This shall not apply to workers entitled to receive the wage rate set forth in Group 1-a below.

LABORER CLASSIFICATIONS

CONSTRUCTION SPECIALIST GROUP: Asphalt ironer and raker; Chainsaw; Laser beam in connection with laborers' work; Cast-in-place manhole form setter; Pressure pipelayer; Davis trencher - 300 or similar type (and all small trenchers); Blaster; Diamond driller; Multiple unit drill; Hydraulic drill

GROUP 1: Asphalt spreader boxes (all types); Barko, Wacker and similar type tampers; Buggymobile; Caulker, bander, pipewrapper, conduit layer, plastic pipelayer; Certified hazardous waste worker including Leade Abatement; Compactors of all types; Concrete and magnesite mixer, 1/2 yd. and under; Concrete pan work; Concrete sander; Concrete saw; Cribber and/or shoring; Cut granite curb setter; Dri-pak-it machine; Faller, logloader and buckler; Form raiser, slip forms; Green cutter; Headerboard, Hubsetter, aligner, by any method; High pressure blow pipe (1-1/2" or over, 100 lbs. pressure/over); Hydro seeder and similar type; Jackhammer operator; Jacking of pipe over 12 inches; Jackson and similar type compactor; Kettle tender, pot and worker applying asphalt, lay-kold, creosote, lime, caustic and similar type materials (applying means applying, dipping or handling of such materials); Lagging, sheeting, whaling, bracing, trenchjacking, lagging hammer; Magnesite, epoxyresin, fiberglass, mastic worker (wet or dry); No joint pipe and stripping of same, including repair of voids; Pavement breaker and spader, including tool grinder; Perma curb; Pipelayer (including grade checking in connection with pipelaying); Precast-manhole setter; Pressure pipe tester; Post hole digger, air, gas and electric; Power broom sweeper; Power tampers of all types (except as shown in Group 2); Ram set gun and stud gun; Riprap stonepaver and rock-slinger, including placing of sacked concrete and/or sand (wet or dry) and gabions and similar type; Rotary scarifier or multiple head concrete chipping scarifier; Roto and Ditch Witch; Rototiller; Sandblaster, pot, gun, nozzle operators; Signalling and rigging; Tank cleaner; Tree climber; Turbo blaster; Vibrascreed, bull float in connection with laborers' work; Vibrator; Hazardous waste worker (lead removal); Asbestos and mold removal worker

GROUP 1-a: Joy drill model TWM-2A; Gardner-Denver model DH143 and similar type drills; Track driller; Jack leg driller; Wagon driller; Mechanical drillers, all types regardless of type or method of power; Mechanical pipe layers, all types regardless of type or method of power; Blaster and powder;

All work of loading, placing and blasting of all powder and explosives of whatever type regardless of method used for such loading and placing; High scalers (including drilling of same); Tree topper; Bit grinder

GROUP 1-b: Sewer cleaners shall receive \$4.00 per day above Group 1 wage rates. "Sewer cleaner" means any worker who handles or comes in contact with raw sewage in small diameter sewers. Those who work inside recently active, large diameter sewers, and all recently active sewer manholes shall receive \$5.00 per day above Group 1 wage rates.

GROUP 1-c: Burning and welding in connection with laborers' work; Synthetic thermoplastics and similar type welding

GROUP 1-d: Maintenance and repair track and road beds. All employees performing work covered herein shall receive \$.25 per hour above their regular rate for all work performed on underground structures not specifically covered herein. This paragraph shall not be construed to apply to work below ground level in open cut. It shall apply to cut and cover work of subway construction after the temporary cover has been placed.

GROUP 1-e: Work on and/or in bell hole footings and shafts thereof, and work on and in deep footings. (A deep footing is a hole 15 feet or more in depth.) In the event the depth of the footing is unknown at the commencement of excavation, and the final depth exceeds 15 feet, the deep footing wage rate would apply to all employees for each and every day worked on or in the excavation of the footing from the date of inception.

GROUP 1-f: Wire winding machine in connection with guniting or shot crete

GROUP 1-g, CONTRA COSTA COUNTY: Pipelayer (including grade checking in connection with pipelaying); Caulker; Bander; Pipewrapper; Conduit layer; Plastic pipe layer; Pressure pipe tester; No joint pipe and stripping of same, including repair of voids; Precast manhole setters, cast in place manhole form setters

GROUP 2: Asphalt shoveler; Cement dumper and handling dry cement or gypsum; Choke-setter and rigger (clearing work); Concrete bucket dumper and chute; Concrete chipping and grinding; Concrete laborer (wet or dry); Driller tender, chuck tender, nipper; Guinea chaser (stake), grout crew; High pressure nozzle, adductor; Hydraulic monitor (over 100 lbs. pressure); Loading and unloading, carrying and hauling of all rods and materials for use in reinforcing concrete construction; Pittsburgh chipper and similar type brush shredders; Sloper; Single foot, hand-held, pneumatic tamper; All pneumatic, air, gas and electric tools not listed in Groups 1 through 1-f; Jacking of pipe - under 12 inches

GROUP 3: Construction laborers, including bridge and general laborer; Dump, load spotter; Flag person; Fire watcher;

Fence erector; Guardrail erector; Gardener, horticultural and landscape laborer; Jetting; Limber, brush loader and piler; Pavement marker (button setter); Maintenance, repair track and road beds; Streetcar and railroad construction track laborer; Temporary air and water lines, Victaulic or similar; Tool room attendant (jobsite only)

GROUP 4: Final clean-up work of debris, grounds and building including but not limited to: street cleaner; cleaning and washing windows; brick cleaner (jobsite only); material cleaner (jobsite only). The classification "material cleaner" is to be utilized under the following conditions:
A: at demolition site for the salvage of the material.
B: at the conclusion of a job where the material is to be salvaged and stocked to be reused on another job.
C: for the cleaning of salvage material at the jobsite or temporary jobsite yard.

The material cleaner classification should not be used in the performance of "form stripping, cleaning and oiling and moving to the next point of erection".

GUNITE LABORER CLASSIFICATIONS

- GROUP 1: Structural Nozzleman
- GROUP 2: Nozzleman, Gunman, Potman, Groundman
- GROUP 3: Reboundman
- GROUP 4: Gunite laborer

WRECKING WORK LABORER CLASSIFICATIONS

- GROUP 1: Skilled wrecker (removing and salvaging of sash, windows and materials)
- GROUP 2: Semi-skilled wrecker (salvaging of other building materials)

LABO0185-002 06/30/2014

ALPINE, AMADOR, BUTTE, COLUSA, EL DORADO, GLENN, LASSEN, MODOC, NEVADA, PLACER, PLUMAS, SACRAMENTO, SHASTA, SIERRA, SISKIYOU, SUTTER, TEHAMA, TRINITY, YOLO AND YUBA COUNTIES

	Rates	Fringes
LABORER		
Mason Tender-Brick.....	\$ 31.11	17.34

LABO0185-005 06/30/2014

ALPINE, AMADOR, BUTTE, COLUSA, EL DORADO, GLENN, LASSEN, MODOC,

NEVADA, PLACER, PLUMAS, SACRAMENTO, SHASTA, SIERRA, SISKIYOU, SUTTER, TEHAMA, TRINITY, YOLO AND YUBA COUNTIES

	Rates	Fringes
Tunnel and Shaft Laborers:		
GROUP 1.....	\$ 34.60	19.49
GROUP 2.....	\$ 34.37	19.49
GROUP 3.....	\$ 34.12	19.49
GROUP 4.....	\$ 33.67	19.49
GROUP 5.....	\$ 33.13	19.49
Shotcrete Specialist.....	\$ 35.12	19.49

TUNNEL AND SHAFT CLASSIFICATIONS

GROUP 1: Diamond driller; Groundmen; Gunite and shotcrete nozzlelemen

GROUP 2: Rodmen; Shaft work & raise (below actual or excavated ground level)

GROUP 3: Bit grinder; Blaster, driller, powdermen, heading; Cherry pickermen - where car is lifted; Concrete finisher in tunnel; Concrete screedman; Grout pumpman and potman; Gunite & shotcrete gunman & potman; Headermen; High pressure nozzleman; Miner - tunnel, including top and bottom man on shaft and raise work; Nipper; Nozzleman on slick line; Sandblaster - potman, Robotic Shotcrete Placer, Segment Erector, Tunnel Muck Hauler, Steel Form raiser and setter; Timberman, retimberman (wood or steel or substitute materials therefore); Tugger (for tunnel laborer work); Cable tender; Chuck tender; Powderman - primer house

GROUP 4: Vibrator operator, pavement breaker; Bull gang - muckers, trackmen; Concrete crew - includes rodding and spreading, Dumpmen (any method)

GROUP 5: Grout crew; Reboundman; Swamper/ Brakeman

LAB00261-002 06/30/2014

MARIN COUNTY

	Rates	Fringes
LABORER (TRAFFIC CONTROL/LANE CLOSURE)		
Escort Driver, Flag Person..	\$ 28.14	19.03
Traffic Control Person I....	\$ 28.44	19.03
Traffic Control Person II...\$	25.94	19.03

TRAFFIC CONTROL PERSON I: Layout of traffic control, crash cushions, construction area and roadside signage.

TRAFFIC CONTROL PERSON II: Installation and removal of temporary/permanent signs, markers, delineators and crash cushions.

LABO0261-004 06/30/2014

MARIN COUNTY

	Rates	Fringes
Tunnel and Shaft Laborers:		
GROUP 1.....	\$ 34.60	19.49
GROUP 2.....	\$ 34.37	19.49
GROUP 3.....	\$ 34.12	19.49
GROUP 4.....	\$ 33.67	19.49
GROUP 5.....	\$ 33.13	19.49
Shotcrete Specialist.....	\$ 35.12	19.49

TUNNEL AND SHAFT CLASSIFICATIONS

GROUP 1: Diamond driller; Groundmen; Guniting and shotcrete nozzle-men

GROUP 2: Rodmen; Shaft work & raise (below actual or excavated ground level)

GROUP 3: Bit grinder; Blaster, driller, powdermen, heading; Cherry pickers - where car is lifted; Concrete finisher in tunnel; Concrete screedman; Grout pumpman and potman; Guniting & shotcrete gunman & potman; Headermen; High pressure nozzleman; Miner - tunnel, including top and bottom man on shaft and raise work; Nipper; Nozzleman on slick line; Sandblaster - potman, Robotic Shotcrete Placer, Segment Erector, Tunnel Muck Hauler, Steel Form raiser and setter; Timberman, retimberman (wood or steel or substitute materials therefore); Tugger (for tunnel laborer work); Cable tender; Chuck tender; Powderman - primer house

GROUP 4: Vibrator operator, pavement breaker; Bull gang - muckers, trackmen; Concrete crew - includes rodding and spreading, Dumpmen (any method)

GROUP 5: Grout crew; Reboundman; Swamper/ Brakeman

LABO0261-007 06/30/2014

MARIN COUNTY

	Rates	Fringes
LABORER		
Mason Tender-Brick.....	\$ 32.36	17.34

LABO0324-004 06/30/2014

NAPA, SOLANO, AND SONOMA, COUNTIES

	Rates	Fringes
LABORER (TRAFFIC CONTROL/LANE CLOSURE)		
Escort Driver, Flag Person..	\$ 27.14	19.03

Traffic Control Person I....\$ 27.44	19.03
Traffic Control Person II...\$ 24.94	19.03

TRAFFIC CONTROL PERSON I: Layout of traffic control, crash cushions, construction area and roadside signage.

TRAFFIC CONTROL PERSON II: Installation and removal of temporary/permanent signs, markers, delineators and crash cushions.

LAB00324-008 06/30/2014

NAPA, SOLANO, AND SONOMA COUNTIES

	Rates	Fringes
Tunnel and Shaft Laborers:		
GROUP 1.....	\$ 34.60	19.49
GROUP 2.....	\$ 34.37	19.49
GROUP 3.....	\$ 34.12	19.49
GROUP 4.....	\$ 33.67	19.49
GROUP 5.....	\$ 33.13	19.49
Shotcrete Specialist.....	\$ 35.12	19.49

TUNNEL AND SHAFT CLASSIFICATIONS

GROUP 1: Diamond driller; Groundmen; Gunite and shotcrete nozzle-men

GROUP 2: Rodmen; Shaft work & raise (below actual or excavated ground level)

GROUP 3: Bit grinder; Blaster, driller, powdermen, heading; Cherry pickermen - where car is lifted; Concrete finisher in tunnel; Concrete screedman; Grout pumpman and potman; Gunite & shotcrete gunman & potman; Headermen; High pressure nozzle-man; Miner - tunnel, including top and bottom man on shaft and raise work; Nipper; Nozzle-man on slick line; Sandblaster - potman, Robotic Shotcrete Placer, Segment Erector, Tunnel Muck Hauler, Steel Form raiser and setter; Timberman, retimberman (wood or steel or substitute materials therefore); Tugger (for tunnel laborer work); Cable tender; Chuck tender; Powderman - primer house

GROUP 4: Vibrator operator, pavement breaker; Bull gang - muckers, trackmen; Concrete crew - includes rodding and spreading, Dumpmen (any method)

GROUP 5: Grout crew; Reboundman; Swamper/ Brakeman

LAB00324-010 06/30/2014

NAPA, SOLANO AND SONOMA COUNTIES

	Rates	Fringes
LABORER (Brick)		
Mason Tender-Brick.....	\$ 31.36	17.34

LAB01414-005 08/05/2015

	Rates	Fringes
Plasterer tender.....	\$ 32.71	17.11
Work on a swing stage scaffold: \$1.00 per hour additional.		

PAIN0016-004 01/01/2015

MARIN, NAPA, SOLANO & SONOMA COUNTIES

	Rates	Fringes
Painters:.....	\$ 36.45	21.48

PREMIUMS:

EXOTIC MATERIALS - \$0.75 additional per hour.

SPRAY WORK: - \$0.50 additional per hour.

INDUSTRIAL PAINTING - \$0.25 additional per hour

[Work on industrial buildings used for the manufacture and processing of goods for sale or service; steel construction (bridges), stacks, towers, tanks, and similar structures]

HIGH WORK:

over 50 feet - \$2.00 per hour additional

100 to 180 feet - \$4.00 per hour additional

Over 180 feet - \$6.00 per hour additional

PAIN0016-005 09/01/2015

ALPINE, BUTTE, COLUSA, EL DORADO (west of the Sierra Nevada Mountains), GLENN, LASSEN (west of Hwy. 395, excluding Honey Lake); MARIN, MODOC, NAPA, NEVADA (west of the Sierra Nevada Mountains), PLACER (west of the Sierra Nevada Mountains), PLUMAS, SACRAMENTO, SHASTA, SIERRA (west of the Sierra Nevada Mountains), SISKIYOU, SOLANO, SONOMA, SUTTER, TEHAMA, TRINITY, YOLO AND YUBA COUNTIES

	Rates	Fringes
DRYWALL FINISHER/TAPER.....	\$ 38.24	19.93

PAIN0016-007 01/01/2015

ALPINE, AMADOR, BUTTE, COLUSA, EL DORADO (west of the Sierra Nevada Mountains), GLENN, LASSEN (west of Highway 395, excluding Honey Lake), MODOC, NEVADA (west of the Sierra Nevada Mountains), PLACER (west of the Sierra Nevada Mountains), PLUMAS, SACRAMENTO, SHASTA, SIERRA (west of the Sierra Nevada Mountains), SISKIYOU, SUTTER, TEHAMA, TRINITY, YOLO & YUBA COUNTIES

	Rates	Fringes
Painters:.....	\$ 30.85	16.85

SPRAY/SANDBLAST: \$0.50 additional per hour.
 EXOTIC MATERIALS: \$1.00 additional per hour.
 HIGH TIME: Over 50 ft above ground or water level \$2.00
 additional per hour. 100 to 180 ft above ground or water
 level \$4.00 additional per hour. Over 180 ft above ground
 or water level \$6.00 additional per hour.

 PAIN0016-008 01/01/2015

MARIN, NAPA, SOLANO AND SONOMA COUNTIES

	Rates	Fringes
SOFT FLOOR LAYER.....	\$ 46.20	18.73

 PAIN0169-004 01/01/2015

MARIN , NAPA & SONOMA COUNTIES; SOLANO COUNTY (west of a line defined as follows: Hwy. 80 corridor beginning at the City of Fairfield, including Travis Air Force Base and Suisun City; going north of Manakas Corner Rd., continue north on Suisun Valley Rd. to the Napa County line; Hwy. 80 corridor south on Grizzly Island Rd. to the Grizzly Island Management area)

	Rates	Fringes
GLAZIER.....	\$ 43.48	24.19

 * PAIN0567-001 07/01/2014

EL DORADO COUNTY (east of the Sierra Nevada Mountains); LASSEN COUNTY (east of Highway 395, beginning at Stacey and including Honey Lake); NEVADA COUNTY (east of the Sierra Nevada Mountains); PLACER COUNTY (east of the Sierra Nevada Mountains); AND SIERRA COUNTY (east of the Sierra Nevada Mountains)

	Rates	Fringes
Painters:		
Brush and Roller.....	\$ 23.16	10.38
Spray Painter & Paperhanger.	\$ 24.01	10.38

PREMIUMS:
 Special Coatings (Brush), and Sandblasting = \$0.50/hr
 Special Coatings (Spray), and Steeplejack = \$1.00/hr
 Special Coating Spray Steel = \$1.25/hr
 Swing Stage = \$2.00/hr

*A special coating is a coating that requires the mixing of 2 or more products.

 PAIN0567-007 07/01/2015

EL DORADO COUNTY (east of the Sierra Nevada Mountains); LASSEN

COUNTY (east of Highway 395, beginning at Stacey and including Honey Lake); NEVADA COUNTY (east of the Sierra Nevada Mountains); PLACER COUNTY (east of the Sierra Nevada Mountains) AND SIERRA COUNTY (east of the Sierra Nevada Mountains)

	Rates	Fringes
SOFT FLOOR LAYER.....	\$ 26.26	11.78

PAIN0567-010 07/01/2015		

EL DORADO COUNTY (east of the Sierra Nevada Mountains); LASSEN COUNTY (east of Highway 395, beginning at Stacey and including Honey Lake); NEVADA COUNTY (east of the Sierra Nevada Mountains); PLACER COUNTY (east of the Sierra Nevada Mountains); AND SIERRA COUNTY (east of the Sierra Nevada Mountains)

	Rates	Fringes
Drywall		
(1) Taper.....	\$ 28.08	12.13
(2) Steeplejack - Taper, over 40 ft with open space below.....	\$ 29.58	12.13

PAIN0767-004 01/01/2015		

ALPINE, AMADOR, BUTTE, COLUSA, EL DORADO, GLENN, LASSEN, MODOC, NEVADA, PLACER, PLUMAS, SACRAMENTO, SHASTA, SIERRA, SISKIYOU, SOLANO (Remainder), SUTTER, TEHAMA, TRINITY, YOLO, YUBA

	Rates	Fringes
GLAZIER.....	\$ 33.79	22.49
PAID HOLIDAYS: New Year's Day, Martin Luther King, Jr. Day, President's Day, Memorial Day, Independence Day, Labor Day, Veteran's Day, Thanksgiving Day, and Christmas Day.		
Employee required to wear a body harness shall receive \$1.50 per hour above the basic hourly rate at any elevation.		

PAIN1176-001 07/01/2014		

HIGHWAY IMPROVEMENT

	Rates	Fringes
Parking Lot Striping/Highway Marking:		
GROUP 1.....	\$ 34.26	11.65
GROUP 2.....	\$ 29.12	11.65
GROUP 3.....	\$ 29.46	11.65

CLASSIFICATIONS

GROUP 1: Striper: Layout and application of painted traffic stripes and marking; hot thermo plastic; tape, traffic stripes and markings

GROUP 2: Gamecourt & Playground Installer

GROUP 3: Protective Coating, Pavement Sealing

PAIN1237-001 01/01/2015

ALPINE; COLUSA; EL DORADO (west of the Sierra Nevada Mountains); GLENN; LASSEN (west of Highway 395, beginning at Stacey and including Honey Lake); MODOC; NEVADA (west of the Sierra Nevada Mountains); PLACER (west of the Sierra Nevada Mountains); PLUMAS; SACRAMENTO; SHASTA; SIERRA (west of the Sierra Nevada Mountains); SISKIYOU; SUTTER; TEHAMA; TRINITY; YOLO AND YUBA COUNTIES

	Rates	Fringes
SOFT FLOOR LAYER.....	\$ 31.79	14.93

PLAS0300-003 07/01/2014

	Rates	Fringes
PLASTERER		
AREA 295: Alpine, Amador, Butte, Colusa, El Dorado, Glenn, Lassen, Modoc, Nevada, Placer, Plumas, Sacramento, Shasta, Sierra, Siskiyou, Solano, Sutter, Tehama, Trinity, Yolo & Yuba Counties.....	\$ 31.41	22.26
AREA 355: Marin.....	\$ 34.75	22.26
AREA 355: Napa & Sonoma Counties.....	\$ 31.41	22.26

PLAS0300-005 06/30/2014

	Rates	Fringes
CEMENT MASON/CONCRETE FINISHER...\$	30.00	22.07

PLUM0038-002 07/01/2015

MARIN AND SONOMA COUNTIES

	Rates	Fringes
PLUMBER (Plumber, Steamfitter, Refrigeration Fitter)		
(1) Work on wooden frame structures 5 stories or less excluding high-rise		

buildings and commercial work such as hospitals, prisons, hotels, schools, casinos, wastewater treatment plants, and resarch facilities as well as refrigeration pipefitting, service and repair work - MARKET

RECOVERY RATE.....	\$ 55.10	40.91
(2) All other work - NEW CONSTRUCTION RATE.....	\$ 65.00	43.49

 PLUM0038-006 07/01/2015

MARIN & SONOMA COUNTIES

	Rates	Fringes
Landscape/Irrigation Fitter (Underground/Utility Fitter)....	\$ 55.10	40.91

 * PLUM0228-001 01/01/2016

BUTTE, COLUSA, GLENN, LASSEN, MODOC, PLUMAS, SHASTA, SIERRA, SISKIYOU, SUTTER, TEHAMA, TRINITY & YUBA COUNTIES

	Rates	Fringes
PLUMBER.....	\$ 38.25	27.64

 PLUM0343-001 07/01/2015

NAPA AND SOLANO COUNTIES

	Rates	Fringes
PLUMBER/PIPEFITTER		
Light Commercial.....	\$ 30.85	19.90
All Other Work.....	\$ 49.15	31.30

DEFINITION OF LIGHT COMMERCIAL:

Work shall include strip shopping centers, office buildings, schools and other commercial structures which the total plumbing bid does not exceed Two Hundred and Fifty Thousand (\$250,000) and the total heating and cooling does not exceed Two Hundred Fifty Thousand (\$250,000); or Any projects bid in phases shall not qualify unless the total project is less than Two Hundred Fifty Thousand (\$250,000) for the plumbing bid; and Two Hundred Fifty Thousand (\$250,000) for the heating and cooling bid. Excluded are hospitals, jails, institutions and industrial projects, regardless size of the project

FOOTNOTES: While fitting galvanized material: \$.75 per hour additional. Work from trusses, temporary staging, unguarded structures 35' from the ground or water: \$.75 per hour additional. Work from swinging scaffolds, boatswains chairs or similar devices: \$.75 per hour additional.

PLUM0350-001 02/01/2015

EL DORADO COUNTY (Lake Tahoe area only); NEVADA COUNTY (Lake Tahoe area only); AND PLACER COUNTY (Lake Tahoe area only)

	Rates	Fringes
PLUMBER/PIPEFITTER.....	\$ 30.88	11.51

PLUM0355-001 07/01/2015

ALPINE, AMADOR, BUTTE, COLUSA, EL DORADO, GLENN, LASSEN, MODOC, NAPA, NEVADA, PLACER, PLUMAS, SACRAMENTO, SHASTA, SIERRA, SISKIYOU, SOLANO, SUTTER, TEHAMA, TRINITY, YOLO, AND YUBA COUNTIES

	Rates	Fringes
Underground Utility Worker /Landscape Fitter.....	\$ 28.60	10.05

PLUM0442-003 07/01/2015

AMADOR (South of San Joaquin River) and ALPINE COUNTIES

	Rates	Fringes
PLUMBER.....	\$ 38.75	26.64

PLUM0447-001 07/01/2013

AMADOR (north of San Joaquin River), EL DORADO (excluding Lake Tahoe area), NEVADA (excluding Lake Tahoe area); PLACER (excluding Lake Tahoe area), SACRAMENTO AND YOLO COUNTIES

	Rates	Fringes
PLUMBER/PIPEFITTER		
Journeyman.....	\$ 41.77	22.35
Light Commercial Work.....	\$ 32.23	17.22

ROOF0081-006 08/01/2015

MARIN, NAPA, SOLANO AND SONOMA COUNTIES

	Rates	Fringes
Roofer.....	\$ 36.08	14.90

ROOF0081-007 08/01/2015

ALPINE, BUTTE, COLUSA, EL DORADO, GLENN, LASSEN, MODOC, NEVADA, PLACER, PLUMAS, SACRAMENTO, SHASTA, SIERRA, SISKIYOU, SUTTER, TEHAMA, TRINITY, YOLO, AND YUBA COUNTIES

	Rates	Fringes
Roofer.....	\$ 34.00	14.80

SFCA0483-003 01/01/2015		

MARIN, NAPA, SOLANO AND SONOMA COUNTIES

	Rates	Fringes
SPRINKLER FITTER (Fire Sprinklers).....	\$ 56.02	27.77

SFCA0669-003 07/01/2013		

ALPINE, BUTTE, COLUSA, EL DORADO, GLENN, LASSEN, MODOC, NEVADA,
PLACER, PLUMAS, SACRAMENTO, SHASTA, SIERRA, SISKIYOU, SUTTER,
TEHAMA, TRINITY, YOLO AND YUBA COUNTIES

	Rates	Fringes
SPRINKLER FITTER.....	\$ 34.19	19.37

SHEE0104-006 07/01/2015		

MARIN, NAPA, SOLANO SONOMA & TRINITY COUNTIES

	Rates	Fringes
Sheet Metal Worker Mechanical Contracts \$200,000 or less.....	\$ 46.30	40.28
All other work.....	\$ 52.20	41.56

SHEE0104-009 07/01/2015		

AMADOR, COLUSA, EL DORADO, NEVADA, PLACER, SACRAMENTO, SUTTER,
YOLO AND YUBA COUNTIES

	Rates	Fringes
SHEET METAL WORKER.....	\$ 40.07	33.17

SHEE0104-010 07/01/2015		

ALPINE COUNTY

	Rates	Fringes
SHEET METAL WORKER.....	\$ 36.85	30.90

SHEE0104-011 07/01/2015		

BUTTE, COLUSA, EL DORADO, GLENN, LASSEN, MODOC, NEVADA, PLACER,
PLUMAS, SACRAMENTO, SHASTA, SIERRA, SISKIYOU, SUTTER, TEHAMA,
YOLO AND YUBA COUNTIES

	Rates	Fringes
Sheet Metal Worker (Metal decking and siding only).....	\$ 34.15	32.98

SHEE0104-014 07/01/2015		

MARIN, NAPA, SOLANO, SONOMA AND TRINITY COUNTIES

	Rates	Fringes
SHEET METAL WORKER (Metal Decking and Siding only).....	\$ 34.15	32.98

SHEE0104-019 07/01/2015		

BUTTE, GLENN, LASSEN, MODOC, PLUMAS, SHASTA, SIERRA, SISKIYOU AND TEHAMA COUNTIES

	Rates	Fringes
SHEET METAL WORKER Mechanical Jobs \$200,000 & under.....	\$ 30.24	30.64
Mechanical Jobs over \$200,000.....	\$ 40.07	33.22

TEAM0094-001 07/01/2015		

	Rates	Fringes
Truck drivers:		
GROUP 1.....	\$ 28.57	25.22
GROUP 2.....	\$ 28.87	25.22
GROUP 3.....	\$ 29.17	25.22
GROUP 4.....	\$ 29.52	25.22
GROUP 5.....	\$ 29.87	25.22

FOOTNOTES:
 Articulated dump truck; Bulk cement spreader (with or without auger); Dumpcrete truck; Skid truck (debris box); Dry pre-batch concrete mix trucks; Dumpster or similar type; Slurry truck: Use dump truck yardage rate.
 Heater planer; Asphalt burner; Scarifier burner; Industrial lift truck (mechanical tailgate); Utility and clean-up truck: Use appropriate rate for the power unit or the equipment utilized.

TRUCK DRIVER CLASSIFICATIONS

GROUP 1: Dump trucks, under 6 yds.; Single unit flat rack (2-axle unit); Nipper truck (when flat rack truck is used appropriate flat rack shall apply); Concrete pump truck (when flat rack truck is used appropriate flat rack shall apply); Concrete pump machine; Fork lift and lift jitneys; Fuel and/or grease truck driver or fuel person; Snow buggy; Steam cleaning; Bus or personhaul driver; Escort or pilot

car driver; Pickup truck; Teamster oiler/greaser and/or serviceperson; Hook tender (including loading and unloading); Team driver; Tool room attendant (refineries)

GROUP 2: Dump trucks, 6 yds. and under 8 yds.; Transit mixers, through 10 yds.; Water trucks, under 7,000 gals.; Jetting trucks, under 7,000 gals.; Single-unit flat rack (3-axle unit); Highbed heavy duty transport; Scissor truck; Rubber-tired muck car (not self-loaded); Rubber-tired truck jumbo; Winch truck and "A" frame drivers; Combination winch truck with hoist; Road oil truck or bootperson; Buggymobile; Ross, Hyster and similar straddle carriers; Small rubber-tired tractor

GROUP 3: Dump trucks, 8 yds. and including 24 yds.; Transit mixers, over 10 yds.; Water trucks, 7,000 gals. and over; Jetting trucks, 7,000 gals. and over; Vacuum trucks under 7500 gals. Trucks towing tilt bed or flat bed pull trailers; Lowbed heavy duty transport; Heavy duty transport tiller person; Self-propelled street sweeper with self-contained refuse bin; Boom truck - hydro-lift or Swedish type extension or retracting crane; P.B. or similar type self-loading truck; Tire repairperson; Combination bootperson and road oiler; Dry distribution truck (A bootperson when employed on such equipment, shall receive the rate specified for the classification of road oil trucks or bootperson); Ammonia nitrate distributor, driver and mixer; Snow Go and/or plow

GROUP 4: Dump trucks, over 25 yds. and under 65 yds.; Water pulls - DW 10's, 20's, 21's and other similar equipment when pulling Aqua/pak or water tank trailers; Helicopter pilots (when transporting men and materials); Lowbed Heavy Duty Transport up to including 7 axles; DW10's, 20's, 21's and other similar Cat type, Terra Cobra, LeTourneau Pulls, Tournorocker, Euclid and similar type equipment when pulling fuel and/or grease tank trailers or other miscellaneous trailers; Vacuum Trucks 7500 gals and over and truck repairman

GROUP 5: Dump trucks, 65 yds. and over; Holland hauler; Low bed Heavy Duty Transport over 7 axles

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

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Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).

The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of "identifiers" that indicate whether the particular rate is a union rate (current union negotiated rate for local), a survey rate (weighted average rate) or a union average rate (weighted union average rate).

Union Rate Identifiers

A four letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than "SU" or "UAVG" denotes that the union classification and rate were prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of the union which prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. 07/01/2014 is the effective date of the most current negotiated rate, which in this example is July 1, 2014.

Union prevailing wage rates are updated to reflect all rate changes in the collective bargaining agreement (CBA) governing this classification and rate.

Survey Rate Identifiers

Classifications listed under the "SU" identifier indicate that no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As this weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates the rates are survey rates based on a weighted average calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier.

Survey wage rates are not updated and remain in effect until a new survey is conducted.

Union Average Rate Identifiers

Classification(s) listed under the UAVG identifier indicate that no single majority rate prevailed for those classifications; however, 100% of the data reported for the classifications was union data. EXAMPLE: UAVG-OH-0010 08/29/2014. UAVG indicates that the rate is a weighted union average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage determination. 08/29/2014 indicates the survey completion date for the classifications and rates under that identifier.

A UAVG rate will be updated once a year, usually in January of each year, to reflect a weighted average of the current negotiated/CBA rate of the union locals from which the rate is based.

WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

- * an existing published wage determination
- * a survey underlying a wage determination
- * a Wage and Hour Division letter setting forth a position on a wage determination matter
- * a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations
Wage and Hour Division
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board
U.S. Department of Labor

200 Constitution Avenue, N.W.
Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

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END OF GENERAL DECISION

Asbestos Removal
 worker/hazardous material
 handler (Includes
 preparation, wetting,
 stripping, removal,
 scrapping, vacuuming, bagging
 and disposing of all
 insulation materials from
 mechanical systems, whether
 they contain asbestos or not)....\$ 31.13 6.95

 BOIL0549-002 01/01/2013

	Rates	Fringes
BOILERMAKER		
(1) Marin & Solano Counties.\$ 42.06	42.06	33.43
(2) Remaining Counties.....\$ 38.37	38.37	31.32

 BRCA0003-001 06/01/2011

	Rates	Fringes
MARBLE FINISHER.....\$ 28.02	28.02	12.22

 BRCA0003-004 05/01/2011

AREA 1: ALPINE, AMADOR, BUTTE, COLUSA, EL DORADO, GLENN,
 LASSEN, MODOC, NEVADA, PLACER, PLUMAS, SACRAMENTO, SHASTA,
 SIERRA, SUTTER, TEHAMA, YOLO AND YUBA COUNTIES

AREA 2: MARIN, NAPA, SISKIYOU, SOLANO, SONOMA AND TRINITY
 COUNTIES

	Rates	Fringes
BRICKLAYER		
AREA 1.....\$ 35.11	35.11	18.99
AREA 2.....\$ 39.85	39.85	22.00

SPECIALTY PAY:

- (A) Underground work such as tunnel work, sewer work,
 manholes, catch basins, sewer pipes and telephone conduit
 shall be paid \$1.25 per hour above the regular rate. Work
 in direct contact with raw sewage shall receive \$1.25 per
 hour in addition to the above.
- (B) Operating a saw or grinder shall receive \$1.25 per hour
 above the regular rate.
- (C) Gunite nozzle person shall receive \$1.25 per hour above
 the regular rate.

 BRCA0003-008 07/01/2013

	Rates	Fringes
TERRAZZO FINISHER.....\$ 33.15	33.15	13.93
TERRAZZO WORKER/SETTER.....\$ 39.95	39.95	24.39

ATTACHMENT D

California Department of Water Resources (DWR) Integrated Regional Water Management Grant Program, and the U.S. Department of Interior, Bureau of Reclamation (USBR) WaterSmart Program Funding Outreach Requirements

1. INTRODUCTION

- A. State Funding: Funding for this Project comes in part from state Prop 84 funds, which requires outreach to Small Business Enterprises (SBE) and Disabled Veteran Enterprises (DVBE).
- B. Federal Funding: Funding for this Project comes in part from federal funds, which requires outreach to disadvantaged business enterprises (DBE).
- C. The goal of this document is to notify Contractor of compliance measures required under state and federal regulations. However, this document shall not operate to relieve Contractor of its duty to become fully informed regarding applicable state and federal regulations.
- D. Reporting of outreach efforts for state/federal funding requirements shall be done on the forms described in this document.
- E. In this document and on related forms, the acronym DBE, SBE, and DVBE is described as follows:

DBE Disadvantaged Business Enterprise

For the purposes of this Contract, a DBE means a business enterprise that is owned and controlled by one or more socially and economically disadvantaged persons as defined by the Small Business Administration, Environmental Protection Agency, or US Department of Transportation.

SBE Small Business Enterprise

For the purposes of this Contract, a SBE means a business enterprise that is independently owned and operated, not dominant in field operations, and has fewer than 100 employees as defined by the California Department of General Services, Small Business Eligibility Requirements. See:

<http://www.dgs.ca.gov/pd/Programs/osds/sbeligibilitybenefits.aspx>

DVBE Disabled Veteran Business Enterprise

For the purposes of this contract, a DVBE means a business enterprise that is owned and controlled by a veteran of the U.S. military, naval, or air service with a service-connected disability as defined by the California Department of General Services, Disabled Veteran Business Enterprise Eligibility Requirements. See

<http://www.dgs.ca.gov/pd/Programs/OSDS/DVBEEligibilityBenefits.aspx>

- F. The following acronyms are sometimes used in this document and on related forms to describe federal agencies that provide resources that should be used to conduct outreach efforts described in Section 2 (Outreach Requirements):
 1. Small Business Administration (SBA)
 2. Minority Business Development Agency (MBDA)
 3. State of California Office of Small Business & Disabled Veteran Business Enterprise Services (OSDS)
- G. To qualify as a DBE, a business must be certified by the U.S. EPA, U.S. Small Business Association, U.S. Department of Transportation, or by another state, local, tribal, or private entity whose certification criteria match those maintained by these federal agencies. To qualify as a SBE/DVBE, a business must be certified by the State of California Office of Small Business and DVBE Certification (OSDS). Evidence of such certification is required and shall be provided to the Owner with Document 00454 (Summary Subcontractors/Suppliers/Vendors/Service Providers Hired).

2. OUTREACH REQUIREMENTS

- A. Contractor shall take the following affirmative steps during bidding and throughout the life of the Project to assure that DBE/SBE/DVBE firms are used whenever possible.

STEP 1: Include qualified DBE/SBE/DBVE enterprises on solicitation lists.
Contractor shall ensure DBE/SBE/DVBE enterprises are made aware of contracting opportunities to the fullest extent possible through outreach and recruitment activities. For example, publish notices in trade papers or newspapers and advertise on the websites of the following agencies: SBA and MBDA. Additional online resources are listed in Paragraph 7, below.
STEP 2: Assure that DBE/SBE/DVBE enterprises are solicited whenever they are potential sources.
Solicitation should be as broad as possible and should occur throughout the life of the Project whenever procuring supplies, construction, or services. (See Step 5, below, for solicitation-related requirements.)
STEP 3: Divide the total requirements, when economically feasible, into smaller tasks or quantities to permit maximum participation by DBE/SBE/DVBE enterprises.
Consider in the scope of work whether portions of the work could be feasibly procured with DBE enterprises. This will include dividing total requirements into smaller tasks or quantities to permit maximum participation by DBE/SBE/DVBEs.
STEP 4: Establish delivery schedules, where the requirements of the work permit, which will encourage participation by DBE/SBE/DVBE enterprises.
Make information on opportunities available to DBE/SBE/DVBE enterprises well in advance, arrange time frames for contracts and establish delivery schedules in a way that encourages and facilitates participation by DBE/SBE/DVBEs.

STEP 5: In soliciting qualified firms, use the services of the U.S. Small Business Administration (SBA) and the Minority Business Development Agency (MBDA), and the State Office of Small Business and Disabled Veteran Enterprise (OSDS).

These agencies offer several services that are provided at no cost, including Internet access to databases of DBE/SBE/DVBE enterprises and the ability to post an advertisement seeking qualified DBE/SBE/DVBE firms. Contractor must provide evidence (documentation) to Owner that the services of SBA, MBDA, and OSDS were used. See Table 1 below for website addresses.

TABLE 1. ACCESSING RESOURCES AND PRODUCING DOCUMENTATION

Resources
<p>1. Small Business Administration (SBA)</p> <p>A. Contractor can search and advertise for DBE services and supplies at the SBA website. Documentation, including negative reports should be provided to show proof of outreach.</p> <ul style="list-style-type: none"> ➤ To perform searches for DBE firms, go to: <ul style="list-style-type: none"> ✓ http://web.sba.gov/pro-net/search/dsp_dsbs.cfm ➤ To document searches Contractor can: <p>Print Adobe PDF copy of search results from the website, showing website address, description of work, search criteria, and date of search. Use reasonably broad search criteria for geographic boundaries and work descriptions to maximize the probability of generating a list of qualified DBEs. Contractor should try to make an effort to seek DBE firms working in the same geographic area in which Contractor seeks subcontractors/services for a given solicitation.</p> ➤ To post opportunities for DBE firms (registration required) go to: <ul style="list-style-type: none"> ✓ http://web.sba.gov/subnet ➤ To document postings: <ul style="list-style-type: none"> ✓ Print Adobe PDF copy of posting from the website, showing website address and date of post. <p>B. Contractor should make an effort to send each entity on the list of qualified DBEs from the search results above a solicitation. Documentation, including negative reports should be provided:</p> <ul style="list-style-type: none"> • Evidence that qualified DBEs from the search results were solicited should be provided. Evidence may be in the form of emails, faxes, letters, or phone logs.

Resources**2. U.S. Department of Commerce Minority Business Development Agency (MBDA):**

A. Contractor can search and advertise for DBE services and supplies at the MBDA website. Documentation, including negative reports should be provided to show proof of outreach.

- To perform searches for DBE firms, go to:
 - ✓ <http://www.mbda.gov/index.cfm?fuseaction=bls.main>
- To document searches Contractor can:
 - ✓ Print Adobe PDF copy of search results from the website, showing website address, description of work, search criteria, and date of search. Use reasonably broad search criteria for geographic boundaries and work descriptions to maximize the probability of generating a list of qualified DBEs. Contractor should try to make an effort to seek DBE firms working in the same geographic area in which Contractor seeks subcontractors/services for a given solicitation.
- To post opportunities for DBE firms (registration required), go to:
 - ✓ www.mbda.gov/
- To document postings:
 - ✓ Print Adobe PDF copy of posting from the website, showing website address and date of post.

B. Contractor should make an effort to send each entity on the list of qualified DBEs from the search results above a solicitation. Documentation, including negative reports should be provided:

- Evidence that qualified DBEs from the search results were solicited should be provided. Evidence may be in the form of emails, faxes, letters, or phone logs.

Resources

3. State of California Office of Small Business & Disabled Veteran Business Enterprise Services (OSDS):

A. Contractor can search and advertise for SBE/DVBE services and supplies at the OSDS website. Documentation, including negative reports should be provided to show proof of outreach.

- To perform searches for SBE/DVBE firms, go to:
 - ✓ <http://www.dgs.ca.gov/pd/programs/osds.aspx>
- To document searches Contractor can:
 - ✓ Print Adobe PDF copy of search results from the website, showing website address, description of work, search criteria, and date of search. Use reasonably broad search criteria for geographic boundaries and work descriptions to maximize the probability of generating a list of qualified SBE/DVBEs. Contractor should try to make an effort to seek SBE/DVBE firms working in the same geographic area in which Contractor seeks subcontractors/services for a given solicitation.
- To document solicitation of SBE/DVBEs from search results:
 - ✓ Send each entity on the list of qualified SBE/DVBEs a solicitation. Evidence may be in the form of emails, faxes, letters, and/or phone logs.

B. OSDS site does not provide the ability to post opportunities.

3. DOCUMENTATION OF OUTREACH EFFORTS

- A. Owner requires evidence that Contractor has followed the affirmative steps above.
- B. Prior to Bid, use form Document 00457 (Affirmative Steps Checklist) to document your DBE/SBE/DVBE enterprises solicitation efforts. Read it carefully, follow its directions, and attach backup documentation described in Table 1 above.
- C. After issuance of Notice of Intent to Award and for the duration of Project, use Document 00455 (Summary of Subcontractors/Suppliers/Vendors/Service Providers Hired Post Award) to document your DBE/SBE/DVBE enterprises solicitation efforts. Read it carefully, follow its directions, and attach backup documentation described in Table 1 above.
- D. In addition to the foregoing documentation requirements, Contractor shall provide semiannual reports on DBE/SBE/DVBE enterprises utilization using Document 00459 (Semi-Annual DBE/SBE/DVBE Procurement Report).

4. ADMINISTRATIVE REQUIREMENTS

- A. Contractor shall pay its subcontractors/suppliers/vendors for satisfactory performance no more than 30 days from the Contractor's receipt of payment from the Owner; and

- B. If a DBE/SBE/DVBE subcontractor/supplier/vendor fails to complete work under the subcontract for any reason, Contractor shall undertake the outreach steps described in Section 2, above, if soliciting a replacement subcontractor/supplier/vendor.

5. OTHER USEFUL RESOURCES

The web sites in the table below offer resources for expanding searches for eligible DBE/SBE/DVBEs beyond those required sources listed above.

Other Useful DBE Resources
<p>California Public Utilities Commission (CPUC) CPUC maintains a database of DBE-owned business enterprises and serves to inform the public. http://www.cpuc.ca.gov/puc/supplierdiversity</p>
<p>California Department of Transportation (Caltrans) Based on the federal Disadvantaged Business Enterprises (DBE) program, Caltrans maintains a database and provides directories of minority and woman-owned firms. Always print the search results page(s) and keep them with the rest of the documentation. www.dot.ca.gov/hq/bep</p>
<p>North American Industry Classification System (NAICS Code Search Tools) Search by keyword or SIC code to get NAICS code http://www.naics.com/search.htm</p>
<p>U.S. EPA Office of Small, Disadvantaged Business Utilization (OSDBU) OSDBU’s mission includes “fostering opportunities for partnerships, contracts, sub-agreements, and grants for small and socioeconomically disadvantaged concerns.” One of the resources to assist prime contractors is a listing of small and disadvantaged businesses (a vendor profile system) registered with OSDBU. http://cfpub.epa.gov/sbvps/</p>

SECTION 01416

REGULATORY REQUIREMENTS - LABOR COMPLIANCE PROGRAM

1.1 APPLICABILITY

- A. This Project is funded in part through Proposition 84 (Safe Drinking Water, Water Quality and Supply, Flood Control, River and Coastal Protection Bond Act of 2006), and as such requires the Owner to implement a Labor Compliance Program (LCP) approved by the Department of Industrial Relations.

1.2 GENERAL

- A. Due to Proposition 84 funding for Project, Owner is required to operate a State-approved LCP pursuant to California Labor Code sections 1771.5 and 1771.7. All Contractors and Subcontractors shall be required to comply with Owner's LCP, as may be amended from time to time by Owner. If Owner adopts an amended or new LCP, Contractor will be provided with a copy of the new LCP, which shall be effective within 10 Days of Contractor's receipt thereof.
- B. Contractor and Subcontractors are responsible for complying with each and every applicable prevailing wage law and Owner's Labor Compliance Program. Strict adherence to all provisions of the LCP is mandatory.

1.3 LABOR COMPLIANCE STANDARDS

- A. Owner's LCP contains the labor compliance standards required by state and federal laws, regulations, and directives, as well as Owner policies and contract provisions, which include, but are not limited to, the following:
 - 1. Payment of applicable general prevailing wage rates.
 - 2. Record-keeping.
 - 3. Employment of properly registered apprentices.
 - 4. Providing certified payroll records upon request but not less than weekly.
 - 5. Monitoring construction sites for the verification of proper payments of prevailing wage rates and work classification.
 - 6. Pre-job conferences with contractors/subcontractors.
 - 7. Communications with the State addressing and resolving noncompliance issues.
 - 8. Withholding contract payments and imposing penalties for noncompliance.
 - 9. Preparation and submittal of annual reports.

END OF SECTION

Sonoma Valley County Sanitation Labor Compliance Program

Sonoma Valley County Sanitation District has designed this program for the purpose of implementing its policies relative to the labor compliance provisions of state and federally funded public works contracts; to comply with statute which mandate a labor compliance program be in place.

Sonoma Valley County Sanitation District LCP will adhere to the statutory requirements as enunciated in Section 1771.5(b) of CA Labor Code. It is the intent of Sonoma Valley County Sanitation District to actively enforce this LCP by having North Valley Labor Compliance monitor Sonoma Valley County Sanitation District construction projects for the payment of prevailing wage rates, and by requiring contractors and sub contractors having workers on projects to submit certified payroll and supporting documents to demonstrate their compliance with prevailing wage requirements.

Should applicable sections of CA Labor Code or Title 8 of the CA Code of Regulations be amended Sonoma Valley County Sanitation District LCP will modify the affected portions of this program accordingly.

CF/0-0-21 North Valley Labor Compliance Services
(Agree for Labor Compliance Program Manual for
Sonoma Valley CSD) TW 13/14-114 (ID 5000)

TABLE OF CONTENTS

I. LABOR COMPLIANCE PROGRAM OUTLINE, LABOR COMPLIANCE OFFICER DUTIES

Components on Labor Compliance Program	Page 4
Insert correct prevailing wage language in Notice to Bidders and Contract	Page 5
Provide Information to Contractors	Page 5
Make certain PWC 100 is submitted	Page 6
Provide Information to workers and support worker complaints	Page 6
Perform audits and investigations	Page 6
Pursuant to 16434(d) written summary of activities	Page 7
Submit Form 700 (FPPC), pursuant to CCR 16430	Page 7
Pursuant to 16430 submittal of annual report each year	Page 7

II. LABOR COMPLIANCE MANUAL

Section 1 – Contractor Requirements	Page 8-10
Section 2 – Review of Certified Payroll Records	Page 11-15
Section 3 – Audit of Certified Payroll Records	Page 16-17
Section 4- Public Requests for Certified Payroll Records	Page 18-19
Section 5 – Apprenticeship	Page 20-21
Section 6 – Prevailing Wage Determinations	Page 22-24
Section 7 – List of Prevailing Wage Rate Employer Payments and Exclusions	Page 25-26
Section 8 – Investigative Procedures, Enforcement, Penalties, Forfeitures and Withholdings, Hearings	Page 27-36
Section 9 – Duties of Labor Compliance Program	Page 37-38
Section 10- Annual Report	Page 39

TABLE OF CONTENTS (continued)

III. Appendices

APPENDIX "A" Suggested Checklist of Labor Law Requirements to Review at Pre-job conference

APPENDIX "B" Audit Record Worksheet

APPENDIX "C" Labor Compliance Review and Enforcement Report Form

APPENDIX "D" Request for Approval of Forfeiture

APPENDIX "E" Notice of Temporary Withholding

APPENDIX "F" Notice of Right to Obtain Review

APPENDIX "G" Notice of Withholding of Contract Payments

APPENDIX "H" Notice of Transmittal

APPENDIX "I" Notice of Opportunity to Review Evidence

APPENDIX "J" Request to Review Evidence

APPENDIX "K" Forms for Awarding Body, Contractor and subcontractors

PWC 100 to be submitted electronically to the DIR/DAS

Forms to be submitted by the contractor and subcontractors

1. DAS 140 – Public Works Contract Award Form
2. Fringe Benefit Statement
3. DAS 142- Request for the Dispatch of Apprentices
4. Statement of Compliance
5. Form A-131 DLSE Wage Reporting Form
6. Non-Performance or Negative Payroll Form
7. CAC Training Fund Contribution Form
8. Subcontractor Affidavit Upon Receipt of Final Payment
9. Contractor Affidavit of Compliance

APPENDIX "L" Annual Report- Pursuant to CCR 16431 LCP AR-1

APPENDIX "M" Form 700

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LABOR COMPLIANCE OFFICER RESPONSIBILITIES

Components of the Labor Compliance Program

Pursuant to CCR 16421

(a) In accordance with Labor Code Section 1771.5(b), a Labor Compliance Program shall include, but not be limited to, the following requirements:

(1) The Call for Bids, Design-Build Request, and the contract or purchase order shall contain appropriate language concerning the requirements of Chapter 1 of Part 7 of Division 2 of the Labor Code.

(2) A prejob conference shall be conducted before commencement of the work with contractors and subcontractors listed in the bid or who are required to be identified or prequalified in a Design-Build Contract. At the prejob conference applicable federal and state labor law requirements shall be discussed, and copies of suggested reporting forms furnished. A checklist, showing which federal and state labor law requirements were discussed, shall be kept for each conference. A checklist in the format of Appendix A presumptively meets this requirement.

(3) A requirement that certified payroll records be kept by the contractor in accordance with Labor Code Section 1776 and furnished to the Labor Compliance Program at times designated in the contract, which shall be at least monthly, or within 10 days of any request by the Awarding Body. Use of the current version of DIR's "Public Works Payroll Reporting Form" (A-1-131) and Statement of Employer Payments (PW26) constitute presumptive compliance with the requirement for certified payroll records kept in accordance with Labor Code Section 1776, provided the forms are filled out accurately and completely. These suggested forms are available from the Department of Industrial Relations.

(4) A program for orderly review of payroll records and, if necessary, for audits to verify compliance with the requirements of Chapter 1 of Part 7 of Division 2 of the Labor Code.

(5) A prescribed routine for withholding penalties, forfeitures, and underpayment of wages for violations of the requirements of Chapter 1 of Part 7 of Division 2 of the Labor Code.

(6) All contracts to which prevailing wage requirements apply shall include a provision that contract payments shall not be made when payroll records are delinquent or inadequate.

(d) Nothing in this section or these regulations shall be construed as limiting the responsibility and authority of an Awarding Body to take cognizance of prevailing wage violations under Section 1726 of the Labor Code and take any appropriate action pursuant to and in accordance with that responsibility and authority.

(e) It is the responsibility of a Labor Compliance Program to enforce prevailing wage requirements, consistent with the policy of the state as expressed in Labor Code Section 90.5(a). A Labor Compliance Program shall take reasonable, vigorous, and prompt action to (1) determine whether violations exist, and (2) enforce compliance,

including through imposition of appropriate penalties and formal enforcement action, when violations are found. A Labor Compliance Program shall neither avoid use of its enforcement authority based on cost considerations nor shall it use that authority in an unreasonable manner to gain leverage over a contractor or subcontractor. Unreasonable use of enforcement authority includes, but is not necessarily limited to, prolonged or excessive withholdings of contract payments without making a determination that a violation has occurred.

(f) The failure of an Awarding Body or Labor Compliance Program to comply with any requirement imposed by this subchapter shall not of itself constitute a defense to the failure to pay prevailing wages or to comply with any other obligation imposed by Chapter 1 (commencing with Section 1720), Part 7, Division 2 of the Labor Code.

To ensure the successful compliance and implementation of this labor compliance program, the following list of activities are conducted by the labor compliance officer:

Provide Information to the Contractors and Subcontractors

The Labor Compliance Officer shall:

- 1. a) Make certain the Awarding Body has accurate prevailing wage language in the bid advertisement, bid form, and contract.

Notice to Contractors

All advertisements or solicitations for bids for public works/prevailing wage projects must contain appropriate language concerning the requirements of Chapter 1 of Part 7 of Division 2 of the Labor Code, as set forth in CA Labor Code, 1720-1861 et seq. The Notice shall also contain the effective date of the Director’s approval of the labor compliance program, a telephone number to call for inquiries, questions or assistance with regard to the Labor Compliance Program. The first advertisement that is printed or made public sets the prevailing wage rates for the life of the project.

Construction Contract/General Requirements

Contracts issued between the Awarding Body and Contractor(s) must contain all components and wording required by California Labor Code and CA Code of Regulations. The Labor Compliance Officer also requires contracts to be signed between the prime and their subcontractors which contain prevailing wage requirements pursuant to CA Labor Code 1775(B)(1) “The contract executed between the contractor and the subcontractor for the performance of work on the public works project shall include a copy of the provisions of Sections 1771, 1775, 1776, 1777.5, 1813 and 1815.

- b) Preside over the labor compliance portion of all pre-bid and pre-construction meetings.

The Labor Compliance Officer will hold a mandatory pre-construction meeting for awarded contractors pursuant to Labor Code 1771.5(b)(2). At this meeting, the Labor Compliance Officer, will discuss prevailing wage requirements and answer questions. State wage determinations and resource materials are discussed.

- c) Design and provide specific forms to ensure labor compliance.

- d) Provide training and support for all contractors and subcontractors performing labor on the project(s).
- e) Monitor, log and track all incoming forms, payrolls and certifications.
- f) Interview workers on the jobsites to verify proper classifications and correct wage rates.
- g) Conduct audits (Appendix B)

Random, On-Site Inspection

- 2. Random, on-site inspections are conducted to observe and interview workers and check hourly wages and classifications. Either the Labor Compliance Officer or field investigator, who has construction experience and is familiar with classifications and has prevailing wage experience, will conduct the interviews. These interviews will occur weekly in accordance with CA Code of Regulations 16432(d), or confirmation of payroll records pursuant to CCR 16432(c) All onsite interviews shall include visual inspection of (1) "the copy of the wage determination(s) of the Director of Department of Industrial Relations of the prevailing wage rate of per diem wages required to be posted at each job site in compliance with Labor Code Section 1773.2 and (2) the Notice of Labor Compliance Approval required to be posted at the job site in accordance with section 16429, listing a telephone number to call for inquiries, questions, or assistance with regard to the Labor Compliance Program."

Cross reference on-site interview information with the Project Inspector of Record (IOR) and Project Superintendent's daily reports. All workers performing labor on the project each day are listed on the IOR's Daily Report with classifications and head counts for each contractor indicated, and the type of work they are performing.

Awarding Body Responsibility

- 3. Pursuant to Labor Code 1773.3 the Awarding Agency will submit the PWC 100 to the DIR/DAS for contract award.

Provide Information and Support for Worker Complaints

- 4.
 - a) Investigate worker complaints
 - b) Respond to complaints and requests for certified payroll from public entities.
 - c) Gather supporting documents.
 - d) Review findings.
 - e) Complete summary of investigation and findings.
 - f) Settlement negotiations.

Summary of Activities Pursuant to CCR 16434(d)

- 5.
 - (d) For each public work project subject to a Labor Compliance Program's enforcement of prevailing wage requirements, a separate, written summary of labor compliance activities and relevant facts pertaining to that particular project shall be maintained. That summary shall demonstrate that reasonable and sufficient efforts

have been made to enforce prevailing wage requirements consistent with the practice of the Labor Commissioner. Appendix C following this section provides a suggested format for tracking and monitoring enforcement activities. Compliance records for a project shall be retained until the later of (1) at least one year after the acceptance of the public work or five years after the cessation of all labor on a public work that has not been accepted, or (2) one year after a final decision or judgment in any litigation under Labor Code Section 1742. For purposes of this section, a written summary or report includes information maintained electronically, provided that the summary or report can be printed out in hard copy form or is in an electronic format that (1) can be transmitted by e-mail or compact disk and (2) would be acceptable for the filing of documents in a federal or state court of record within this state.

Annual Reports and Filing of Form 700 (FPPC)

- 6.
 - a) The Labor Compliance Officer will keep a written summary of activities pursuant to CCR 16434(d)
 - b) The Labor Compliance Officer will submit annual reports pursuant to CCR 16431 on the LCP AR1 form and submit the report by August 31 each year for the period of July 1- June 30th of the preceding year.
 - c) Pursuant to CCR 16430 (a) an awarding body that operates either its own labor compliance program or that contracts with a third party to operate all or part of its labor compliance program shall determine and designate those employees and consultants of the program who participate in making governmental decisions for the Awarding Body within the meaning of Title 2, California Code of Regulations, sections 18700-18702.4. Those designated employees and consultants shall be required to file Statements of Economic Interest (FPPC Form 700) and to comply with other applicable requirements of the Political Reform Act (commencing with Section 87100 of the Government Code) in connection with work performed on behalf of the Awarding Body. Pursuant to CCR 16430 (b) Designated employees and consultants who operate or are employed by a third party labor compliance program shall file their Statements of Economic Interest (FPPC Form 700) with the filing office of each Awarding Body with which the third party program contracts, unless the Department of Industrial Relations or the Fair Political Practices Commission specifies a different or alternative filing location.

END OF SECTION

II

LABOR COMPLIANCE MANUAL

For every day a worker works on a job or project that is funded with funds that by statute require a Labor Compliance Program be enforced, and is paid for that work, the employer must pay each worker who performs labor the prevailing rate of per diem wages for holiday and overtime work and certify that the worker was paid correctly. In addition to keeping the payroll records available for the public to see, all contractors bidding public works projects must use the current prevailing wage determinations to bid the labor portion of the project.

All contractors who bid on public works are encouraged to print a current copy of the California Labor Code and California Code of Regulations. They should be familiar with all the sections of these two documents, in order to be in compliance with the public works laws.

SECTION I**CONTRACTOR REQUIREMENTS**

The contractor and each subcontractor shall maintain payrolls and basic records (timecards, cancelled checks, cash receipts, trust fund forms, accounting ledgers, tax forms, superintendent and foreman daily logs etc.) during the course of the work on District projects which are subject to LCP. Such records shall include the name, address, social security number of each worker, his or her classification, a general description of the work each employee performed each day, the rate of pay (including rates of contributions for, or costs assumed to provide fringe benefits), daily and weekly number of hours worked, and actual wages paid.

1. Public Works Contract Award Form DAS 140

Pursuant to CA Labor Code 1777.5(e) the DAS 140 must be filled out with the appropriate apprenticeship box checked from all contractors and subcontractors to the appropriate apprenticeship committee(s), pertaining to each trade, within 10 days of contract signing with the General/Prime Contractor or at least prior to commencing work on the public works project. Two copies of the DAS 140 are provided to the Prime Contractor from each subcontractor so the Prime can forward a copy to the Labor Compliance Officer. Also confirmation of submittal to the

State approved training committee is requested, either fax confirmation or a copy of the certified mail receipt.

2. Appendix "A" checklist of labor law requirements

The Appendix "A" will be discussed in detail at the pre bid and pre construction meetings, a signed Appendix "A" will be required from the Prime and all subcontractors on the project.

3. Fringe Benefit Statement Form, Statement of Employer Payments

Fringe Benefits can be paid by the Contractor in cash directly to the workers or directly to a fund or both. The Fringe Benefit Statement Form includes the names and addresses of funds to which fringes are paid or if cash is paid to the employee or both. Training fees are indicated by trade and to what program and how much per hour are contributed. A separate form is used for each trade. The figures on the form, added to the basic hourly rate or wages on the payroll, should add up to the total hourly prevailing wage amount for the applicable determination.

4. Request for Dispatch of Apprentices Form DAS 142

Pursuant to CA Labor Code 1777.5(e) each contractor that employs workers in an apprenticeable craft must request the dispatch of apprentices from a state approved apprenticeship training committee within 72 hours of commencing work on a public works project. A copy of the DAS 142 and proof of submittal must be provided to the Prime Contractor in duplicate, so a copy can be forwarded to the Labor Compliance Officer. Also each contractor must provide proof of submittal, either fax confirmation or certified mail receipt.

5. Payrolls

All payrolls submitted for review during the course of the contract are logged. The schedule for submitting payroll(s) is indicated in the General Requirements of the contract documents. The Prime Contractor must review their subcontractors' payrolls before they are submitted to check for errors, omitted dates, signatures, or other information and to make sure all components required in the payrolls are included. Pursuant to CA Labor Code 1776 all payrolls must include one complete copy with:

- a. Employee full name, address and social security number.
- b. Full work classification, DIR recognized.
- c. The hourly pay rate, the basic hourly rate added to the fringes and training on the Fringe Benefit Statement (FBS) must equal the Prevailing Wage Rate for that classification. A new FBS must be submitted for each craft if there are any predetermined increases for crafts pertaining to each contractor.
- d. Total regular, overtime and holiday hours and hourly rate indicated.
- e. The contractor's full name, address, project and name and location, license and workers compensation number.

- f. The dates of the payroll(s).
- g. An attached certification including matching dates to the payroll(s) and the signature and title of the person responsible for the payroll. Payroll(s) may be copies but the certification must be original.

The Labor Compliance Program requires that Owners, Partners, Owner-Operators or Officers of Corporations performing labor on prevailing wage projects must be paid **no less** than prevailing wage rates. There are no exceptions unless they are in supervisory capacity.

The Labor Compliance Officer (LCO) checks that all payrolls are complete, accurate and received each month before the Prime Contractor's pay application is processed and the check issued. Every payroll is randomly checked for correct classifications, pay rate, overtime, apprentice ratios and accurateness. If there are any items missing then the Prime Contractor is notified immediately and a notice is sent requesting needed documents or outlining discrepancies and requesting corrections within 10 days pursuant to CA Labor Code 1776(d).

All components of the Labor Compliance Program are highly confidential. Names and Social Security Numbers of individuals on payrolls are not made available to anyone except the Division of Labor Standards Enforcement, the Department of Industrial Relations or the Division of Apprenticeship Standards, when requested.

END OF SECTION

SECTION 2

REVIEW OF CERTIFIED PAYROLL RECORDS

Submitting Payrolls

The contractor and each subcontractor shall maintain weekly certified payroll records pursuant to Labor Code Section 1776, for submittal to the Labor Compliance Officer. The contractor shall be responsible for the submittal of payroll records of all its subcontractors. All certified payroll records shall be accompanied by a statement of compliance signed by the contractor or each subcontractor indicating that the payroll records are correct and complete, that the wage rates contained therein are not less than those determined by the Director of the Department of Industrial Relations, and that the classifications set forth for each employee conform with the work performed. Each week of payroll must be filled out completely and dated correctly.

Privacy Considerations pursuant to CCR 16403

(a) Records received from the employing contractor shall be kept on file in the office or entity that processed the request for at least 6 months following completion and acceptance of the project. Thereafter, they may be destroyed unless administrative, judicial or other pending litigation, including arbitration, mediation or other methods of dispute resolution, are in process. Copies on file shall not be obliterated in the manner prescribed in subdivision (b) below;

(b) copies provided to the public upon written request shall be marked, obliterated or provided in such a manner that the name, address and Social Security number, and other private information pertaining to each employee cannot be identified. All other information including identification of the contractor shall not be obliterated;

(c) the public entity may affirm or deny that a person(s) was or is employed on a public works contract (by a specific contractor) when asked, so long as the entity requires such information of an identifying nature which will reasonably preclude release of private or confidential information.

Pursuant to CCR 16404, Use of Electronic Reporting forms

The certified payroll records required by Labor Code Section 1776 may be maintained and submitted electronically subject to all of the following conditions:

(a) The reports must contain all of the information required by Labor Code Section 1776, with the information organized in a manner that is similar or identical to how the information is reported on the Department of Industrial Relations' suggested "Public Works Payroll Reporting Form" (Form A-1-131);

(b) The reports shall be in a format and use software that is readily accessible and available to contractors, awarding bodies, Labor Compliance Programs, and the Department of Industrial Relations;

(c) Reports submitted to an awarding body, a Labor Compliance Program, the Division of Labor Standards Enforcement, or other entity within the Department of Industrial Relations must be either (1) in the form of a non-modifiable image or record that bears an electronic signature or includes a copy of any original

certification made on paper, or alternatively (2) printed out and submitted on paper with an original signature;

(d) The requirements for redacting certain information shall be followed when certified payroll records are disclosed to the public pursuant to Labor Code Section 1776(e), whether the records are provided electronically or as hard copies; and

(e) No contractor or subcontractor shall be mandated to submit or receive electronic reports when it otherwise lacks the resources or capacity to do so, nor shall any contractor or subcontractor be required to purchase or use proprietary software that is not generally available to the public.

Confirmation of Payroll Records pursuant to CCR 16432

The LCO may request copies of timecards, front and back copies of cancelled checks, daily logs, employee sign-in sheets and/or any other record maintained for the purposes of reporting payroll may be requested by the Labor Compliance Officer at any time and shall be provided within 10 days following the receipt of the request.

Full Accountability: each individual, laborer or craftsperson working on a public works contract must appear on the payroll. The basic concept is that the employer who pays the trade worker must report that individual on its payroll. This includes individuals working as apprentices in an apprenticeable trade. Owner-operators are to be reported by the contractor employing them, rental equipment operators are to be reported by the rental company paying the workers' wages.

Sole owners and partners who work on a contract must also submit a certified payroll record listing the days and hours worked, and the trade classification descriptive of the work actually done.

The contractor shall provide the records required under this section to the LCO within ten (10) days of each pay day, and available for inspection by the Department of Industrial Relations.

When the payrolls are received the LCO will log it on a spreadsheet, check rates, hours, dates, classification, overtime, and original signatures. Pursuant to CCR 16432(b) the payroll submitted by a contractor "shall be reviewed by the Labor Compliance Program as promptly as practicable after receipt thereof, but in no event more than 30 days after such receipt." If there are items missing or incomplete or out of compliance, a Notice will be sent to the Prime Contractor who then in turn will forward to their subcontractor. Compliance will be linked to each pay application. The District will withhold an amount equal to the underpayment from the Prime Contractor. The amount will be released when compliance is achieved. If compliance is not achieved then further Notices will be sent to the contractor and the LCO will follow the outlined enforcement procedures in Section 8 of this manual.

Responsibility for subcontractors

The Prime/General contractor shall be responsible for ensuring adherence to labor standard provisions by its subcontractors. Moreover, the prime contractor is responsible for Labor Code violations of its subcontractors in accordance with Labor Code 1775.

Payment to Employees

Employees must be paid unconditionally, and not less often than bi-weekly, the full amounts, that are due and payable for the period covered by the particular payday. Thus, an employer must establish a fixed work week (Sunday through Saturday, for example) and an established payday, (such as every Friday or the preceding day should such payday fall on a holiday). On each and every payday, each worker must be paid all sums due as of the end of the preceding workweek and must be provided with an itemized wage statement.

Payroll Forms

Contractors and subcontractors must keep payroll records in accordance with Section 1776 et seq. of the CA Labor Code

- a. Name of Company, Full Address, Prime Contractor, Contract Number, CA State Contractors License #, workers compensation policy #.
- b. Payroll number, week beginning and ending dates, project location.
- c. Full name, address, SS# of each worker.
- d. Complete work classification and description, if necessary.
- e. Hours of straight time, overtime, and holiday time worked; daily totals along with weekly totals.
- f. Actual per diem, holiday and overtime wages paid to each journeyman, apprentice, or any other worker that was on the site.
- g. Total Hourly rate of pay.
- h. Gross Amount.
- i. Benefits.
- j. Amount paid to the apprenticeship training program for the workers trade (if applicable).
- k. Deductions.
- l. Net amount and check #.

Certification Form Statement of Compliance

This form is usually found printed on the back of the single page payroll form. If not, the Contractor attaches a Statement of Compliance form to the payroll, with the certification signed and completely filled out. The box is checked indicating where the fringes are paid. The dates of the certification sheet must match the dates on the payroll. The person with authority to represent the company in a legal matter must sign the certification.

A certification is a legal document. The person having authority to verify its correctness and accuracy signs this document. (i.e. the owner, controller or a person with authority to sign legal documents.

To simplify referencing, all payrolls are numbered. This allows payrolls to be logged and aids in determining which payrolls have been received or are missing. If the LCO is missing one, this process enables them to request the payroll by number, so as to reduce the number of duplicated copies sent back and forth.

In addition to numbering the payrolls, the Contractor is instructed to write or stamp the word "FINAL" on the last payroll submitted for the project. This tells the LCO that the contractor will not be submitting additional payrolls for the project.

Non – Performance/Negative Payroll Reporting Form

This form shall be submitted in lieu of actual payrolls when the contractor or subcontractor is on and does not perform labor for the payroll week. Do not submit a Negative payroll until you have submitted an active payroll and started work on the project.

Fringe Benefit Statement

This form is required to be submitted at the time of the contract signing or at the latest with the first submitted payroll. Benefits to workers must be paid to them, either to acceptable funds or in their paychecks, and added to the basic hourly wage paid. The total amount of the hourly wage including benefits and training fees must meet or exceed the prevailing wage for that classification of worker.

Employer and Employee Definitions

Owners, Owner Operators, Corporate Officers and Partners

Owners, owner-operators, corporate officers and partners, on prevailing wage projects, will be at no less than the prevailing wage rates for their classification, if they perform work on the job site.

Owners or employees who are on the job site in a supervisory capacity, not performing labor, are required to report their hours on the payroll sheet and shall be marked as "supervisory".

Salaried Employees

A person on the job as a salaried employee, in a management capacity only (no physical labor with tools or a machine) is exempt from prevailing wage rates, but must report his hours on the project.

Worker

A person, who performs labor on the site, pursuant to CA Labor Code 1723, is classified as a worker and should be paid in accordance with the published wage rates.

Falsification and Failure to Comply

Falsification of Payroll records, Misclassification of work and or Failure to Accurately Report Hours of Work.

Falsification of payroll records and failure to accurately report hours of work is characterized as deliberate underreporting of hours of work; underreporting the headcount; stating that the proper prevailing wage rate was paid when, in fact it was not; clearly misclassifying the work performed by the worker; and any other deliberate and/or willful act which results in the falsification or inaccurate reporting of payroll records. Such violations are deemed to be willful violations committed with the intent to defraud.

Failure to make Employer Payments

Employer payments are defined as the amounts stipulated for fringe benefits or trust fund contributions and are determined to be part of the required prevailing wage rate. Failure to make employer payments or provide fringe benefits and/or make trust fund contributions in a timely manner is equivalent to payment of less than the stipulated wage rate and shall be reported to the Labor Commissioner, upon completion of an investigation and audit.

Kickbacks

The penalty for anyone who is found guilty of accepting fees, bribes, or any other form of Compensation or kick-backs, from a worker on a prevailing wage project, will be charged with a felony. Any person or company that attempts to charge a fee for registration or information about public works employment is guilty of a misdemeanor, pursuant to CA Labor Code 1778 and 1779.

END OF SECTION

SECTION 3

AUDIT OF CERTIFIED PAYROLL RECORDS

Audits shall be conducted by the LCO, and shall be conducted at the request of the Labor Commissioner to determine whether all tradesworkers on project sites have been paid according to the prevailing wage rates.

An audit record is sufficiently detailed to “verify compliance with the requirements of Chapter 1”, Public Works, of Part 7 of Division 2, when the audit record displays that the following procedures were accomplished:

Audits of the obligation to secure workers’ compensation means demanding written evidence of a binder issued by the carrier, or telephone or written inquiry to the Workers’ Compensation Insurance Rating Bureau;

Audits of the obligations to employ and train apprentices means inquiry to the program sponsor for the apprenticeable craft or trade in the area of the public works as to: Whether contract award information was received, including an estimate of journey-person hours to be performed and the number of apprentices to be employed; whether apprentices have to be requested, and whether the request has been met; whether the program sponsor know of any amounts sent by the contractor or subcontractor to it for the training trust, or the CA Apprenticeship Council; and whether persons listed on the certified payroll in the craft or trade as being less than the journeyperson rate are apprentices registered with that program and working under apprentice agreements approved by the Division of Apprenticeship Standards;

Audits of the obligation to pass through amounts made part of the bid for apprenticeship training contribution, to either the training trust or the CA Apprenticeship Council, means asking for copies of checks sent, or when the audit occurs more than 30 days after the month in which the payroll has been paid, copies of cancelled checks;

Audit of “illegal taking of wages” means inspection of written authorization for Deductions (listed in Labor Code Section 224) in the contractor or subcontractor’s Files and comparison to wage deduction statements furnished employees (Labor Code Section 226), together with an interview of several employees as to any payments not shown on the wage deduction statement;

Audits of the obligation to keep records of working hours, and pay not less than required by Title 8 CCR Section 16200(a)(3)(F) for hours worked in excess of 8 hours are the steps for review and audit of Certified Payrolls under Title 8 CCR Section 16432;

Audits of the obligation to pay the prevailing per diem wage, means such steps for Review and Audit of certified weekly payrolls which will produce a report covering compliance in the areas of;

All elements defined as the "General Prevailing Rate of Per Diem Wages" in Title 8 CCR Section 16000, which were determined to be prevailing in the Director's determination which was in effect on the date of the call for bids, available in its principal office and posted on the jobsite;

All elements defined as "Employer Payments" set forth in CCR, Section 16000 of these regulations, which were determined to be prevailing in the Director's determination which was in effect on the date of the call for bids, and pursuant to CA Labor Code Section 1773.2 was to be specified in the call for bids, made available in its principal office and posted on the jobsite.

END OF SECTION

SECTION 4

PUBLIC REQUESTS FOR CERTIFIED PAYROLL RECORDS

Requests for Payroll Records

Pursuant to Section 16400 of the CA Code of Regulations, requests may be made from any person for Certified copies of payroll records to any of the following entities:

- a) The Awarding Body
- b) Any office of the Department of Labor Standards Enforcement, or of the Division of Apprenticeship Standards.

Requests for payroll must be made in writing and contain the following information:

- 1. The name of the Awarding Body
- 2. The contract number and or description
- 3. The job location
- 4. The name of the contractor
- 5. The regular business address of the contractor

Note: Requests for records of more than one contractor or subcontractor must list the information regarding that contractor individually, even if all requests pertain to the same particular public works project. Blanket requests covering an entire public works project will not be accepted; unless the contractor and subcontractor responsibilities regarding the project are not clearly defined.

Acknowledgement of Request

The public entity receiving a request for payroll records must respond to the request for payroll records and indicate an estimated cost of providing payroll(s).

Request to Contractor

The request for copies of payroll records by the District can be in any form that will provide evidence of

Receipt thereof, and shall include the following:

1. Specify the records to be provided and the form upon which the information is to be provided.
2. Conspicuous notice of the following:
 - a) That the person certifying the copies of the payroll records is, if not the contractor, considered as an agent acting on behalf of the contractor.
And
 - b) Failure to provide certified copies of the records to the requesting public entity within 10 working days of the receipt of the request will subject the contractor to a penalty of One Hundred Dollars (\$100.00) per calendar day or portion thereof for each worker until strict compliance is achieved.
3. Cost of preparation per Section 16402 (see "cost" below).
4. Notice of the right of the District to inspect the original payroll records at the contractor's office upon reasonable written or oral notice.

Cost

The cost of preparation to each contractor, subcontractor or District, when the request was made shall be provided in advance to the person seeking the payroll record. These costs are as follows: pursuant to CCR 16402

1. One dollar(\$1.00) for the first page of the payroll records;
2. .25 cents for each page thereafter;
3. Ten dollars (\$10.00) for handling costs.

Payment shall be made in the form of cash, certified check or money order and shall be made payable prior to the release of the documents.

Privacy Considerations

Pursuant to CCR 16403, Privacy Considerations

(a) Records received from the employing contractor shall be kept on file in the office or entity that processed the request for at least 6 months following completion and acceptance of the project. Thereafter, they may be destroyed unless administrative, judicial or other pending litigation, including arbitration, mediation or other methods of dispute resolution, are in process. Copies on file shall not be obliterated in the manner prescribed in subdivision (b) below;

(b) copies provided to the public upon written request shall be marked, obliterated or provided in such a manner that the name, address and Social Security number, and other private information pertaining to each employee cannot be identified. All other information including identification of the contractor shall not be obliterated;

(c) the public entity may affirm or deny that a person(s) was or is employed on a public works contract (by a specific contractor) when asked, so long as the entity requires such information of an identifying nature which will reasonably preclude release of private or confidential information.

END OF SECTION

SECTION 5
APPRENTICESHIP

As specified by the apprenticeship laws, Section 1777.5 and 1777.6 of the CA Labor Code, each contractor and subcontractor is required to:

1. Notify the local apprenticeship committee of the award of a contract by submitting a copy of the Public Works Contract Award Form (DAS 140), for each trade employed;
2. Request the Dispatch of Apprentices by submitting a DAS 142 72 hours prior to starting work, for each craft the contractor will employ. A copy of the request needs to be sent to the Prime Contractor and a copy of proof of submittal, either fax confirmation or certified mail receipt. A Union Contractor will send this to their Union, if the contractor is a non Union contractor this is sent to the training committee they are approved to train through, if the contractor is not approved to train then they must send the request for apprentices to the state approved committee for the jurisdiction of the project. If the first committee cannot provide an apprentice then they have to send the DAS 142 to a second state approved committee found on the DAS website, if they cannot dispatch an apprentice then they will have to request from another committee and so on. Each contractor has to keep a copy of correspondence and proof of the requests.
3. Pay every apprentice the prevailing rate of per diem wages for apprentices in the trade to which the worker is registered.
4. Pay only apprentices who are in training under an apprentice program that has been approved by the Chief of the Division of Apprenticeship Standards (DAS) and are parties to written apprenticeship agreements.
5. Ensure the ratio of apprentices to Journeymen employed in a particular craft is no higher than the ratio stipulated in the standards under which the apprenticeship program operates, in no case shall the ratio be less than one (1) hour of apprenticeship work for every five (5) hours of Journeyman work. Where an hourly apprenticeship ratio is not feasible the Chief of the DAS may order a minimum ratio of not less than (1) apprentice for each five (5) Journeyman in a trade. Any work performed by a Journeyman in excess of 8 hours per day or 40 hours per week, shall not be used to calculate the hourly ratio required by this section.

6. It is unlawful for an employer or a labor union to refuse to accept otherwise qualified employees as registered apprentices on any public works, on the grounds of race, religious creed, color, or national origin, ancestry, sex or age.
7. Pay non-registered apprentices Journeyman's rates for the particular trade or craft.
8. Pay to either an approved Apprenticeship Committee or the CA Apprenticeship Council the apprenticeship training fees listed on the wage rate determination for each hour of work for all Journeymen and apprentices of that craft on the project.

Pursuant to Section 1777.5 of the CA Labor Code, this section shall not apply to contracts of General Contractors or contracts of specialty contractors not bidding for the work through a General or Prime Contractor, where the contracts of the General Contractors or those specialty Contractors involve less than thirty thousand dollars (\$30,000). Pursuant to section 1777.7(a)(1) "A Contractor or Subcontractor that is determined by the Chief of the DAS to have knowingly violated section 1777.5 shall forfeit as a civil penalty an amount not exceeding one hundred (\$100) for each full calendar day of non-compliance...."

Pursuant to CCR 16434(D) Failure to pay the correct apprentice rate or classifying a worker as an apprentice when not properly registered is equivalent to payment of less than the stipulated wage rate and shall be reported to the Labor Commissioner, upon completion of an investigation and audit.

Every employer on a publicly funded project must pay the state training fee, according to their trade, or trades, (if there is more than one involved). It must be withheld from the worker's pay and paid to the state approved apprenticeship program. It can be paid to a fund, the CA Apprenticeship Council, or to another state approved apprenticeship program. Should the administrator(s) of each fund send a letter refusing the funds, then and only then, the money must be paid to the worker, included in his paycheck, with his other benefits. This must be stated on the fringe benefit statement and must be accompanied by the letter(s) of refusal. There are NO OTHER EXCEPTIONS. Section 1777.5 through 1777.6 of the CA Labor Code contain these rules.

END OF SECTION

SECTION 6

PREVAILING WAGE DETERMINATIONS

The Department of Industrial Relations issues wage determinations twice a year, in February and August. At that time changes are made to wage rates, fringe benefit rates and/or training fees for the trades and classifications that contractor’s use on public works projects. Effective dates of determination are outlined in CCR 16204.

Asterisked Classifications

- a. Single asterisked (*) classifications: these are work pay rates that will not increase for the life of the project. The rate is set by the determination that is in effect for each trade at the time of the first bid advertisement.
- b. Double asterisked (**) classifications: these work classifications have increases posted with the determination so the contractors can calculate the increases for the life of the project.

The State publishes the wages on the website of the Department of Labor Statistics and Research (DLSR) and can also be obtained in writing or calling the DLSR. The basis for Determining the Prevailing Wage Rate is outlined in CCR 16200, and the Director shall follow those procedures specified in Section 1773 and 1777.5 of the Labor Code.

Pursuant to Labor Code 1773.4 “Any prospective bidder or his representative, any representative of any craft, classification or type of workman involved, or the awarding body may, within 20 days after commencement of advertising in the call for bids by the Awarding Body, file with the Director of Industrial Relations a verified petition to review the determination of any such rate upon the ground that they have not been determined in accordance with the provision of Section 1773 of this code.”

Projects subject to Prevailing Wage Law Pursuant to CCR 16001

(a) General Coverage. State prevailing wage rates apply to all public works contracts as set forth in Labor Code Sections 1720, 1720.2, 1720.3, 1720.4, and 1771.

(1) Any interested party enumerated in Section 16000 of these regulations may file with the Director of Industrial Relations or the Director's duly authorized representative, as set forth in Section 16301 of these regulations, a request to determine coverage under the prevailing wage laws regarding either a specific project or type of work to be performed which that interested party believes may be subject to or excluded from coverage as public works under the Labor Code. If such a request is filed by any party other than the awarding body, a copy of the

request must be served upon the awarding body, in accordance with the filing procedures set forth in Section 16302(d) of these regulations, when it is filed with the Director.

(2) Within 15 days of receipt of a copy of the request for a coverage determination, the awarding body shall forward to the Director or his/her duly authorized representative as provided for in Section 16301 of these regulations, any documents, arguments, or authorities it wishes to have considered in the coverage determination process.

(3) All parties to the coverage determination request shall have a continuing duty to provide the Director or his/her duly authorized representative as provided for in Section 16301 of these regulations, with relevant documents in their possession or control, until a determination is made. Where any party or parties' agent has a document in their possession, but refuses to release a copy, the Department shall consider that the documents, if released, would contain information adverse to the withholding party's position and may close the record and render a decision on the basis of that inference and the information received.

(b) Federally Funded or Assisted Projects. The application of state prevailing wage rates when higher is required whenever federally funded or assisted projects are controlled or carried out by California awarding bodies of any sort.

(c) Field Surveying Projects. Field survey work traditionally covered by collective bargaining agreements is subject to prevailing wage rates when it is integral to the specific public works project in the design, preconstruction, or construction phase.

(d) Residential Projects. Residential projects consisting of single family homes and apartments up to and including four stories are subject to payment of prevailing wages when paid for in whole or in part out of public funds, including federally-funded or assisted residential projects controlled or carried out by an awarding body.

Note: Such projects may require a special determination by the Director which should be requested by the awarding body at least 45 days before the commencement of advertising of the call for bids by the awarding body.

(f) Maintenance. Public works contracts for maintenance are subject to prevailing wage rate payment as set forth in Section 1771 of the Labor Code.

Appeal of Public Works Coverage Determination Pursuant to CCR 16002.5

(a) Those interested parties enumerated in Section 16000 of these regulations may appeal to the Director of Industrial Relations or the Director's duly authorized representative as set forth in Section 16301 of these regulations a determination of coverage under the public works laws (Labor Code Section 1720 et seq.) regarding either a specific project or type of work under Section 16001(a) of these regulations. Such notice of appeal must be served within 30 days of the issuance of the coverage determination. The party appealing the determination must, in accordance with the filing procedures set forth in Section 16302(d) of these regulations, give written notification to the awarding body and any other identifiable parties.

(b) The notice of appeal shall state the full factual and legal grounds upon which the determination is appealed, and whether a hearing is desired. The decision to hold a hearing is within the Director's sole discretion. The Director may appoint a hearing officer to conduct the hearing and propose a decision on the appeal. The Director shall make the final decision on the appeal.

(c) The authority of the Director to determine coverage of projects under the prevailing wage laws is quasi-legislative, and a final determination on any appeal is subject to judicial review pursuant to the Code of Civil Procedure, Section 1085.

Special Determinations pursuant to CCR 16202

(a) Awarding body request. The awarding body shall request the Director to make a determination for a particular craft, classification or type of worker not covered by a general determination. Any such request shall be submitted at least 45 days prior to the bid advertisement date.

(b) Department of Industrial Relations initiated determination. Where an awarding body does not specify the prevailing wage rate as set forth in Labor Code Section 1773.2, any interested party (as defined in Section 16000 of these regulations) may petition the Director as set forth in Labor Code Section 1773.4 and Section 16302 of these regulations. The Labor Commissioner may, prior to the letting of the bid, request such a determination of the Director.

Procedures for Obtaining Prevailing Wage Determination are outlined in CCR 16205.

Petition to Review Prevailing Wage Determinations is outlined in CCR 16302.

Hearings Procedure, including a petition to review under CA Labor Code 1773.4, shall be followed pursuant to CCR 16304.

END OF SECTION

SECTION 7

LIST OF GENERAL PREVAILING RATE EMPLOYER PAYMENTS & EXCLUSIONS

This section includes wording from CA Labor law pertaining to the following:

Title 8-Employer Payments

1. "The rate of contribution irrevocably made by a contractor or subcontractor a trustee or a third person pursuant to a fund, plan or program for the benefit of employees, their families and dependents or retirees."
2. "The rate of costs to the contractor or subcontractor which may be reasonably anticipated in providing benefits to employees."
3. "The rate of contribution irrevocably made by the contractor or subcontractor for apprenticeship or other training programs...."

General Prevailing Rate of Per Diem Wage Includes:

1. "...straight-time hourly rate of pay and"
2. "...rate for holiday and overtime work; and"
3. "...employer payments for any or all programs or benefits for employees...."
 - a. "medical and hospital care, prescription drugs, dental care, vision care, diagnostic services, and other health and welfare benefits."
 - b. "retirement plan benefits"
 - c. "vacations and holidays with pay, or cash payments in lieu of thereof"
 - d. "compensation for injuries or illnesses resulting from occupational activity"
 - e. "life, accidental death and dismemberment and disability or sickness and accident insurance."

- f. "supplemental unemployment benefits"
- g. "thrift, security savings, supplement trust, and beneficial trust funds otherwise designated...."
- h. "occupational health and safety research, safety training..."

Exclusions

The term "general prevailing rate of per diem wage" does not include any employer payments for:

- 1. "job related expenses other than travel time and subsistence pay"
- 2. "contract administration, operation of hiring halls, grievance processing, or similar purposes, except for those amounts specifically earmarked and actually used for administration of those type of employee or retiree benefit plans enumerated.
- 3. "Union, organizational, professional or other dues except as they may be included in and withheld from the basic taxable hourly wage rate."
- 4. "Industry or trade promotion"
- 5. "Political contributions or activities"
- 6. Any benefit to employees, their families and dependents, or retirees including any benefit enumerated above where the contractor or subcontractor is required by Federal, State or local law to provide such benefit.

END OF SECTION

SECTION 8

INVESTIGATIVE PROCEDURES, ENFORCEMENT, PENALTIES, FORFEITURES AND WITHHOLDINGS

Payroll records shall be furnished by contractors and subcontractors in accordance with section 16421(a)(3) and in a format prescribed at section 16401 of Title 8 of the California Code of Regulations, the records shall be reviewed by the Labor Compliance Program as promptly as practicable after receipt thereof, but in no event more than 30 days after such receipt. "Review" for this purpose shall be defined as inspection of the records furnished to determine if (1) all appropriate data elements identified in Labor Code Section 1776(a) have been reported; (2) certification forms have been completed and signed in compliance with Labor Code Section 1776(b); and (3) the correct prevailing wage rates have been reported as paid for each classification of labor listed thereon, with confirmation of payment in the manner and to the extent described in subpart (c) below.

(c) "Confirmation" of payroll records furnished by contractors and subcontractors shall be defined as an independent corroboration of reported prevailing wage payments. Confirmation may be accomplished through worker interviews, examination of paychecks or paycheck stubs, direct confirmation of payments from third party recipients of "Employer Payments" (as defined at section 16000 of Title 8 of the California Code of Regulations), or any other reasonable method of corroboration. For each month in which a contractor or subcontractor reports having workers employed on the public work, confirmation of furnished payroll records shall be undertaken randomly for at least one worker for at least one weekly period within that month. Confirmation shall also be undertaken whenever complaints from workers or other interested persons or other circumstances or information reasonably suggest to the Labor Compliance Program that payroll records furnished by a contractor or subcontractor are inaccurate.

(d) Representatives of the Labor Compliance Program shall conduct in-person inspections at the site or sites at which the contract for public work is being performed ("On-Site Visits"). On-Site Visits may be undertaken randomly or as deemed necessary by the Labor Compliance Program, but shall be undertaken during each week that workers are present at sites at which the contract for public work is being performed. All On-Site Visits shall include visual inspection of (1) the copy of the determination(s) of the Director of Industrial Relations of the prevailing wage rate of per diem wages required to be posted at each job site in compliance with Labor Code Section 1773.2,

and (2) the Notice of Labor Compliance Program Approval required to be posted at the job site in accordance with section 16429 above, listing a telephone number to call for inquiries, questions, or assistance with regard to the Labor Compliance Program. On-Site Visits may include other activities deemed necessary by the Labor Compliance Program to independently corroborate prevailing wage payments reported on payroll records furnished by contractors and subcontractors.

(e) An Audit, as defined herein, shall be prepared by the Labor Compliance Program whenever the Labor Compliance Program has determined that there has been a violation of the Public Works Chapter of the Labor Code resulting in the underpayment of wages. An "Audit" for this purpose shall be defined as a written summary reflecting prevailing wage deficiencies for each underpaid worker, and including any penalties to be assessed under Labor Code Sections 1775 and 1813, as determined by the Labor Compliance Program after consideration of the best information available as to actual hours worked, amounts paid, and classifications of workers employed in connection with the public work. Such available information may include, but is not limited to, worker interviews, complaints from workers or other interested persons, all time cards, cancelled checks, cash receipts, trust fund forms, books, documents, schedules, forms, reports, receipts or other evidences which reflect job assignments, work schedules by days and hours, and the disbursement by way of cash, check, or in whatever form or manner, of funds to a person(s) by job classification and/or skill pursuant to a public works project. An Audit is sufficiently detailed when it enables the Labor Commissioner, if requested to determine the amount of forfeiture under section 16437, to draw reasonable conclusions as to compliance with the requirements of the Public Works Chapter of the Labor Code, and to enable accurate computation of underpayments of wages to workers and of applicable penalties and forfeitures. An Audit using the forms in Appendix B, when accompanied by a brief narrative identifying the Bid Advertisement Date of the contract for public work and summarizing the nature of the violation and the basis upon which the determination of underpayment was made, presumptively demonstrates sufficiency. Records supporting an Audit shall be maintained by the Labor Compliance Program to satisfy its burden of coming forward with evidence in administrative review proceedings under Labor Code Section 1742 and the Prevailing Wage Hearing Regulations found at sections 17201-17270 of Title 8 of the California Code of Regulations.

(f) After the Labor Compliance Program has determined that violations of the prevailing wage laws have resulted in the underpayment of wages and an audit has been prepared, notification shall be provided to the contractor and affected subcontractor of an opportunity to resolve the wage deficiency prior to a determination of the amount of forfeiture by the Labor Commissioner pursuant to these regulations. The contractor and affected subcontractor shall be provided at least 10 days following such notification to submit exculpatory information consistent with the "good faith mistake" factors set forth in Labor Code Section 1775(a)(2)(A)(i) and (ii). If, based upon the contractor's submission, the Labor Compliance Program reasonably concludes that the failure to pay the correct wages was a good faith mistake, and has no knowledge that the contractor and affected subcontractor have a prior record of failing to meet their prevailing wage

obligations, the Labor Compliance Program shall not be required to request the Labor Commissioner for a determination of the amount of penalties to be assessed under Labor Code Section 1775 if the underpayment of wages to workers is promptly corrected and proof of such payment is submitted to the Labor Compliance Program. For each instance in which a wage deficiency is resolved in accordance with this regulation, the Labor Compliance Program shall maintain a written record of the failure of the contractor or subcontractor to meet its prevailing wage obligation. The record shall identify the public works project, the contractor or affected subcontractor involved, and the gross amount of wages paid to workers to resolve the prevailing wage deficiency; and the record shall also include a copy of the Audit prepared pursuant to subpart (e) above along with any exculpatory information submitted to the Labor Compliance Program by the affected contractor or subcontractor.

Enforcement

The LCO has a duty to the Director of the Department of Industrial Relations to enforce the Labor Code public works requirements (Chapter 1 of part 7 of Division 2 and Division 3 of the Labor Code) and the procedural regulations of the Department of Industrial Relations in a manner consistent with the practice of Title 8, CA Code of Regulations, Section 16000, *et seq.*

The contractor and subcontractor, if applicable, shall be notified by the LCO of non-compliance issues and a Notice shall be sent outlining the deficiencies and items to be corrected or restitution due to workers.

Withholding Contract Payments When Payroll Records are Delinquent or Inadequate

1. "Withhold" means to cease payments by the awarding body, its agents or others who pay on behalf of the contractor. Where the violation is by a subcontractor, the contractor shall be notified of the nature of the violation and reference made to its rights under Labor Code 1729.
2. "Contracts" except as otherwise provided by agreement, means only contracts under a single master contract, or contracts entered into as stages of a single project which may be the subject of withholding, pursuant to Labor Code Sections 1720, 1720.2, 1720.3, 1720.4, 1771 and 1771.5.
3. "Delinquent payroll records" means those not submitted on the basis set for in the District Contract with the contractor outlined in the Labor Compliance Program.
4. "Inadequate payroll records" are any one of the following:
 - a. A record lacking information required by Labor Code Section 1776;
 - b. A record which contains the required information but which is not certified, or certified by someone that is not an agent of the contractor or subcontractor;
 - c. A record remaining uncorrected for one payroll period, after the LCO has given the contractor notice of inaccuracies detected by audit or record review; provided, however, that prompt correction will stop any duty to withhold if such inaccuracies do not amount to 1 percent of the entire certified weekly payroll on dollar value and do not affect more than half the persons listed as workers employed on that certified weekly payroll, as defined in Labor

Code Section 1776 and Title 8 CCR Section 16401. Prompt correction will stop any duty to withhold if such inaccuracies are *de minimus*.

(e) The withholding of contract payments when payroll records are delinquent or inadequate is required by Labor Code Section 1771.5(b)(5), and it does not require the prior approval of the Labor Commissioner. The Awarding Body shall only withhold those payments due or estimated to be due to the contractor or subcontractor whose payroll records are delinquent or inadequate, plus any additional amount that the Labor Compliance Program has reasonable cause to believe may be needed to cover a back wage and penalty assessment against the contractor or subcontractor whose payroll records are delinquent or inadequate; provided that a contractor shall be required in turn to cease all payments to a subcontractor whose payroll records are delinquent or inadequate until the Labor Compliance Program provides notice that the subcontractor has cured the delinquency or deficiency.

(f) When contract payments are withheld under this section, the Labor Compliance Program shall provide the contractor and subcontractor, if applicable, with immediate written notice that includes all of the following: (1) a statement that payments are being withheld due to delinquent or inadequate payroll records, and that identifies what records are missing or states why records that have been submitted are deemed inadequate; (2) specifies the amount being withheld; and (3) informs the contractor or subcontractor of the right to request an expedited hearing to review the withholding of contract payments under Labor Code Section 1742, limited to the issue of whether the records are delinquent or inadequate or the Labor Compliance Program has exceeded its authority under this section.

(g) No contract payments shall be withheld solely on the basis of delinquent or inadequate payroll records after the required records have been produced.

(h) In addition to withholding contract payments based on delinquent or inadequate payroll records, penalties shall be assessed under Labor Code Section 1776(g) for failure to timely comply with a written request for certified payroll records. The assessment of penalties under Labor Code Section 1776(g) does require the prior approval of the Labor Commissioner under section 16436 of these regulations.

Withholding for Violation for Not paying the Per Diem Prevailing wages

1. "Amount equal to the underpayment" is total of the following determined by payroll review, audit, or admission of the contractor or subcontractor:
 - a. The difference between the amounts paid to workers and the correct General Prevailing Wage Rate of Per Diem Wages as defined in Title 8, CCR Section 16000 *et seq.*
 - b. The difference between the amounts paid to workers and the correct amounts of employer payments, as defined in Title 8 CCR Section 16000 and determined to be part of the prevailing wage rate costs of contractors due for employment of workers in such craft, classification, or trade in which they were employed and the amounts paid;
 - c. Estimated amounts of "illegal" taking of wages; and
 - d. Amounts of apprenticeship training fund contributions paid to neither the program sponsor's training trust nor the CA Apprenticeship Council.

2. Provisions relating to the penalties under Labor Code 1775 and 1813:
 - a. Pursuant to CA Labor Code 1775 the contractor shall, as a penalty to the District, forfeit up to two hundred dollars (\$200) for each calendar day, or portion thereof, for each worker paid less than the prevailing wages.
 - b. Pursuant to CA Labor Code 1813, the contractor shall, as a penalty to the District, on whose behalf the contract is awarded, forfeit twenty-five dollars (\$25) for each worker employed in the execution of the contract by the contractor or by any subcontractor for each calendar day during which such worker is required or permitted to work more than 8 hours in any one calendar day and 40 hours in any one calendar week.

Forfeitures Requiring Approval by the Labor Commissioner

1. "Forfeitures" are the amounts of unpaid penalties and wages assessed by the District for violations of the prevailing wage laws, whether collected by withholding from the contract amount, by suit under the contract, or both. Pursuant to CCR 16436 "if the aggregate amount of the forfeitures assessed as to a contractor or subcontractor is less than \$1,000.00, the forfeiture shall be deemed approved by the Labor Commissioner upon service and the Labor Commissioner's receipt of copies of the following: (1) the Notice of Contract Withholding authorized by Labor Code Section 1771.6(a); (2) an Audit as defined in section 16432(e) of these regulations, and (3) a brief narrative identifying the Bid Advertisement Date of the contract for public work and summarizing the nature of the violation, the basis of the underpayment, and the factors considered in determining the assessment of penalties, if any, under Labor Code 1775.
Pursuant to CCR 16436(c) "For all other forfeitures, approval by the Labor Commissioner shall be requested and obtained in accordance with section 16437.
2. "Failing to pay the correct rate of prevailing wages" means those public works violations which the Labor Commissioner has exclusive authority to approve before they are recoverable by the Labor Compliance Program, and which are appealable by the contractor before the Director of the Department of Industrial Relations under Labor Code sections 1742 and 1742.1 pursuant to the CCR Title 8, Subchapter 8 (§17201 through 17270). Regardless of what is defined as "prevailing wages" in contract terms, noncompliance with the following are considered failures to pay the prevailing wages:
 - a. Nonpayment of items defined as "Employer Payments: and General Prevailing "Rate of Per Diem Wages" in Labor Code Section 1771.
 - b. Failure to provide complete and accurate payroll records, as required by Labor Code Section 1776;
 - c. Paying apprentice wages lower than the journey level rate to a worker who is not an apprentice as defined in Labor Code Section 3077, working under an apprentice agreement in a recognized program;
 - d. Accepting or extracting kickbacks, in violation of Labor Code Section 1778;
 - e. Engaging in prohibited actions related to fees for registration as a public works employee.

- f. Failure to pay overtime for work over 8 hours in any one day or 40 hours in one week, in violation of Labor Code sections 1813 and 1815.

Determination of Amount of Forfeiture by the Labor Commissioner

1. Pursuant to CCR 16437 where the LCO requests a determination of the amount of forfeiture, the request shall include a file or report to the Labor Commissioner which contains at least the following information:
 - a. The date that the public work was accepted, and the date the notice of completion was filed;
 - b. Any other deadline which, if missed, would impede collection;
 - c. Evidence of violation in narrative form;
 - d. Evidence that an "audit" or "investigation" occurred in compliance with Title 8 CCR section 16432(e) "An audit, as defined herein, shall be prepared by the Labor Compliance Program whenever the Labor Compliance Program has determined that there has been a violation of the Public Works Chapter of the Labor Code resulting in the underpayment of wages;
 - e. Evidence that the contractor was given the opportunity to explain why it believes there was no violation; or that any violation was caused by mistake, inadvertence, or neglect before the forfeiture was sent to the Labor Commissioner, and the contractor either did not do so or failed to convince the Labor Compliance Program of its position;
 - f. Where Labor Compliance Program seeks not only amounts of wages but also a penalty as part of the forfeiture, and the contractor has unsuccessfully contended that the cause of violation was a mistake, inadvertence, or neglect, a statement should accompany the proposal for a forfeiture with a recommended penalty amount, pursuant to Labor Code Section 1775(a);
 - g. Where the Labor Compliance Program seeks only wages or a penalty less than \$200.00 per day as part of the forfeiture, and the contractor has successfully contended that the cause of violation was a mistake, inadvertence, or neglect, then the file should include evidence as to the contractor's knowledge of its obligation, including the Programs communication to the contractor of the obligation in the bid invitations, at a pre-job conference agenda and records, and any other notice given as part of the contracting process. Included with the file should be a statement similar to that described in subsection (f) above and recommended penalty amounts, pursuant to Labor Code Section 1775(a);
 - h. The previous record of the contractor and subcontractor in meeting their prevailing wage obligations; and
 - i. Whether the Labor Compliance Program has been granted approval on only an interim or temporary basis under sections 16425 or 16426, or whether it has been granted extended approval under section 16427.
2. The file or report shall be served on the Labor Commissioner not less than 30 days before the final payment or, if that deadline has passed, not less than 180 days following the filing of the notice of completion as long as funds remain in the contract.
3. A copy of the file or report shall be served on the contractor at the same time it is sent to the Labor Commissioner.

The Labor Compliance Program may exclude from the documents served on the contractor/subcontractor copies of documents secured from these parties during an audit, investigation, or meeting if those documents are clearly referenced in the file or report.

4. The Labor Commissioner shall affirm, reject, or modify the forfeiture in whole or in part as to wages and penalties due.
5. The Labor Commissioner's determination of the forfeiture is effective on one the following date for the Labor Compliance Program having approval pursuant to Section 16426 of the CCR's: on the date the Labor Commissioner serves by first class mail on the Labor Compliance Program and on the contractor, an endorsed copy of the proposed forfeiture approved. Service on the contractor is effective if made on the last address supplied by the contractor in the record.

Deposits of Penalties and Forfeitures Withheld

1. Pursuant to CCR 16438 where the involvement of the Labor Commissioner has been limited to a determination of the actual amount of penalty, forfeiture, or underpayment of wages, and the matter has been resolved without litigation by or against the Labor Commissioner, the Awarding Body shall deposit penalties and forfeitures into its General Fund.
2. Where collection of fines, penalties or forfeitures results from administrative proceedings or court action to which the Labor Commissioner and Awarding Body's Labor Compliance Program are both parties, the fines, penalties or forfeitures shall be divided between the General Funds of the State and the Awarding Body as the courts may decide.
3. All amounts recovered by suit brought by the Labor Commissioner, and to which the Awarding Body is not a party, shall be deposited in the general fund of the state.
4. All wages and benefits which belong to an employee and are withheld or collected from a contractor or subcontractor, either by withholding or as a result of administrative proceedings or any court action, and which have not been paid to the employee or irrevocably committed on the employee's behalf to a benefit fund, shall be deposited with the Labor Commissioner, who shall handle such wages and benefits in accordance with Labor Code Section 96.7

Debarment Policy

It is the policy of the Labor Compliance Program that the public works prevailing wages Requirements set forth in CA Labor Code Section 1720-1861 are strictly enforced. In furtherance thereof, construction contractors and subcontractors found to be repeat violators of the CA Labor Code shall be referred to the Labor Commissioner for debarment from bidding on or Otherwise being awarded any public work contract, within the state of CA, for the performance of construction and/or maintenance services for the period no to exceed three (3) years in duration. The duration of the debarment period shall depend upon the nature and severity of labor cod violations and any mitigating or aggravating factors, which may be presented at the hearing conducted by the Labor Commissioner for such purpose.

Notice of Withholding and review thereof

Notice of Withholding Contract Payments- Pursuant to CA Labor Code 1741 and CCR 16411 After determination of the amount of forfeiture by the Labor Commissioner, the Labor Compliance Program will provide notice of withholding contract payments to the contractor and subcontractor, if applicable. The notice shall be in writing and shall describe the nature of violation and the amount of wages, penalties, and forfeitures withheld. Service of the notice shall be completed pursuant to Section 1013 of the Code of Civil Procedure by first-class and certified mail to the contractor and subcontractor, if applicable. The notice shall advise the contractor and subcontractor, if applicable, of the procedure for obtaining review of the withholding of contract payments. The Labor Compliance Program shall also serve a copy of the notice by certified mail to any bonding company issuing a bond that secures the payment of wages covered by the notice and to any surety on a bond, if their identities are known to the the Awarding Body.

Withholding, Retention, or Forfeiture

Pursuant to CCR 16412 when a notice has been sent pursuant to CCR 16411 then the awarding body shall proceed to withhold, retain, or forfeit the amount stated in the notice, pursuant to CA Labor Code 1727.

Review of Notice of Withholding of Contract Payments and Hearing Procedure

Pursuant to CCR 16439 (a) A contractor or subcontractor may request a settlement meeting pursuant to Labor Code Section 1742.1(b) and may request review of a Labor Compliance Program enforcement action in accordance with Labor Code Sections 1771.6(b) and 1742 and the regulations found at sections 17201-17270 of Title 8 of the California Code of Regulations. The Labor Compliance Program shall have the rights and responsibilities of the Enforcing Agency (as defined in section 17202(f) of Title 8 of the California Code of Regulations), in responding to such a request for review, including but not limited to the obligations to serve notices, transmit the Request for Review to the hearing office, and provide an opportunity to review evidence in a timely manner, to participate through counsel in all hearing proceedings, and to meet the burden of establishing prima facie support for the Notice of Withholding of Contract Payments.

Pursuant to CA Labor Code 1742

1. An affected contractor or subcontractor may obtain review of a NWCP under this chapter by transmitting a written request to the office of the Labor Compliance Officer that appears on the NWCP within 60 days after service of the NWCP. If no hearing is requested within 60 days after service of the NWCP, the NWCP shall become final.
2. Within ten days following the receipt of the request for review, the LCP shall transmit to the Office of the Director-Legal Unit the request for review and copies of the Notice of Withholding of Contract Payments, any audit summary that accompanied the notice, and proof of service or other documents

showing the name and address of any bonding company or surety that secures the payment of the wages covered by the notice.

3. Upon receipt of a timely request, a hearing shall be commenced within 90 days before the director, who shall appoint an impartial hearing officer possessing the qualifications of an administrative law judge pursuant to subdivision (b) of Section 11502 of Government Code. The appointed hearing officer shall be an employee of the Department, but shall not be an employee of the Division of Labor Standards Enforcement. The contractor or subcontractor shall be provided an opportunity to review evidence to be utilized by the LCO at the hearing within 20 days of the receipt of the written request for a hearing. Any evidence obtained by the Labor Compliance Program shall be promptly disclosed to the contractor or subcontractor.

The contractor or subcontractor shall have the burden of proving that the basis for the civil wage and penalty assessment is incorrect. The assessment shall be sufficiently detailed to provide fair notice to the contractor or subcontractor of the issues at the hearing.

Within 45 days of the conclusion of the hearing, the director shall issue a written decision affirming, modifying, or dismissing the assessment. The decision of the director shall consist of a notice of findings, and an order. This decision shall be served on all parties and the awarding body pursuant to Section 1013 of the Code of Civil Procedure by first-class mail at the last known address of the party on file with the Labor Commissioner. Within 15 days of the issuance of the decision, the director may reconsider or modify the decision to correct an error, except that a clerical error may be corrected at any time.

LC 1742 (c) An affected contractor or subcontractor may obtain review of the decision of the director by filing a petition for a writ of mandate to the appropriate superior court pursuant to Section 1094.5 of the Code of Civil Procedure within 45 days after service of the decision. If no petition for writ of mandate is filed within 45 days after service of the decision, the order shall become final.

Pursuant to CCR 16439(b)(c) If a contractor or subcontractor seeks review of a Labor Compliance Program enforcement action, the Labor Commissioner may intervene to represent the Awarding Body, or to enforce relevant provisions of the Labor Code consistent with the practice of the Labor Commissioner, or both. CCR 16439(c) Except in cases where the Labor Commissioner has intervened pursuant to subpart (b) above, the Labor Compliance Program shall have the authority to prosecute, settle, or seek the dismissal of any Notice of Withholding of Contract Payments issued pursuant to Labor Code Section 1771.6 and any review proceeding under Labor Code Section 1742, without any further need for approval by the Labor Commissioner. Whenever a Labor Compliance Program settles in whole or in part or seeks and obtains the dismissal of a Notice of Withholding of Contract Payments or a review proceeding under Labor Code Section 1742, the Labor Compliance Program shall document the reasons for the settlement or request for dismissal and shall make that documentation available to the Labor Commissioner upon request.

CA Labor Code Section 1742.1(b)

The contractor may ask that for review of a Labor Compliance Program enforcement action in accordance with Labor Code Sections 1771.6(b) and 1742 and the regulations found at sections 17201-17270 of Title 8 of the California Code of Regulations. The Labor Compliance Program shall have the rights and

responsibilities of the Enforcing Agency (as defined in section 17202(f) of Title 8 of the California Code of Regulations), in responding to such a request for review, including but not limited to the obligations to serve notices, transmit the Request for Review to the hearing office, and provide an opportunity to review evidence in a timely manner, to participate through counsel in all hearing proceedings, and to meet the burden of establishing prima facie support for the Notice of Withholding of Contract Payments.

Distribution of Forfeited Sums

Before making payments to the contractor of money due under a contract for public work, the Awarding Body shall withhold and retain therefrom all amount required to satisfy the NWCP. The amounts required to satisfy the NWCP shall not be disbursed by the Awarding Body until receipt of a final order that is not longer subject to judicial review.

Pending a final order, or the expiration of the time period for seeking review of the notice of withholding, the Awarding Body shall not disburse any contract payments withheld.

From the amount recovered, the wage claim shall be satisfied prior to the amount being applied to penalties. If insufficient money is recovered to pay each worker in full, the money shall be prorated among all workers employed on the public works project who are paid less than the prevailing wage rate, shall have PRIORITY over all Stop Notices filed against the prime contractor.

Wages for workers who cannot be located shall be placed in the Industrial Relations Unpaid Wage Fund and held in trust for the workers pursuant to Labor Code Section 1771.6(e). Penalties shall be paid into the General Fund of the District that has enforced this chapter pursuant to Labor Code Section 1771.7.

END OF SECTION

SECTION 9

Duties of Labor Compliance Program

Pursuant to CCR 16434

A Labor Compliance Program shall have a duty to the Director to enforce the requirements of Chapter 1 of Part 7 of Division 2 of the Labor Code and these regulations in a manner consistent with the practice of the Labor Commissioner. It is the practice of the Labor Commissioner to refer to the Director’s ongoing advisory service of web-posted public works coverage determinations as a source of information and guidance in making enforcement decisions. It is also the practice of the Labor Commissioner to be represented by an attorney in prevailing wage hearings conducted pursuant to Labor Code Section 1742(b) and sections 17201-17270 of Title 8 of the CCR’s.

a) Upon receipt of a written complaint alleging that a contractor or subcontractor has failed to pay prevailing wages as required by Labor Code, the Labor Compliance Program shall do all of the following:

b) Within 15 days after receipt of the complaint, send a written acknowledgement to the complaining party that the complaint has been received and identifying the name, address, and telephone number of the investigator assigned to the complaint;

c) Within 15 days after receipt of the complaint, provide affected contractor with the notice required under LC 1775(c) if the complaint is against the subcontractor;

1. Notify the complaining party in writing of the resolution of the complaint within 10 days after the complaint has been resolved by the Labor Compliance Program;
2. Notify the complaining party in writing at least once every 30 days of the status of the complaint that has not been resolved by the Labor Compliance Program; and
3. Notify the complaining party in writing at least once every 90 days of the status of the complaint that has been resolved by the Labor Compliance Program but remains under review or in litigation before another entity.

(c) The duties of a Labor Compliance Program with respect to apprenticeship standards are as follows:

- (1) Either the Awarding Body or the Labor Compliance Program acting on its behalf shall (A) inform contractors and subcontractors bidding public works about apprenticeship requirements, (B) send copies of awards and notices of discrepancies to the Division of Apprenticeship Standards as required under

Section 1773.3 of the Labor Code, and (C) refer complaints and promptly report suspected violations of apprenticeship requirements to the Division of Apprenticeship Standards.

(2) The Labor Compliance Program shall be responsible for enforcing prevailing wage pay requirements for apprentices consistent with the practice of the Labor Commissioner, including (A) that any contributions required pursuant to Labor Code Section 1777.5(m) are paid to the appropriate entity, (B) that apprentices are paid no less than the prevailing apprentice rate, (C) that workers listed and paid as apprentices on the certified payroll records are duly registered as apprentices with the Division of Apprenticeship Standards, and (D) requiring that the regular prevailing wage rate be paid (i) to any worker who is not a duly registered apprentice and (ii) for all hours in excess of the maximum ratio permitted under Labor Code Section 1777.5(g), as determined at the conclusion of the employing contractor or subcontractor's work on the public works contract.

(d) For each public work project subject to a Labor Compliance Program's enforcement of prevailing wage requirements, a separate, written summary of labor compliance activities and relevant facts pertaining to that particular project shall be maintained. That summary shall demonstrate that reasonable and sufficient efforts have been made to enforce prevailing wage requirements consistent with the practice of the Labor Commissioner. Appendix C following this section provides a suggested format for tracking and monitoring enforcement activities. Compliance records for a project shall be retained until the later of (1) at least one year after the acceptance of the public work or five years after the cessation of all labor on a public work that has not been accepted, or (2) one year after a final decision or judgment in any litigation under Labor Code Section 1742. For purposes of this section, a written summary or report includes information maintained electronically, provided that the summary or report can be printed out in hard copy form or is in an electronic format that (1) can be transmitted by e-mail or compact disk and (2) would be acceptable for the filing of documents in a federal or state court of record within this state.

END OF SECTION

SECTION 10

ANNUAL REPORT

Pursuant to CCR 16431

(a) The Labor Compliance Program shall submit to the Director our annual report on our operation by no later than August 31 of each year. The annual report shall cover the twelve month period commencing on July 1 of the preceding calendar year and ending on June 30 of the year in which the report is due.

(b) The annual report shall be made on the appropriate form [LCP-AR1, LCP-AR2], for the type of Labor Compliance Program that is submitting the report, unless the Director has agreed to a different reporting format for a Program that has been granted extended authority under section 16427 above.

The annual report will contain, as a minimum, the following information:

1. If the LCP performed any LC 1771.5 enforcement activity during the last 12 months in the reporting period?
2. Any suggestions we may have for the DIR to better assist us with our program in the coming year.
3. List of projects handled by the LCP within the last 12 months.
4. Summary of all wages and penalties assessed and/or recovered.
5. List of amounts of wages and penalties assessed and/or recovered for which approval of Forfeiture was not requested from the Labor Commissioner, with an explanation.
6. List of projects for which approval of forfeiture was requested from the Labor Commissioner, and a list of penalties of 1776(g), 1775, and 1813 and wages assessed, and then list the amount that was recovered for each.
7. Identify any cases that were subject to LC 1742 proceedings.
8. Notate if any contractors or subcontractors were referred to the Labor Commissioner for debarment, if so, list the contractors.
9. Notate if any violations were sent to the Division of Apprenticeship Standards, if yes, list the contractors.

(c) The Annual Report for a person or entity operating a Labor Compliance Program shall also include (1) a certification of compliance with conflict of interest disclosure requirements by employees and consultants who participate in making governmental decisions, as defined under Title 2, California Code of Regulations, section 18701, and (2) a current statement disclosing the information required under section 16426(a)(2), (3) and (5) above.

(d) Information in the Annual Report shall be reported in sufficient detail to afford a basis for evaluating the scope and level of enforcement activity of the Labor Compliance Program. An annual report shall also include such additional information as the Labor Compliance Program may be required to report as a condition of its approval.

(e) A Labor Compliance Program that has ceased operating, either due to the voluntary termination of its program or the revocation of its approval by the Director, shall file a closing annual report within sixty (days) following its last day of operation as an approved program.

END OF SECTION

**Labor Compliance
Appendix A Checklist**

Project: _____

Checklist of Labor Law Requirements

Review at Pre-Construction Meeting, CA Code of Regulations, Section 16430.

1. It is the contractor's duty to pay prevailing wages under CA Labor Code, Section 1770 et seq., Pursuant to section 1771, except for public works project for \$1,000.00 or less, not less than the prevailing wage rate of per diem wages for work of a similar character in the locality in which the public works is performed and not less than the prevailing wage rate of per diem wages for holiday and overtime work fixed as provided in this chapter shall be paid to all workers employed on public works projects.

This section is applicable only to work performed under contract and is not applicable to work carried out by a public agency with its own forces.

2. It is the contractor and subcontractors' duty to employ registered apprentices on the public works project under Labor Code, Section 1777.5.
3. The penalties for failure to pay prevailing wages and employ apprentices include forfeitures and debarment under Labor Code, Sections 1775 and 1777.7 and 1813.
4. Falsification of payroll records and failure to accurately report hours of work are characterized as deliberate underreporting of hours of work; underreporting the headcount; stating that the proper prevailing wage rate was paid when, in fact it was not; clearly misclassifying the work performed by the worker; and any other deliberate and/or willful act which results in the falsification or inaccurate reporting of payroll records. Such violations are deemed to be willful violations committed with the intent to defraud.
5. The Contractor is required to keep and submit copies of complete certified payrolls, upon request, under Labor Code, Section 1776, and the penalties for failure to do so under Labor Code, Section 1776 (g).
6. The Contractor is required to post an equal opportunity poster in a conspicuous place for the duration of the project; to strictly enforce prohibition against employment discrimination under Labor Code, Sections 1735 & 1777.6, the Government Code and Title VII of the Civil Rights Act of 1964, and to provide equal opportunity as required in the Public Contracts Code and in the contract.
7. The Contractor is prohibited from accepting or extracting kickbacks from employee wages under Labor Code, Section 1778 or for accepting fees for registering any person for public work under Labor Code, Section 1779 or for filling work orders on public works under Labor Code Section 1780 and is informed of the penalties for doing so.
8. The Contractor is required to list all subcontractors hired to perform work covering more than one-half of one percent of the contract amount, under Government Code, Section 4100 et seq.

- 9. The Contractor is required to be properly licensed and to require all subcontractors to be properly licensed and is informed of the penalty for employing workers while unlicensed under Labor Code, Section 1021 and under California Contractors' License Law, found in the Business and Professions Code, Section 7000 et seq.
- 10. All contractors are required to be properly insured for General Liability Insurance, and Workers Compensation under Labor Code, Section 1861.
- 11. The Contractor is reminded of the requirement against engaging in unfair business practices and unfair competition under the Business and Professions Code, Section 17200-17208.
- 12. The Contractor is required to abide by the Occupational, Safety and Health, (OSHA) laws and regulations that apply to the particular construction project.
- 13. The federal prohibition against hiring undocumented workers, and the requirement to secure proof of eligibility/citizenship from all workers.
- 14. The requirement to provide itemized wage statements to employees under Labor Code Section 226.

As a signatory contractor on this project, in accordance with the District's contract documents, and the Labor Code Laws of the State of California, the undersigned agrees to abide by all the requirements and understand that failure to comply with the above will subject me and/or my company to withholding of funds and penalties.

I acknowledge that I have been informed and am aware of the foregoing requirements and that I am authorized to make this certification on behalf of _____
name of contractor

CONTRACTOR:

Awarding Body REPRESENTATIVE:

 (Company - Print)

 (Signature)

 (Print Name)

 (Date)

 (District)

 (Signature)

 (Print Name)

 (Date)

PREVAILING WAGE DETERMINATION SUMMARY

CODE NO.	CLASSIFICATION	HOURLY		CONTRIBUTIONS	TRAINING	HOLIDAY / TRAVEL & SUNDAY		Other hourly Requirements
		Effective Date	RATE			TIME 1/2	SUBSISTENCE	
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								
11								
12								

WAGE DETERMINATION INFORMATION

CODE NO.	CLASSIFICATION	WAGE DETERMINATION NO.
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		

Appendix C

Suggested Single Project Labor Compliance Review and Enforcement Report Form
[Appendix C following 8 CCR §16434]

Awarding Body: _____

Project Name: _____

Name of Approved Labor Compliance Program: _____

Bid Advertisement Date: _____

Acceptance Date: _____

Notice of Completion Recordation Date: _____

Summary of Labor Compliance Activities

1. Contract Documents Containing Prevailing Wage Requirements (Identify)

2. Prejob Conference(s) -- Attach list(s) of attendees and dates

3. Notification to Project Workers of Labor Compliance Program's Contact Person. (Explain Manner of Notification for each project work site.)

4. Certified Payroll Record Review

a. CPRs Received From:

<u>Contractor/Subcontractor</u>	<u>For weeks ending ("w/e") through w/e</u>
_____	_____
_____	_____
_____	_____
_____	_____

b. Classifications identified in CPRs and applicable Prevailing Wage Determinations

<u>Classification</u>	<u>Determination No.</u>
_____	_____
_____	_____
_____	_____
_____	_____

5. Further investigation or audit due to CPR review, information or complaint from worker or other interested person, or other reason:

a. Independent Confirmation of CPR Data

<u>Contractor/Subcontractor</u>	<u>Worker Interviews (Yes/No)</u>	<u>Reconciled CPRs with Paychecks or Stubs (Yes/No)</u>
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

b. Employer Payments (Health & Welfare, Pension, Vacation/Holiday) Confirmation

<u>Contractor/Subcontractor</u>	<u>Recipients of Employer Payments</u>	<u>Written confirmation Obtained (Yes/No)</u>
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

c. Contributions to California Apprenticeship Council or Other Approved Apprenticeship Program

<u>Contractor/Subcontractor</u>	<u>Recipients of Contributions</u>	<u>Written confirmation Obtained (Yes/No)</u>
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

d. **Additional Wage Payments or Training Fund Contributions Resulting from Review of CPRs**

<u>Contractor/Subcontractor</u>	<u>Additional amounts Paid to Workers</u>	<u>Additional Training Fund</u>	<u>Explanation</u>
_____	_____	_____	*
_____	_____	_____	*
_____	_____	_____	*
_____	_____	_____	*

* Use separate page(s) for explanation

6. **Complaints Received Alleging Noncompliance with Prevailing Wage Requirements.**

<u>Name of Complainant</u>	<u>Date Received</u>	<u>Resolution or Current Status</u>
_____	_____	*
_____	_____	*
_____	_____	*
_____	_____	*

*Use separate page(s) to explain resolution or current status

7. **Requests for Approval of Forfeiture to Labor Commissioner**

<u>Contractor/Subcontractor</u>	<u>Date of Request</u>	<u>Approved/Modified/Denied</u>
_____	_____	_____
_____	_____	_____
_____	_____	_____

8. **Litigation Pending Under Labor Code Section 1742**

<u>Contractor/Subcontractor</u>	<u>DIR Case Number</u>
_____	_____
_____	_____
_____	_____

9. (Check one): _____ Final report this project _____ Annual report this project

Authorized Representative for Labor Compliance Program

Labor Compliance Program Regulations – APPENDIX D

REQUEST FOR APPROVAL OF FORFEITURE – Suggested format

1. AWARDING BODY / THIRD PARTY LCP:

Name and Contact Information:	Date of Request:
Name and Contact Information for Awarding Body if different from LCP:	LCP Approval Status (specify if either interim or temporary or if LCP has extended authority):

2. PROJECT INFORMATION:

Project Name:	Contract Number:
Project Location:	
Bid Advertisement Dates:	Estimated Date Project is to be completed:
Acceptance Date of Project by the Awarding Body:	Notice of Completion/Date Recorded with County Recorder:
Other Relevant Deadline (specify):	Amount being held in Retention:

3. CONTRACTOR INFORMATION:

Name and address of Affected Contractor:	Name and address of Affected Subcontractor:
General Description of Scope of Work of the Entire Project:	
General Description of Scope of Work covered in the proposed Forfeiture (describe and attach relevant portions of contract or subcontract):	

4. LABOR COMPLIANCE PROGRAM INVESTIGATION AND FINDINGS:

Total Amount of Request for Notice of Withholding of Contract Payments:			
Wages Due:	Training Funds Due:	Total Penalties Due:	Potential Liquidated Damages [Wages + Training Funds]:
LC 1775 Penalties Due:	LC 1813 Penalties Due:	LC 1776 Penalties Due:	Other:

[Provide narrative summaries covering the following]:

- A. *Statement of Issues.*
- B. *Investigative Report (detailed narrative including but not limited to how the investigation was conducted including worker declarations, reviewing certified payroll records, verification of employer payment contributions, etc.).*
- C. *Audit Report (detailed explanation of how audit was completed addressing each of the issues above).*
- D. *Affected contractor and subcontractor information (how affected contractor and subcontractor were informed of potential violations; summary of their response with respect to violations and penalty issues; and any other information considered in determining recommended penalties).*
- E. *Recommended penalties under Labor Code Section 1775(a) and basis for recommendation, including how factors in subsection (a)(2) of Section 1775 were applied to arrive at the recommended amount(s).*

ATTACHMENTS

- 1. Audit Summary (Appendix B)
- 2. 1st Bid Advertisement Publication
- 3. Notice of Completion
- 4. Scope of Work
- 5. Complaint form(s) and Declarations, if any

Send the Request and all Attachments to:

Division of Labor Standards Enforcement
 Bureau of Field Enforcement
 Attn.: Regional Manager
 300 Oceangate Blvd., No. 850
 Long Beach, CA 90802

COPIES OF THIS REQUEST, INCLUDING ALL ATTACHMENTS, SHALL BE SERVED ON THE AFFECTED CONTRACTOR AND AFFECTED SUBCONTRACTOR AT THE SAME TIME THAT IT IS SENT TO THE DIVISION OF LABOR STANDARDS ENFORCEMENT.

Appendix E

[Name and Contact Information for person issuing Notice]	
Date:	Case or Contract No.:

NOTICE OF TEMPORARY WITHHOLDING OF CONTRACT PAYMENTS DUE TO DELINQUENT OR INADEQUATE PAYROLL RECORDS (8 CCR §16435)

Awarding Body:	Work performed in County of:
Project Name and Number (if any):	
Prime Contractor:	
Subcontractor:	

Pursuant to Labor Code §1771.5(b)(5) and 8 CCR §16435, contract payments are being withheld due to delinquent or inadequate payroll records.

Contractor or subcontractor whose payroll records are delinquent or inadequate:

The following payroll records are delinquent (specify weeks and due dates):

The following payroll records are inadequate (specify weeks and ways in which records are deemed inadequate under 8 CCR §16435(d)):

Estimated amount of contract payments due to contractor or subcontractor that are being withheld pursuant to this Notice:

See page 2 for additional information, including appeal rights.

Labor Compliance Officer

APPENDIX F

Notice of Right to Obtain Review - Formal Hearing

In accordance with Labor Code sections 1742 and 1771.6, an affected contractor or subcontractor may obtain review of this Notice of Withholding of Contract Payments by transmitting a written request to the office of the Labor Compliance Program that appears below within 60 days after service of the notice. **To obtain a hearing, a written Request for Review must be transmitted to the following address:**

Sonoma Valley County Sanitation District
Joan Hultberg
404 Aviation Blvd.
Santa Rosa, CA 95403

A **Request for Review** either shall clearly identify the Notice of Withholding of Contract Payments from which review is sought, including the date of the notice, or it shall include a copy of the notice as an attachment, and shall also set forth the basis upon which the notice is being contested. In accordance with Labor Code section 1742, the contractor or subcontractor shall be provided an opportunity to review evidence to be utilized by the Labor Compliance Program at the hearing within 20 days of the Labor Compliance Program's receipt of the written **Request for Review**.

Failure by a contractor or subcontractor to submit a timely Request for Review will result in a final order which shall be binding on the contractor and subcontractor, and which shall also be binding, with respect to the amount due, on a bonding company issuing a bond that secures the payment of wages and a surety on a bond. Labor Code section 1743.

In accordance with Labor Code section 1742(d), a certified copy of a final order may be filed by the Labor Commissioner in the office of the clerk of the superior court in any county in which the affected contractor or subcontractor has property or has or had a place of business. The clerk, immediately upon the filing, shall enter judgment for the State against the person assessed in the amount shown on the certified order.

Opportunity for Settlement Meeting

In accordance with Labor Code Section 1742.1 (b), the Labor Compliance Program shall, upon receipt of a request from the affected contractor or subcontractor within 30 days following the service of this Notice of Withholding of Contract Payments, afford the contractor or subcontractor the opportunity to meet with the Labor Compliance Program's designee **to attempt to settle a dispute regarding the notice**. The settlement meeting may be held in person or by telephone and shall take place before the expiration of the 60-day period for seeking a hearing as set forth above under the heading Notice of Right to Obtain Review. No evidence of anything said or any admission made for the purpose of, in the course of, or pursuant to, the settlement meeting is admissible or subject to discovery in any administrative or civil proceeding. No writing prepared for the purpose of, in the course of, or pursuant to, the settlement meeting, other than a final settlement agreement, is admissible or subject to discovery in any administrative or civil proceeding. This opportunity to timely request an informal settlement meeting is **in addition** to the right to obtain a formal hearing, and a settlement meeting may be requested even if a written **Request for Review** has already been made. Requesting a settlement meeting, however, does not extend the 60-day period during which a formal hearing may be requested.

A written request to meet with the Labor Compliance Program's designee to attempt to settle a dispute regarding this notice must be transmitted to **SONOMA VALLEY COUNTY SANITATION DISTRICT** at the following address:

Sonoma Valley County Sanitation District
Joan Hultberg
404 Aviation Blvd.
Santa Rosa, CA 95403

Liquidated Damages

In accordance with Labor Code section 1742.1, after 60 days following the service of this Notice of Withholding of Contract Payments, the affected contractor, subcontractor, and surety on a bond or bonds issued to secure the payment of wages covered by the notice shall be liable for liquidated damages in an amount equal to the wages, or portion thereof that still remain unpaid. If the notice

subsequently is overturned or modified after administrative or judicial review, liquidated damages shall be payable only on the wages found to be due and unpaid. If the contractor or subcontractor demonstrates to the satisfaction of the Director of the Department of Industrial Relations that he or she had substantial grounds for believing the assessment or notice to be an error, the Director shall waive payment of the liquidated damages.

The Amount of Liquidated Damages Available Under this Notice is \$

Distribution:

Prime Contractor

Subcontractor

Surety(s) on Bond

Attach:

Audit Summary

Proof of Service

APPENDIX G

Joan Hultberg 404 Aviation Blvd. Santa Rosa, CA 95403	
Date:	In Reply Refer to Case No.:

Notice of Withholding of Contract Payments

Awarding Body - Work Performed in County of -
Project Name
Prime Contractor
Subcontractor

After an investigation concerning the payment of wages to workers employed in the execution of the contract for the above-named public works project, the Labor Compliance Program for **Sonoma Valley County Sanitation District** has determined that violations of the California Labor Code have been committed by the contractor and/or subcontractor identified above. In accordance with Labor Code sections 1771.5 and 1771.6, the Labor

The Labor Compliance Program has determined that the total amount of wages due is: \$

The Labor Compliance Program has determined that the total amount of penalties assessed under Labor Code sections 1775 and 1813 is: \$

The Labor Compliance Program has determined that the amount of penalties assessed under Labor Code section 1776 is: \$

SONOMA VALLEY COUNTY SANITATION DISTRICT LABOR COMPLIANCE PROGRAM

By: _____

APPENDIX H

Labor Compliance Program:

Contact person

Phone, fax

Date

NOTICE OF TRANSMITTAL

To:

Department of Industrial Relations
Office of the Director - Legal Unit
Attention: Lead Hearing Officer
P.O. Box 420603
San Francisco, CA 94142-0603

Enclosed herewith please find a Request for Review, dated _____, postmarked _____, and received by this office on _____.

Also enclosed please find the following:

Copy of Notice of Withholding of Contract Payments

Copy of Audit Summary

Labor Compliance Program

Signed _____

Cc:

Prime Contractor

Subcontractor

Bonding Company

Within ten (10) days following its receipt of a Request for Review, the Enforcing Agency shall transmit to the Office of the Director - Legal Unit, the Request for Review and copies of the Assessment or Notice of Withholding of Contract Wages, any Audit Summary that accompanied the Assessment or Notice, and a Proof of Service or other document showing the name and address of any bonding company or Surety entitled to notice under Rule 20(a) [Section 17220(a)] above. The Enforcing Agency shall transmit these items to the following address.

Appendix I

Labor Compliance Program

Review Office-Notice of Withholding of Contract Payments

Phone, Fax

Date

Case No.,

Notice of Opportunity to Review Evidence Pursuant to Labor Code Section 1742(b)

To: Prime Contractor

To: Subcontractor

Please be advised that this office has received your Request for Review, dated _____, and pertaining to the Notice of Withholding of Contract Payments issued by the Labor Compliance Program in Case No. _____.

In accordance with Labor Code section 1741(b), this notice provides you with an opportunity to review evidence to be utilized by the Labor Compliance Program at the hearing on the Request for Review, and the procedures for reviewing such evidence.

Rule 17224 of the Prevailing Wage Hearing Regulations provides as follows:

A(a) Within ten (10) days following its receipt of a Request for Review, the Enforcing Agency shall also notify the affected contractor or subcontractor of its opportunity and the procedures for reviewing evidence to be utilized by the Enforcing Agency at the hearing of the Request for Review.

(b) An Enforcing Agency shall be deemed to have provided the opportunity to review evidence required by this Rule if it (1) gives the affected contractor or subcontractor the option at said party's own expense to either (i) obtain copies of all such evidence through a commercial copying service or (ii) inspect and copy such evidence at the office of the Enforcing Agency during normal business hours; or if (2) the Enforcing Agency at its own expense forwards copies of all such evidence to the affected contractor or subcontractor.

(c) The evidence required to be provided under this Rule shall include the identity of witnesses whose testimony the Enforcing Agency intends to present, either in person at the hearing or by declaration or

affidavit. This provision shall not be construed as requiring the Enforcing Agency to prepare or provide any separate listing of witnesses whose identities are disclosed within the written materials made available under subpart (a).

(d) The Enforcing Agency shall make evidence available for review as specified in subparts (a) through (c) within 20 days of its receipt of the Request for Review; *provided that*, this deadline may be extended by written request or agreement of the affected contractor and subcontractor. The Enforcing Agency's failure to make evidence available for review is required by Labor Code section 1742(b) and this Rule, shall preclude the enforcing agency from introducing such evidence in proceedings before the Hearing Officer or the Director.

(e) This Rule shall not preclude the Enforcing Agency from relying upon or presenting any evidence first obtained after the initial disclosure of evidence under subparts (a) through (d), *provided that*, such evidence is promptly disclosed to the affected contractor or subcontractor. This Rule also shall not preclude the Enforcing Agency from presenting previously undisclosed evidence to rebut new or collateral claims raised by another party in the proceeding.

In accordance with the above Rule, please be advised that the Labor Compliance Program's procedure for you to exercise your opportunity to review evidence is as follows:

Within five calendar days of the date of this notice, please transmit the attached Request to Review Evidence to the following address:

Attention: _____

Appendix J

Request to Review Evidence

To: _____

From: _____

Regarding Notice of Contract Withholding of Contract Payments Dated _____

Our Case No. : _____

The undersigned hereby requests an opportunity to review evidence to be utilized by the Labor Compliance Program at the hearing on the Request for Review.

Signed

Phone No: _____

Fax No: _____

STATE OF CALIFORNIA – DEPARTMENT OF INDUSTRIAL RELATIONS

TO: California Department of Industrial Relations
 Division of Apprenticeship Standards
 P.O. Box 420603
 San Francisco, CA 94142

AWARDING AGENCY ID NUMBER

If you do not have an ID number please contact DAS

FROM:

**EXTRACT OF
 PUBLIC WORKS CONTRACT AWARD**

A CONTRACT TO PERFORM PUBLIC WORKS UNDER LABOR CODE SECTION 1777.5 HAS BEEN AWARDED TO:

1. NAME OF GENERAL CONTRACTOR			2. CONTRACTOR'S LICENSE NO		
3. MAILING ADDRESS (STREET NUMBER OR P.O. BOX)			4. CITY		
			5. ZIP CODE		6. TELEPHONE NUMBER
7. GENERAL CONTRACTOR'S CONTACT EMAIL ADDRESS			8. ADDRESS/LOCATION OF PUBLIC WORKS SITE (INCLUDE CITY AND COUNTY):		
9. NAME OF PROJECT			8a. County		
10. CONTRACT NUMBER		11. PROJECT NUMBER		12. DOLLAR AMOUNT OF CONTRACT AWARD	
13. FIRST ADVERTISED BID DATE MONTH DAY YEAR		14. CONTRACT AWARD DATE MONTH DAY YEAR		12a. ESTIMATED TOTAL PROJECT COSTS, IF DIFFERENT FROM ITEM 12 (see instructions).	
16. STATE CONSTRUCTION BONDS If YES, List the Sources and Dollar Amount of Bond Proceeds: SOURCES			15. WHICH STATUTE, IF ANY, APPLIES TO THIS PROJECT?		
			17. WILL YOU OPERATE A DIR-APPROVED LABOR COMPLIANCE PROGRAM (LCP) FOR THIS PROJECT? YES NO		
16. STATE CONSTRUCTION BONDS If YES, List the Sources and Dollar Amount of Bond Proceeds: SOURCES			18. IS THERE A PROJECT LABOR AGREEMENT (PLA) ASSOCIATED WITH THIS PROJECT? If yes, please email a copy to cmupla@dir.ca.gov YES NO		
			19. IS THERE A PROJECT LABOR AGREEMENT (PLA) ASSOCIATED WITH THIS PROJECT? If yes, please email a copy to cmupla@dir.ca.gov YES NO		
18. STARTING DATE (ESTIMATED OR ACTUAL) (MM/DD/YYYY)			20. COMPLETION DATE (ESTIMATED OR ACTUAL) (MM/DD/YYYY)		
21. BRIEF DESCRIPTION OF WORK TO BE PERFORMED			22. NEW CONSTRUCTION REMODELING ALTERATION, DEMOLITION, REPAIR OR MAINTENANCE		
23. CLASSIFICATION OR TYPE OF WORKER (CARPENTER, PLUMBER, ETC.) THAT WILL BE EMPLOYED BY THE CONTRACTOR(S) Please list Sub-contractors and their worker classifications on page 2					
24. Is language included in the Contract Award to effectuate the requirements of sections 1771, 1774, 1775, 1776, 1777.5, 1813, and 1815 of the Labor Code? YES NO					
25. SIGNATURE		26. TITLE		27. DATE	
28. PRINTED OR TYPED NAME		29. E-MAIL ADDRESS		30. TELEPHONE NUMBERS	
If different from above, name, title, and contact information of person responsible for carrying out Awarding Body's LCP or CMU responsibilities.					
31. NAME		32. TITLE		33. E-MAIL ADDRESS	
				34. TELEPHONE NUMBER	

Duplication of this form is permissible

DIR-PWC 100 (rev. 10/11) successor to the DAS 13 form

EXTRACT OF PUBLIC WORKS CONTRACT AWARD (Continued)

Listing of Sub Contractors

Con. Lic. #	Contractor	Classification of workers

Provided for Reference Only.
Please use the Web Application
to submit your Contract Award information.
<https://www.dir.ca.gov/PWC100>

DIR-PWC 100 (rev. 10/11) successor to the DAS 13 form

PUBLIC WORKS CONTRACT AWARD INFORMATION

Contract award information must be sent to your Apprenticeship Committee if you are approved to train. If you are not approved to train, you must send the information (which may be this form) to ALL applicable Apprenticeship Committees in your craft or trade in the area of the site of the public work. Go to: <http://www.dir.ca.gov/das/PublicWorksForms.htm> for information about programs in your area and trade. You may also consult your local Division of Apprenticeship Standards (DAS) office whose telephone number may be found in your local directory under California, State of, Industrial Relations, Division of Apprenticeship Standards.

Do not send this form to the Division of Apprenticeship Standards.

NAME OF YOUR COMPANY	CONTRACTOR'S STATE LICENSE NO
MAILING ADDRESS- NUMBER & STREET, CITY, ZIP CODE	AREA CODE & TELEPHONE NO.
NAME & ADDRESS OF PUBLIC WORKS PROJECT	DATE YOUR CONTRACT EXECUTED
	DATE OF EXPECTED OR ACTUAL START OF PROJECT
NAME & ADDRESS OF PUBLIC AGENCY AWARDED CONTRACT	ESTIMATED NUMBER OF JOURNEYMEN HOURS
	OCCUPATION OF APPRENTICE
THIS FORM IS BEING SENT TO: (NAME & ADDRESS OF APPRENTICESHIP PROGRAM(S))	ESTIMATED NUMBER OF APPRENTICE HOURS
	APPROXIMATE DATES TO BE EMPLOYED

This is not a request for dispatch of apprentices.

Contractors must make a separate request for actual dispatch, in accordance with Section 230.1(a) California Code of Regulations

Check One Of The Boxes Below

1. We are already approved to train apprentices by the _____ Apprenticeship Committee. We will employ and train under their Standards. Enter name of the Committee
2. We will comply with the standards of _____ Apprenticeship Committee for the duration of this job only. Enter name of the Committee
3. We will employ and train apprentices in accordance with the California Apprenticeship Council regulations, including § 230.1 (c) which requires that apprentices employed on public projects can only be assigned to perform work of the craft or trade to which the apprentice is registered and that the apprentices must at all times work with or under the direct supervision of journeyman/men.

Signature _____ Date _____
 Typed Name _____
 Title _____

**State of California - Department of Industrial Relations DIVISION
 OF APPRENTICESHIP STANDARDS**

DAS 140 (REV. 1/04)

Statement of Employer Payments

Date:		In Reply, Refer to Case No:	
Prime:			
Subcontractor:			
PROJECT NAME:			
PROJECT CONTRACT NO.:		County/location:	



HEALTH AND WELFARE			
NAME OF PLAN	Address, City and Zip		
ADMINISTRATOR	Address, City and Zip		
CLASSIFICATION(S) USED	CONTRIBUTION PER CLASSIFICATION PER HOUR		
CONTRIBUTIONS:	WEEKLY	MONTHLY	QUARTERLY ANNUALLY
PENSION			
NAME OF PLAN	Address, City and Zip		
ADMINISTRATOR	Address, City and Zip		
CLASSIFICATION(S) USED	CONTRIBUTION PER CLASSIFICATION PER HOUR		
CONTRIBUTIONS:	WEEKLY	MONTHLY	QUARTERLY ANNUALLY
VACATION/HOLIDAY			
NAME OF PLAN	Address, City and Zip		
ADMINISTRATOR	Address, City and Zip		
CLASSIFICATION(S) USED	CONTRIBUTION PER CLASSIFICATION PER HOUR		
CONTRIBUTIONS:	WEEKLY	MONTHLY	QUARTERLY ANNUALLY
TRAINING			
NAME OF PLAN	Address, City and Zip		
ADMINISTRATOR	Address, City and Zip		
CLASSIFICATION(S) USED	CONTRIBUTION PER CLASSIFICATION PER HOUR		
CONTRIBUTIONS:	WEEKLY	MONTHLY	QUARTERLY ANNUALLY

IF YOU USE OTHER PLANS NOT LISTED ABOVE, YOU MAY USE THE BACK OF THIS FORM TO PROVIDE THIS ADDITIONAL INFORMATION

PW 26

 REQUEST FOR DISPATCH OF AN APPRENTICE – DAS 142 FORM DO NOT SEND THIS FORM TO DAS	
<p>You may use this form to request dispatch of an apprentice from the Apprenticeship Committee in the craft or trade in the area of the public work. Go to: http://www.dir.ca.gov/DAS/PublicWorksForms.htm for information about programs in your area and trade. You may also consult your local Division Apprenticeship Standards (DAS) office whose telephone number may be found in your local directory under California, State of, Industrial Relations, Division of Apprenticeship Standards. <u>Except for projects with less than 40 hours of journeyman work, you must request and employ apprentices in no less than 8 hour increments.</u></p>	
Date: _____	Contractor Requesting Dispatch:
To Applicable Apprenticeship Committee: Name: _____ Address: _____ _____ Tel. No. _____ Fax No. _____	Name: _____ Address: _____ _____ License No. _____ Tel. No. _____ Fax No. _____
Project Information: Contract No. _____ Name of the Project: _____ Address: _____ _____	
Dispatch Request Information: Number of Apprentice(s) Needed: _____ Craft or Trade: _____ Date Apprentice(s) to Report: _____ (72 hrs. notice required) Time to Report: _____ Name of Person to Report to: _____ Address to Report to: _____ _____	
<p><i>You may use this form to make your written request for the dispatch of an apprentice. Requests for dispatch must be in writing and submitted at least 72 hours in advance (excluding weekends and holidays) via first class mail, fax or email. Proof of submission may be required. Please take note of California Code of Regulations, Title 8, § 230.1 (a) for all applicable requirements regarding apprenticeship requests and/or visit http://www.dir.ca.gov/DAS/DASApprenticesOnPublicWorksSummaryOfRequirements.htm</i></p> <p><i>DAS 142 (Revised 12/11)</i></p>	

Labor Compliance Program

**STATEMENT OF COMPLIANCE
(CERTIFICATION UNDER PENALTY OF PERJURY)**

I, _____, do, hereby certify under penalty of perjury
(Name)

- 1. That all of the information in this report is true and correct.
- 2. That I pay, or supervise the payment of, the persons employed by:

_____, on _____,
(Company) (Project)

and that during the payroll period commencing _____
(Beginning Date)

and ending _____ That all persons employed on said project have
(Date Ending)

been paid the full weekly wages earned, that no rebates have been or will be made, either directly or indirectly to or on behalf of, said company from the full wages earned by any person and that no deductions have been made, either directly or indirectly, from the full wages earned by any person, other than normal and permissible deductions, as described below:

FICA-FEDERAL & STATE TAXES – VACATION & HOLIDAYS HEALTH & WELFARE – ANNUITY/PENSION FUNDS-TRAINING FEES

- 3. That any payrolls, under this contract, required to be submitted for the above period, are correct and complete; that the wage rate for laborers and mechanics, contained herein, are not less than the applicable wage rates contained in any determination incorporated into the contract; that the classifications, set forth for each laborer or mechanic, conform with the work he performed.
- 4. That any apprentices employed, in the above period, are duly registered in a bonafide apprenticeship program, registered with the state apprenticeship agency.
- 5. That fringes are paid: To Worker: To Funds:
Each laborer or mechanic, listed in the above referenced payroll, has been paid as indicated on the payroll an amount not less than the sum of the applicable, basic hourly rate, plus the amount of required fringe benefits, as listed in the contract.

(Name) (Title)

(Signature) (Date)

NOTICE TO PUBLIC ENTITY

For Privacy Considerations

Fold back along dotted line prior to copying for release to general public (private persons).

(Paper Size then 8-1/2 x 11 inches)

I, _____, the undersigned, am the
(Name - print)

_____ with the authority to act for and on behalf of
(Position in business)

_____, certify under penalty of perjury
(Name of business and/or contractor)

that the records or copies thereof submitted and consisting of _____
(Description, number of pages)

are the originals or true, full, and correct copies of the originals which depict the payroll record(s)
of the actual disbursements by way of cash, check, or whatever form to the individual or
individuals named.

Date: _____ Signature: _____

A public entity may require a stricter and/or more extensive form of certification.



PUBLIC WORKS PAYROLL REPORTING FORM

Page ____ of ____

NAME OF CONTRACTOR: OR SUBCONTRACTOR:		CONTRACTORS LICENSE NO.:		ADDRESS:																										
PAYROLL NO.:		FOR WEEK ENDING:		SELF-INSURED CERTIFICATE NO.:																										
				WORKERS COMPENSATION POLICY NO.:																										
				PROJECT OR CONTRACT NO.:																										
				PROJECT AND LOCATION:																										
(1) NAME, ADDRESS AND SOCIAL SECURITY NUMBER OF EMPLOYEE	(2) NO. OF WEEKS EMPLOYED	(3) WORK CLASSIFICATION	(4) DAY							(5) TOTAL HOURS	(6) HOURLY RATE OF PAY	(7) GROSS AMOUNT EARNED		(8) DEDUCTIONS, CONTRIBUTIONS AND PAYMENTS								(9) NET WGS PAID FOR WEEK	CHECK NO.							
			M	T	W	TH	F	S	S			DATE	THIS PROJECT	ALL PROJECTS	FED. TAX	FICA (SOC. SEC.)	STATE TAX	SDI	VAC/ HOLIDAY	HEALTH & WELF.	PENSION			TRAING.	FUND ADMIN.	DUES	TRAV. SUBS.	SAVINGS	OTHER*	TOTAL DEDUC- TIONS
			HOURS WORKED EACH DAY																											
		S																												
		O																												
		S																												
		O																												
		S																												
		O																												

Form A-1-111 (9/69-2-80)

S = STRAIGHT TIME
O = OVERTIME
SDI = STATE DISABILITY INSURANCE

*OTHER - Any other deductions, contributions and/or payments whether or not included or required by prevailing wage determinations must be separately listed. Use extra sheet(s) if necessary

CERTIFICATION MUST be completed (See reverse side)

North Valley Labor Compliance Program
Labor Compliance Program

NON-PERFORMANCE PAYROLL REPORT

Report # _____

Contractor: _____

Subcontractor : _____

I do, hereby state that no persons were employed on the construction site of:

Project: _____, Contract No. _____,

during the payroll period commencing on the _____ day of _____,

20____, and ending on the _____ day of _____, 20____.

Remarks:

Final payroll: ____Yes ____ No

Signature of Authorized Person: _____

Name: _____ Date: _____

Title: _____

Note: One copy of this form must be submitted within (10) ten days following the close of the contractor's pay period, for any pay period or part pay period that the contractor did not employ workmen on the contract site.

This report is not required prior to submission of the INITIAL, ACTUAL payroll report, nor is it required after the FINAL pay report for the project.

State of California
 Department of Industrial Relations
 California Apprenticeship Council
 P.O. Box 101325
 Pasadena, CA 91189-0005

TRAINING FUND CONTRIBUTIONS

Please use a separate form for each jobsite, listing the occupations for the jobsite. One check payable to the California Apprenticeship Council may be submitted for all jobsites and/or occupations. Training fund contributions are not accepted by the California Apprenticeship Council for federal public works projects, unless the project is administered by a public agency or for non-apprenticeable occupations such as utility technicians, lead abatement worker, etc.

California Apprenticeship Council

****Training Fund Contributions are due on the 15th of each month****

PLEASE TYPE OR PRINT IN BLACK OR BLUE INK. ALL FIELDS MUST BE FILLED IN TO ENSURE SUCCESSFUL SUBMISSION AND PROCESS OF PAYMENT.

NAME AND ADDRESS OF CONTRACTOR/SUB CONTRACTOR MAKING CONTRIBUTION		CONTRACTOR'S LICENSE NUMBER	
		CONTRACT OR PROJECT NUMBER	
		JOBSITE LOCATION (INCLUDE COUNTY) IF APPLICABLE - GIVE NAME OF SCHOOL, HOSPITAL, BUILDING, etc.	
NAME AND ADDRESS OF PUBLIC AGENCY AWARDED CONTRACT		PERIOD COVERED BY CONTRIBUTION (FROM - TO)	
CLASSIFICATIONS OF WORKERS (CARPENTER, PLUMBER, ELECTRICIAN, ETC.)	COUNTY WORK PERFORMED IN	ALL HOURS	CONTRIBUTION RATE PER HOUR
			\$ 0.00
			\$ 0.00
			\$ 0.00
			\$ 0.00
			\$ 0.00
			\$ 0.00
TOTAL			\$ 0.00
IF APPRENTICES WERE EMPLOYED, PLEASE LIST THE APPRENTICESHIP PROGRAM AND NUMBER OF APPRENTICE HOURS WORKED			
TYPE OR PRINT YOUR NAME AND TITLE			DATE
EMAIL			AREA CODE & TELEPHONE NUMBER

CAC 2 (rev.8/12)

TRAINING FUND CONTRIBUTIONS

PRIME CONTRACTOR AFFIDAVIT OF PUBLIC WORKS COMPLIANCE
Certification of Compliance with Prevailing Wage Laws

I,

As the Owner
or Official
Representative
of

_____ (NAME)

_____ (COMPANY)

I hereby, certify under penalty of perjury:

- 1) That I am the Owner or Official Representative of the above named company and therefore responsible for compliance with the Public Works laws for my company and for the subcontractors contracted by my company on this project.
- 2) That as Owner or Official Representative of this company, I was informed of the California Public Works laws and was given the information and forms to complete the project in compliance with these laws at the beginning of the project.
- 3) That the determinations and classifications published by the State of California Department of Labor Statistics & Research (DLSR) have been used to bid the wages on this project by my company and my subcontractors' companies.
- 4) That all workers who performed labor on the project will be paid all prevailing wages as listed in the applicable determinations due to them in the course of the work as listed on their timecards, including fringe benefits.
- 5) That all training fees, if applicable, to the trade in which they are employed will be paid to the appropriate, approved fund.
- 6) That all workers listed as apprentices are registered, state apprentices and furnished a certificate of registration.
- 7) I am aware of Section 3700 of the California Labor Code and agree to carry worker's compensation insurance or to undertake self-insurance in accordance with that code for the duration of this project.

Title: _____

Signature: _____

Date: _____ Project: _____

LCP-AR1

LABOR COMPLIANCE PROGRAM ANNUAL REPORT

Format for Awarding Body that enforces its own Labor Compliance Program for some but not all projects

Report for the reporting period _____ to _____
(mm/dd/yyyy) (mm/dd/yyyy)

1. Name of Labor Compliance Program (LCP) :		
2. LCP I.D. Number (assigned by DIR):	3. Date of Initial Approval:	
4. Contact person (include name, title, address, telephone, fax, and e-mail, if available):		
5. Did LCP perform any LC § 1771.5 enforcement activities during the 12 months in the reporting period? Please check one: <input type="checkbox"/> Yes If Yes, proceed to item 6 on the next page <input type="checkbox"/> No If No, complete the information below, sign the form and submit to DIR, Office of the Director, Attn: LCP Special Assistant, 455 Golden Gate Avenue, 10th Floor, San Francisco CA 94102		
What suggestions do you have for the Department of Industrial Relations to better assist you with your program in the coming year? (attach additional sheets if necessary)		
SUBMITTED BY:		
Signature	Name and Title	Date

LCP-AR1

6. LC § 1771.5 enforcement activities (provide all information requested, attaching as many sheets as necessary).

A. List projects handled by LCP within the past 12 months.

Project Name	Bid Advertisement Date	Prime Contractor	Contract Amount
Total			

B. Summary of all wages and penalties assessed and/or recovered.

Project Name	Affected Contractor (who directly employed the worker)	Amount Assessed	Amount Recovered	Approval of Forfeiture Requested from Labor Commissioner?	Description of Violation
				<input type="checkbox"/> Yes <input type="checkbox"/> No	
				<input type="checkbox"/> Yes <input type="checkbox"/> No	
				<input type="checkbox"/> Yes <input type="checkbox"/> No	
				<input type="checkbox"/> Yes <input type="checkbox"/> No	
				<input type="checkbox"/> Yes <input type="checkbox"/> No	
				<input type="checkbox"/> Yes <input type="checkbox"/> No	
				<input type="checkbox"/> Yes <input type="checkbox"/> No	
				<input type="checkbox"/> Yes <input type="checkbox"/> No	
Total					

LCP-ARI

C. For any amount identified in item B for which approval of forfeiture not requested from the Labor Commissioner, please explain below.

Project Name	Amount Assessed	Amount Recovered	Explanation
Total			

D. For any amount identified in item B for which approval of forfeiture was requested from the Labor Commissioner, please provide the following:

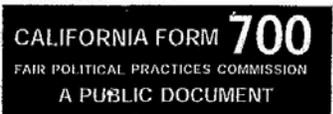
Project Name	Amount Assessed					Amount Recovered				
	LC §1776(g)	LC § 1775	LC § 1813	Wages	Total	LC § 1776(g)	LC § 1775	LC § 1813	Wages	Total
Total										

E. Identify cases that are or were the subject of LC § 1742 proceedings.

Project Name	Contractor	Nature of Violation	ODL Case #	Current Status

F. Did you refer any contractor to the Labor Commissioner for debarment per LC § 1777.1?
 Please check one: Yes No
 If yes, identify affected contractor(s) or subcontractor(s) and date(s) of referral: _____

G. Did you refer any apprenticeship violation to the Division of Apprenticeship Standards (DAS)?
 Please check one: Yes No
 If yes, identify affected contractor(s) or subcontractor(s) and date(s) of referral: _____



STATEMENT OF ECONOMIC INTERESTS COVER PAGE

Date Received Official Use Only

Please type or print in ink.

NAME OF FILER (LAST) (FIRST) (MIDDLE)

1. Office, Agency, or Court

Agency Name

Division, Board, Department, District, if applicable Your Position

If filing for multiple positions, list below or on an attachment.

Agency: Position:

2. Jurisdiction of Office (Check at least one box)

- State, Multi-County, City of, Judge or Court Commissioner, County of, Other

3. Type of Statement (Check at least one box)

- Annual, Leaving Office, Assuming Office, Candidate

4. Schedule Summary

- Schedule A-1, A-2, B, C, D, E, None - No reportable interests on any schedule

5. Verification

MAILING ADDRESS STREET CITY STATE ZIP CODE

DAYTIME TELEPHONE NUMBER E-MAIL ADDRESS (OPTIONAL)

I have used all reasonable diligence in preparing this statement. I have reviewed this statement and to the best of my knowledge the information contained herein and in any attached schedules is true and complete. I acknowledge this is a public document.

I certify under penalty of perjury under the laws of the State of California that the foregoing is true and correct.

Date Signed Signature

SECTION 01420

REFERENCES AND DEFINITIONS**PART 1 GENERAL****1.1 SUMMARY**

- A. Section Includes: Reference standards, abbreviations, symbols, definitions, and terminology 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 (including all amendments, changes, errata, addenda, and supplements) in effect at the time of opening of Bids, except as may be otherwise specifically stated in the Contract Documents.
 - 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.
 - a. Exception: Comply with issues in effect as listed in governing legal requirements.
- 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, report it in writing at once by submitting a RFI to Owner, and do not proceed with the Work affected thereby until consent to do so is given by Owner.
- 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 Owner, Contractor, or Engineer, 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 Owner, 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.
- 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. ASTM and ANSI References: Specifications and Standards of the American Society for Testing and Materials International (ASTM International) 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
AB	Aggregate Base
ABMA	American Bearing Manufacturers Association
ABPA	American Board Products Association
ACI	American Concrete Institute
ADA	Americans with Disabilities Act
AED	Association of Equipment Distributors
AFBMA	Anti-friction Bearing Manufacturers Association
AGA	American Gas Association
AGMA	American Gear Manufacturers 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
API	American Petroleum Institute
ARI	Air-Conditioning and Refrigeration Institute
ASCE	American Society of Civil Engineers
ASHRAE	American Society of Heating, Refrigeration, and Air-Conditioning Engineers
ASME	American Society of Mechanical Engineers
ASSE	American Society of Safety Engineers
ASTM	ASTM International
AWCI	Association of the Wall and Ceiling Industries
AWG	American Wire Gauge
AWPA	American Wood-Preservers' Association
AWPB	American Wood Preservers Bureau
AWS	American Welding Society
AWWA	American Water Works Association
BHMA	Builders Hardware Manufacturers Association
BIL	Basic Insulation Level
BOD	Biological Oxygen Demand
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 or California Energy Commission
CF	Cubic Foot or Cubic Feet
CFM	Cubic Feet per Minute
CFR	Code of Federal Regulations
CGA	Common Ground Alliance
CI	Chlorine Institute, Inc.
CISPI	Cast Iron Soil Pipe Institute
CL	Center Line
CLMFI	Chain Link Fence Manufacturers Institute
CMAA	Crane Manufacturers Association of America, Inc.
CMC	California Mechanical Code
CO	Change Order
COE	United States Army Corps of Engineers
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
CY	Cubic Yard or Cubic Yards
DBE	Disadvantaged Business Enterprise
DFPA	Douglas Fir Plywood Institute
DFT	Dry Film Thickness
DHI	Door and Hardware Institute

EIA	Electronic Industries Association
EPA	Environmental Protection Agency
ETL	Electrical Testing Laboratories
FGMA	Flat Glass Marketing Association
FPS	Feet per Second or Fluid Power Society
FS	Federal Specifications
GA	Gypsum Association
GPM	Gallons Per Minute
Greenbook	Standard Specifications for Public Works Construction
HI	Hydraulic Institute
HMI	Hoist Manufacturer's Institute
HMMA	Hollow Metal Manufacturer's Association
HP	Horse Power
HPMA	Hardwood Plywood Manufacturers Association
HVAC	Heating, Ventilating and Air Conditioning
IACS	International Annealed Copper Standards
IAPMO	International Association of Plumbing and Mechanical Officials
ICBO	International Conference of Building Officials
ICEA	Insulated Cable Engineers Association
ID	Identification or Inside Diameter
IEEE	Institute of Electrical and Electronic Engineers
IES	Illuminating Engineering Society
ISA	International Society of Arboriculture
ISAS	Instrumentation, Systems, and Automation Society
ISO	International Organization for Standardization
JATC	Joint Apprenticeship Training Committee
JV	Joint Venture
LBE	Local Business Enterprise
LLC	Limited Liability Corporation or Company
LS	Lump Sum
M.I.	Middle Initial
M/WBE	Minority and/or Woman-Owned Business Enterprise
MBE	Minority Business Enterprise
MGD	Million Gallons per Day
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
NFoPA	National Forest Products Association
NFPA	National Fire Protection Association

NIC	Not In Contract
NIOSH	National Institute for Occupational Safety and Health
NIST	National Institute of Standards and Technology
NPT	National Pipe Thread
NRMCA	National Ready Mixed Concrete Association
NSF	National Sanitation Foundation
NTS	Not to Scale
NWWDA	National Wood Windows and Doors Association
OC	On Center
OD	Outside Diameter
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
PL	Property Line
PLC	Programmable Logic Controller
PM	Preventive Maintenance
PPM	Parts per Million
PR	Proposal Request
PRMD	Permits and Resource Management Department, County of Sonoma
PS	Product Standard, U. S. Department of Commerce
PSF or psf	Pounds per Square Foot
PSI or psi	Pounds per Square Inch
PSIG	Pounds per Square Inch Gauge
PVC	Polyvinyl chloride
RC	Relative Compaction
RFI	Request for Information
RFP	Request for Proposals
RFS	Request for Substitution
RIS	Redwood Inspection Service
RPM	Revolutions per Minute
SAE	Society of Automotive Engineers
SDeI	Steel Deck Institute
SDoI	Steel Door Institute
SDR	Standard Dimension Ratio
SF	Square Foot or Square Feet
SFM	State of California, Office of State Fire Marshal
SIDR	Standard Inside Dimension Ratio
SIGMA	Sealed Insulating Glass Manufacturers Association
SJI	Steel Joint Institute
SMACNA	Sheet Metal and Air Conditioning Contractors National Association
SPIB	Southern Pine Inspection Bureau
SSPC	Society for Protective Coating (formerly Steel Structures Painting Council)
SWI	Steel Window Institute
TCA	Tile Council of America
TIE	Time Impact Evaluation

TMS	The Masonry Society
TPI	Truss Plate Institute Inc.
UFC	Uniform Fire Code
UL	Underwriters' Laboratories, Inc.
UMC	Uniform Mechanical Code
UPC	Uniform Plumbing Code
USA	Underground Service Alert
USACE	United States Army Corps of Engineers
USC	United States Code
VOC	Volatile Organic Compounds
WBE	Women's Business Enterprise
WCLIB	West Coast Lumber Inspection Bureau
WHI	Warnock Hersey International
WIC	Woodwork Institute of California
WWPA	Western Wood Products Association
WWPI	Western Wood Preservers Institute

B. Abbreviations in Specifications:

cm	centimeter (centimeters)
Co.	Company
Corp.	Corporation
cu	Cubic
dia	diameter
Div	Division
ft	foot (feet)
g	gram (grams) or Standard Acceleration of Gravity
gal	gallon (gallons)
gpd	gallons per Day
hr	hour
in	inch (inches)
Inc.	Incorporated
kg	kilogram (kilograms)
km	kilometer (kilometers)
kVAR	kilovolts amperes reactive
kW	kilowatt
l	liter (liters)
lb(s)	Pound(s)
m	meter (meters)
mfr	manufacturer
mg	milligram (milligrams)
ml/mls	milliliter (milliliters)
mm	millimeter (millimeters)
No	number
sq	square
Sta	Station
T & G	tongue and groove
Typ	typical

US	United States
yd	yard (yards)

C. Abbreviations on Drawings:

1. As listed for Specifications above.
2. Additional abbreviations, used only on Drawings, are indicated thereon.

1.4 SYMBOLS

A. Symbols in Specifications:

:	“shall be” or “shall” - where used within sentences or paragraphs
#1	number
1#	pound
&	and
%	percent
C	Centigrade
F	Fahrenheit
°	degree
/	“per,” except where used to combine words; example: power/fuel, and in that case it means “and”
“	inch (inches)
’	foot (feet)
@	at

B. Symbols on Drawings:

1. As listed for Specifications above.
2. Symbols, used only on Drawings, are indicated thereon.

1.5 DEFINITIONS

A. Wherever any of the words or phrases defined below, or a pronoun used in place thereof, is used in any part of the Contract Documents, it shall have the meaning here set forth. In the Contract Documents, the neuter gender includes the feminine and masculine, and the singular number includes the plural.

B. The following definitions shall apply regardless of capitalization unless the context otherwise requires:

1. Wherever words “as directed,” “as required,” “as permitted,” or words of like effect are used, it shall be understood that direction, requirements, or permission of Owner is intended. Words “sufficient,” “necessary,” “proper,” and the like shall mean sufficient, necessary, or proper in judgment of Owner. Words “approved,” “acceptable,” “satisfactory,” “favorably reviewed,” or words of like import, shall mean approved by, or acceptable to, or satisfactory to, or favorably reviewed by Owner.
2. Wherever the word “may” or “ought” is used, the action to which it refers is discretionary. Wherever the word “shall” or “will” is used, the action to which it refers is mandatory.
3. Addenda: Written or graphic instruments issued prior to the opening of Bids, which clarify, correct, or change the bidding requirements or the Contract Documents. Addenda shall not include the minutes of the Pre-Bid Conference, if any, or Site Visit.

4. Agency: The Sonoma County Water Agency (SCWA), a public agency of the State of California, acting under and by virtue of the authority vested in the Owner by the laws of the State of California as an agent of District.
5. Agreement (Document 00520): Agreement is the basic Contract Document that binds the parties to construction Work. Agreement defines relationships and obligations between Owner and Contractor and by reference incorporates Conditions of Contract, Drawings, and Specifications and contains Addenda and all Modifications subsequent to execution of Contract Documents.
6. Alternate: Work added to or deducted from the base Bid, if accepted by Owner.
7. Application for Payment: Written application for monthly or periodic progress or final payment made by Contractor complying with the Contract Documents.
8. Approved Equal: Approved in writing by Owner as being of equivalent quality, utility and appearance.
9. Asbestos: Any material that contains more than one percent asbestos and is friable or is releasing asbestos fibers into the air above current action levels established by OSHA or Cal/OSHA.
10. Bid: The offer or proposal of the Bidder submitted on the prescribed form(s) setting forth the prices for the Work to be performed.
11. Bidder: One who submits a Bid.
12. Bidding Documents: All documents comprising the Project Manual (including all documents and Specification Sections listed in Document 00010 [Table of Contents]), including documents supplied for bidding purposes only and Contract Documents.
13. Board: The Board of Directors of the Owner.
14. Business Day: Any Day other than Saturday, Sunday, and the following days that have been designated as holidays by Owner. If a holiday falls on a Saturday, the preceding Friday will be the holiday. If a holiday falls on a Sunday, the following Monday will be the holiday.
 - a. New Year's Day, January 1;
 - b. Martin Luther King Jr.'s Birthday, third Monday in January;
 - c. Lincoln's Birthday, February 12;
 - d. Presidents' Day, third Monday in February;
 - e. Memorial Day, last Monday in May;
 - f. Independence Day, July 4;
 - g. Labor Day, first Monday in September;
 - h. Veterans' Day, November 11;
 - i. Thanksgiving Day, as designated by the President;
 - j. The Day following Thanksgiving Day;
 - k. Christmas Day, December 25; and
 - l. Each day appointed by the Governor of California and formally recognized by the Sonoma County Board of Supervisors as a day of mourning, thanksgiving, or special observance.
15. By Owner: Work that will be performed by Owner or its agents at the Owner's expense.

16. By Others: Work that is outside scope of Work to be performed by Contractor under this Contract, which will be performed by Owner, other contractors, or other means.
17. Change Order: A written instrument prepared by Owner and signed by Owner and Contractor, stating their agreement upon all of the following:
 - a. a change in the Work;
 - b. the amount of the adjustment in the Contract Sum, if any; and
 - c. the amount of the adjustment in the Contract Time, if any.
18. Code Inspector: A local or state agency responsible for the enforcement of applicable codes and regulations.
19. Concealed: Work not exposed to view in the finished Work, including within or behind various construction elements.
20. Construction Change Directive (“CCD”): A written order prepared and signed by Owner, directing a change in the Work and stating a proposed basis for adjustment, if any, in the Contract Sum or Contract Time, or both.
21. Contract Conditions or Conditions of the Contract: Consists of two parts: General Conditions and Supplementary Conditions.
 - a. General Conditions are general clauses that are common to the Owner Contracts, including Document 00700 (General Conditions).
 - b. Supplementary Conditions modify or supplement General Conditions to meet specific requirements for these Contract Documents, including Document 00800 (Supplementary Conditions) ~~[OPTIONAL:] and Document 00805 (Supplementary Conditions—Hazardous Materials).~~
22. Contract Documents and Contract: Contract Documents and Contract shall consist of the documents identified as the Contract Documents in Document 00520 (Agreement), plus all changes, Addenda, and Modifications thereto.
23. Contract Modification: Either:
 - a. a written amendment to Contract signed by Contractor and Owner; or
 - b. a Change Order; or
 - c. a Construction Change Directive; or
 - d. a written directive for a minor change in the Work issued by Owner.
24. Contract Sum: The sum stated in the Agreement and, including authorized adjustments, the total amount payable by Owner to Contractor for performance of the Work and the Contract Documents. The Contract Sum is also sometimes referred to as the Contract Price or the Contract Amount.
25. Contract Time: The number or numbers of Days or the dates stated in the Agreement:
 - a. to achieve Substantial Completion of the Work or designated Milestones; and/or
 - b. to complete the Work so that it is ready for final payment and is accepted.
26. Contractor: The person or entity identified as such in the Agreement and referred to throughout the Contract Documents as if singular in number and neutral in gender. The term “Contractor” means the Contractor or its authorized representative.
27. Contractor’s Employees: Persons engaged in execution of Work under Contract as direct employees of Contractor, as Subcontractors, or as employees of Subcontractors.

28. Day: One calendar day of 24 hours measured from midnight to the next midnight, unless the word "day" is specifically modified to the contrary.
29. Defective: An adjective which, when modifying the word "Work," refers to Work that is unsatisfactory or unsuited for the use intended, faulty, or deficient, that does not conform to the Contract Documents, or does not meet the requirements of any inspection, reference standard, test or approval referred to in the Contract Documents (including but not limited to approval of Samples and "or equal" items), or has been damaged prior to final payment (unless responsibility for the protection thereof has been assumed by Owner). Owner is the judge of whether Work is Defective.
30. District: The Sonoma County Water Agency [OR ___ CSD], a local district of the State of California, acting by and through its Board of Directors.
31. Drawings: The graphic and pictorial portions of Contract Documents, wherever located and whenever issued, showing the design, location and dimensions of the Work, generally including plans, elevations, sections, details, schedules, and diagrams.
32. Engineer: If used elsewhere in the Contract Documents, "Engineer" shall mean a person holding a valid California State Architect's or Engineer's license representing the Owner in the administration of the Contract Documents. Engineer may be an employee of or an independent consultant to Owner. When Engineer is referred to within the Contract Documents and no Engineer has in fact been designated, then the matter shall be referred to Owner. The term Engineer shall be construed to include employees of Engineer and/or employees that Engineer supervises. When the designated Engineer is an employee of Owner, his or her authorized representatives on the Project will be included under the term Engineer. If Engineer is an employee of Owner, or Agency, Engineer is the beneficiary of all Contractor obligations to Owner, including without limitation, all releases and indemnities.
33. Equal: Equal in opinion of Owner. Burden of proof of equality is responsibility of Contractor.
34. Exposed: Work exposed to view in the finished Work, including behind louvers, grilles, registers and various other construction elements.
35. Final Acceptance or Final Completion: Owner's acceptance of the Work as satisfactorily completed in accordance with Contract Documents. Requirements for Final Acceptance/Final Completion include, but are not limited to:
 - a. All systems having been tested and accepted as having met requirements of Contract Documents.
 - b. All required instructions and training sessions having been given by Contractor.
 - c. All required permitting reports.
 - d. All Project Record Documents having been submitted by Contractor, reviewed by Owner, and accepted by Owner.
 - e. All punch list Work, as directed by Owner, having been completed by Contractor.
 - f. Generally all Work, except Contractor maintenance after Final Acceptance/Final Completion, having been completed to satisfaction of Owner.
36. Force Account: Work directed to be performed without prior agreement as to lump sum or unit price cost thereof, and which is to be billed at cost for labor, materials, equipment, taxes, and other costs, plus a specified percentage for overhead and profit.
37. Furnish: Supply only, do not install.

38. Indicated: Shown or noted on the Drawings.
39. Install: Install or apply only, do not furnish.
40. Latent: Not apparent by reasonable inspection, including but not limited to, the inspections and research required as a condition to bidding under Document 00700 (General Conditions).
41. Law: Unless otherwise limited, all applicable laws including without limitation all federal, state, and local laws, statutes, standards, rules, regulations, ordinances, and judicial and administrative decisions.
42. Material: This word shall be construed to embrace machinery, manufactured articles, materials of construction (fabricated or otherwise), and any other classes of material to be furnished in connection with Contract, except where a more limited meaning is indicated by context.
43. Milestone: A principal event specified in Contract Documents relating to an intermediate completion date or time prior to Substantial Completion of all Work.
44. Modification: Same as Contract Modification.
45. Not in Contract: Work that is outside the scope of Work to be performed by Contractor under Contract Documents.
46. Notice of Completion: Shall have the meaning provided in California Civil Code Section 9204, and any successor statute.
47. Off Site: Outside geographical location of the Project.
48. Owner: The District.
49. Owner-Furnished, Contractor-Installed: Items furnished by Owner at its cost for installation by Contractor at its cost under Contract Documents.
50. Owner's Representative(s): See Document 00520 (Agreement).
51. Partial Utilization: Use by Owner of a substantially completed part of the Work for the purpose for which it is intended (or a related purpose) prior to Substantial Completion of all of the Work.
52. PCBs: Polychlorinated byphenyls.
53. Phase: A specified portion of the Work (if any) specifically identified as a Phase in Document 00520 (Agreement) or Document 01100 (Summary).
54. Product Data: That information (brochures, catalog sheets, manufacturer's cut sheets, etc.) supplied by vendors having technical and commercial characteristics of the supplied equipment or materials and accompanying commercial terms such as warranties, instructions, and manuals.
55. Progress Report: A periodic report submitted by Contractor to Owner with progress payment invoices accompanying progress schedule. See Section 01320 (Progress Schedules and Reports) and Document 00700 (General Conditions).
56. Project: Total construction of which Work performed under Contract Documents may be whole or part.
57. Project Float: As defined in paragraph 1.2.B.3, Section 01320 (Progress Schedules and Reports).
58. Project Manual: Project Manual consists of Bidding Requirements, Agreement, Bonds, Certificates, Contract Conditions, Drawings, and Specifications.

59. Project Record Documents: All Project deliverables required under Sections 01700 et seq., including without limitation, as-built drawings; Project Record Specifications; Installation, Operation, and Maintenance Manuals; and Machine Inventory Sheets.
60. Provide: Furnish and install.
61. Request for Information (“RFI”): A document prepared by Contractor requesting information regarding the Project or Contract Documents as provided in Section 01250 (Modification Procedures). The RFI system is also a means for Owner to submit Contract Document clarifications or supplements to Contractor.
62. Request for Proposals (“RFP”): A document issued by Owner to Contractor whereby Owner may initiate changes in the Work or Contract Time as provided in Contract Documents. See Section 01250 (Modification Procedures).
63. Request for Substitution (“RFS”): A document prepared by Contractor requesting substitution of materials as permitted and to the extent permitted in Contract Documents. See Section 01600 (Product Requirements).
64. RFI-Reply: A document consisting of supplementary details, instructions, or information issued by Owner that clarifies or supplements Contract Documents, and with which Contractor shall comply. RFI-Replies do not constitute changes in Contract Sum or Contract Time except as otherwise agreed in writing by Owner. RFI-Replies will be issued through the RFI administrative system.
65. Samples: Physical examples of materials, equipment, or workmanship that are representative of some portion of the Work and which establish the standards by which such portion of the Work will be judged.
66. Sanitation Standards: The Sonoma County Water Agency Design and Construction Standards for Sanitation Facilities.
67. Shop Drawings: All drawings, diagrams, illustrations, schedules, and other data or information which are specifically prepared or assembled by or for Contractor and submitted by Contractor to illustrate some portion of the Work.
68. Shown: As indicated on Drawings.
69. Site: The particular geographical location of Work performed pursuant to Contract Documents.
70. Specifications: The written portion of the Contract Documents consisting of requirements for materials, equipment, construction systems, standards, and workmanship for the Work; performance of related services; and are contained in Divisions 1 through 16.
71. Specified: As written in Specifications.
72. Subcontractor: A person or entity that has a direct contract with Contractor to perform a portion of the Work at the Site. The term “Subcontractor” is referred to throughout the Contract Documents as if singular in number and neutral in gender and means a Subcontractor or an authorized representative of the Subcontractor. The term “Subcontractor” does not include a separate contractor or subcontractors of a separate contractor.
73. Substantial Completion: The Work (or a specified part thereof) has progressed to the point where, in the opinion of Owner as evidenced by a Certificate of Substantial Completion, the Work is sufficiently complete, in accordance with Contract Documents, so that the Work (or specified part) can be utilized for the purposes for which it is

- intended; or if no such certificate is issued, when the Work (or specified part) is complete and ready for final payment as evidenced by written recommendation of Owner for final payment. The terms "Substantially Complete" and "Substantially Completed" as applied to all or part of the Work refer to Substantial Completion thereof.
74. Superintendence: Executive oversight and charge of the main aspects of construction, including scheduling, sequence of subcontractor Work, and quality control.
 75. Supplemental Instruction: A written directive from Owner to Contractor ordering alterations or Modifications that do not result in change in Contract Sum or Contract Time, and do not substantially change Drawings or Specifications. See Section 01250 (Modification Procedures).
 76. Testing and special inspection agency: An independent entity engaged by Owner to inspect and/or test the workmanship, materials, or manner of construction of buildings or portions of buildings, to determine if such construction complies with the Contract Documents and applicable codes.
 77. Underground Facilities: All pipelines, conduits, ducts, cables, wires, manholes, vaults, tanks, tunnels or other such facilities or attachments, and any encasements containing such facilities that have been installed underground to furnish any of the following services or materials: Electricity, gases, chemicals, steam, liquid petroleum products, telephone or other communications, cable television, sewage and drainage removal, traffic or other control systems, or water.
 78. Unit Price Work: Shall be the portions of the Work for which a unit price is provided in Document 00520 (Agreement) or Section 01100 (Summary).
 79. Work: The entire completed construction, or the various separately identifiable parts thereof, required to be furnished under the Contract Documents within the Contract Time. Work includes and is the result of performing or furnishing labor and furnishing and incorporating materials and equipment into the construction, and performing or furnishing services and furnishing documents, all as required by the Contract Documents including everything shown in the Drawings and set forth in the Specifications. Wherever the word "work" is used, rather than the word "Work," it shall be understood to have its ordinary and customary meaning.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION - NOT USED

END OF SECTION

SECTION 01450

QUALITY CONTROL**PART 1 GENERAL****1.1 SECTION INCLUDES**

- A. Contractor's Quality Control
- B. Quality of the Work
- C. Inspections and Tests by Governing Authorities
- D. Inspections and Tests by Serving Utilities
- E. Inspections and Tests by Manufacturer's Representatives
- F. Tests and Inspections by Owner or Owner's Independent Testing and Inspection Agency
- G. Additional Testing and Inspection

1.2 CONTRACTOR'S QUALITY CONTROL

- A. Contractor's Quality Control: Ensure that products, services, workmanship, and Site conditions comply with requirements of Drawings and Specifications by coordinating, supervising, testing, and inspecting the Work and by utilizing only suitably qualified and appropriately audited, licensed, or trained personnel.
- B. Quality Requirements: Work shall be accomplished in accordance with quality requirements of Drawings and Specifications, including, by reference, all codes, laws, rules, regulations, and standards. When no quality basis is prescribed, the quality and testing procedures shall be in accordance with the best-accepted practices of the construction industry for the locale of the Project, for projects of this type, or standards set by engineering or technical societies (e.g., ASTM or ASHRAE), whichever is more stringent.
- C. Quality Control Personnel: Employ and assign knowledgeable and skilled personnel as necessary to perform quality control functions to ensure that the Work is provided as required.
- D. At Contractor's expense, Contractor may employ a certified independent testing agency to perform compaction tests where there is disagreement. Owner may consider such tests, but will have the authority to make the final determination of relative compaction.
- E. At Contractor's expense, Contractor may employ a certified independent welding inspection agency to perform welding inspections. Owner may consider such tests, but will have the authority to make the final determination of welding quality.

1.3 QUALITY OF THE WORK

- A. Quality of Products: Unless otherwise indicated or specified, all products shall be new, free of defects, and fit for the intended use.
- B. Quality of Installation: All Work shall be produced plumb, level, square and true, or true to indicated angle, and with proper alignment and relationship between the various elements, as indicated or required by Contract Documents.
- C. Protection of Completed Work: Take all measures necessary to preserve completed Work free from damage, deterioration, soiling, and staining, until acceptance by Owner.
- D. Standards and Code Compliance and Manufacturer's Instructions and Recommendations: Unless more stringent requirements are indicated or specified, comply with manufacturer's

instructions and recommendations, reference standards and building code research report requirements in preparing, fabricating, erecting, installing, applying, connecting, and finishing Work.

- E. Deviations from Standards and Code Compliance and Manufacturer's Instructions and Recommendations: Secure Owner's advance written consent. Document and explain all deviations from reference standards and building code research report requirements and manufacturer's product installation instructions and recommendations, including acknowledgement by the manufacturer that such deviations are acceptable and appropriate for the Project.
- F. Verification of Quality: Work shall be subject to verification of quality by Owner in accordance with provisions of the Contract Documents.
 - 1. Cooperate by making Work available for inspection.
 - 2. Such verification may include mill, plant, shop, or field inspection as required.
 - 3. Provide access to all parts of the Work, including plants where materials or equipment are manufactured or fabricated.
 - 4. Provide all information and assistance as required, including that by and from subcontractors, fabricators, materials suppliers and manufacturers, for verification of quality by Owner.
 - 5. Applicable provisions of the Contract Documents shall govern Contract Modifications, if any, resulting from such verification activities.
- G. Observations by Owner's Consultants: Periodic and occasional observations of Work in progress will be made by Owner and Owner's consultants as deemed necessary to review progress of Work and general conformance with design intent.
- H. Limitations on Inspection, Test, and Observation: Neither employment of independent testing and inspection agency nor observations or tests by Owner and Owner's consultants shall in any manner relieve Contractor of obligation to perform Work in full conformance to all requirements of Contract Documents.
- I. Owner's Acceptance and Rejection of Work: Owner reserves the right to reject all Work not in conformance with the requirements of the Drawings and Specifications, or otherwise Defective.
- J. Correction of Defective Work: Defective Work shall be modified, replaced, repaired or redone by the Contractor at no change in Contract Sum or Contract Time.
- K. Acceptance of Defective Work: Acceptance of Defective Work, without specific written acknowledgement and approval of Owner, shall not relieve the Contractor of the obligation to correct such Work.
- L. Contract Adjustment for Defective Work: Should Owner determine that it is not feasible or in Owner's interest to require Defective Work to be repaired or replaced, an equitable reduction in Contract Sum shall be made by agreement between Owner and Contractor. If equitable amount cannot be agreed upon, a Construction Change Directive will be issued and the amount in dispute resolved in accordance with applicable provisions of Document 00700 (General Conditions).
- M. Non-Responsibility for Defective Work: Owner and Owner's consultants disclaim any and all responsibility for Work produced not in conformance with the Drawings and Specifications.
- N. Responsibility for Defective Work: Contractor shall have full responsibility for all consequences resulting from Defective Work, including without limitation all delays, disruptions, extra inspection and correction costs by Contractor and Owner and re-Work, and extra time and costs of all types. Contractor waives excuses for Defective Work relating

to Owner's prior review of Submittals and/or prior failure to notice Defective Work in place on inspection.

1.4 INSPECTIONS AND TESTS BY GOVERNING AUTHORITIES

- A. Regulatory Requirements for Testing and Inspection: Comply with CBC requirements and all other requirements of governing authorities having jurisdiction.
- B. Inspections and Tests by Governing Authorities: Cause all tests and inspections required by governing authorities having jurisdiction to be made for Work under this Contract.
 - 1. Such authorities may include, but are not limited to PRMD, Fire Department, and similar agencies.
 - 2. Except as specifically noted, scheduling, conducting and paying for such inspections shall be solely the Contractor's responsibility.

1.5 INSPECTIONS AND TESTS BY SERVING UTILITIES

- A. Inspections and Tests by Serving Utilities: Cause all tests and inspections required by serving utilities to be made for Work under this Contract. Scheduling, conducting, and paying for such inspections shall be solely the Contractor's responsibility.

1.6 INSPECTIONS AND TESTS BY MANUFACTURER'S REPRESENTATIVES

- A. Inspections and Tests by Manufacturer's Representatives: Cause all tests and inspections specified to be conducted by materials or systems manufacturers to be made. Additionally, all tests and inspections required by materials or systems manufacturers as conditions of warranty or certification of Work shall be made, the cost of which shall be included in the Contract Sum.

1.7 TESTS AND INSPECTIONS BY OWNER OR OWNER'S INDEPENDENT TESTING AND INSPECTION AGENCY

- A. Owner may conduct or Owner may select an independent testing and inspection agency or agencies to conduct tests and inspections as indicated on Drawings, in Specifications, and as required by governing authorities having jurisdiction.
- B. Responsibility for payment for such tests and inspections shall be as indicated in paragraph 1.7D below. All time and costs for Contractor's service related to such tests and inspections shall be included in Contract Time and Contract Sum.
- C. Contractor shall pay for all additional charges by testing and inspection agencies and governing authorities having jurisdiction due to the following:
 - 1. Contractor's failure to properly schedule or notify testing and inspection agency or authorities having jurisdiction.
 - 2. Changes in sources, lots, or suppliers of products after original tests or inspections.
 - 3. Changes in means, methods, techniques, sequences, and procedures of construction that necessitate additional testing, inspection, and related services.
 - 4. Changes in mix designs for concrete and mortar after review and acceptance of submitted mix design.
 - 5. Contractor-submitted requests to change materials or products, which are accepted, but require testing and/or reinspection beyond original design.
- D. In addition to tests to be performed by Contractor (and to be paid by Contractor) as required elsewhere in Contract Documents, tests and special inspections that may be performed by Owner or Owner's independent testing and inspection agency or agencies and paid by Owner include, but are not limited to, the following:

SECTION	TESTS
02320	Relative compaction

- E. Owner may perform tests at any time at its discretion.
- F. California Test Method No. 216 (Relative Compaction of Untreated and Treated Soils and Aggregates) shall be modified as follows:
1. In lieu of the specified 10-pound hammer, a Test Lab Model No. F-590 Mechanical Compactor (or equal) with a 10-pound hammer will be used.
 2. In lieu of the specified split cylindrical mold, a non-split cylindrical mold of the same diameter and wall thickness will be used.
 3. Any of the provisions of Test Method No. 216 which conflict with the use of such equipment described in (1) and (2) are considered void to the extent they preclude the use of such equipment.
 4. In lieu of the specified test form, an Owner standard form will be used.
 5. Correction for oversize material may be obtained from a table based upon the given equations and the coefficient for +3/4-inch aggregate will be computed from the following formulae:

$$Y = 1.0 \text{ for } P = 10 \text{ to } 20$$

$$Y = 1.0 - .002 (P - 20) \text{ for } P = 20 \text{ to } 50$$
 where:
 - Y = coefficient for 3/4" aggregate
 - P = percent retained on 3/4" screen
 6. In-place density and relative compaction will be determined on the basis of individual test sites in lieu of the area concept.
- G. Test and Inspection Reports: After each inspection and test by an independent testing and inspection agency or agencies, one copy of report shall be promptly submitted to Owner, who will distribute copies to Contractor and any agency having jurisdiction (if required by Code).
1. Reports shall clearly identify the following:
 - a. Date issued.
 - b. Project name and number.
 - c. Identification of product and Specifications Section in which Work is specified.
 - d. Name of inspector.
 - e. Date and time of sampling or inspection.
 - f. Location in Project where sampling or inspection was conducted.
 - g. Type of inspection or test.
 - h. Date of test.
 - i. Results of tests.
 - j. Comments concerning conformance with Contract Documents and other requirements.
 2. Test reports shall indicate specified or required values and shall include statement whether test results indicate satisfactory performance of products.
 3. Samples taken but not tested shall be reported.
 4. Test reports shall confirm that methods used for sampling and testing conform to specified test procedures.

5. When requested, testing and inspection agency shall provide interpretations of test results.

H. Contractor Responsibilities for Inspections and Tests:

1. Unless specified otherwise, notify Owner and testing agency 72 hours in advance of expected time of each test and inspection, and for all other operations requiring inspection and testing services, by submitting Contractor's inspection request in writing (or, if Owner provides a specific form, on that form).
 - a. When tests or inspections cannot be performed after such notice, due to Contractor's negligence, reimburse Owner for testing and inspection agency personnel and travel expenses incurred.
2. Deliver to laboratory or designated location, adequate samples of materials proposed to be used that require advance testing, together with proposed mix designs.
3. Cooperate with testing and inspection agency personnel, Owner, and Owner's consultants. Provide access to Work areas and off-Site fabrication and assembly locations, including during weekends and after normal Work hours.
4. Provide incidental labor and facilities to provide safe access to Work to be tested and inspected, to obtain and handle Samples at the Site or at source of products to be tested, and to store and cure test Samples.
5. Provide, at least 15 Days in advance of first test or inspection of each type, a schedule of tests or inspections indicating types of tests or inspections and their scheduled dates.

1.8 ADDITIONAL TESTING AND INSPECTION

- A. If initial tests or inspections made by Owner or the testing and inspection agency reveal that materials do not comply with Contract Documents, or if Owner has reasonable doubt that materials do not comply with Contract Documents, additional tests and inspections shall be made as directed.
1. If additional tests and inspections establish that materials comply with Contract Documents, Owner shall pay all costs for such tests and inspections.
 2. If additional tests and inspections establish that materials do not comply with Contract Documents, all costs of such tests and inspections shall be deducted from Contract Sum.
 3. If Work requiring inspection is covered by follow-on or follow-up Work before it is inspected, uncover Work so proper inspections can be performed. All costs of such tests and inspections shall be deducted from Contract Sum.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION - NOT USED

END OF SECTION

SECTION 01500

TEMPORARY FACILITIES AND CONTROLS

PART 1 GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Temporary Electricity
 - 2. Temporary Telephone
 - 3. Temporary Water
 - 4. Temporary Sanitary Facilities
 - 5. Temporary Barriers and Enclosures
 - 6. Tree and Plant Protection
 - 7. Water Control
 - 8. Noise Control
 - 9. Traffic Control
 - 10. Project Funding Signs
 - 11. Storm Water Pollution Prevention Plan
 - 12. Removal of Temporary Facilities and Controls

1.2 DEFINITIONS

- A. Dripline: The area on the ground from the trunk of any tree to the point directly below the outermost tips of the foliage of that tree.
- B. Tree Protection Zone (TPZ): A space above and below ground within which trees are to be retained and protected. May extend beyond the Dripline when practical.
- C. Tree damage: Tree damage shall include, but not be limited to, the following: significant injury to the root system or other parts of a tree including burning, application of toxic substances, damaging through contact with equipment or machinery, changing the natural grade within the TPZ, compacting the soil within the TPZ, interfering with the normal water requirements of the tree, unauthorized trenching or excavating within the TPZ, or unauthorized removal of more than 1/3 of the live wood, foliage, or roots.

1.3 TEMPORARY ELECTRICITY

- A. Provide, maintain, and pay for electrical power at the Site for construction purposes.

1.4 TEMPORARY TELEPHONE

- A. Provide, maintain, and pay for telephone service to field office at time of Project mobilization.

1.5 TEMPORARY WATER

- A. Provide, maintain, and pay for suitable quality water service required for construction operations.

1.6 TEMPORARY SANITARY FACILITIES

- A. Provide and maintain required temporary buildings with sanitary toilets for worker use.
- B. Comply with minimum requirements of the Health Department or other public agency having jurisdiction; maintain in a sanitary condition at all times.

1.7 TEMPORARY BARRIERS AND ENCLOSURES

- A. Provide barriers to prevent unauthorized entry to construction areas, to allow for Owner's use of Site, and to protect existing facilities and adjacent properties from damage from construction operations.
- B. Provide barricades required by governing authorities to control public access to existing buildings.
- C. Protect vehicular traffic, stored materials, Site, and structures from damage.
- D. Provide temporary chainlink modular construction fence as needed for security and the protection of public safety.

1.8 TREE AND PLANT PROTECTION

- A. Root protection:
 - 1. No storage of materials or equipment will be allowed within the TPZ.
 - 2. Whenever possible, excavation shall be on a radial line, diverging from the tree trunk.
- B. Exposure to harmful substances: No storage or dumping of any substances that may cause minimum Tree Damage shall occur at any location on the Site.
- C. Where construction is to be performed in the vicinity of trees and shrubbery, the Work shall be carried on in a manner that will cause minimum Tree Damage. Owner will designate trees that are to be removed. Under no circumstances are additional trees to be removed without written permission from Owner. Trees and shrubbery that are not to be removed shall be protected from injury or damage resulting from Contractor's operations.
- D. Limb Protection: Use small construction equipment as necessary to minimize removal of or avoid damage to overhanging tree branches. Remove limbs only when directed by Owner. Prune or remove limbs, if authorized, in accordance with ANSI A300. Owner will provide a copy of the guidelines upon request. "Heading" of any tree will not be permitted.
- E. Damage shall be immediately reported to Owner, who will file a report so that remedies may be determined.
- F. For any tree that is removed without Owner's permission or is irreparably damaged, in the opinion of Owner, Owner may elect to pursue any of the following remedies in its sole discretion:
 - 1. Require Contractor to repair by pruning, if possible, or replace trees not intended for removal. Whether or not a tree can be repaired by pruning will be determined by Owner. Subsequent pruning, if appropriate, shall be conducted by a Certified Arborist at Contractor's expense.
 - 2. Require Contractor to remove trees that cannot be repaired by pruning, and replace with new trees of minimum 4 inch caliper.
 - 3. Assess money damages in the amount of \$27.00 per square inch of cross section, measured at 4 1/2 feet above ground, but not less than \$250.00, which damages shall be deducted from monies due or to become due under the Contract. If tree protection is not performed or is not performed adequately, and Owner determines that a tree has been irreparably damaged, Owner may assess the same damages as for unauthorized removal of a tree.
- G. Prior to the commencement of construction activities, trees necessary to remove or at risk of being damaged will be identified by Owner's arborist.
- H. Owner's arborist will inventory these trees, with the results of the inventory providing species, size (diameter at breast height, or dbh), and number of protected trees. Also, in consultation with the appropriate County, the arborist will determine if any are heritage or landmark trees.

- I. If any protected trees are identified that will be potentially removed or damaged by construction of the proposed project, design changes will be implemented where feasible to avoid the impact.
- J. Tree Protection: All trees removed or damaged, authorized or unauthorized, shall be mitigated for in accordance with the Tree Preservation and Protection Zoning Ordinance

1.9 WATER CONTROL

- A. See Section 02240 (Dewatering) for information on water control.
- B. Grade Site to drain unless otherwise indicated or specified.
- C. Maintain excavations free of water.
- D. Protect Site from puddling or running water.
- E. Provide water barriers as required to protect Site from soil erosion.

1.10 NOISE CONTROL

- A. When required by OSHA Standards, construction workers shall be provided with ear protection to operate equipment.
- B. Ensure to Owner that all construction equipment and vehicles used for the Work are equipped with properly installed engine mufflers where applicable. Locate all stationary noise-generating equipment, including hammer bore and drill rigs, as far as possible from nearby noise-sensitive receptors. Stationary noise sources located within 500 feet of noise-sensitive receptors shall be equipped with noise reducing engine housings, and the line of sight between such sources and nearby sensitive receptors shall be blocked by portable acoustic barriers.
- C. Ensure that construction equipment with internal combustion engines have sound control devices at least as effective as those provided by the original equipment manufacturer. No equipment shall be permitted to have an un-muffled exhaust.
- D. Residences and other sensitive receptors within 200 feet of a construction area shall be notified of the construction schedule in writing, at least two weeks prior to the commencement of construction activities. This notice shall indicate the allowable hours of construction activities as specified by the applicable local jurisdiction. The Contractor shall designate a noise disturbance coordinator who shall be responsible for responding to complaints regarding construction noise. The coordinator shall determine the cause of the complaint and ensure that reasonable measures are implemented to correct the problem. A contact number for the noise disturbance coordinator shall be conspicuously placed on construction site fences and entrances and be included in the construction schedule notification sent to nearby residences and sensitive receptors

1.11 TRAFFIC CONTROL

- A. Traffic control and safety precautions shall conform to the "California Manual on Uniform Traffic Control Devices," provisions of local encroachment permits and with these Specifications.
- B. Traffic Control and Management Plan requirements:
 - 1. Identify hours for deliveries (Monday - Friday, 9:00 AM to 3:30 PM, or other hours if approved by the appropriate local jurisdiction).
 - 2. Include a discussion of haul routes, limits on the length of open trench, work area delineation, traffic control and flagging.
 - 3. Identify all access and parking restriction, pavement markings and signage requirements (e.g., speed limit, temporary loading zones).

4. Lay out a plan for notifications and a process for communication with affected residents and businesses prior to the start of construction. Advance public notification shall include posting of notices and appropriate signage of construction activities. The written notification shall include the construction schedule, the exact location and duration of activities within each street (i.e., which lanes and access point/driveways would be blocked on which days and for how long), and a toll-free telephone number for receiving questions or complaints.
 5. Include a plan to coordinate all construction activities with emergency service providers in the area at least one month in advance. Emergency service providers shall be notified of the timing, location, and duration of construction activities. All roads shall remain passable to emergency service vehicles at all times.
 6. Include a plan to coordinate all construction activities with the appropriate local school district at least two months in advance. The school district shall be notified of the timing, location, and duration of construction activities. Coordinate with the appropriate local school district to identify peak circulation periods at schools along the alignment(s) (i.e., the arrival and departure of students), and require their contractor to avoid construction and lane closures during those periods. The construction contractor for each project component shall be required to maintain vehicle, pedestrian, and school bus service during construction through inclusion of such provisions in the construction contract. The assignment of temporary crossing guards at designated intersections may be needed to enhance pedestrian safety during project construction.
 7. Open trenches be covered with metal plates at the end of each workday to accommodate traffic and access.
 8. Specify the street restoration requirements pursuant to agreements with the local jurisdictions.
 9. Develop circulation and detour plans to minimize impact to local street circulation. This may include the use of signing and flagging to guide vehicles through and/or around the construction zone.
 10. Encourage construction crews to park at staging areas to limit lane closures in the public right-of-way.
- C. Notification:
1. At least 7 Days prior to commencement of Work, notify residents along the Project roadways, in writing, that traffic flows will be subject to detours and/or delays, and that access to individual driveways may be disrupted during working hours. Provide notice to Owner.
 2. At least 7 Days prior to commencement of Work, post the Project area to inform drivers of impending construction Work and likely delays and detours.
 3. Notify the property occupants, in writing, at least 3 Days in advance of the trenching across property occupants' driveways. Provide notice to Owner.
 4. Coordinate vehicular access with police, fire, garbage, and USPS at least 7 Days prior to commencement of Work.
 5. Provide 72-hour notice to the local service providers prior to construction of individual pipeline segments.
 6. Provide Traffic Control/Management Plan to the local service providers prior to construction.
 7. If any applicable permits require Contractor to notify residents or any organization of traffic detours or delays, provide such notice(s) to Owner.

D. Traffic Control Measures:

1. Pay for all costs for traffic signage, including flagging.
2. Provide safe passage for vehicular and pedestrian traffic through the Work at all times.
3. Traffic on two-lane streets may be reduced to one lane provided that, with all restriction of traffic flow, flaggers, cones, signs, and barricades are furnished as required by Owner. Permit the traffic equal flow time in each direction.
4. Maintain access to public and private buildings, businesses and driveways. Provide approved metal "bridge" or temporary backfill for access when and where required within ½ hour after request by Owner except that emergency vehicles and personnel shall be provided immediate access at all times.
5. Restore access to all residences for all non-working hours, holidays, and weekends.

E. Maintain traffic control measures:

1. Maintain traffic control through the Site and provide local access as specified herein regardless of rain or other causes, either within or beyond the control of Contractor, which may force suspension or delay of the Work. At all times keep on the Site such materials, labor forces, and equipment as may be necessary to keep the streets and driveways within the Site open to traffic and in good repair. Expedite the passage of such traffic, using such labor forces and equipment as may be necessary.

1.12 STORM WATER POLLUTION PREVENTION PLAN

A. Prior to commencement of Work at the Site, obtain Owner approval on a Storm Water Pollution Prevention Plan (SWPPP) prepared in accordance with:

1. The Caltrans Storm Water Quality Handbooks:
 - a. Storm Water Pollution Prevention Plan (SWPPP) and Water Pollution Control Program (WPCP) Preparation Manual; and
 - b. Construction Site Best Management Practices (BMPs) Manual.

B. Submit SWPPP to Owner for review in accordance with Section 01330 (Submittal Procedures). Provide the SWPPP to Owner prior to commencement of Work at the Site.

C. Develop and implement a monitoring program in accordance with the requirements of the General Permit to verify compliance with the General Permit.

D. The SWPPP shall include all of the requirements in paragraphs 1.14A, 1.14B, and 1.14B of this Section 01500. Particular attention shall be paid to:

1. Site Map
2. Locations of all equipment and materials storage
3. Location and containment for fueling area, construction entrances, and concrete washouts
4. Locations of all other staging areas, stockpile areas, and disposal sites.
5. Location of sanitation facilities
6. All erosion and sediment control BMPs, as well as non-storm water BMPs
7. Dewatering plan
8. BMPs:
 - a. Avoid scheduling construction activities during a rain event, but be prepared for sudden changes in conditions;
 - b. Construct berms, silt fences, straw bales, fiber rolls, and/or sand bags around stockpiled soils;
 - c. Cover stockpiled soils during a rain event and monitor perimeter barriers, repair as necessary;
 - d. Stabilize entrances to work area to prevent tracking of dirt or mud onto roadways;

- e. Implement dust control practices as appropriate on all stockpiled material, and
 - f. Restore the construction area to pre-existing conditions when construction is complete.
- E. Water Pollution Control Drawings shall be of sufficient size and scale to detail BMP locations. Remove all extraneous information from the base sheets to improve clarity, including geometric equations, notes, details, and all data not related to water pollution control work. Use a copy of the appropriate Drawing(s) as a base sheet(s) with the pertinent stage of construction drawn in as an overlay to accurately reflect Site conditions at various phases of construction. Provide enlarged detail mapping as necessary to detail BMP locations.
 - F. Revise and update the SWPPP whenever there is a change in construction operations that may affect the Site drainage patterns or discharge of pollutants to surface waters, groundwaters, or a separate municipal storm sewer system.
 - G. Failure to fully comply with these requirements shall subject Contractor to all fines, damages, and job delays incurred due to failure to implement the SWPPP.
 - H. Keep a copy of the General Permit, together with updates and revisions at the Site.
 - I. Furnish SWPPP to Owner upon Owner's request.

1.13 REMOVAL OF TEMPORARY FACILITIES AND CONTROLS

- A. Remove temporary utilities, equipment, facilities, and materials prior to final inspection.
- B. Clean and repair damage caused by installation or use of temporary Work.
- C. Restore existing facilities used during construction to original condition. Restore permanent facilities used during construction to specified condition.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION - NOT USED

END OF SECTION

SECTION 01540

SITE SECURITY AND SAFETY**PART 1 GENERAL****1.1 SUBMITTALS**

- A. Safety Program.
- B. Fire Protection Plan.

1.2 PROTECTION

- A. Continuously maintain protection as necessary to protect the Work, as a whole and in part, and adjacent property and improvements from accidents, injuries or damage.
- B. Properly protect the Work:
 - 1. With lights, guard rails, temporary covers and barricades.
 - 2. Enclose excavations with proper barricades.
 - 3. Brace and secure all parts of the Work against storm and accident.
 - 4. Provide such additional forms of protection that may be necessary under existing circumstances.
- C. Provide and maintain in good condition all protective measures required to adequately protect the public from hazards resulting from the Work and to exclude unauthorized persons from the Work. When regulated by Building Code, Cal OSHA, or other authority, such legal requirements for protection shall be considered as minimum requirements. Be responsible for the protection in excess of such minimum requirements as required.

1.3 CONTROL OF SITE

- A. Ensure that no alcohol, firearms, weapons, or controlled substance enters or is used at the Site. Immediately remove from the Site and terminate the employment of any employee found in violation of this provision.

1.4 SAFETY PROGRAM

- A. Prior to starting any Work at the Site, submit a Safety Program that has been reviewed and approved by an Industrial Hygienist certified by the American Board of Industrial Hygiene or by a Certified Safety Professional. The Safety Program shall include the name, certification number, and certification seal of the Industrial Hygienist or Certified Safety Professional. Comply with the Safety Program and all applicable federal, state, and local regulation codes, rules, law and ordinances.
- B. Receipt and/or review of the Safety Program by Owner, Engineer or Owner's Representative shall not relieve Contractor of any responsibility for complying with all applicable safety regulations.
- C. It is essential that Contractor and each Subcontractor implement an effective and vigorous Safety and Health Program to cover their respective portions of the Work. Subject to Contractor's overall responsibility for Project safety, it shall be understood that the full responsibility for providing a safe place to work with respect to their respective portions of the Work rests with each individual Contractor and Subcontractor.

D. Safety Program components:

1. Injury and Illness Prevention Program (IIPP): Conforming to the General Industrial Safety Orders (CCR Title 8, Division 1, Chapter 4, Subchapter 7, Section 3203), and the California Labor Code (Section 6401.7).
 2. Site-Specific Safety and Health Plan (SSHP): Describing health and safety procedures that shall be implemented during the Work in order to ensure safety of the public and those performing the Work. Follow the guidelines for a SSHP listed in CCR Title 8, Division 1, Chapter 4, Subchapter 7, Section 5192, Item (b)(4) f.
 3. Confined Space Program:
 - a. The Site contains permit- and non-permit-confined spaces. Owner will provide Contractor with any available information regarding existing permit space hazards, entry operations, and safety information relating to Work in the existing permit spaces as set forth in the General Industrial Safety Orders (CCR Title 8, Division 1, Chapter 4, Subchapter 7, Section 5157).
 - b. Permit space entry is allowed only through compliance with a permit space program meeting the requirements of Section 5157 of the General Industrial Safety Orders. During entry operations, or at the conclusion of entry operations, verbally notify Owner of the permit space program followed and of any hazards confronted or created in permit spaces during entry operations.
- E. The wearing of hard hats shall be mandatory at all times for personnel on Site. Supply sufficient hard hats to equip properly all employees and visitors.
- F. Whenever an exposure exists, appropriate personal protective equipment (PPE) shall be used by all affected personnel. Supply PPE to all personnel under Contractor's direction.

1.5 SAFETY REQUIREMENTS

- A. Standards: Maintain the Project in accordance with state and local safety and insurance standards.
- B. Hazards Control:
1. Store volatile wastes in covered metal containers and remove from premises daily.
 2. Prevent accumulation of wastes that create hazardous conditions.
 3. Provide adequate ventilation during use of volatile or noxious substances.
- C. Conduct cleaning and disposal operations to comply with local ordinances and anti-pollution laws.
1. Do not burn or bury rubbish or waste material on the Site.
 2. Do not dispose of volatile wastes such as mineral spirits, oil, or paint thinner in storm or sanitary drains.
 3. Do not dispose of wastes into streams or waterways.
- D. Provide accident information on the forms provided by Contractor. This information shall be provided on the same Day as the occurrence of said incident.

1.6 SITE SAFETY OFFICER

- A. Designate one of Contractor's staff as "Site Safety Officer" whose duties shall include the responsibility for enforcing the environmental protection provisions of the Contract Documents including safety and health, the requirements of the Occupational Safety and Health Act, and other applicable federal, state and local standards. Submit for review by Owner Contractor's intended traffic flow plan, security plan, program for temporary structures, housecleaning plan, demolition program, and environmental safety and health plan. After review by Owner, the implementation and enforcement of these plans shall

become the responsibility of the Site Safety Officer. Any changes in the plans shall be requested by Contractor through the Site Safety Officer for written concurrence by Owner.

- B. Owner's risk management representative(s) shall be allowed access to accident/injury and illness reports, inspection reports, scheduling and construction meetings, and safety meetings.

1.7 FIRE PROTECTION PLAN

- A. Prior to starting any Work at the Site, submit a fire protection plan that has been reviewed and approved by the Sonoma Valley Fire and Rescue Authority, and Schell-Vista Fire Protection District. It is recommended that the plan include, but not be limited to, a discussion of the following items:

1. Equipment spark arresters
2. Fire-extinguishing equipment on hand
3. Method of operation in case of fire
4. Notification to authorities of any fire
5. Access available during performance of Work
6. Educating workers of fire protection plan
7. Storage protection for flammable materials
8. Ventilation and illumination equipment

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION - NOT USED

END OF SECTION

SECTION 01600

PRODUCT REQUIREMENTS**PART 1 GENERAL****1.1 SECTION INCLUDES**

- A. Products
- B. Product Options and Substitutions
- C. Product Delivery Requirements
- D. Product Storage and Handling

1.2 PRODUCTS

- A. Products: New material, machinery, components, equipment, fixtures, and systems forming the Work. Does not include machinery and equipment used for preparation, fabrication, conveying, and erection of the Work. Products may also include existing materials or components required for reuse.
- B. Do not use materials and equipment removed from existing premises, except as specifically permitted by the Contract Documents.
- C. For similar components, provide interchangeable components of the same manufacturer.

1.3 PRODUCT OPTIONS AND SUBSTITUTIONS

- A. Summary:
 - 1. This paragraph 1.3 describes procedures for selecting products and requesting substitutions of unlisted materials in lieu of materials named in the Specifications or approved for use in Addenda that were not already the subject of a Document 00660 (Substitution Request Form) submittal as provided in Document 00200 (Instructions to Bidders).
- B. For products specified by naming one manufacturer only, Owner believes that the manufacturer listed is capable of producing equipment or products that will satisfy the requirements of the associated Specification. This statement, however, shall not be construed as an endorsement of a particular manufacturer's product, nor shall it be construed that a named manufacturer's standard product will comply with the requirements of the associated Specification. In such cases, the Owner is not aware of an equal manufacturer.
- C. Contractor's Options:
 - 1. For products specified only by reference standard: Select any product meeting that standard.
 - 2. For products specified by naming one or more products or manufacturers:
 - a. Select products of any named manufacturer meeting Specifications.
 - b. If product becomes unavailable due to no fault of Contractor or if the product specified no longer complies with local regulations or laws, submit Request for Substitution (RFS), including all information contained in this Section 01600 and a fully executed Document 00660 (Substitution Request Form), but using the term "Contractor" each place the term "Bidder" appears in that form.
- D. Substitutions:
 - 1. Except as provided in Document 00200 (Instructions to Bidders) with respect to "or Approved Equal" items, Owner will consider Contractor's substitution requests only

- when product becomes unavailable due to no fault of Contractor or if the product specified no longer complies with local regulations or laws. Requests for review of proposed substitute items will not be accepted from anyone other than Contractor. The RFS shall state the extent, if any, to which the evaluation and acceptance of the proposed substitute will prejudice Contractor's achievement of Substantial Completion on time, and whether or not acceptance of the substitute for use in the Work will require a change in any of the Contract Documents (or in the provisions of any other direct contract with Owner for work on the Project).
2. Submit separate RFS for each product and support each request with:
 - a. Product identification.
 - b. Manufacturer's literature.
 - c. Samples, as applicable.
 - d. Name and address of similar projects on which product has been used, and dates of installation.
 - e. Name, address, and telephone number of manufacturer's representative or sales engineer.
 - f. For construction methods: Detailed description of proposed method; drawings illustrating methods.
 3. Where required, itemize a comparison of the proposed substitution with product specified and list significant variations including, but not limited to dimensions, weights, service requirements, and functional differences. If variation from product specified is not pointed out in submittal, variation will be rejected even though submittal was favorably reviewed. Identify all variations of the proposed substitute from that specified in the RFS and indicate available maintenance, repair, and replacement service.
 4. State whether the substitute will require a change in any of the Contract Documents (or provisions of any other direct contract with Owner for work on the Project) to adapt the design of the proposed substitute, and whether or not incorporation or use of the substitute in connection with Work is subject to payment of any license fee or royalty. Submit data relating to changes in construction schedule.
 5. Include accurate cost data comparing proposed substitution with product and amount of net change in Contract Sum including, but not limited to, an itemized estimate of all costs or credits that will result directly or indirectly from acceptance of such substitute, including costs of redesign and claims of other contractors affected by the resulting change, all of which will be considered by Owner in evaluating the proposed substitute. Owner may require Contractor to furnish additional data about the proposed substitute.
 6. Owner will not consider substitutions for acceptance (or, in Owner's sole discretion, Owner may make Contractor solely responsible for all resulting costs, expenses and other consequences) when a substitution:
 - a. Results in delay meeting construction Milestones or completion dates.
 - b. Is indicated or implied on submittals without formal request from Contractor.
 - c. Is requested directly by Subcontractor or supplier.
 - d. Acceptance will require substantial revision of Contract Documents.
 - e. Disrupts Contractor's job rhythm or ability to perform efficiently.
 7. Substitute products shall not be ordered without written acceptance of Owner.
 8. Owner will determine acceptability of proposed substitutions and reserve right to reject proposals due to insufficient information.

9. Accepted substitutions will be evidenced by a Change Order or a CCD. All Contract Document requirements apply to Work involving substitutions.
- E. Contractor's Representation and Warranty:
 1. Contractor's RFS constitutes a representation and warranty that Contractor:
 - a. Has investigated proposed product and determined that it meets or exceeds, in all respects, specified product.
 - b. Will provide the same warranty for substitution as for specified product.
 - c. Will coordinate installation and make other changes that may be required for Work to be complete in all respects.
 - d. Waives claims for additional costs which may subsequently become apparent.
 - e. Will compensate Owner for additional redesign costs associated with substitution.
 - f. Will be responsible for Construction Schedule slippage due to substitution.
 - g. Will be responsible for Construction Schedule delay due to late ordering of available specified products caused by requests for substitution that are subsequently rejected by Owner.
 - h. Will compensate Owner for all costs; including extra costs of performing Work under Contract Documents, extra cost to other contractors, and any claims brought against Owner, caused by late requests for substitutions or late ordering of products.
- F. Owner's Duties:
 1. Review Contractor's RFS with reasonable promptness.
 2. Notify Contractor in writing of decision to accept or reject requested substitution.
- G. Administrative Requirements:
 1. Specified products, materials, or systems for Project may include engineering or on-file standards required by the regulatory agency. Contractor's substitution of products, materials or systems may require additional engineering, testing, reviews, approvals, assurances, or other information for compliance with regulatory agency requirements or both. Provide all agency approvals or other additional information required and pay additional costs for required Owner services made necessary by the substitution at no increase in Contract Sum or Contract Time, and as a part of substitution proposal.

1.4 PRODUCT DELIVERY REQUIREMENTS

- A. Deliver products in accordance with manufacturer's instructions.
- B. Promptly inspect shipments to assure that products comply with requirements, quantities are correct, and products are undamaged.

1.5 PRODUCT STORAGE AND HANDLING

- A. Store products only in staging area per provisions of Section 01100 (Summary).
- B. Handle, store, and protect products in accordance with manufacturer's instructions, with seals and labels intact and legible. Store sensitive products in weather-tight, climate-controlled enclosures.
- C. For exterior storage of fabricated products, place on appropriate supports, above ground.
- D. Cover products subject to deterioration with impervious sheet covering. Provide ventilation to avoid condensation.
- E. Store loose granular materials on solid flat surfaces in a well-drained area.
- F. Provide equipment and personnel to store products by methods to prevent soiling, disfigurement, or damage.
- G. Arrange storage of products to permit access for inspection. Periodically inspect to assure products are undamaged and are maintained under specified conditions.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION - NOT USED

END OF SECTION

SECTION 01740

CLEANING

PART 1 GENERAL**1.1 SUMMARY**

- A. Section Includes:
 - 1. Progress Cleaning
 - 2. Final Cleaning
- B. Related Sections:
 - 1. Section 01500 (Temporary Facilities and Controls)
 - 2. Section 02320 (Excavation, Bedding, and Backfill)

1.2 PROGRESS CLEANING

- A. Perform periodic cleaning to ensure that any streets and other Owner and public properties are maintained free from accumulation of waste materials, dust, mud, and debris.
- B. Where required, wet down surfaces to lay dust and prevent the blowing of dust to nearby residences or public properties.
- C. Keep paved roads clean and free of dust, mud, and debris resulting from Contractor's operations. Daily cleanup throughout the job will be required as Contractor progresses with its Work, but extra attention to cleanup shall be made prior to weekends and holidays. Without limiting the foregoing, remove trench spoil along traveled ways daily; grade and vacuum broom surfaces initially where applicable and later water flush with high-pressure sprays, being careful to avoid downstream contamination.
- D. Dust, mud, spoils, and construction debris shall be removed daily from roadways, ditches, shoulders, and private property (fills or spoils placed on private property at private property owner's written request excepted).
- E. Contain trash and food that could attract wildlife, and remove trash from Site regularly to avoid attracting predators of sensitive species.
- F. Disposal of Materials:
 - 1. Waste materials, debris, and rubbish shall be disposed of at sites to be chosen by Contractor in accordance with applicable local, state, and federal regulations.
 - 2. Contractor is cautioned that the County of Sonoma and cities within the county have regulations governing the disposal of rubble, broken pavement, and similar materials.
 - 3. Become familiar with the requirements of the agency having jurisdiction over any contemplated disposal site and comply with such requirements.
- G. Excess soil from performance of Work shall be disposed at sites to be chosen by Contractor in accordance with applicable local, state, and federal regulations, and, if applicable, in accordance with Contractor's soil disposal plan. If Contractor elects to dispose of soil on any private property, prior to any such disposal, a letter allowing such disposal shall be obtained from the property owner and presented to Owner. The letter shall state that the property owner has complied with local, state, and federal laws with respect to disposal on property owner's property. Contractor is advised that the property owner is required to obtain a fill permit from PRMD. Regardless of the location of the disposal area, Contractor shall specify the location in the Storm Water Pollution Prevention Plan (SWPPP) if required under Section 01500 (Temporary Facilities and Controls). Any requirements in the SWPPP

that pertain to the area of Work shall also apply to the disposal area. In addition, placement of fill in wetland areas is subject to permit procedures of the US Army Corps of Engineers. At the completion of Work, a letter from each affected property owner will be required releasing Contractor, Owner, Agency, and any Owner consultant from future liability.

- H. If Contractor does not properly clean the Site, in the opinion of Owner, then Owner shall have the option of using outside equipment to perform the cleanup and such cost will be withheld from the Contract Sum.

1.3 FINAL CLEANING

- A. Execute final cleaning prior to final inspection, using only properly skilled workers.
- B. Remove grease, dust, dirt, stains, labels, fingerprints, and other foreign materials from exposed interior and exterior finished surfaces.
- C. Repair, patch, and touch up marred surfaces to match adjacent finishes.
- D. Clean interior and exterior surfaces exposed to view: remove temporary labels, stains and foreign substances, polish transparent and glossy surfaces, vacuum carpeted and soft surfaces.
- E. Clean equipment and fixtures to a sanitary condition, clean or replace filters of mechanical equipment operated during construction, clean ducts, blowers and coils of units operated without filters during construction.
- F. Clean Site.
- G. Mechanically sweep paved areas.
- H. Remove waste and surplus materials, rubbish, and construction facilities from Site.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION - NOT USED

END OF SECTION

SECTION 01741

CONSTRUCTION MATERIAL WASTE MANAGEMENT PLAN

PART 1 GENERAL

1.1 CONSTRUCTION MATERIAL WASTE MANAGEMENT PLAN

- A. Submit Construction Material Waste Management Plan that includes, but is not limited to:
 - 1. Management monitoring program that includes, at a minimum, multiple recyclables containers. Goal is to divert 75 percent of materials waste to recycling instead of landfill. This applies only to materials that would typically be disposed via dumpster.
 - 2. Current recycling program used by each material supplier for materials listed in Divisions 1-16.
 - 3. Estimate of on-Site material reuse (native fill) in tons.
 - 4. Completed Self-Certification of Compliance for Contractor and each listed Subcontractor. Self-Certification of Compliance form is included at the end of this Section 01741.
 - 5. Identification of disposal sites.
 - 6. Method of disposal description.
 - 7. Evidence of written permission from disposal site owner.
 - 8. Copy of permits, as applicable.
- B. Submit monthly progress reports updated with waste management log that includes which material containers have been removed, how many have been removed, and the weight of those containers.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION - NOT USED

END OF SECTION

SELF-CERTIFICATION OF COMPLIANCE FORM FOLLOWS THIS SECTION

**SELF-CERTIFICATION OF COMPLIANCE WITH
CONSTRUCTION MATERIAL WASTE PLAN**

Firm Name: _____ Phone: _____

Address: _____

Principal Service or Product: _____

- | | |
|---|---|
| <input type="checkbox"/> Prime Contractor | <input type="checkbox"/> Supplier of Material/Service |
| <input type="checkbox"/> Subcontractor | <input type="checkbox"/> Broker |

- | | |
|---|--|
| <input type="checkbox"/> Sole Ownership | <input type="checkbox"/> Corporation |
| <input type="checkbox"/> Partnership | <input type="checkbox"/> Joint Venture |

I, Contractor/Subcontractor, hereby certify that I have read and understood, and agree to adopt and implement, the approved Construction Waste Management Plan for the North Bay Water Reuse Program Sonoma Valley County Sanitation District Fifth Street East Recycled Water Pipeline.

Certified by:

Name: _____

Title: _____

Signature: _____

Date: _____

SECTION 01770

CONTRACT CLOSEOUT

PART 1 GENERAL**1.1 SUMMARY**

- A. Section Includes:
1. Description of Contract closeout procedures including:
 - a. Removal of Temporary Construction Facilities
 - b. Substantial Completion
 - c. Final Completion
 - d. Project Record Documents
 - e. Project Guarantee
 - f. Warranties
 - g. Turn-In
 - h. Computer Programs
 - i. Release of Claims
 - j. Fire Inspection Coordination
 - k. Building Inspection Coordination

1.2 REMOVAL OF TEMPORARY CONSTRUCTION FACILITIES

- A. Remove temporary materials, equipment, services, and construction prior to Substantial Completion inspection.
- B. Clean and repair damage caused by installation or use of temporary facilities.
- C. Restore permanent facilities used during construction to specified condition.
- D. Comply with paragraph 1.15 of Section 01500 (Temporary Facilities and Controls).

1.3 SUBSTANTIAL COMPLETION

- A. When Contractor considers Work or designated portion of the Work as Substantially Complete, submit timely written notice to Owner, with list of items remaining to be completed or corrected.
- B. Within reasonable time, Owner will inspect to determine status of completion.
- C. Should Owner determine that Work is not Substantially Complete, Owner will promptly notify Contractor in writing, listing all defects and omissions.
- D. Remedy deficiencies and send a second written notice of Substantial Completion. Owner will reinspect the Work. If deficiencies previously noted are not corrected on reinspection, then Contractor shall pay the cost of the reinspection.
- E. When Owner concurs that Work is Substantially Complete, Owner will issue a Certificate of Substantial Completion, accompanied by Contractor's list of items to be completed or corrected as verified by Owner.
- F. Before a Certificate of Substantial Completion will be issued, Contractor must accomplish:
 1. Startup of manufactured units, equipment, and systems that require startup and run for periods prescribed by Owner.
 2. Testing and Commissioning.
 3. Training.
 4. Submittal of final Installation, Operation, and Maintenance Manuals.

5. Submittal of complete Project set of survey notes of construction staking including, but not limited to, field notes, maps, drawings, coordinate listings and all other survey information produced as a result of the Work.
- G. A punch list examination will be performed upon Substantial Completion. 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 Owner for costs associated with these visits.

1.4 FINAL COMPLETION

- A. Final Completion occurs when Work meets requirements for Owner's Final Acceptance. When Contractor considers Work is Finally Complete, submit written certification that:
 1. Contractor has inspected Work for compliance with Contract Documents, and all requirements for Final Acceptance have been met.
 2. Except for Contractor maintenance after Final Acceptance, Work has been completed in accordance with Contract Documents and deficiencies listed with Certificate of Substantial Completion have been corrected. Equipment and systems have been tested in the presence of Owner, and are operative.
 3. Work is complete and ready for final inspection.
- B. In addition to submittals required by Contract Documents, provide submittals required by governing authorities and submit final statement of accounting giving total adjusted Contract Sum, previous payments, and sum remaining due.
- C. When Owner finds Work is acceptable and final closeout submittals are complete, Owner will issue final Change Order reflecting approved adjustments to Contract Sum not previously made by Change Order. Should Owner determine that Work is incomplete or Defective:
 1. Owner promptly will so notify Contractor, in writing, listing the incomplete or Defective items.
 2. Promptly remedy the deficiencies and notify the Owner when it is ready for reinspection.
 3. When Owner determines that the Work is acceptable under the Contract Documents, Owner will request Contractor to make closeout submittals.
- D. Final adjustments of accounts:
 1. Submit a final statement of accounting to Owner, showing all adjustments to the Contract Sum and complete and execute Document 00650 (Agreement and Release of Any and All Claims).
 2. If so required, Owner shall prepare a final Change Order for submittal to Contractor, showing adjustments to the Contract Sum that were not previously made into a Contract Modification.

1.5 PROJECT RECORD DOCUMENTS

- A. Contract Documents will not be closed out and final payment will not be made until completion and submittal of Project Record Documents described in Section 01780 (Project Record Documents).

1.6 PROJECT GUARANTEE

- A. Requirements for Contractor's guarantee of completed Work are included in Article 9 of Document 00700 (General Conditions) and Document 00630 (Guaranty).
- B. Neither recordation of Final Acceptance nor final certificate for payment nor provision of the Contract nor partial or entire use or occupancy of premises by Owner shall constitute

acceptance of Work not done in accordance with Contract Documents nor relieve Contractor of liability in respect to express warranties or responsibility for faulty materials or workmanship.

- C. Owner may make repairs to Defective Work as set forth in Document 00700 (General Conditions), paragraph 9.3.
- D. If, after installation, operation, or use of materials or equipment to be provided under Contract proves to be unsatisfactory to Owner, Owner shall have right to operate and use materials or equipment until said materials and equipment can, without damage to Owner, be taken out of service for correction or replacement. Period of use of Defective materials or equipment pending correction or replacement shall in no way decrease guarantee period required for acceptable corrected or replaced items of materials or equipment.
- E. Nothing in this Section 01770 shall be construed to limit, relieve, or release Contractor's, Subcontractors', and equipment suppliers' liability to Owner for damages sustained as result of latent defects in equipment caused by negligence of suppliers' agents, employees, or Subcontractors. Stated in another manner, warranty contained in the Contract Documents shall not amount to, nor shall it be deemed to be, waiver by Owner of any rights or remedies (or time limits in which to enforce such rights or remedies) it may have for Defective workmanship or Defective materials under laws of this State pertaining to acts of negligence.

1.7 WARRANTIES

- A. Execute Contractor's Submittals and assemble warranty documents and operation and maintenance manuals executed or supplied by Subcontractors, suppliers, and manufacturers.
 - 1. Provide table of contents and assemble in 8½ inches by 11 inches three-ring binder with durable plastic cover, appropriately separated and organized.
 - 2. Assemble in Specification Section order.
- B. Submit material prior to final Application for Payment.
 - 1. For equipment put into use with Owner's permission during construction, submit within 14 Days after first operation.
 - 2. For items of Work delayed materially beyond Date of Substantial Completion, provide updated Submittal within 14 Days after acceptance, listing date of acceptance as start of warranty period.
- C. Warranties are intended to protect Owner against failure of Work and against deficient, Defective, and faulty materials and workmanship, regardless of sources.
- D. Limitations: Warranties are not intended to cover failures that result from the following:
 - 1. Unusual or abnormal phenomena of the elements
 - 2. Vandalism after Substantial Completion
 - 3. Insurrection or acts of aggression including war
- E. Related Damages and Losses: Remove and replace Work which is damaged as result of Defective Work, or which must be removed and replaced to provide access for correction of warranted Work.
- F. Warranty Reinstatement: After correction of warranted Work, reinstate Guarantee Period for corrected Work as of the date the corrected Work was done.
- G. Replacement Cost: Replace or restore failing warranted items without regard to anticipated useful service lives.
- H. Warranty Forms: Submit drafts to Owner for approval prior to execution. Forms shall not detract from or confuse requirements or interpretations of Contract Documents.

1. Warranty shall be countersigned by manufacturers.
2. Where specified, warranty shall be countersigned by Subcontractors and installers.
- I. Rejection of Warranties: Owner reserves right to reject unsolicited and coincidental product warranties that detract from or confuse requirements or interpretations of Contract Documents.
- J. Term of Warranties: For materials, equipment, systems, and workmanship, warranty period shall be as stated in Document 00630 (Guaranty), except where:
 1. Detailed Specifications for certain materials, equipment or systems require longer warranty periods.
 2. Materials, equipment or systems are put into beneficial use of Owner prior to Final Completion as agreed to in writing by Owner.
- K. Transfer of Warranties: Any warranty shall automatically transfer, without charge, to a subsequent owner who acquires the Project. Any transfer of the Project shall not extend the duration of any warranty.
- L. Warranty of Title: No material, supplies, or equipment for Work under Contract shall be purchased subject to any chattel mortgage, security agreement, or under a conditional sale or other agreement by which an interest therein or any part thereof is retained by seller or supplier. Contractor warrants good title to all material, supplies, and equipment installed or incorporated in Work and agrees upon completion of all Work to deliver premises, together with improvements and appurtenances constructed or placed thereon by Contractor, to Owner free from any claim, liens, security interest, or charges, and further agrees that neither Contractor nor any person, firm, or corporation furnishing any materials or labor for any Work covered by Contract shall have right to lien upon premises or improvement or appurtenances thereon. Nothing contained in this paragraph, however, shall defeat or impair right of persons furnishing materials or labor under bond given by Contractor for their protection or any rights under law permitting persons to look to funds due Contractor in hands of Owner.

1.8 TURN-IN

- A. Contract Documents will not be closed out and final payment will not be made until all keys and locks issued to Contractor during prosecution of Work and letters from property owners, if required under paragraph 1.2.F of Section 01740 (Cleaning), are turned in to Owner.

1.9 COMPUTER PROGRAMS

- A. When any equipment requires operation by computer programs, submit the program, on appropriate electronic media, plus all user manuals and guides for operating the programs and making changes in the programs for upgrading and expanding the databases. Program shall be Windows 7 compatible. Provide required licenses to Owner at no additional cost.

1.10 RELEASE OF CLAIMS

- A. Contract Documents will not be closed out and final payment will not be made until Document 00650 (Agreement and Release of Any and All Claims) is completed and executed by Contractor and Owner.

1.11 FIRE INSPECTION COORDINATION

- A. Coordinate fire inspection and secure sufficient notice to Owner to permit convenient scheduling (if applicable).

1.12 BUILDING INSPECTION COORDINATION

- A. Coordinate with Owner a final inspection for the purpose of obtaining an occupancy certificate (if applicable).

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION - NOT USED

END OF SECTION

SECTION 01780

PROJECT RECORD DOCUMENTS**PART 1 GENERAL****1.1 SUMMARY**

- A. Section Includes:
 - 1. Administrative and procedural requirements for the following Project Record Documents:
 - a. Project Record Drawings and Shop Drawings
 - b. Project Record Specifications
 - c. Miscellaneous Project Record Submittals
- B. Specific Project Record Documents requirements that expand requirements of this Section may be included in the individual Sections of Divisions 2 through 16.

1.2 SUBMITTAL

- A. During construction, bring hard-copy updates of the Project Record Drawings (Field Set) to monthly Progress Payment Meetings.
- B. At completion of Project, deliver Project Record Documents to Owner. Project Record Documents required include:
 - 1. Marked-up copies of Drawings (Field Set)
 - 2. Final Project Record Drawings
 - 3. Marked-up copies of Specifications
 - 4. Marked-up copies of Shop Drawings, if applicable
 - 5. Miscellaneous Project Record Submittals
- C. Accompany submittal with transmittal letter containing:
 - 1. Date
 - 2. Project title and Owner's Contract number
 - 3. Contractor's name and address
 - 4. Number and title of each Project Record Document
 - 5. Certification that each document as submitted is complete and accurate, and signature of Contractor or Contractor's authorized representative.

1.3 GENERAL

- A. Prior to start of construction, Owner will provide one full size set of Drawings and one copy of the Project Manual for Contractor's use for recording as-built conditions.
- B. Post changes and Modifications to the Contract Documents as they occur. Do not wait until the end of the Project. Owner will review Project Record Documents on a monthly basis to assure compliance with this requirement.
- C. Refer instances of uncertainty to Owner for resolution.
- D. Maintenance of Documents:
 - 1. Store Project Record Documents in the field office apart from Contract Documents used for construction.
 - 2. Do not permit Project Record Documents to be used for construction purposes.
 - 3. Maintain Project Record Documents in good order and in a clean, dry, neat, and legible condition.

4. Make Project Record Documents available at all times for inspection by Owner.

1.4 PROJECT RECORD DRAWINGS AND SHOP DRAWINGS

- A. Quality Draftsmanship: Project Record Drawings and Project Record Shop Drawings shall be prepared by competent drafters and shall be clear and fully legible. Owner shall be the sole judge of the acceptability of the Project Record Drawings and Project Record Shop Drawings.
- B. Mark-up Procedure: During the construction period, maintain a set of full size prints of Drawings and Shop Drawings for Project Record Documents purposes ("Field Set"). Stamp each document (on each sheet or page) "PROJECT RECORD" in 2-inch high letters. Keep record documents current. Note: A reference by number to a Change Order, CCD, RFI, RFQ, RFP, Field Order or other such document is not acceptable as sufficient record information on any record document. Do not permanently conceal any Work until required information has been recorded.
 1. Mark Drawings and Shop Drawings to indicate the actual installation where the installation varies appreciably from the installation shown originally. Give particular attention to information on concealed elements that would be difficult to identify or measure and record later. Items required to be marked include but are not limited to:
 - a. Dimensional changes to the Drawings and Shop Drawings
 - b. Revisions to details shown on the Drawings and Shop Drawings
 - c. Depths of various elements of foundation in relation to main floor level or survey datum
 - d. Variable or concealed field conditions
 - e. Horizontal and vertical location of underground utilities and appurtenances referenced to permanent surface improvements
 - f. Location of internal utilities and appurtenances concealed in construction referenced to visible and accessible features of structure
 - g. Locations of underground Work, points of connection with existing utilities, changes in direction, valves, manholes, catch basins, capped stub outs, invert elevations, and similar items
 - h. Actual numbering and set points of each electrical circuit
 - i. Field changes of dimension and detail
 - j. Revisions to routing of piping and conduits
 - k. Revisions to electrical circuitry
 - l. Actual equipment locations
 - m. Duct, conduit, and cable size and routing
 - n. Changes made by Change Order or CCD
 - o. Details not on original Drawings or Shop Drawings
 2. Mark completely and accurately Drawings or Shop Drawings, whichever is the most capable of showing actual physical conditions. Where Shop Drawings are marked, show cross-reference on Drawings location.
 3. Mark important additional information that was either shown schematically or omitted from original Drawings.
 4. Use revision block to record information related to the mark-ups, including CCD numbers; Alternate numbers, Change Order numbers, and similar identification.
 5. Mark Drawing and Shop Drawing sets with red, erasable colored pencil.
 6. Responsibility for Mark-up: Where feasible, the individual or entity who obtained Project Record Drawing or Shop Drawing data, whether the individual or entity is the

- installer, Subcontractor, or similar entity, is required to prepare the mark-up on Project Record Drawings or Shop Drawings.
- a. Accurately record information in an understandable and legible drawing technique.
 - b. Record data as soon as possible after it has been obtained. In the case of concealed installations, record and check the mark-up prior to concealment.
- C. Preparation of Project Record Drawings and Project Record Shop Drawings: Immediately prior to inspection for Certification of Substantial Completion, review completed marked-up Project Record Drawings (Field Set) and Project Record Shop Drawings with Owner. When authorized, prepare final Project Record Drawings and Project Record Shop Drawings.
1. Project Record Drawings:
 - a. Prior to review of Contractor's Application for Payment, the Owner and Contractor will review updates to the Field Set of Project Record Drawings to verify that record documents are current.
 - b. Upon Certification of Substantial Completion, Contractor shall transfer all updates from the "Field Set" to a clean set of full-size contract drawings furnished by the Owner. Each sheet shall include a Project Record Drawing stamp which is dated and "wet signed" by the Contractor. Submit a full-sized PDF (scan) to Owner.
 - c. If Contractor chooses and Owner approves in advance, Contractor may submit electronic updates on final Project Record Drawings, so long as final Project Record Drawings preserve the integrity of the data and are compatible with Owner's software.
 2. Project Record Shop Drawings:
 - a. Transfer all information previously marked on Field Set to a separate clean set of Shop Drawings provided by Owner. Erase, redraw, and add details and notations where applicable. Identify and date each Shop Drawing; include the printed designation "PROJECT RECORD SHOP DRAWING" in a prominent location on each Shop Drawing. Bind the set with durable paper cover sheets, with appropriate identification, including titles, dates, and other information on cover sheet.
- D. In addition to requirements of this Section, comply with supplemental requirements of Divisions 15.
1. Division 15 of the Specifications may require the preparation of large scale, detailed layout drawings of the Work of that Division. These layout drawings are not Shop Drawings as defined by Section 01420 (References and Definitions), but together with Shop Drawings or layout drawings of all other affected Sections are used to check, coordinate, and integrate the work of the various Sections.
 2. Include these layout drawings as part of the Project Record Documents.

1.5 PROJECT RECORD SPECIFICATIONS

- A. During the construction period, maintain one copy of the Specifications, including Addenda and Modifications issued, for Project Record Documents purposes.
- B. Mark the Project Record Specifications to indicate the actual installation where the installation varies substantially from that indicated in Specifications issued. Note related Project Record Drawing information, where applicable. Give particular attention to substitutions, selection of product options, Change Order and CCD Work, and information on concealed installation that would be difficult to identify or measure and record later.

1. In each Specification Section where products, materials or units of equipment are specified or scheduled, mark the copy with the proprietary name and model number of the product furnished.
 2. Record the name of the manufacturer, catalog number, supplier and installer, and other information necessary to provide a record of selections made and to document coordination with Installation, Operation, and Maintenance Manuals.
 3. For each principal product specified, indicate whether data has been submitted in Installation, Operation, and Maintenance Manuals.
- C. Preparation of Project Record Specifications: Immediately prior to inspection for Certification of Substantial Completion, review completed Field Set Project Record Specifications with Owner. When authorized, prepare final Project Record Specifications.
1. After Substantial Completion and before Final Completion, carefully transfer all data shown on the Field Set to a separate clean set of Specifications provided by Owner. Include the printed designation "PROJECT RECORD SPECIFICATION" in a prominent location on the Specifications.

1.6 MISCELLANEOUS PROJECT RECORD SUBMITTALS

- A. Refer to other Specification Sections for miscellaneous record keeping requirements and submittals in connection with various construction activities. Immediately prior to Substantial Completion, complete miscellaneous records and place in good order, properly identified and bound or filed, ready for use and reference. Submit to the Owner for Owner's records. Categories of requirements resulting in miscellaneous records may include, but are not limited to, the following:
1. List all products used in the Project, organized by Specification section and article. Product list shall be submitted in an electronic format, compatible with Microsoft Excel 2000.
 2. Delivery records of materials incorporated into the Work
 3. Records of product lot numbers and expiration dates
 4. Quality Assurance/Quality Control records for field Work

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION - NOT USED

END OF SECTION

DIVISION 2

SITE CONSTRUCTION

SECTION 02116

GROUNDWATER DISPOSAL**PART 1 GENERAL****1.1 SUMMARY**

- A. Section Includes: Handling, storage, testing, transporting and disposal of groundwater from trench dewatering potentially containing volatile organic compounds (VOCs), petroleum hydrocarbons, metals, and/or chlorinated solvents.
- B. Related Sections:
 - 1. Section 02240 (Dewatering)

1.2 SUBMITTALS

- A. Quality Assurance/Control Submittals:
 - 1. Groundwater Characterization and Management Plan (GCM Plan):
 - a. Prepare a GCM Plan that describes the storage, characterization, treatment, transportation, and disposal of groundwater generated during trench excavation dewatering activities.
 - 1) A California Registered Professional Civil Engineer or a California Registered Geologist experienced in construction activities involving groundwater silt removal shall prepare and stamp the GCM Plan.
 - b. Submit Owner-approved GCM Plan attached to Request for One Time Groundwater Discharge permit application to Owner prior to implementing the GCM Plan.
 - c. The GCM Plan shall, at a minimum, contain the following:
 - 1) Estimated volume of water expected to be generated during dewatering activities and the rate of extraction.
 - 2) A list of chemicals of concern that may potentially be present in groundwater entering trench excavations.
 - 3) Description of the type of tanks to be used for storing groundwater and estimate of the number of tanks and tank volumes required.
 - 4) Proposed temporary stockpile area for groundwater storage bins.
 - 5) Name and phone number for proposed state-certified chemical analytical laboratory.
 - 6) List of chemical analyses required for disposal.
 - 7) Planned method for achieving the water quality requirements required by the receiving facility, if any.
 - 8) Planned method(s) of dewatering and conveying groundwater generated from construction activities to the receiving facility, including a map.
 - 9) Procedures to ensure against spills, releases, or leaks during dewatering and conveyance of affected water to the receiving facility.
 - (a) Evidence that disposal facility is permitted to receive the water at the estimated concentrations
 - (b) Acceptance criteria and contaminant limits
 - 10) Secondary disposal point in the event that contaminant concentrations exceeds the primary disposal facility's acceptance criteria.
 - 11) Identification of permits or design limitations (e.g., flow rate, emission rate) of the receiving facility that may affect dewatering operations.

- 12) A description of the required documents to be obtained by Contractor.
- 13) Notification procedures in the event of an emergency.
- 14) Procedures for notification and coordination with receiving facility personnel prior to when dewatering activities are to occur.
- 15) A description of permits (if any) that must be obtained or regulations that must be complied with in order to implement the GCM Plan.
- 16) Identification of groundwater management procedure to be used for handling and disposing groundwater containing contaminants exceeding the acceptable limits for discharging to sanitary sewer.
- 17) Any proposed pre-disposal treatment methods and associated permits that must be obtained or regulations that must be complied with in order to implement the proposed pre-disposal treatment methods.

2. Reports: Laboratory analysis reports

1.3 PROJECT CONDITIONS

A. Existing Conditions:

1. There is a potential for the presence of reportable concentrations of silt in the groundwater from dewatering activities.
2. The Work location crosses Agua Caliente Creek and is near Lilley Creek.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION

3.1 GROUNDWATER MANAGEMENT

A. GCM Plan Implementation:

1. Implement the approved GCM Plan for groundwater encountered during trenching operations.
2. Provide a minimum of two 2,500-gallon double-walled water storage tanks on Site. If more storage capacity is needed, provide additional storage tanks on Site. Water storage tanks shall be stored at an Owner-approved area.
3. Collect groundwater samples from holding tank(s) and submit to a chemical analysis laboratory certified under the State Environmental Laboratory Accreditation Program (ELAP). Analyses required for the samples shall at a minimum include: Silt, or as otherwise required by the Owner's Wastewater Source Control Section. Additional analyses shall be performed that may be required by the receiving facility for disposal or recycling of the groundwater.
4. Discharge of groundwater to the sewer:
 - a. Store dewatering water in tanks.
 - b. Analyze water per Owner's Wastewater Discharge Limitations related to Owner's Groundwater Disposal to Sewer Permit requirements.
 - c. Provide analytical results to Owner.
 - d. E-mail analytical results to Owner's Wastewater Source Control Section at Erik.Brown@scwa.ca.gov.
 - e. Obtain written approval to discharge from Owner and provide copy of chemical analysis results.

- f. Notify Owner a minimum of 48 hours prior to any discharge to sewer following approval of analytical results. State intention to discharge to sewer and include location, start date, and time.
 - g. Discharge location shall be approved in writing by Owner.
 - h. Discharge through a totalizing meter that has been calibrated within one week of discharge. Provide written evidence of meter calibration by a certified meter calibration company prior to any discharge.
5. Upon completion of dewatering Work, decontaminate temporary storage tanks and dewatering pumps and remove from the Site. Contractor is responsible for permanent disposal of equipment that cannot be decontaminated or recycled, in accordance with applicable laws and regulations.

END OF SECTION

SECTION 02158

HORIZONTAL DIRECTIONAL DRILLING**PART 1 GENERAL****1.1 SUMMARY**

A. Related Sections:

1. Section 02515 (Recycled Water Main)
2. Section 02240 (Dewatering)

1.2 DEFINITIONS

- A. HDD: Horizontal Directional Drilling is a method of trenchless pipe installation using a steerable drilling operation which directly installs a pipe along a linear alignment (not necessarily horizontal) without an open hole or open face.
- B. Contingency Plan: Plan which addresses the possibility of unintended fluid release (“frac-out”) during HDD activities; includes locating, containment, and cleanup.

1.3 SUBMITTALS

- A. Submit letters, shop drawings and product data showing materials of construction, installation equipment and details of installation for the HDD operation including:
 1. Written certification from the manufacturer that the drilling equipment is capable of completing the planned installation, as indicated.
 2. Proof of manufacturer’s inspection and calibration of surveying equipment. Submit prior to the commencement of drilling operations.
 3. Construction Procedures
 - a. HDD and Contingency Plan:
 - 1) Obtain Owner’s approval of HDD Plan prior to commencing HDD mobilization. Plan must comply with CDFW permit requirements.
 - (i) Detailed descriptions of: Methods
 - (ii) Equipment:
 - (iii) Calibrations
 - (iv) Drawings
 - (v) Photographs
 - (vi) Descriptions of any modifications since manufacture
 - (vii) MSDS for materials to be used for the pipeline installations
 - 2) Submit Contingency Plan to Owner at least 30 days prior to operations. Plan must comply with CDFW permit requirements.
 - b. Notifications:
 - 1) Variations in Plan and Profile. Document any variations between the actual plan and profile of the bore path and the locations indicated. Notify Owner immediately upon discovery of any deviations.
 - c. Daily Logs and Records:
 - 1) Submit complete, legible, written daily logs and records within one business day of the date to which the logs and records correspond
 - d. Written descriptions of the construction method and equipment to be used, and access pit sizes and locations required for equipment and material access.

- e. Grouting techniques to be used for overexcavation if any, including equipment, pumping procedures, grout types, and mixtures.
- f. Description of line and grade control.
- g. Proposed procedures, materials and equipment for lubricating the exterior of the pipe during pulling.
- h. Details of spoil removal system, including equipment type, number and disposal location.
- i. Proposed methods, materials and equipment for removing and clearing obstructions so that the HDD can advance forward.
- j. Procedures for locating and controlling the direction of the drilling operation.
- k. Submit as built drawings showing plan and profile views of the installed pipeline, correctly referenced to project benchmarks and major site features.

1.4 QUALITY ASSURANCE

- A. Daily Logs and Records. Maintain daily logs and records documenting drilling lengths, location of drill head, drilling fluid pressures and flow rates, drilling fluid losses, inadvertent returns, drilling times required for each pipe segment, any instances of retraction and re-drilling of the pilot bore or segments thereof, and any other relevant observations. Maintain and update these records daily, or more frequently if directed by Owner. The position of the drill head shall be continuously tracked.
- B. Advance Notice and Inspections. Provide at least 72 hours advance written notice to Owner of the planned inception of major drilling activities, including pre-reaming, reaming, and pipe pullback. Perform work in the presence of Owner, unless Owner grants prior written approval to perform such work in Owner's absence.
- C. Surveying Equipment and Procedures. Equipment used for tracking the bore path and drill head shall be inspected and calibrated by the equipment manufacturer prior to use.

1.5 PROJECT/SITE REQUIREMENTS

- A. Boring locations are as indicated on the drawings. The boring logs indicate the soil and groundwater conditions at the boring location at the time of the boring and conditions can change away from the actual boring location and with time. The boring logs and geotechnical technical memorandum are available to Contractor for his information to be used at his own risk. Contractor is responsible for any conclusions to be drawn from the borings including the character of the materials to be encountered and the degree of difficulty to be expected in the performance of the work.
- B. Do not assume that materials other than those disclosed by the borings will not be encountered or that the proportions and character of the various materials will not vary from those indicated in the boring logs.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. The carrier pipe shall be either Fusible PVC or HDPE in the diameter and dimension ratios shown on the drawings and as specified in Section 02515.
- B. Cement grout shall consist of a mixture of 1 part cement to 6 parts sand. The amount of cement may be increased or decreased as necessary and as permitted by Owner to provide good flowing characteristics.
- C. Lubricant shall be bentonite or polymer based slurry.

2.2 EQUIPMENT

- A. The drill rig and associated equipment shall be in good condition and capable of completing the project without significant delays.
- B. The drill bit and reamers shall have a closed face and shall be capable of supporting the excavated area (face) during excavation and shutdown. The bit shall be full directional in both the horizontal and vertical directions from the drill rig so that the alignment can be maintained during the entire drilling operation.
- C. The drill bit shall be capable of drilling through materials encountered including sand, gravel, glacial till and outwash, organics and marine clay.
- D. Surveying equipment required for completing the as-built drawings.

PART 3 - EXECUTION

3.1 GENERAL

- A. Provide materials, equipment and incidentals necessary for the construction of new 14-inch and 18-inch diameter recycled water force main by horizontal directional drilling as indicated and as specified herein.
- B. Furnish survey including layout, inspection and record-keeping incidental to the drilling and pipe installation.
- C. Drilling shall be conducted at locations indicated. Work must be conducted outside of nearby waterways.
- D. Drilling shall either be conducted from a pit or as a sacrificial tangent curve to intersect the alignment outside of nearby waterways. Should a pit be used, work done to construct and maintain the pit will be part of this work.
- E. Work is subject to requirements of CDFW permit.

3.2 ACCESS PITS/PREPARATION

- A. Excavation, trenching, dewatering, sheeting, shoring and bracing shall comply with applicable requirements of OSHA, Sonoma County, City of Sonoma, CDFW, and other permitting agencies, and these specifications.
- B. Locate and protect existing utilities as required. Coordinate utility protection with the respective utility companies.
- C. No rescue shafts will be allowed within the limits of nearby waterways.

3.3 PILOT BORE ALIGNMENT/LAYOUT

- A. Before drilling is allowed to begin, layout the pipeline alignment. There shall be at least one alignment point every 25 feet. Each alignment point shall show the ground elevation, designed pipeline invert elevation, corresponding pilot bore elevation, and the difference between the ground and pilot bore elevations.
- B. Continuously monitor horizontal and vertical position and record the position at least once per drill stem length, or at 25 feet or 30-minute intervals, whichever is most frequent.

3.4 HDD OPERATIONS

- A. Though the installation process may be licensed or proprietary in nature, Contractor shall not change any material, thickness, design, values or procedural matters stated in the submittals, without the prior knowledge and approval of Owner. Contractor shall submit, in writing, full details about component materials, their properties and installation procedures and abide by them fully during the entire course of the work.

- B. Ream the pilot hole to a diameter which is sufficiently sized to reduce forces applied to the pipe during pull back. Intermediate temporary pipes may be used as required to install final pipe.
- C. If pulling equipment is not capable of monitoring pulling forces imposed upon the pipe, a weak link shall be between the pipe and the molehead/reamer in order not to exceed the safe pulling strength as prescribed by the pipe manufacturer.
- D. Install a swivel between the molehead/reamer and pipe connection to minimize torsional stresses imposed on the pipe.
- E. Pressure grout the annular space around the final pipe if the final ream produces a theoretical annular space of more than 0.2 cu ft per linear foot of pipe.
- F. Directly install the recycled water line by making either a single or multiple passes with a directional drill to the lines and grades indicated.
- G. Install the pipe from either a pit which allows the pipe installation along the proposed grade directly or by drilling an initial sacrificial tangent section outside the limits of any nearby waterway which is then excavated and cut-off or turned down to make the pipe connection at the grades indicated.
- H. Provide remote sensing at the drill rig to maintain alignment of the drilling operation and provided a profile and plan locations of the as-installed pipe.
- I. Install final pipe as one continuous fused string. Install final pipe in a continuous operation without allowing the pipe to set in the ground unmoved.
- J. Pull pipe into place without damaging the pipe joints or pipe sections. Replace any pipe damaged during installation at no additional cost to Owner.
- K. Maintain proper lubrication during pipe installation to reduce the exterior friction and possibility of the pipe seizing in place.
- L. Drill pipe thrust and torque shall be measured and recorded at least once per drill pipe length, or at 30 feet or 30-minute intervals, whichever is most frequent. Loss of circulation or sudden increase in torque or thrust shall be reported to Owner immediately. All thrust and torque measurements shall be made during pilot hole drilling, pre-reaming, reaming, pullback and shall be submitted with daily logs. Instances of thrust, torque, or pullback exceeding allowable limits shall be reported immediately to Owner.
- M. Continuously monitor and record drilling fluid pressures and flow rates. The pressures shall be monitored at the pump discharge. These measurements shall be made during pilot hole drilling, reaming and pullback operations.
- N. Measure and record drilling fluid viscosity and density at least three times per shift with at least two hours between readings, using calibrated Marsh funnel and mud balance. These measurements shall be included in daily logs submitted to Owner. Document modifications to the drilling fluids, by noting the types and quantities of drilling fluid additives, the dates and times when introduced, and the reason for the addition or modification.
- O. Employ licensed surveyors to locate the entry and exit points, and to establish horizontal and vertical datum for the bore and the pipe layout and fabrication areas.
- P. To confirm no damage to the pipe, upon completion of insertion and pull back, perform a mandrel test on the pipeline.

3.5 MONITORING

- A. Surface Settlement Monitoring:
 - 1. Make a visual inspection of the roadway from each shoulder to look for signs of settlement on an hourly basis during the time of active drilling.

2. Establish surface settlement monitoring points on the shoulders of the roadway and at any intermediate points which may be accessible or as directed by Owner. Establish surface settlement monitoring points along the centerline of the pipe. Install additional monitoring points at locations deemed necessary.
 3. Record location of settlement monitoring points with respect to construction baselines and elevations. Record elevations to an accuracy of 0.01 feet for each monitoring point location. Establish monitoring points at locations and by methods that protect them from damage by construction operations, tampering, or other external influences.
 4. Monitor ground settlement directly above and 10-ft before and after any utility or pipeline intersection.
 5. Ground Surface Movement. Settlement or heave of the ground surface along the HDD alignment shall not exceed 0.5-in.
- B. Reporting Frequency:
1. Submit records of readings daily from the various surface settlement monitoring points and visual observations along the centerline of the pipe.
 2. Report any loss of ground, roadway cracking, depression or settlement or other unusual activities immediately.
- C. HDD operations shall limit vibrations transmitted to surrounding structures so as not to cause damage.
- D. Disposal of Wastes and Groundwater:
1. Contractor shall dispose of waste soils, slurries and other wastes in accordance with applicable regulations. No waste shall be left on-site following completion of the work.
 2. Contractor shall dispose of groundwater generated by dewatering operations and any surface water entering access pits in accordance with Section 02240.

3.6 MOVEMENT AND TOLERANCES

- A. No more than 3-in horizontal and 3-in vertical deviation from design location shall be permitted in the position of the carrier pipe.
- B. When the initial bore deviates from the design line or grade by amounts greater than that specified, return the pipe to design line or grade plus or minus the specified tolerance at a rate of not more than 1-in per 25 feet.
- C. If either pipe is off design line or grade by an amount that requires redesign of the pipeline or associated structures, Contractor shall do so at no additional cost to Owner.

END OF SECTION

SECTION 02240

DEWATERING**PART 1 GENERAL****1.1 SUMMARY** Related Sections:

1. Section 02320 (Excavation, Bedding, Backfill, and Resurfacing)
2. Section 02116 (Groundwater Disposal)

1.2 SYSTEM DESCRIPTION

A. Performance Requirements:

1. Sufficient in size and capacity to control surface and sub-surface water (groundwater).
2. Allow for the safe performance of Work within excavations.
3. Allow material to be excavated and placed in a dry condition.
4. Provide sufficiently dry ground conditions to permit excavation and placement of materials to grades indicated and allow construction to be performed to the specified quality for the various items of Work affected by dewatering.
5. Prevent loss of fines, seepage, boils, quick conditions, or softening of foundation strata.
6. Maintain adequate control of groundwater so that the stability of excavated and constructed slopes is not adversely affected by saturated soil, and damage to structures or other facilities does not occur.
7. Prevent erosion.
8. Prevent the flooding of excavations.
9. Protect excavations from becoming wet from surface water.
10. Discharge and dispose of water in a manner that complies with all applicable permits, laws, and regulations.

1.3 SUBMITTALS

A. Quality Assurance/Control Submittals:

1. Dewatering Plan:
 - a. Drawings, data, and operation schedule
 - b. Location, depth, and size of well points, headers, sumps, and ditches
 - c. Size and location of discharge lines
 - d. Capacities of pumps and standby units
 - e. Detailed description of dewatering methods to be employed to convey the water from Site to a designated disposal site
 - f. Monitoring for ground settlement

1.4 QUALITY ASSURANCE

- A. Control the rate and effect of dewatering in such a manner as to avoid settlement and subsidence.
- B. Where critical structures or facilities exist immediately adjacent to areas of proposed dewatering, establish reference points and observe at frequent intervals to detect any settlement that may develop. The responsibility for conducting the dewatering operation in a manner that protects adjacent structures and facilities rests solely with Contractor. The cost of repairing any damage to adjacent structures and restoration of facilities is the responsibility of Contractor.

PART 2 - PRODUCTS

2.1 EQUIPMENT

- A. Where required, dewatering may include, but not be limited to, use of well points, sump pumps, temporary pipelines for water disposal, and rock or gravel placement.

PART 3 - EXECUTION

3.1 GENERAL

- A. All portions of the Work are subject to the dewatering requirements specified herein. Portions of the Work may occur below the elevation of the groundwater table and require significant dewatering effort.
- B. Have on hand at all times:
 - 1. Sufficient pumping equipment and machinery in good working condition
 - 2. Competent workers for the operation of the pumping equipment
 - 3. Adequate standby power generation equipment to ensure efficient maintenance of dewatering operation during power failure
- C. Unless otherwise indicated, maintain water level at least two feet below the bottom of excavation in Work areas where groundwater occurs.
- D. Commence dewatering when groundwater is first encountered and continue throughout excavation, construction, pipe laying, and backfilling, as applicable, and until water can be allowed to rise in accordance with the provisions of this Section 02240 and Section 02320 (Excavation, Bedding, Backfill, and Resurfacing). Keep trenches free from water while the pipe or other structures are installed and until backfilling has progressed to a sufficient height to anchor the Work against possible flotation or leakage.
- E. Preserve the undisturbed bearing capacity of the sub-grade soils at bottom of excavation.
- F. If foundation soils are disturbed or loosened by the upward seepage of water or an uncontrolled flow of water, excavate affected areas and replace with drain rock at no additional cost to Owner.
- G. Prevent flotation by maintaining a positive and continuous removal of water.
- H. If well points or wells are used, adequately space them to provide the necessary dewatering; sandpack and/or use other means to prevent pumping of fine sands or silts from the subsurface. Maintain a continual check to ensure that the subsurface soil is not being removed by the dewatering operation.
- I. Discharge water in such a manner as to cause no injury to public or private property, or be a menace to public health; comply with all permit and local requirements
- J. Dispose of water from the Work in a suitable manner without damage to property. No water shall be drained into Work built or under construction without prior consent of Owner. Filter water to remove sand and fine-sized soil particles before discharge into any drainage system. Filter method shall be in accordance with applicable permits and is subject to Owner approval.
- K. Perform release of groundwater to its static level in such a manner as to maintain the undisturbed state of the natural foundation soils, prevent disturbance of compacted backfill and prevent flotation or movement of structures and pipelines.
- L. The discharge of water shall not result in the deposition of sediments that could cause current or future nuisance or adversely affect the beneficial uses of the receiving water area. The point of discharge shall be acceptable to Owner and comply with all applicable permits, laws and regulations.

M. Discharge to land or surface water shall require additional permitting from San Francisco Bay Regional Water Quality Control Board.

END OF SECTION

SECTION 02255

SHORING**PART 1 GENERAL****1.1 DEFINITIONS**

- A. For the purposes of this Section 02255, shoring or shoring system shall mean shoring, sheeting, shielding, sloping, bracing, and equivalent provisions and protective systems for worker protection from the hazard of caving ground in open trenches, at manholes, and other excavations.

1.2 REFERENCES

- A. California Code of Regulations Title 8, Construction Safety Orders, Section 1541.1 Division 1, Chapter 4, subchapter 4

1.3 SYSTEM DESCRIPTION

- A. Design Requirements:
1. Comply with CCR Title 8, Division 1, Chapter 4, subchapter 4 (Construction Safety Orders), Section 1541.1.
 2. Support earth and rock pressure, unrelieved hydrostatic pressures, utility loads, equipment, applicable traffic and construction loads, and other surcharge loads.
 3. Support maximum loads that can occur during construction.
- B. Performance Requirements:
1. Provide a stable excavation without lateral or vertical movement or settlement of the ground.
 2. Prevent damage to or movement of adjacent structures and utilities.

1.4 SUBMITTALS

- A. Shop Drawings:
1. Shoring System(s):
 - a. Include supporting calculations for proposed shoring systems. Include details, arrangements, and the methods of installation, as applicable. Indicate depth of excavation at which support system will be installed.
 - b. Show in the calculations the full excavation depth load to be carried by various members of the support system. Include design loads and calculated deflections of shoring and support members.
 - c. Describe method of installation and removal of shoring, including the sequencing of specific components as related to excavation, construction and backfilling operations.
 - d. All calculations and drawings shall be stamped and signed by a licensed California Civil or Structural Engineer.

1.5 PROJECT CONDITIONS

- A. Project Requirements:
1. If existing utilities interfere with proposed method of support, modify the support system at Contractor's expense.

PART 2 PRODUCTS

2.1 MATERIALS

- A. Timber and structural metal used for the supporting system, whether new or used: Sound and free from defects that may impair strength

PART 3 - EXECUTION

3.1 GENERAL

- A. Proceed with caution in areas where utilities are within the shoring and excavation prism. Expose utilities by hand excavation.
- B. Maintain bracing support members in tight contact with each other and with the surface being supported.
- C. Remove sheet piling and other shoring in such a manner as to prevent caving at the walls of excavations, or damage to piping, structures, or other improvements.
- D. Immediately fill voids created by the removal of the supporting system with well-graded cohesionless sand, lean concrete, or sand cement grout, or as otherwise required by encroachment permits.
- E. Remove shoring as backfilling progresses but only when banks are stable and safe from caving or collapsing.
- F. Unless otherwise approved by Owner, leave no sheeting in a trench and make no backfill against the sheeting before it is removed.
- G. If sheeting extends below the invert of the pipe or manhole and is approved by Owner to be left in place, remove the upper portion by trimming in a manner satisfactory to Owner.

END OF SECTION

SECTION 02320

EXCAVATION, BEDDING, BACKFILL, AND RESURFACING

PART 1 GENERAL

1.1 SUMMARY

- A. Section Includes:
 1. Existing Asphalt Concrete Removal and Disposal
 2. Existing Road Base Removal and Disposal
 3. Trench Excavation
 4. Construction in Roadside Ditches
 5. Bedding
 6. Aggregate and Native Backfill
 7. Geotextile Fabric
 8. Drain Rock
 9. Aggregate Base
 10. Asphalt Concrete Resurfacing
 11. Street Cleaning
 12. Street Re-striping
 13. Steel Trench Plates
 14. Survey Monuments
- B. Related Sections:
 1. Section 02240 (Dewatering)
 2. Section 02515 (Recycled Water Main)
 3. Section 03650 (Controlled Density Fill)

1.2 REFERENCES

- | | | |
|----|--------------------------------|---|
| A. | California Test Method No. 216 | Relative Compaction of Untreated and Treated Soils and Aggregates |
| B. | California Test Method No. 231 | Relative Compaction of Untreated/Treated Soils and Aggregates (Area Concept Utilizing Nuclear Gauges) |
| C. | Caltrans 26-1.02 | Standard Specification for Materials for Aggregate Bases |
| D. | Caltrans 37-3 | Standard Specification for Slurry Seal |
| E. | Caltrans 39 | Standard Specification for Hot Mix Asphalt |
| F. | Caltrans 39-1.09C | Standard Specification for Tack Coat |
| G. | Caltrans 39-1.10 | Standard Specification for Spreading and Compacting Equipment |
| H. | Caltrans 39-1.11 | Standard Specification for Transportation, Spreading, and Compacting |
| I. | Caltrans 39.12 | Standard Specification for Smoothness |
| J. | Caltrans 68-2.02F | Standard Specification for Permeable Material |
| K. | Caltrans 82 | Standard Specification for Markers and Delineators |
| L. | Caltrans 84 | Standard Specification for Traffic Stripes and Pavement Markers |

M.	Caltrans 85	Standard Specification for Pavement Markers
N.	Caltrans 92	Standard Specification for Asphalts
O.	Caltrans 93	Standard Specification for Liquid Asphalts
P.	Caltrans 94	Standard Specification for Asphaltic Emulsions
Q.	Caltrans Standard Plans No. A20A	Pavement Markers and Traffic Lines Typical Details
R.	Caltrans Standard Plans No. A20B	Pavement Markers and Traffic Lines Typical Details
S.	Caltrans Standard Plans No. A20C	Pavement Markers and Traffic Lines Typical Details
T.	Caltrans Standard Plans No. A20D	Pavement Markers and Traffic Lines Typical Details
U.	Caltrans Standard Plans No. A24A	Pavement Markings Arrows
V.	Caltrans Standard Plans No. A24B	Pavement Markings Arrows
W.	Caltrans Standard Plans No. A24C	Pavement Markings Symbols and Numerals
X.	Caltrans Standard Plans No. A24D	Pavement Markings Words
Y.	Caltrans Standard Plans No. A24E	Pavement Markings Words and Crosswalks
Z.	City of Sonoma Standard Plan No. 108	Curb, Gutter & Sidewalk Type A
AA.	City of Sonoma Standard Plan No. 110	Curb, Gutter & Sidewalk Type B
BB.	City of Sonoma Standard Plan No. 111	Residential Driveway Approach
CC.	City of Sonoma Standard Plan No. 113	Cross Gutter
DD.	City of Sonoma Standard Plan No. 117	Survey Monument Installation
EE.	City of Sonoma Standard Plan No. 501	Pipe Bedding and Backfilling Requirements
FF.	Greenbook 302-5	Asphalt Concrete Pavement
GG.	Greenbook 306-1	Open Trench Operations
HH.	Greenbook 306-1.3.2	Mechanically Compacted Backfill
II.	Greenbook 310	Painting
JJ.	Greenbook 312	Pavement Marker Placement and Removal
KK.	Greenbook 400-3	Portland Cement Concrete
LL.	TPW Drawing No. 219	Trench Backfill and Paving Details

1.3 DEFINITIONS

- A. TPW: County of Sonoma Transportation and Public Works Department
- B. County: County of Sonoma
- C. California Test Method 216 (modified): Method of Test for Relative Compaction of Untreated and Treated Soils and Aggregates as modified by Owner per Section 01450 (Quality Control)

- D. California Test Method 231 (modified): Method of Test for Relative Compaction of Untreated/Treated Soils and Aggregates (Area Concept Utilizing Nuclear Gauges) as modified by Owner per Section 01450 (Quality Control)
- E. CDF: Controlled Density Fill
- F. Greenbook: Standard Specifications for Public Works Construction

1.4 SUBMITTALS

- A. Product Data:
 - 1. Geotextile filter fabric
 - 2. Tack coat material
 - 3. Street restriping material
 - 4. Warning Tape
 - 5. Tracer wire
- B. Quality Assurance/Control Submittals:
 - 1. Design Data:
 - a. Asphalt concrete trench resurfacing: Mix design
 - b. Aggregate base rock: Mix design
 - c. Asphalt concrete overlay: Mix design
 - d. Drain rock: Mix design
 - e. Bedding material: Mix design
 - f. Backfill material: Mix design
 - g. Steel plates for trenches:
 - 1) Design drawings and structural calculations showing that the plates, with additional under support if required, will sustain H-20 traffic loads without shifting or bouncing
 - 2. Test Reports:
 - a. Aggregate trench backfill material for County: Test results on material to confirm specified characteristics
 - b. Drain rock: Test results on material to confirm specified characteristics
 - c. Aggregate base rock: Test results on material to confirm specified characteristics
 - d. Under sidewalk sand: Test results on material to confirm specified characteristics
 - e. Geotextile filter fabric: Manufacturer's test results of materials properties
 - 3. Work Plans:
 - a. Soil Disposal Plan
 - b. Street Paving
 - c. Survey Monument Replacement Plan
 - d. Roadside Ditch Protection Plan: Describe measures to be taken to prevent and limit disturbance of roadside ditches

1.5 DELIVERY, STORAGE, AND HANDLING

- A. Packing, Shipping, Handling, and Unloading:
 - 1. Asphalt Concrete: Storage, proportioning, mixing, and delivery in accordance with Caltrans 39. Use tarps on haul vehicles unless prior approval is obtained from Owner
 - 2. Tack Coat and Prime Coat: Mixing and applying in accordance with Caltrans 39-1.09C and Caltrans 93
 - 3. Slurry Seal: Mixing, proportioning, and spreading in accordance with Caltrans 37-3
 - 4. Pipe and appurtenances: Packing, shipping, handling, unloading, and storing in accordance with manufacturer's instructions

PART 2 PRODUCTS

2.1 MATERIALS

A. Geotextile Fabric:

1. Mirafi 600X
2. Geotex 315ST
3. US 315
4. Or Approved Equal

B. Bedding Material:

1. Pipe bedding material:
 - a. Granular material
 - b. 100 percent crushed rock with 100 percent crushed faces
 - c. Sand equivalent not less than 30
 - d. Resistance (R-value) not less than 78
 - e. Free of asphaltic material
 - f. Size and gradation within the following limits:

Sieve Size	Percent Passing Sieve
3/4 inch	100
3/8 inch	80
No. 4	35 to 55
No. 200	3 to 9

2. Controlled Density Fill: See Section 03650 (Controlled Density Fill)

C. Drain Rock:

1. 100 percent crushed rock
2. Conform to Caltrans 68-2.02F, Class 1, Type B
3. Free of asphaltic material

D. Trench backfill material for pipelines:

1. Aggregate Base
2. CDF Per Section 03650 (Controlled Density Fill)

E. Aggregate Base:

1. Class 2, 3/4 inch maximum, in accordance with Caltrans 26-1.02 with the following modification: Contains no asphaltic material

F. Asphalt concrete for resurfacing of County streets and private roadways:

1. Hot Mix asphalt comprised of Type B, 1/2-inch maximum, medium aggregate in accordance with Caltrans 39, and PG64-16 asphalt in accordance with Caltrans 92
2. Liquid anti-stripping agent:
 - a. From a manufacturer and of a type approved by TPW's materials laboratory for Work on County roads
 - b. Store, measure, and blend with asphalt binder in accordance with requirements of County

G. Tack Coat:

1. Asphaltic emulsion for asphalt overlay: SS-1 bituminous material conforming to Caltrans 94, mixed 50/50 with water
2. Asphaltic emulsion for slurry seal: SS-1 bituminous material conforming to Caltrans 94, mixed one part emulsion to 3 parts water

H. Prime Coat:

1. Liquid asphalt: PG 64-16 paving asphalt conforming to Caltrans 92 or SS-1h emulsion conforming to Caltrans 94
- I. Steel plates for covering excavations:
 1. Capable of sustaining H-20 traffic loads without shifting or bouncing
 2. 1-inch thick minimum or thicker as determined by Civil or Structural Engineer calculations
 3. Skid resistant
- J. Warning Tape:
 1. Commercially available polyethylene base tape having a minimum tensile strength of 1500 psi
 2. Minimum thickness 0.004 inch and minimum width 6 inches
 3. Three layer construction with middle foil layer for inductive and conductive locating
 4. Resistant to acids, alkali, water and other detrimental substances normally found in soils
 5. Color: Purple
 6. Marked with bold, black lettering as follows: "Caution Buried Reclaimed Water Line Below"
- K. Tracer Wire:
 1. Number 12 American Wire Gauge (AWG) Thermoplastic High Heat-resistant Nylon-Coated (THHN) insulated copper wire
 2. Color of insulation: Red or as approved by Owner

PART 3 EXECUTION

3.1 GENERAL

- A. Roadside Ditches:
 1. Only trenching and backfilling procedures for the installation of recycled water service for the adjacent property shall be allowed in roadside ditches.
 2. Except as required for recycled water service construction, do not fill or re-grade roadside ditches. Minimize disturbance to existing roadside ditches and culverts. Restore disturbed areas to pre-existing ditch contours. All construction activities that may disturb existing roadside ditches and culverts shall be in accordance with the Roadside Ditch Protection Plan and be subject to Owner approval.
 3. No other roadside ditch disturbance shall be allowed without written Owner approval.
 4. Immediately remove construction materials that enter the roadside ditches using hand tools, such as rakes and shovels.

3.2 TRENCH EXCAVATION

- A. Remove, transport, and dispose of excavated trench materials as indicated:
 1. Dispose excavated trench materials: Per Owner-approved Soil Disposal Plan
 2. Before excavation is started, locate and expose existing utilities including, but not limited to, structures, pipes, valve, conduits, cables, and ducts, which intersect the line of the piping, to avoid possible damage to these utilities during excavation operations and to determine conflicts in location, if any.
 3. Cut, remove, and haul away from Site any existing surfacing over the trench:
 - a. Sawcut paving, curbs, gutters, sidewalks, driveways, and other structures between portion to remain and portion to be removed.
 - b. Inside of County roadway: Saw cutting of asphalt in accordance with TPW drawing number 219. Outside of County roadway: Saw cutting of asphalt shall extend 6-

- inches beyond each side of excavated trench in conformance with City of Sonoma Standard Plan No. 501.
- c. Sawcut curb, gutter, and sidewalk to the nearest weakened plane joint
 - d. Replace to pre-Work condition and match existing appearance, including brickwork, valves, and other existing features
4. Remove water that may accumulate in the excavation during the process of Work in accordance with Section 02240 (Dewatering) so that Work can be performed in a dry trench.
 5. Maximum length of open trench:
 - a. Maximum length of open trench: Greenbook 306-1.
 - b. On any given day, excavate only the amount of trench that can be backfilled the same day, as determined by Owner.
 - c. If trenches must remain open overnight, provide steel trench plates as specified herein to cover the trenches and prevent a falling hazard to people and wildlife.
 - d. As determined by Owner, the maximum allowable length of open trench may be adjusted based upon weather or other Site conditions encountered during construction.
 6. Any trench or portion of trench that is opened and remains idle for three days, or longer, as determined by Owner, may be directed to be immediately refilled, without completion of Work, to be retrenched and completed later, at no additional cost to Owner.
 7. Excavate trenches as needed to:
 - a. Conform to safety and permit requirements.
 - b. Not over-excavate trenches beyond Contract Documents requirements, unless approved by Owner.
 - c. Facilitate removal of handling devices after the pipe is laid.
 - d. Form bell (joint) holes at the ends of the pipe
 - e. Prevent point loading at the bells or couplings
 - f. Facilitate bolting, visual inspection, and other required field operations for pipe installation.
 - g. Provide adequate access for bolting, visual inspection, and other required field operations for pipe installation outside of joints, appurtenances, and connections to existing pipes.
 8. Grade the bottom of the trench to the line and grade to which the pipe is to be laid:
 - a. Make proper allowance for pipe thickness and for bedding material.
 - b. Remove hard spots that would prevent a uniform thickness of bedding.
 - c. Check the grade and correct any irregularities found before laying each section of pipe.
 - d. The trench bed shall form a continuous and uniform bearing and support for the pipe at every point between bell holes, except the grade may be disturbed for the removal of lifting tackle.
 - e. Remove rocks or boulders that protrude into the bedding zone, fill voids with bedding material, and compact to the specified bedding density.
 9. Avoid overloading or surcharge a sufficient distance back from edge of excavation to prevent slides or caving in accordance with Cal/OSHA requirements.
- B. Whenever the indicated maximum allowable trench width is exceeded for any reason, embed or cradle the pipe in concrete in a manner satisfactory to Owner.
- C. Excavation in rocky ground:

1. Excavate the trench a minimum of 3 inches below the grade of the bottom of the pipe, or 1/4 of the pipe outside diameter, whichever is greater
 2. Place sufficient bedding material in the trench and tamp to bring the trench bottom up to the grade of the bottom of the pipe
 3. The relative compaction of the tamped bedding material: Not less than 90 percent as determined by California Test Method No. 216 (modified)
 4. Provide firm, uniform bearing for the pipe.
- D. Unstable trench bottoms:
1. Over-excavate unstable trench bottoms, to a maximum of 12 inches below required trench bottom and drain rock as directed by Owner
- E. Make provisions for trench crossings at street crossings or where existing driveways occur on a street, either by means of backfill or temporary bridges, as Owner may direct
- F. Provide free access to fire hydrants, water valves, and private roadways.
- G. Provide means for storm and surplus water to flow uninterrupted in the gutters or drainage channels.
- H. Laying of pipe: Section 02515 (Recycled Water Main)

3.3 EXCAVATION FOR STRUCTURES

- A. Excavate to elevations and dimensions indicated within a tolerance of plus/minus 1 inch. Extend excavation a sufficient distance from structures for installing services and other construction, for compacting structure backfill material, and for inspections:
1. Do not disturb bottom of excavation. Trim bottoms to required lines and grades to leave solid base to receive other Work.
 2. Level off bottoms of excavations. Remove loose materials and bring excavations into approved condition.
 3. Do not carry excavations lower than indicated except as directed by Owner.
 4. Notify Owner as soon as excavation is completed in order that subgrades may be inspected. Do not commence further construction until subgrade has been inspected and approved by Owner as being free of undesirable material, and of compaction density required by this Section 02320.
- B. If undisturbed soil is not firm, as directed by Owner, over-excavate, install drain rock, geotextile fabric and level the working course back to grade.

3.4 DRAIN ROCK

- A. When crushed drain rock and geotextile fabric are required to stabilize a soft, wet, or spongy trench bottom, place trench stabilization materials:
1. Up to the bottom plane of the bedding material
 2. In lifts not exceeding 6 inches in loose thickness
 3. Tamp to 90 percent relative compaction.
 4. Wrap drain rock in geotextile fabric with 12-inches minimum overlap at the ends
- B. Owner shall be the sole judge of the suitability of the trench bottom and as to the amount of drain rock required to stabilize soft trench bottoms. Remove any soft material and replace with drain rock and geotextile fabric as directed by Owner.

3.5 BEDDING METHODS: PIPE

- A. After pipe has been properly laid and inspected by Owner, place initial bedding material to spring line of pipe and work into pipe "haunches."
- B. Following initial bedding, compact bedding material by hand tamping in layers not exceeding 3 inches in uncompacted depth:

1. The use of machine tampers will not be permitted.
 2. After hand tamping, the relative compaction of the bedding material: Not less than 90 percent as determined by California Test Method No. 216 (modified)
- C. Contractor is wholly responsible for any damage to the pipe that occurs during compaction.
- D. Water flushing or jetting: Not allowed for consolidation of bedding.
- E. Place geotextile filter fabric when drain rock is used as indicated.
- F. If required by Owner or permits, use only CDF.

3.6 BACKFILLING METHODS: PIPE

- A. Above the level of the bedding, backfill the trench as indicated.
- B. Jetting of trench backfill is prohibited.
- C. Use mechanical compaction methods for all materials.

3.7 DETECTABLE WARNING TAPE

- A. Provide for all buried pipelines.
- B. Install as indicated and per manufacturers written recommendations and instructions.

3.8 UNDERGROUND PIPE TRACER WIRE

- A. Provide tracer wire for all buried pipelines.
- B. Lay tracer wire on top of and along the entire length of all buried pipelines.
- C. Extend wire a minimum of 6 inches with 2- to 3-inch pigtail above grade at all points of access, valves, valve boxes, vaults, air valves, blow-offs, junction boxes, and pull-boxes; where pipelines rise above grade; and where pipelines penetrate into buildings.
- D. Make all wire connections with copper crimps wrapped with electrical tape.
- E. Fasten tracer wire to top of pipe with duct tape at approximately 10-foot intervals.

3.9 BEDDING AND BACKFILL: STRUCTURES

- A. Subgrade to receive structure bedding or backfill:
1. Free of undesirable material as determined by Owner.
 2. Scarified to a depth of 6 inches.
 3. Compact to 95% relative density per California Test Method 216 (modified).
 4. Do not place any bedding or backfill material until subgrade under bedding or backfill has been inspected and approved by Owner as being free of undesirable material and compacted to specified density.
- B. Bedding:
1. Compact drain rock to form a firm unyielding structural base.
- C. Backfill:
1. Place in lift thicknesses capable of being compacted to specified relative density indicated but not to exceed the thickness allowed by Greenbook 306-1.3.2.
 2. Use hand-operated equipment for backfilling and compacting next to structures.

3.10 MOISTURE CONTROL

- A. Uniformly moisten or aerate each backfill, aggregate backfill, and aggregate base layer before compaction to within 2 percent of optimum moisture content, as determined by California Test Method No. 216 (modified):
1. Do not place backfill material on surfaces that are muddy, frozen, or contain frost or ice.
 2. Remove and replace, or scarify and air-dry, otherwise satisfactory backfill material that exceeds optimum moisture content by 2 percent or more and is too wet to compact to specified dry unit weight.

3.11 AGGREGATE BASE

- A. Commence compaction immediately after placing of the moisture-conditioned material and before the material has dried sufficiently to allow separation between the fine and coarse particles
- B. Finished surface of aggregate base:
 - 1. Firm and unyielding.
 - 2. Any visible movement vertically or horizontally of the aggregate base under the action of construction equipment or other maximum legal axle loads shall be considered evidence that the aggregate base does not meet this requirement
- C. Place in accordance with Caltrans 26

3.12 STEEL PLATES

- A. Place steel plates over open trenches with wedges of compacted asphalt around edges prior to end of each day to provide smooth transition to and from plate edges and to ensure sealing of plate edges such that no animals enter the trench. Owner will inspect plate edge sealing prior to the end of each day. Repair voids promptly.
- B. Tack weld or pin adjacent plates together to prevent separation.
- C. Maintain plates and asphalt edge sealing wedges while plates are in place.
- D. Remove temporary asphalt wedges when the plates are removed.

3.13 ASPHALT CONCRETE TRENCH RESURFACING

- A. Resurfacing within County streets shall conform to County of Sonoma Department of Transportation and Public Works, Pavement Cut Policy or the County encroachment permit, whichever is more stringent.
- B. Resurfacing within City streets and paved easements shall conform to City of Sonoma Standard Plan 501, or the City encroachment permit, whichever is more stringent.
- C. Use indicated type of trench backfill and resurfacing for asphalt placement.
- D. Thickness of a layer of asphalt:
 - 1. County of Sonoma Right of Way: Conform to County of Sonoma Standards or match existing, whichever is greater.
 - 2. City of Sonoma Right of Way: Conform to City of Sonoma Standards or match existing, whichever is greater.
- E. Asphalt cold milling of conforms and edges: In accordance with Greenbook 302-5.
- F. If existing edge of asphalt concrete shaves or breaks off during trench excavation, sawcut asphalt again as directed by Owner.
- G. Spread and compact asphalt concrete resurfacing in accordance with Caltrans 39, using spreading and compaction equipment conforming to Caltrans 39-1.10.

3.14 TACK COAT

- A. Following 28-day curing of new concrete curb and gutter and valley gutter, and prior to placing asphalt concrete trench resurfacing and asphalt concrete overlay, apply a tack coat (paint binder) of asphaltic emulsion in conformance with Caltrans 39-1.09C at a rate of 0.10 gallon per square yard to the following locations:
 - 1. Vertical surfaces of sawcut asphalt pavement and exposed lips of concrete gutters, asphalt concrete trench and manhole resurfacing, and construction joints at the beginning of asphalt concrete overlay conform.
 - 2. Vertical surfaces of exposed concrete lips of gutters for asphalt concrete street overlays.
- B. Allow tack coat to thoroughly cure.

- C. Maintain the tack coat until such time as asphalt concrete resurfacing and/or overlay is installed.

3.15 STREET CLEANING

- A. Following trench and manhole resurfacing, asphalt concrete street surface repair outside of trenches, replacement of concrete curb and gutter, and edge and conform cold milling, clean streets within the Work area:
 - 1. Immediately prior to, and on the same day as, placement of tack coat and prime coat for overlay.

3.16 SURVEY MONUMENTS

- A. Survey monuments damaged or removed during construction shall be replaced by the Contractor in conformance with Specification Section 01100 (Summary) and City of Sonoma Standard Drawing No. 117.

3.17 RE-STRIPING OF STREETS

- A. Replace in-kind street traffic stripes, word markings, symbols, numerals, pavement markers, and delineators that are removed by Contractor's Work in accordance with the requirements of encroachment permit; pertinent portions of Greenbook 310 and 312; Caltrans 82, 84, and 85; and Caltrans Standard Plan Nos. A20A, A20B, A20C, A20D, A24A, A24B, A24C, A24D, and A24E.
- B. Re-establish centerlines and lane lines the same day as they are covered by temporary resurfacing by the use of temporary reflective markers placed at 24-foot spacing.
- C. Install permanent traffic striping and legends no later than seven days after permanent resurfacing.

3.18 GUTTERS, CURBS, SIDEWALKS, AND DRIVEWAY ENTRANCES

- A. Concrete gutters, curbs, and sidewalks that are damaged or removed to facilitate the pipeline construction shall be replaced per City of Sonoma Standard Plan No. 108 and 110.
- B. Concrete driveway approaches within the City limits that are damaged or removed to facilitate the pipeline construction shall be replaced per City of Sonoma Standard Plan No. 111.
- C. Concrete cross gutters within the City limits that are damaged or removed to facilitate the pipeline construction shall be replaced per City of Sonoma Standard Plan No. 113.
- D. Removed asphalt curbs shall be replaced to match existing asphalt curbs. Provide tack coat between existing and replaced sections of asphalt.

3.19 FIELD QUALITY CONTROL

- A. Site Tests:
 - 1. Owner will perform in-place moisture-density tests after receiving written request from Contractor.
 - 2. Bedding, Backfill, Structural Bedding and Structural Backfill Materials:
 - a. Determine in-place density and moisture of soils and aggregates by the use of nuclear methods and the area concept as per California Test Method No. 231 with the following conditions:
 - 1) Determine maximum density as specified in Part II of California Test Method No. 216.

- 2) At a minimum, take one in-place density test using the sand volume method as prescribed in Part I of California Test Method No. 216 to standardize the nuclear gauge for each type of soil or aggregate.
- 3) After correlation is ensured and the equipment standardized, use nuclear gauge as directed by Owner.
3. Asphalt Concrete Material:
 - a. Use a straight edge in accordance with Caltrans 39-1.12 to determine surface variances
 - b. Repair any surface variance greater than 1/8 inch by cold milling, patching, or removal and replacement of asphalt concrete resurfacing material as determined by Owner.
 - c. Following repair, recheck for variances with the straight edge.
4. Contractor is responsible for ensuring that the quality of Work meets or exceeds the generally-accepted standard of Work, or Owner's requirements as indicated, if more restrictive.
5. Ensure Owner has immediate access for testing of soils-related Work.
6. Ensure excavations are safe for testing personnel.

END OF SECTION

SECTION 02515

RECYCLED WATER MAIN**PART 1 GENERAL****1.1 SUMMARY**

A. Related Sections:

1. Section 02320 (Excavation, Bedding, Backfill, and Resurfacing)
2. Section 03002 (Concrete)

1.2 REFERENCES

- | | | |
|----|-----------------|---|
| A. | ANSI/AWWA C207 | Steel Pipe Flanges for Waterworks Services, Size 4 in. through 144 in. |
| B. | ANSI/ASME B1.1. | Unified Inch Screw Threads (UN and UNR Thread Form) |
| C. | ASTM B695 | Standard Specification for Coatings of Zinc Mechanically Deposited on Iron and Steel |
| D. | ASTM D2774 | Standard Practice for Underground Installation of Thermoplastic Pressure Piping |
| E. | ASTM D2837 | Standard Test Method for Obtaining Hydrostatic Design Basis for Thermoplastic Pipe Material |
| F. | ASTM D3139 | Standard Specification for Joints for Plastic Pressure Pipes Using Flexible Elastomeric Seals |
| G. | ASTM D3350 | Standard Specification for Polyethylene Plastic Pipe and Fittings Materials |
| H. | ASTM F477 | Standard Specification for Elastomeric Seals (Gaskets) for Joining Plastic Pipe |
| I. | ASTM F714 | Standard Specifications for Polyethylene (PE) Plastic Pipe (SDR-PR) Based on Outside Diameter |
| J. | AWWA C104 | Cement-Mortar Lining for Ductile-Iron Pipe and Fittings |
| K. | AWWA C110 | Ductile-Iron and Gray-Iron Fittings, 3 in. through 144 in. |
| L. | AWWA C150 | Thickness Design of Ductile-Iron Pipe |
| M. | AWWA C153 | Ductile-Iron Compact Fittings, 3 in. through 64 in. for Water Service |
| N. | AWWA C900 | Standard for Polyvinyl Chloride (PVC) Pressure Pipe for Water Distribution, 4 in. through 12 in. |
| O. | AWWA C906 | Polyethylene (PE) Pressure Pipe and Fittings, 4 In. Through 63 In., for Water Distribution and Transmission |

1.3 SUBMITTALS

A. Product Data:

1. Pipe and fittings, including:
 - a. List of pipe fittings to be used
 - b. Manufacturer
 - c. Model number, if applicable
 - d. Size and schedule
 - e. Material
 - f. Pressure rating

2. Joint Restraints
3. Sleeve-type Couplings
4. Flange Coupling Adapters
- B. Quality Assurance/Control Submittals:
 1. Test Reports:
 - a. Hydrostatic test reports
 2. Testing equipment calibration information:
 - a. Pressure gauges
 3. Manufacturer's Instructions: Pipe installation
 4. Fusion joint data log, including:
 - a. Fusion machine
 - b. Operator
 - c. Pipe size
 - d. Heat temperature
 - e. Melt time
 - f. Fusion pressure
 - g. Joint identification/number
 5. Certifications:
 - a. Evidence that technicians installing fusible PVC or HDPE are qualified by the pipe supplier for the type and size of pipe being used.

1.4 DELIVERY, STORAGE, AND HANDLING

- A. Storage and Protection:
 1. In accordance with manufacturer's recommendations.
 2. Store materials in a manner that will not be a hazard to traffic or to the public and will not obstruct access to adjacent property.
 3. Store plastic materials out of direct sunlight.
 4. Rubber gaskets:
 - a. Store in a cool, well-ventilated place.
 - b. Do not expose to direct sunlight.
 - c. Do not allow contact with oils, fuels, petroleum, or solvents.
 5. Protect against breakage, rusting, accumulation of foreign matter, disintegration, and injury.

PART 2 PRODUCTS

2.1 RECYCLED WATER MAIN PIPE

- A. Bell and spigot end PVC:
 1. Manufacturers:
 - a. Diamond Plastics
 - b. North American Pipe Corporation
 - c. Vinyltech
 - d. Or Approved Equal
 2. PVC Pipe:
 - a. AWWA C900 or AWWA C905
 - b. DR 25 minimum class 165, unless otherwise indicated
 - c. Color: Purple

- B. Fusible PVC:
 - 1. Manufacturers:
 - a. Underground Solutions
 - b. Or Approved Equal
 - 2. Fusible PVC Pipe:
 - a. AWWA C900
 - b. DR 25 minimum class 165, unless otherwise indicated
 - c. Extruded with plain ends. Ends shall be square to the pipe and free of any bead or chamfer.
 - d. Color: Purple
- C. High Density Polyethylene (HDPE) Pipe:
 - 1. Manufacturers:
 - a. Performance Pipe
 - b. JM Eagle
 - c. Or Approved Equal
 - 2. HDPE Pipe:
 - a. AWWA C906, ASTM F714, DR 11, minimum class 200 psi
 - b. Minimum Cell Class: 345464C (or E) per ASTM D3350
 - c. Minimum Hydrostatic Design Basis: 1600 psi at 73 degrees Fahrenheit
 - d. Polyethylene resin used in the manufacturing of the pipe: conform with ASTM D2837
 - e. Color: Purple stripes along length of the pipe
- D. Pipe Identification:
 - 1. Mark each segment of pipe with the name of the manufacturer, size, material code, pressure class and AWWA designation

2.2 RECYCLED WATER MAIN FITTINGS

- A. Ductile iron push-on or mechanical joint fittings:
 - 1. Conform with AWWA C110
 - 2. Cement mortar lined, AWWA C104
 - 3. Bituminous coating, AWWA C110
 - 4. Minimum pressure rating 350 psi
 - 5. Compatible with type, pressure class, and ends of adjacent pipe used
- B. Compact ductile iron push-on or mechanical joint fittings:
 - 1. Conform with AWWA C153
 - 2. Cement mortar lined, AWWA C104
 - 3. Petroleum asphaltic coating, AWWA C153
 - 4. AWWA C150 minimum pressure rating of 350 psi or minimum Class 54 thickness rating
 - a. Compatible with type, pressure class, and ends of adjacent pipe used
- C. Gray iron push-on or mechanical joint fittings:
 - 1. Conform with AWWA C110
 - 2. Cement mortar lined, AWWA C104
 - 3. Bituminous coating, AWWA C110
 - 4. Minimum pressure rating 250 psi
 - 5. Compatible with type, pressure class, and ends of adjacent pipe used
- D. Restrained joints:
 - 1. Compatible with type, pressure class, and ends of adjacent pipe used
 - 2. Manufacturers and models:

- a. EBAA Iron: Megalug
- b. Or Approved Equal
- E. Couplings:
 - 1. Compatible with type, pressure class, and ends of adjacent pipe used
 - 2. Provide restraints as required to sustain force developed by test pressure specified
 - 3. Manufacturers:
 - a. APAC
 - b. Smith-Blair
 - c. Romac
 - d. Powerseal
 - e. Or Approved Equal
- F. HDPE:
 - 1. Fusion:
 - a. Join with butt heat fusion joints in compliance with the manufacturer's recommendations and ASTM 2657.
 - 2. Fittings:
 - a. Provide flange connections and mechanical joint connections from a pipe stub with a polyethylene and steel stiffener. Provide flanged connections from a pipe stub and a steel back-up flange.
 - 3. Compatible with type, pressure class, and ends of adjacent pipe used

2.3 GASKETS

- A. PVC Pipe and Fittings: Conforming to AWWA C900 or AWWA C905, ASTM F477 and ASTM D3139

2.4 NUTS AND BOLTS:

- A. Material:
 - 1. Buried: Type 316 stainless steel.
 - 2. Exposed: Mechanical galvanized ASTM B695, Class 40.
- B. Heads and dimensions per ANSI/ASME B1.1.
- C. Threaded per ANSI/ASME B1.1.
- D. Project ends 1/4 to 1/2 inch beyond nuts.

PART 3 EXECUTION

3.1 PIPELINE SEPARATION

- A. Utilities indicated are approximately shown. Field verify utilities per Section 00700 General Conditions and elsewhere through the Contract Documents prior to construction. Notify Owner of utility conflicts, including the following minimum separation between the recycled water pipeline and utility, as soon as such conflicts are uncovered:
 - 1. Water parallel: Four feet horizontal and one foot vertical above recycled water pipeline. No vertical separation is required when there is 10 feet minimum separation.
 - 2. Water crossing: One foot vertically above recycled water pipeline.
 - 3. Sewer parallel: Four feet horizontal and one foot vertical below recycled water pipeline. No vertical separation is required when there is 10 feet minimum separation.
 - 4. Sewer Crossing: One foot vertically below recycled water pipeline.
 - 5. Creek Crossing at Watmaugh Rd: Two foot minimum horizontal clearance from the bridge's wing walls.

- 6. Other utilities (gas, electrical, storm drain, etc.) parallel: three feet horizontal.
- 7. Other utilities (gas, electrical, storm drain, etc.) crossing: one foot vertical.
- B. With approval from Owner, Class 200 PVC may be used where the minimum separation requirements cannot be met.

3.2 DISTRIBUTING MATERIALS

- A. Distribute materials along trench only as will be used each day, unless otherwise approved by Owner.

3.3 PREPARATION OF TRENCH

- A. See Section 02320 (Excavation, Bedding, Backfill, and Resurfacing)

3.4 PREPARING PIPE FOR TRENCH

- A. Inspect each pipe and fitting before pipe and/or fitting is lowered into trench.
- B. Wipe pipe joints, fittings, and appurtenances clean of dirt, grease, and foreign matter before pipe is lowered into trench.
- C. Clean ends of pipe thoroughly.
- D. Remove foreign matter and dirt from inside of pipe and keep clean during and after installation.

3.5 LAYING PIPE

- A. Install pipe, fittings, and appurtenances in accordance with manufacturer's written instructions and/or written recommendations and these Specifications.
- B. Use restrained joint fittings at bends, valves, and at locations indicated. Obtain written permission from Owner for use of concrete anchor or thrust blocks to provide support for fittings in lieu of restrained joints and in accordance with Section 03002 (Concrete). Fusible PVC may be used in lieu of bell restraints.
- C. Use proper implements, tools, and facilities for safe and proper protection and installation of pipe.
- D. Do not drop or dump pipe into trenches under any circumstances.
- E. Cut pipe for inserting valves, fittings, or closure pieces without damage to pipe.
- F. PVC Pipe:
 - 1. Install per ASTM D2774.
 - 2. Join individual pieces of pipe, valves, and fittings by placing rubber rings on machined ends of pipe and pulling couplings, valves, or fittings in accordance with Manufacturer's written instructions and/or written recommendations.
 - 3. Check rings to ensure proper position and seating after coupling is in place.
 - 4. Utilize adapters for connections as required by Manufacturer.
- G. Fusible Pipe:
 - 1. Unless otherwise specified, assemble fusible pipe lengths in the field with butt-fused joints. Follow the pipe supplier's written guidelines for this procedure.
 - 2. Fuse fusible pipe using certified fusion technicians, as documented by the pipe supplier.
 - 3. Record and log each fusion joint by an electronic monitoring device (data logger) connected to the fusion machine.
 - 4. Only appropriately sized and outfitted fusion machines that have been approved by the pipe supplier shall be used for the fusion process. Fusion machines must incorporate the following elements:
 - a. Heat Plate: Heat plates shall be in good condition with no deep gouges or scratches. Plates shall be clean and free of any debris or contamination. Heater controls shall

- function properly; cord and plug shall be in good condition. The appropriately sized heat plate shall be capable of maintaining a uniform and consistent heat profile and temperature for the size of pipe being fused, per the pipe supplier's guidelines.
- b. Carriage: Carriage shall travel smoothly with no binding at less than 50 psi. Jaws shall be in good condition with proper inserts for the pipe size being fused. Insert pins shall be installed with no interference to carriage travel.
 - c. General Machine: Overview of machine body shall yield no obvious defects, missing parts, or potential safety issues during fusion.
 - d. Data Logging Device: An approved data logging device with the current version of the pipe supplier's recommended and compatible software shall be used. Data logging device operations and maintenance manual shall be with the unit at all times. If fusing for extended periods of time, an independent 110V power source shall be available to extend battery life.
5. Other equipment specifically required for the fusion process may include the following:
 - a. Pipe rollers for support of pipe to either side of the machine.
 - b. A weather protection canopy that allows full machine motion of the heat plate, fusion assembly and carriage shall be provided for fusion in inclement, extreme temperatures, or windy weather, per the pipe supplier's recommendations.
 - c. An infrared (IR) pyrometer for checking pipe and heat plate temperatures.
 - d. Fusion machine operations and maintenance manual shall be kept with the fusion machine at all times.
 - e. Use facing blades specifically designed for cutting fusible pipe material.
 6. Record and log each fusion joint by an electronic monitoring device (data logger) connected to the fusion machine. Generate the fusion data logging and joint report by software developed specifically for the butt-fusion of fusible pipe. The software shall register and/or record the parameters required by the pipe supplier and these specifications. Data not logged by the data logger shall be logged manually and included in the Fusion Technician's joint report log.
- H. Where indicated or approved by Owner to deflect pipe from a straight line, either in vertical or horizontal plane, do not exceed the amount of deflection recommended by pipe or coupling manufacturer and as approved by Owner.
 - I. Prevent excavated or other foreign material from entering pipe during laying operation.
 - J. When laying operations are not in progress, at close of day's Work, or whenever workers are absent from Site, close and block open end of last laid section of pipe with a watertight plug to prevent entry of trench water or foreign material, and creep of gasketed joints.
 - K. End closure: Sufficient to prevent trench water from entering pipe.
 - L. Keep water out of trench.

3.6 HYDROSTATIC TEST

- A. Perform final hydrostatic test for acceptance only after line has been laid and backfill placed and compacted.
- B. When Owner determines conditions require joint inspection during test, conduct test after partial completion of backfill with joints exposed.
- C. Water system component reporting: Prior to final hydrostatic test, submit to Owner material type, manufacturer, and model number of water system components used in construction.
- D. Only Owner will operate valves on existing pipes in service.
- E. Testing against valves is not allowed unless otherwise authorized by Owner

- F. Subject each valved section of pipe, or combined sections, as approved by Owner, to a hydrostatic pressure of not less than 150 psi, at any point on main.
- G. Duration of each pressure test: Minimum of 4 hours.
- H. Hydrostatic test procedure:
 - 1. Slowly fill each section of pipe with water and apply specified test pressure by means of a pump connected to pipe in an Owner-approved manner.
 - 2. Furnish pump, pipe connection, gauge, and measuring devices, and necessary apparatus.
 - 3. Before applying test pressure, expel all air from pipe.
 - 4. Leakage is defined as the quantity of water to be supplied into newly laid pipe, or any valved section of it, necessary to maintain specified leakage test pressure after pipe has been filled with water and air expelled.
 - a. Acceptance: Zero leakage.
 - b. Should any test of combined sections of pipe laid disclose leakage greater than specified limit, locate cause and repair defect until zero leakage is achieved at no additional cost to Owner.
 - 5. Repair leaks as directed by Owner regardless of hydrostatic test results.

END OF SECTION

SECTION 02610

VALVE COVERS

PART 1 GENERAL

1.1 SUMMARY

A. Section Includes:

1. Valve Boxes for:
 - a. Air Valves
 - b. Blowoff Valves
 - c. Butterfly Valves
 - d. Flow Meters
 - e. Plug Valves

B. Related Sections:

1. Section 02315 (Excavation, Bedding, Backfill, and Resurfacing)
2. Section 03002 (Concrete)
3. Section 09900 (Paints and Coatings)
4. Section 15112 (Plug Valves)
5. Section 15113 (Butterfly Valves)
6. Section 15115 (Air Valves)

1.2 REFERENCES

- | | | |
|----|-------------|--|
| A. | ACI 318 | Building Code Requirements for Structural Concrete and Commentary |
| B. | ASTM A 1064 | Standard Specifications for Carbon-Steel Wire and Welded Wire Reinforcement, Plain and Deformed for Concrete |
| C. | ASTM A48 | Standard Specifications for Gray Iron Castings |
| D. | ASTM A615 | Standard Specification for Deformed and Plain Carbon-Steel Bars for Concrete Reinforcement (Including Supplementary Requirements S1) |
| E. | ASTM C31 | Standard Practice for Making and Curing Concrete Test Specimens in the Field |
| F. | ASTM C33 | Standard Specification for Concrete Aggregates |
| G. | ASTM C39 | Standard Test Method for Compressive Strength of Cylindrical Concrete Specimens |
| H. | ASTM C94 | Standard Specification for Ready-Mixed Concrete |
| I. | ASTM C150 | Standard Specification for Portland Cement |
| J. | ASTM C478 | Standard Specification for Precast Reinforced Concrete Manhole sections |

1.3 SUBMITTALS

A. Product Data:

1. Type of material
2. Loading information, including calculations for H-20 loading
3. Construction/assembly instructions

B. Shop Drawings:

1. Size:
 - a. Dimensions of structure

- b. Dimensions of lid
- 2. Reinforcing steel:
 - a. Grade, sizes, number, configuration, spacing, and location.

PART 2 PRODUCTS

2.1 GENERAL

- A. Portland Cement: Conform to ASTM C150 Type II or V and Low Alkali (0.6 percent or less).
- B. Concrete: 3,000 psi minimum in conformance with ASTM C39
- C. Designed to take H-20 loading
- D. Covers shall be purple or painted purple in conformance with Section 09900 (Paints and Coatings)
- E. Manhole Covers and Frame:
 - 1. Conform to ASTM A48
 - 2. Flat Bearing Surface
 - 3. Removable Lid with curved blind pick-holes
- F. Manufacturers:
 - 1. Brooks
 - 2. Christy
 - 3. Jensen
 - 4. Or Approved Equal

2.2 AIR VALVE COVER

- A. 36-inch minimum inside diameter with 36-inch lid or 24-inch by 36-inch minimum inside dimension and lid.
- B. Etched with 2-inch lettering: "SVCS D AV"

2.3 BLOWOFF VALVE COVER

- A. 10-inch minimum inside diameter and lid
- B. Etched with 2-inch lettering: "SVCS D BO"

2.4 BUTTERFLY VALVE COVER

- A. 10-inch minimum inside diameter and lid
- B. Etched with 2-inch lettering: "SVCS D BFV"

2.5 PLUG VALVE COVER

- A. 10-inch minimum inside diameter and lid
- B. Etched with 2-inch lettering: "SVCS D PGV"

2.6 FLOW METER COVER

- A. 36-inch minimum inside diameter with 36-inch lid or 24-inch by 36-inch minimum inside dimension and lid.
- B. Etched with 2-inch lettering: "SVCS D WM"

2.7 FOUNDATION AND BACKFILL

- A. See Bedding and Backfill for Structures in Section 02320 (Excavation, Bedding, Backfill, and Resurfacing) and Section 03002 (Concrete)

PART 3 EXECUTION

3.1 INSTALLATION

- A. Install in conformance with bedding and backfill for structures requirements per Section 02320 (Excavation, Bedding, Backfill, and Resurfacing), Section 03002 (Concrete), plans, and manufacturer's recommendations.
- B. Lids shall be flush with ground surface in traffic and pedestrian areas and be raised 2 to 6 inches above ground surface in non-traffic or pedestrian areas.

END OF SECTION

DIVISION 3

CONCRETE

SECTION 03002

CONCRETE**PART 1 GENERAL****1.1 SUMMARY**

A. Section Includes:

1. Concrete for:
 - a. Anchor and thrust blocks
 - b. Curbs
 - c. Gutters
 - d. Valve Structure footings
2. Forms
3. Steel Reinforcement

B. Related Sections:

1. Section 02320 (Excavation, Bedding, Backfill, and Resurfacing)

1.2 REFERENCES

- | | | |
|----|------------|--|
| A. | ACI 211.1 | Standard Practice for Selecting Proportions for Normal, Heavyweight and Mass Concrete |
| B. | ACI 212.3R | Chemical Admixtures for Concrete |
| C. | ACI 301 | Specifications for Structural Concrete for Buildings |
| D. | ACI 304R | Guide for Measuring, Mixing, Transporting, and Placing Concrete |
| E. | ACI 304.2R | Placing Concrete by Pumping Methods |
| F. | ACI 305R | Guide to Hot Weather Concreting |
| G. | ACI 306R | Guide to Cold Weather Concreting |
| H. | ACI 318 | Building Code Requirements for Structural Concrete and Commentary |
| I. | ACI 347R | Guide to Formwork for Concrete |
| J. | | |
| K. | ASTM A615 | Standard Specification for Deformed and Plain Carbon-Steel Bars for Concrete Reinforcement (Including Supplementary Requirements S1) |
| L. | ASTM C31 | Standard Practice for Making and Curing Concrete Test Specimens in the Field |
| M. | ASTM C33 | Standard Specification for Concrete Aggregates |
| N. | ASTM C39 | Standard Test Method for Compressive Strength of Cylindrical Concrete Specimens |
| O. | ASTM C94 | Standard Specification for Ready-Mixed Concrete |
| P. | ASTM C138 | Standard Test Method for Density (Unit Weight), Yield, and Air Content (Gravimetric) of Concrete |
| Q. | ASTM C143 | Standard Test Method for Slump of Hydraulic-Cement Concrete |
| R. | ASTM C150 | Standard Specification for Portland Cement |
| S. | ASTM C157 | Standard Test Method for Length Change of Hardened Hydraulic-Cement Mortar and Concrete |

T.	ASTM C172	Standard Practice for Sampling Freshly Mixed Concrete
U.	ASTM C173	Standard Test Method for Air Content of Freshly Mixed Concrete by the Volumetric Method
V.	ASTM C231	Standard Test Method for Air Content of Freshly Mixed Concrete by the Pressure Method
W.	ASTM C260	Standard Specification for Air-Entraining Admixtures for Concrete
X.	ASTM C289	Standard Test Method for Potential Alkali-Silica Reactivity of Aggregates (Chemical Method)
Y.		
Z.	ASTM C330	Standard Specification for Lightweight Aggregates for Structural Concrete
AA.	ASTM C494	Standard Specification for Chemical Admixtures for Concrete
BB.	ASTM C618	Standard Specification for Coal Fly Ash and Raw or Calcined Natural Pozzolan for Use in Concrete
CC.	ASTM D994	Standard Specification for Preformed Expansion Joint Filler for Concrete (Bituminous Type)

1.3 SUBMITTALS

- A. Shop Drawings:
 - 1. Reinforcing steel:
 - a. Grade, sizes, number, configuration, spacing, and location.
 - b. All fabrication and placement details.
- B. Samples:
 - 1. Aggregates at point of batching.
- C. Quality Assurance/Control Submittals:
 - 1. Design Data:
 - a. Concrete mix designs:
 - 1) Sieve analysis and source of fine and coarse aggregates.
 - 2) Results of test for aggregate organic impurities.
 - 3) Results of test for deleterious aggregate per ASTM C289.
 - 4) Proportioning of materials.
 - 5) Type of cement.
 - 6) Type of fly ash.
 - 7) Slump.
 - 8) Air content.
 - 9) Brand, type, ASTM designation, and quantity of each admixture proposed for use.
 - 10) Standard deviation value for concrete production facility.
 - 2. Test Reports:
 - a. Concrete:
 - 1) Shrinkage test results.
 - 2) 28-day cylinder compressive test results of trial mixes per ACI 318 and as indicated herein
 - 3. Certificates:
 - a. Mill certificates
 - 1) Reinforcing steel.
 - 2) Concrete.

- b. Certificate of conformance for fly ash.

1.4 QUALITY ASSURANCE

- A. Perform Work in accordance with ACI 301.
- B. Conform to ACI 305R when concreting during hot weather.
- C. Conform to ACI 306R when concreting during cold weather.
- D. Maintain one copy of each document listed in this Section 03002 on Site.
- E. Owner will perform materials evaluation.
- F. Concrete:
 - 1. Begin concrete production after concrete mix design has been approved.
 - 2. Approval of concrete mix design by Owner does not relieve Contractor of responsibility to provide concrete that meets requirements of this Specification.
 - 3. Adjust concrete mix designs when material characteristics, job conditions, weather, strength test results or other circumstances warrant.
 - 4. Do not revise concrete mixes without prior approval by Owner.

1.5 DELIVERY, STORAGE, AND HANDLING

- A. Packing, Shipping, Handling, and Unloading:
 - 1. Concrete:
 - a. Prepare a delivery ticket for each load of ready-mixed concrete.
 - b. Truck operator shall give ticket to Owner at time of delivery.
 - c. Ticket to show:
 - 1) Mix identification mark.
 - 2) Quantity delivered.
 - 3) Amount of each material in batch.
 - 4) Outdoor temperature in shade.
 - 5) Time at which cement was added.
 - 6) Numerical sequence of delivery.
 - 7) Amount of water added.
 - 2. Reinforcing steel:
 - a. Ship to Site with attached plastic or metal tags with permanent mark numbers.
 - b. Mark numbers to match Shop Drawing mark number.
- B. Storage and Protection:
 - 1. Cement and fly ash:
 - a. Store in moistureproof, weathertight enclosures.
 - b. Do not use if caked or lumpy.
 - 2. Aggregate:
 - a. Store to prevent segregation and contamination with other sizes or foreign materials.
 - 3. Admixtures:
 - a. Protect from contamination, evaporation, freezing, or damage.
 - b. Maintain within temperature range recommended by manufacturer.
 - c. Completely mix solutions and suspensions prior to use.
 - 4. Reinforcing steel:
 - a. Support and store rebar above ground.
 - b. Keep clean and out of dirt or mud at all times.

PART 2 PRODUCTS

2.1 MATERIALS

- A. Portland Cement: Conform to ASTM C150 Type II or V and Low Alkali (0.6 percent or less).
- B. Fly Ash:
 - 1. ASTM C618, Class F
 - 2. Nonstaining
 - 3. Hardened concrete containing fly ash: Uniform light gray color
 - 4. Maximum loss on ignition: 6 percent
 - 5. Compatible with other concrete ingredients
- C. Admixtures:
 - 1. Air entraining admixtures: ASTM C260.
 - 2. Water reducing, retarding, and accelerating admixtures:
 - a. ASTM C494 Type A through E
 - b. Conform to provisions of ACI 212.3R
 - c. Do not use retarding or accelerating admixtures unless specifically approved in writing and at no cost to Owner
 - d. Follow manufacturer's instructions
 - e. Use chloride-free admixtures only
 - 3. Maximum total water soluble chloride ion content contributed from ingredients of concrete including water, aggregates, cementitious materials and admixtures by weight percent of cement:
 - a. 0.06 prestressed concrete
 - b. 0.10 all other concrete
 - 4. Do not use calcium chloride.
 - 5. Pozzolanic admixtures: ASTM C618
 - 6. Provide admixtures of same type, manufacturer and quantity as used in establishing required concrete proportions in mix design
- D. Water: Potable, clean, free of oils, acids, and organic matter
- E. Aggregates:
 - 1. Normal weight concrete: ASTM C33, except as modified below
 - 2. Fine aggregate:
 - a. Clean natural sand
 - b. No manufactured or artificial sand
 - 3. Coarse aggregate:
 - a. Crushed rock, natural gravel, or other inert granular material
 - b. Maximum amount of clay or shale particles: 1 percent
 - 4. Gradation of coarse aggregate:
 - a. Lean concrete and concrete topping: Size #7
 - b. All other concrete: Size #57 or #67
 - 5. Coarse aggregate for lightweight concrete:
 - a. ASTM C330
 - b. Maximum size: 3/4 inch
- F. Reinforcement:
 - 1. Reinforcing Steel Bars: ASTM A615, free of rust, corrosion, and scale
 - 2. Steel welded wire fabric: ASTM A1064
- G. Expansion Joint Filler:
 - 1. Exterior driveways, curbs, and sidewalks:

- a. Joint material: conform to ASTM D994
- H. Epoxy Grout
 - 1. Manufacturers:
 - a. Simpson Set-XP
 - b. Hilti HIT RE-500
 - c. Or Approved Equal
- I. Forms:
 - 1. Prefabricated or job built
 - 2. Plywood: PS1, waterproof, resin bonded, exterior-type Douglas Fir
 - a. Face adjacent to concrete: Grade B or better
 - 3. Fiberboard: Fed Spec LLL-B-810, Type IX, tempered, waterproof, screen back, concrete form hardboard
 - 4. Lumber: Straight; uniform width and thickness; and free from knots, offsets, holes, dents, and other surface defects
 - 5. Chamfer strips: Clear white pine, surface against concrete planed
 - 6. Form ties: Removable end, permanently embedded body type with cones on outer ends not requiring auxiliary spreaders
 - a. Cone diameter: 3/4-inch minimum to 1-inch maximum
 - b. Embedded portion 1-inch minimum back from concrete face
 - c. If not provided with threaded ends, constructed for breaking off ends without damage to concrete
 - 7. Form release: Nonstaining and shall not prevent bonding of future finishes to concrete surface

2.2 CONCRETE MIXES

- A. Concrete:
 - 1. Ready mixed concrete conforming to ASTM C94
 - 2. Specified quality capable of being placed without segregation and, when cured, of developing properties required
- B. Strength:
 - 1. Provide specified strength and type of concrete for each use in structure(s) as follows:

Type	Weight	Specified Strength*
All Concrete	Normal Weight	3000 psi
*Minimum 28-day compressive strength		
- C. Air Entrainment:
 - 1. Provide air entrainment in concrete resulting in a total air content percent by volume as follows:

Type	Maximum Aggregate Size	Total Air Content Percent
Concrete topping	3/8 inch	6 to 8
All other concrete	1 inch or 3/4 inch	5 to 7
 - 2. Air content: Measured in accordance with ASTM C231, ASTM C173, or ASTM C138
- D. Slump: 4 inches maximum, 1 inch minimum
 - 1. Measured at point of discharge of concrete into concrete construction member
 - 2. Pumped concrete:

- a. Provide additional water at batch plant to allow for slump loss due to pumping
- b. Provide only enough additional water so that slump of concrete at discharge end of pump hose does not exceed maximum slump specified above
- 3. Determine slump per ASTM C143
- E. Selection of Proportions:
 - 1. General - Proportion ingredients to:
 - a. Produce proper workability, durability, strength, and other required properties
 - b. Prevent segregation and collection of excessive free water on surface
 - 2. Minimum cement contents and maximum water cement ratios for concrete shall be as follows:

Minimum Specified Strength	Minimum Cement (lb/cy)			Maximum Water Cement Ratio by Weight
	1/2	3/4	1	
3000	611	611	611	0.45

- 3. Substitution of fly ash: Maximum of 15 percent by weight of cement at rate of 1 pound fly ash for 1 pound of cement
- 4. Sand cement grout:
 - a. Three parts sand
 - b. One part Portland cement
 - c. Entrained air: Six percent plus or minus one percent
 - d. Sufficient water for required workability
 - e. Minimum 28-day compressive strength: 3,000 psi
- 5. Normal weight concrete: Proportion mixture to provide desired characteristics using method described below:
 - a. Trial Mix: Per ACI 318 except as modified herein
 - 1) Air content within range specified in this Section 03002
 - 2) Record and report temperature of trial mixes
 - 3) Proportion trial mixes per ACI 211.1
- 6. Required average strength to exceed specified 28-day compressive strength by amount determined or calculated in accordance with requirements of ACI 318 using standard deviation of proposed concrete production facility as described in ACI 318
- F. Allowable 28-day shrinkage: 0.040 percent per ASTM C157

2.3 BASE MATERIAL

- A. See Section 02320 (Excavation, Bedding, Backfill, and Resurfacing).

PART 3 EXECUTION

3.1 FORMING AND PLACING CONCRETE

- A. General:
 - 1. Contractor is responsible for design and erection of formwork.
 - 2. Construct formwork so that concrete members and structures are of correct size, shape, alignment, elevation and position.
 - a. Allowable tolerances: As recommended in ACI 347R
 - 3. Provide slabs and beams of minimum indicated depth when sloping foundation base slabs or elevated floor slabs to drains.

- a. For slabs on grade, slope top of subgrade to provide floor slabs of minimum uniform indicated depth.
 - b. Do not place floor drains through beams.
- B. Openings: Provide openings in formwork to accommodate Work of other trades.
 1. Accurately place and securely support items built into forms.
- C. Chamfer Strips: Place 1/2-inch chamfer strips in forms to produce 1/2 inch-wide beveled edges on permanently exposed corners of members.
- D. Reinforcement:
 1. Position, support and secure reinforcement against displacement.
 2. Locate and support with chairs, runners, bolsters, spacers, and hangers, as required.
 3. Set wire ties so ends do not touch forms and are directed into concrete, not toward exposed concrete surfaces.
 4. Lap splice lengths: In accordance with ACI 318 Chapter 12.
 5. Unless otherwise indicated, provide minimum concrete cover as follows:
 - a. Concrete deposited against earth: 3 inches
 - b. Formed surfaces exposed to weather or in contact with earth: 2 inches
 - c. Formed surfaces exposed to or located above any liquid: 2 inches
 6. Do not weld reinforcing bars.
 7. Inspect to ensure steel is free of rust, corrosion, mud, or dirt prior to installation.
- E. Construction, Expansion, and Contraction Joints:
 1. Provide at locations indicated.
 2. Locate construction joints in floor slabs and foundation base slabs so that concrete placements are approximately square and do not exceed 2,500 sf.
 3. At least 48 hours shall elapse between placing of adjoining concrete construction.
 4. Thoroughly clean and remove laitance and loose and foreign particles from construction joints.
 5. Before new concrete is placed, coat construction joints with an approved bonding adhesive; use and apply in accordance with manufacturer's instructions.
- F. Embedments:
 1. Set and build in anchorage devices and other embedded items required for other Work that is attached to or supported by concrete.
 2. Use setting diagrams, templates, and instructions for locating and setting.
- G. Preparation:
 1. Clean and adjust forms prior to concrete placement.
 2. Tighten forms to prevent mortar leakage.
 3. Coat form surfaces with form release agents prior to placing reinforcing bars in forms.
- H. Aggregate:
 1. Do not use frozen or partially frozen aggregates.
 2. Do not use bottom 6 inches of stockpiles in contact with ground.
 3. Allow sand to drain until moisture content is uniform prior to use.
- I. Placing Concrete:
 1. Place concrete in compliance with ACI 304R and ACI 304.2R.
 2. Place in a continuous operation within planned joints or sections.
 3. Begin placement when Work of other trades affecting concrete is completed.
 4. Place concrete by methods that prevent aggregate segregation.
 5. Do not allow concrete to free fall more than four feet.
 6. Where free fall of concrete would exceed four feet, place concrete by means of tremie pipe or chute.

J. Consolidation:

1. Consolidate concrete using mechanical vibrators supplemented with hand rodding and tamping, so that concrete is worked around reinforcement and embedded items into all parts of forms.

K. Protection:

1. Protect concrete from physical damage or reduced strength due to weather extremes.
2. In cold weather comply with ACI 306R except as modified herein.
 - a. Do not place concrete on frozen ground or in contact with forms or reinforcing bars coated with frost, ice, or snow.
 - b. Minimum concrete temperature at time of mixing:

Outdoor Temperature at Placement (in Shade)	Concrete Temperature at Mixing
Below 30°F	70°F
Between 30-45°F	60°F
Above 45°F	50°F

- c. Do not place heated concrete that is warmer than 80°F.
 - d. If freezing temperatures are expected during curing, maintain concrete temperature at or above 50°F for seven days or 70°F for three days.
 - e. Do not allow concrete to cool suddenly.
3. In hot weather comply with ACI 305R except as modified herein.
 - a. At air temperature of 90°F and above, keep concrete as cool as possible during placement and curing.
 - b. Do not allow concrete temperature to exceed 70°F at placement.
 - c. Prevent plastic shrinkage cracking due to rapid evaporation of moisture.
 - d. Do not place concrete when actual or anticipated evaporation rate equals or exceeds 0.2 pounds per square foot per hour as determined from ACI 305R, Figure 2.1.5.

L. Curing:

1. Wet cure concrete topping by maintaining a minimum depth of 2 inches of water over top of concrete topping.
 - a. Wet cure a minimum of seven days.
2. Begin curing concrete as soon as free water has disappeared from exposed surfaces.
3. Cure concrete by use of moisture retaining cover, burlap kept continuously wet, or by membrane curing compound.
4. Provide protection as required to prevent damage to concrete and to prevent moisture loss from concrete during curing period.
5. Provide curing for minimum of seven days.
6. Form materials left in place may be considered as curing materials for surfaces in contact with form materials except in periods of hot weather.
7. If forms are removed before seven days have elapsed, finish curing of formed surfaces by one of above methods for remainder of curing period depending on weather.
8. Curing vertical surfaces with a curing compound: Cover vertical surfaces with a minimum of two coats of curing compound.
 - a. Allow preceding coat to completely dry prior to applying next coat.
 - b. Apply first coat of curing compound immediately after form removal.
 - c. Vertical surface at time of receiving first coat: Damp with no free water on surface

- d. Vertical surface: Steeper than 1 vertical to 4 horizontal

M. Form Types:

1. Surfaces exposed to view:
 - a. Prefabricated plywood panel forms, job-built plywood forms, or forms lined with plywood or fiberboard
 - b. Laid out in a regular and uniform pattern with long dimensions vertical and joints aligned
 - c. Produce finished surfaces free from offsets, ridges, waves, and concave or convex areas
 - d. Construct forms sufficiently tight to prevent leakage of mortar
2. Surfaces normally submerged or not normally exposed to view:
 - a. Wood or steel forms sufficiently tight to prevent leakage of mortar
3. Other types of forms may be used:
 - a. For surfaces not restricted to plywood or lined forms
 - b. As backing for form lining

3.2 CONCRETE FINISHES

A. Surfaces Exposed to View:

1. Provide a smooth finish for exposed concrete surfaces and surfaces that are:
 - a. To be covered with a coating or covering material applied directly to concrete
 - b. Scheduled for grout-cleaned finish
2. Remove fins and projections, and patch voids, air pockets, and honeycomb areas with cement grout.
3. Fill tie holes with nonshrink nonmetallic grout.

B. Surfaces Not Exposed to View:

1. Patch voids, air pockets and honeycomb areas with cement grout.
2. Fill tie holes with nonshrink nonmetallic grout.

C. Troweled Finish:

1. Float finish surface.
2. Next power trowel, and finally hand trowel.
3. Produce a smooth surface that is relatively free of defects with first hand troweling.
4. Perform additional toweling by hand after surface has hardened sufficiently.
5. Final trowel when a ringing sound is produced as trowel is moved over surface.
6. Thoroughly consolidate surface by hand troweling.
7. Leave finished surface essentially free of trowel marks, uniform in texture and appearance and plane to a Class A tolerance.
8. On surfaces intended to support floor coverings remove any defects of sufficient magnitude that would show through floor covering by grinding.

3.3 FIELD QUALITY CONTROL

A. Site Tests:

1. Strength test - procedure:
 - a. Three cylinders, 6 inches diameter x 12 inches high, will be taken from each delivery per ASTM C172 and ASTM C31.
 - b. Cylinders will be tested per ASTM C39:
 - 1) One cylinder at seven days
 - 2) Two cylinders at 28 days
2. Strength test - frequency:
 - a. Not less than one test each day concrete placed

- b. Not less than one test for each 50 cubic yards or major fraction thereof placed in one day
 - c. Not less than one test for each type of concrete poured
 - d. Not less than one test for each concrete structure exceeding 2 cubic yards volume
 3. Slump test: Per ASTM C143.
 - a. Determined for each strength test sample
 - b. Additional slump tests may be taken
 4. Air content: Per ASTM C231, ASTM C173, and ASTM C138
 - a. Determined for each strength test sample
 5. Temperature: Determined for each strength test sample
- B. Evaluation of Tests:
1. Strength test results: Average of 28-day strength of two cylinders from each sample.
 - a. If one cylinder manifests evidence of improper sampling, molding, handling, curing, or testing, strength of remaining cylinder will be used as test result for that sample.
 - b. If both cylinders show any of above defects, test will be discarded.
- C. Acceptance of Concrete:
1. Strength level of each type of concrete:
 - a. Average of three consecutive strength tests equals or exceeds required specified 28-day compressive strength
 - b. No individual strength test falls below required specified 28-day compressive strength by more than 500 psi

END OF SECTION

SECTION 03650

CONTROLLED DENSITY FILL

PART 1 GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Controlled Density Fill (CDF)
 - 2. Trench Dams

1.2 REFERENCES

- | | | |
|----|---------------------|--|
| A. | ASTM C31 | Standard Practice for Making and Curing Concrete Test Specimens in the Field |
| B. | ASTM C33 | Standard Specification for Concrete Aggregates |
| C. | ASTM C39 | Standard Test Method for Compressive Strength of Cylindrical Concrete Specimens |
| D. | ASTM C94 | Standard Specification for Ready-Mixed Concrete |
| E. | ASTM C138 | Standard Test Method for Density (Unit Weight), Yield, and Air Content (Gravimetric) of Concrete |
| F. | ASTM C143 | Standard Test Method for Slump of Hydraulic-Cement Concrete |
| G. | ASTM C150 | Standard Specification for Portland Cement |
| H. | ASTM C172 | Standard Practice for Sampling Freshly Mixed Concrete |
| I. | ASTM C173 | Standard Test Method for Air Content of Freshly Mixed Concrete by the Volumetric Method |
| J. | ASTM C231 | Standard Test Method for Air Content of Freshly Mixed Concrete by the Pressure Method |
| K. | ASTM C260 | Standard Specification for Air-Entraining Admixtures for Concrete |
| L. | ASTM C494 | Standard Specification for Chemical Admixtures for Concrete |
| M. | ASTM C618 | Standard Specification for Coal Fly Ash and Raw Calcined Natural Pozzolan for Use as a Mineral Admixture in Portland Cement Concrete |
| N. | Greenbook 201 | Concrete, Mortar and Related Materials |
| O. | Greenbook 201-1.2.2 | Aggregates |
| P. | Greenbook 201-1.2.3 | Water |
| Q. | Greenbook 201-6 | Controlled Low Strength Material (CLSM) |
| R. | Greenbook 201-6.2.2 | Aggregates |
| S. | Greenbook 201-6.3 | Proportioning |
| T. | Greenbook 201-6.4 | Mixing |

1.3 SUBMITTALS

A. Quality Assurance/Control Submittals:

1. Design Data:
 - a. CDF: Mix design
2. Test Reports:
 - a. CDF:
 - 1) Test results on laboratory trial batches to confirm weight and strength
 - 2) Admixtures

1.4 DELIVERY, STORAGE, AND HANDLING

A. Packing, Shipping, Handling, and Unloading:

1. CDF: Transport and deliver in accordance with Greenbook 201 and ASTM C94.

PART 2 PRODUCTS

2.1 MATERIALS

A. CDF:

1. General:
 - a. Non-segregating, self-containing, free-flowing, and excavatable material resulting in a hardened, dense, non-settling fill.
2. Consistency: Allow mix to flow into voids and around pipes, appurtenances, and structures
3. Conform to Greenbook 201-6 except as modified herein:
 - a. Designed compressive strength: 75 psi minimum to 200 psi maximum at 28 Days
 - b. Slump: 8 inches plus or minus 2 inches
 - c. Mixture:
 - 1) Minimum total cementitious material: 100 lb./yd³ minimum
 - 2) Portland cement:
 - (a) Conform to ASTM C150, Type II cement
 - (b) 50 lb./yd³ minimum
 - 3) Fly ash: Class F conforming to ASTM C618
 - 4) Aggregates:
 - (a) Conform to Greenbook 201-1.2.2 and 201-6.2.2
 - (b) Conform to ASTM C33
 - (c) Sand equivalent: 31 minimum
 - (d) Maximum aggregate size: 3/8 inch
 - 5) Water: Conform to Greenbook 201-1.2.3
 - 6) Admixtures:
 - (a) Accelerating: Conform to ASTM C494
 - (b) Water-Reducing: Conform to ASTM C494
 - (c) Air-Entraining: 25 percent maximum conforming to ASTM C260
 4. Mix materials in accordance with Greenbook 201-6.4.
 5. Proportion materials in accordance with Greenbook 201-6.3

PART 3 EXECUTION

3.1 CDF

- A. Use CDF for trench dams at 300 foot minimum intervals along pipeline route. Trench dam width shall extend 8-inch minimum into the each side of the standard trench wall.
- B. Mixing drums and trucks: Completely empty conventional concrete from the drum prior to any CDF being batched into the drum
- C. Temperature: At least 40 degrees Fahrenheit at the time of placement; do not place when either ground or ambient air temperatures are less than 38 degrees Fahrenheit.
- D. Traffic: Not allowed over CDF for at least 24 hours after placement or until CDF has hardened sufficiently to prevent rutting, whichever is later.
- E. Ensure that placement of CDF trench dams does not cause pipes to become buoyant. CDF may need to be placed in several lifts in order to prevent pipe buoyancy.

3.2 FIELD QUALITY CONTROL

- A. Site Tests:
 - 1. Strength test procedure:
 - a. Three cylinders, 6 inches diameter x 12 inches high, will be taken from each delivery per ASTM C172 and ASTM C31.
 - b. Cylinders will be tested per ASTM C39:
 - 1) One cylinder at seven days
 - 2) Two cylinders at 28 days
 - 2. Strength test - frequency:
 - a. Not less than one test each day concrete placed
 - b. Not less than one test for each 50 cubic yards or major fraction thereof placed in one Day
 - c. Not less than one test for each structure exceeding 2 cubic yards volume
 - 3. Slump test: Per ASTM C143.
 - a. Determined for each strength test sample
 - b. Additional slump tests may be taken
 - 4. Air content: Per ASTM C231, ASTM C173, and ASTM C138
 - a. Determined for each strength test sample
 - 5. Temperature: Determined for each strength test sample
- B. Evaluation of Tests:
 - 1. Strength test results: Average of 28-day strength of two cylinders from each sample.
 - a. If one cylinder manifests evidence of improper sampling, molding, handling, curing, or testing, strength of remaining cylinder will be used as test result for that sample.
 - b. If both cylinders show any of above defects, test will be discarded.
- C. Acceptance of Concrete:
 - 1. Strength level of each type of concrete:
 - a. Average of three consecutive strength tests shall be within the required specified 28-day compressive strength
 - b. No individual strength test falls below or above the required specified 28-day compressive strength by more than 25 psi

END OF SECTION

DIVISION 9

FINISHES

SECTION 09900

PAINTS AND COATINGS**PART 1 GENERAL****1.1 SUMMARY**

A. Section Includes: Field-applied paints, coatings, and polyethylene wrap

1.2 SUBMITTALS

A. Product Data:

1. Paint manufacturer's information:
 - a. Suitability of the material for the intended use
 - b. Color

B. Quality Assurance/Control Submittals:

1. Manufacturer's Instructions and Recommendations:
 - a. Surface preparation and coating application

1.3 DELIVERY, STORAGE, AND HANDLING

A. General:

1. Unless otherwise specified herein, strictly observe coating manufacturer's printed recommendations and instructions for handling and protecting coating materials and for all other procedures relative to coating.

B. Acceptance at Site:

1. Containers:
 - a. Unopened on arrival at Site
 - b. No punctures
2. Manufacturer's label:
 - a. Fastened to container; plainly legible
 - b. Name of manufacturer
 - c. Designated name, formula, or specification number
 - d. Color
 - e. Date of manufacture
 - f. Manufacturer's instructions
3. Damage to shop-applied coatings: Repair per manufacturer's recommendations.

C. Storage and Protection:

1. Materials:
 - a. Store out of direct sunlight
 - b. Store out of cold weather
 - c. Store in temperature conditions recommended by manufacturer
 - d. Use within the manufacturer's recommended shelf life

1.4 PROJECT CONDITIONS

A. Project Environmental Requirements:

1. Coatings shall not be applied under the following conditions:
 - a. Temperature exceeding the manufacturer's recommended maximum and minimum allowable temperature
 - b. Dust or smoke laden atmosphere

- c. Damp or humid weather
 - d. Substrate or air temperature is less than five degrees F above dewpoint
 - 1) Dewpoint: Determined by use of a sling psychrometer in conjunction with U.S. Dept. of Commerce, Weather Bureau psychrometric tables
 - e. When air temperature is expected to drop below 40 degrees F or less than five degrees F above the dewpoint within 8 hours after application of coating
 - 1) Dewpoint: Determined as above
2. Spray paint shall not be applied under windy or wet conditions.

PART 2 PRODUCTS

2.1 MATERIALS

- A. General:
 1. Use coating materials suitable for the intended use and recommended by manufacturer for the intended service.
 2. Compatibility: Use materials that are compatible with the materials or coatings to be coated
 3. Color: Purple, unless otherwise indicated

PART 3 EXECUTION

3.1 GENERAL

- A. Unless otherwise specified herein, strictly observe coating manufacturers' printed recommendations and instructions for thinning and mixing of materials, for preparation of surfaces for coating, application, and curing, and for all other procedures relative to coating.

3.2 PREPARATION

- A. Remove all grease, oil, heavy chalk, dirt, or other contaminants prior to applying field coating.
- B. Clean and dry surfaces prior to coating application.

3.3 APPLICATION

- A. Apply under dry and dust-free conditions.
- B. Apply after all concrete work and equipment installation is complete and the work areas are clean and dust free.
- C. Achieve a uniform texture and color-matched appearance.
- D. Apply field coatings as indicated:
 1. Items to be coated:
 - a. Recycled Water Valve Covers:
 - 1) Paint exposed portion of valve covers purple
 - b. Recycled Water Pipe:
 - 1) All pipes and fittings not manufactured to be purple, shall be painted purple on the outside of the pipe
 2. Prime coat: Epoxy primer, one coat.
 3. Finish coats: Polyurethane, two coats
- E. Touch up factory-applied coating surfaces that are defective or that are scratched or damaged in the field.
 1. Defective coatings may need to be reapplied at the factory, at Owner discretion.

2. Entirely remove the damaged or defective portion of coatings before applying field touch-up coating.
3. Apply sufficient thickness to cover damaged areas while blending with original finish paint system.
4. Color and gloss: To match factory-applied coating.

3.4 FIELD QUALITY CONTROL

A. Inspection

1. Even film of uniform thickness
2. Finished surfaces free from runs, drips, ridges, waves, laps, brush marks, and variations in color, texture, and finish

END OF SECTION

DIVISION 15

MECHANICAL

SECTION 15106

DUCTILE IRON PIPE**PART 1 GENERAL****1.1 SUMMARY**

- A. Section Includes:
 1. Ductile iron piping, fittings, and appurtenances.
 2. Polyethylene encasement tape
- B. Related Sections:
 1. Section 02515 (Recycled Water Main)
 2. Section 09900 (Paints and Coatings)

1.2 REFERENCES

A. ANSI/ASME B1.1	Unified Inch Screw Threads (UN and UNR Thread Form)
B. ANSI/ASME B2.1	Pipe Threads
C. ANSI/ASME B16.1	Cast-Iron Pipe Flanges and Flanged Fittings, Class 25, 125, 250, and 800
D. ANSI/AWWA C104	Cement-Mortar Lining for Ductile-Iron Pipe and Fittings for Water
E. AWWA C606	Grooved and Shouldered Joints
F. ANSI/AWWA C110	Ductile Iron and Gray Iron Fittings
G. ANSI/AWWA C111	Gasket Joints for Cast Iron and Ductile Iron Pressure Pipe and Fittings
H. ANSI/AWWA C115/A21.15	Standard for Flanged Ductile-Iron Pipe With Threaded Flanges
I. ANSI/AWWA C116/A21.16	Protective Fusion-Bonded Epoxy Coatings for the Interior and Exterior Surfaces of the Ductile-Iron and Gray-Iron Fittings for Water Supply Service
J. ANSI/AWWA C150	Thickness Design of Ductile Iron Pipe
K. ANSI/AWWA C151 A215.51	Ductile-Iron Pipe, Centrifugally Cast
L. ANSI/AWWA C214	Tape Coating Systems for the Exterior of Steel Water Pipelines
M. ASTM B695	Standard Specification for Coatings of Zinc Mechanically Deposited on Iron and Steel
N. ASTM C150	Standard Specification for Portland Cement
O. AWWA C213	Fusion-Bonded Epoxy Coating for the Interior and Exterior of Steel Water Pipelines

1.3 SUBMITTALS

- A. Product Data:
 1. Pipe and fittings, including:
 - a. List of pipe fittings to be used
 - b. Manufacturer
 - c. Model number, if applicable
 - d. Size and schedule

- e. Material
- f. Pressure rating
- B. Quality Assurance/Control Submittals:
 - 1. Test Reports:
 - a. Hydrostatic test reports.

1.4 DELIVERY, STORAGE, AND HANDLING

- A. Delivery at Site:
 - 1. All material which will not be installed the same Day as delivered to the Site is to be stored in the original manufacturer's packaging.
- B. Protection Prior to Installation:
 - 1. Protect all products from excessive heat and from moisture during storage and handling.
- C. During loading, transportation, unloading, storage, and laying:
 - 1. Take every precaution to prevent damage to the pipe, linings, and coatings.
 - 2. Provide trucks, trailers, or railway cars used for transporting coated pipe with bolsters between each layer of pipe curved to fit the outside of the pipe.
- D. During Unloading:
 - 1. Lifting of pipe:
 - a. Using two slings placed at the quarter points of the pipe sections.
 - b. Pipe may be lifted into the trench using one sling near the center of the pipe, provided the pipe is guided to prevent uncontrolled swinging and no damage will result to the pipe or harm to the workers.
 - c. The slings shall bear uniformly against the pipe.
 - d. When not being handled, the support the pipe on timber cradles or on properly prepared ground, graded to eliminate all rock points and to provide uniform support along the full length.
 - e. Any unit of pipe that, in the opinion of Owner is damaged must be removed from the Site of the work and replaced with another unit.
- E. Pipe and Fittings:
 - 1. Do not store on rocks or gravel, or other hard material which might damage the pipe or lining and coating.
 - 2. Do not allow pipe to rest on the bell end of the pipe.
 - a. This includes storage areas and along the pipe trench.
- F. Slings:
 - 1. Heavy canvas, or nylon slings of suitable strength shall be used for lifting and supporting materials.
 - 2. Chains or cables cannot be used.
- G. Rubber Gasket Storage:
 - 1. Store all rubber gaskets in a cool, well-ventilated place.
 - 2. Do not expose to the direct rays of the sun.
 - 3. Do not allow contact with oils, fuels, petroleum, or solvents.

PART 2 PRODUCTS

2.1 ACCEPTABLE MANUFACTURERS

- A. Subject to compliance with the Contract Documents the following manufacturers are acceptable:

1. Ductile iron pipes:
 - a. United States Pipe and Foundry Company (U.S. Pipe)
 - b. Griffin Pipe Products Company
 - c. American Cast Iron Pipe Company
 - d. Or Approved Equal
2. Flanged adaptors:
 - a. Dresser (Style 128)
 - b. Smith Blair Style 912
 - c. Smith Blair Style 913
 - d. Or Approved Equal.
3. Transition coupling:
 - a. Dresser (Style 62)
 - b. Smith-Blair Style 415
 - c. Or Approved Equal.
4. Polyethylene encasement tape:
 - a. Chase (Chasekote 750)
 - b. Kendall (Polyken 900)
 - c. 3M (Scotchrap 50)
 - d. Or Approved Equal

2.2 MATERIALS

- A. Ductile Iron Pipe:
 1. ANSI/AWWA C115/A21.15
 2. ANSI/AWWA C150.
 3. AWWA C151.
- B. Fittings and Flanges:
 1. ANSI/AWWA C110.
 2. AWWA C115.
 3. Flanges drilled and faced per ANSI/ASME B16.1.
- C. Nuts and Bolts:
 1. Material:
 - a. Buried: Type 316 stainless steel.
 - b. Exposed: Mechanical galvanized ASTM B695, Class 40.
 2. Heads and dimensions per ANSI/ASME B1.1.
 3. Threaded per ANSI/ASME B1.1.
 4. Project ends 1/4 to 1/2 inch beyond nuts.
- D. Gaskets: Per ductile iron pipe manufacturer's recommendation
- E. If mechanical coupling system is used, utilize pipe thickness and grade in accordance with AWWA C606.

2.3 FABRICATION

- A. Pipe and Pipe Fittings:
 1. Ductile iron pipe: Pressure Class 350, conforming to the requirements of ANSI/AWWA C150 and AWWA C151
 2. Ductile iron fittings:
 - a. Pressure rating
 - 1) 250 psi.
 - 2) Conforming to the requirements of ANSI/AWWA C110.

3. Flanged ductile iron pipe and fittings must conform to the requirements of AWWA C115.
- B. Joints:
1. General:
 - a. All ductile iron fittings for use on PVC pipe shall be restrained joint.
 - b. Joints above grades shall be flanged.
 2. Restrained Joints:
 - a. Use on pipeline blocks to counter balance hydrostatic forces in the pipelines.
 - b. Thrust blocks can only be used with Owner's approval.
 - c. Boltless, utilizing ductile iron retainers and locking segments, or locking gaskets.
 3. Push-on Joints:
 - a. Conform to ANSI/AWWA C111.
 - b. Bell-and-spigot ends with rubber gaskets:
 - 1) The clearance between the bells and spigots shall be such that when combined with the gasket groove configuration and the gasket itself, will provide watertight joints under all operating conditions when properly installed.
 4. Flanges:
 - a. Threaded in accordance with ANSI/ ASME B2.1.
 - b. Thread diameters adjusted to conform to ductile iron pipe outside diameters.
 - c. Flanges are to be ductile iron with bolt circle and bolt holes conforming to Class 125 per ANSI/ ASME B16.1.
- C. Corrosion Protection:
1. Protect exterior surfaces of buried pipes protected by polyethylene tape, in accordance with AWWA C213, or coal tar epoxy, in accordance with ANSI/AWWA C214.
 2. Paint exposed pipes purple in accordance with Section 09900 (Paints and Coatings)
 3. Protect exterior surfaces of fittings with fusion-bonded epoxy in accordance with AWWA/ANSI C116/A21-16.
- D. Lining:
1. Interior surfaces of pipe and fittings shall be cement mortar-lined in accordance with ANSI/AWWA C104 unless noted otherwise. Cement shall be ASTM C150, Type II or V, containing less than 0.60 alkalis. Lining thickness shall be a minimum of 1/8-inch for pipe 12 inches or less.

PART 3 EXECUTION

3.1 PIPE PREPARATION AND HANDLING

- A. Inspect pipe and fitting carefully before installing.
1. Any pipe or coating system which, in the opinion of Owner, is damaged shall not be used and be promptly removed from the Site
 2. Clean ends of pipe thoroughly.
 3. Remove foreign matter and dirt from inside of pipe and keep clean during and after installation.
- B. Use proper implements, tools, and facilities for the safe and proper protection and installation of the pipe.
1. Carefully handle pipe in such a manner as to avoid any physical damage to the pipe.
 2. Do not drop or dump pipe into trenches under any circumstances.
- C. When pipe laying is not in progress, close the open ends of installed pipe to prevent entrance of trench water or other foreign material into the pipe.

3.2 INSTALLATION

- A. Joining Method - Push-On Mechanical (Gland-Type) Joints:
1. Install in accordance with ANSI/AWWA C111.
 2. Assemble mechanical joints carefully according to manufacturer's recommendations.
 3. If effective sealing is not obtained, disassemble, thoroughly clean, and reassemble the joint at no additional cost to Owner.
 4. Do not overstress bolts.
 5. Where piping utilizes mechanical joints with tie rods, align joint holes to permit installation of harness bolts.
- B. Joining Method - Push-On Joints:
1. Install in accordance with AWWA C151.
 2. Assemble push-on joints in accordance with manufacturer's instructions.
 3. Bevel and lubricate spigot end of pipe to facilitate assembly without damage to gasket. Use lubricant that is non-toxic, does not support the growth of bacteria, has no deteriorating effects on the gasket material, and imparts no taste or odor to water in pipe.
 4. Assure the gasket groove is thoroughly clean
 5. For cold weather installation, warm gasket prior to placement in bell
 6. Taper of bevel approximately 30 degrees with centerline of pipe and approximately 1/4 inch back
- C. Joining Method - Flanged Joints:
1. Install in accordance with AWWA C115.
 2. Extend pipe completely through screwed-on flanged and machine flange face and pipe in single operation.
 3. Make flange faces flat and perpendicular to pipe centerline.
 4. When bolting flange joints, exercise extreme care to ensure that there is no restraint on opposite end of pipe or fitting which would prevent uniform gasket compression or would cause unnecessary stress, bending or torsional strains to be applied to cast flanges or flanged fittings.
 5. Allow one flange free movement in any direction while bolts are being tightened.
 6. Do not assemble adjoining flexible joints until flanged joints in piping system have been tightened.
 7. Gradually tighten flange bolts uniformly to permit even gasket compression.
- D. Flange Adapters 12 inch and less:
1. Locate and drill holes for anchor studs after pipe is in place and bolted tight.
 2. Drill holes not more than 1/8 inch larger than diameter of stud projection.
- E. Cutting:
1. Do not damage interior lining material during cutting.
 2. Use abrasive wheel cutters or saws.
 3. Make square cuts.
 4. Bevel and free cut ends of sharp edges after cutting.

3.3 DISTRIBUTING MATERIALS

- A. Store materials in a manner that will not cause a hazard to traffic or the public in general and that will not obstruct access to adjacent property.

3.4 LAYING PIPE

- A. All pipe, fittings, and appurtenances shall be installed in accordance with the manufacturer's instructions and these Specifications.
- B. Gaskets:
 - 1. Install gasket such that the holes on the flat surface faces inside the coupling and the rounded edge faces the coupling entrance.
 - 2. The gasket must be evenly seated in the groove.
- C. Lubricant:
 - 1. Apply lubricant generously to the installed gasket, the coupling interior, and the pipe spigot (from the taper end to the full insertion mark).
 - 2. Note that the lubricant shall never be applied to the groove because of the potential for leakage.
- D. Field Cuts:
 - 1. If field cuts are required, square all cuts to the satisfaction of Owner
 - 2. Field cut pipe have the burrs removed, ends beveled, and marked for proper insertion depth
 - a. Bevels: Use a factory-finished beveled end as a guide in beveling
 - 3. In addition, copy the full insertion mark onto the newly cut section to ensure proper stab and copy the spigot end onto the newly cut section to ensure proper stab and bevel the spigot end to an angle of approximately 15°
- E. Orientation:
 - 1. Lay pipe with bell end facing in the direction of the laying, unless otherwise allowed.

3.5 FIELD QUALITY CONTROL

- A. Hydrostatic Test:
 - 1. Test in accordance with Section 02515 (Recycled Water Main).

END OF SECTION

SECTION 15112

PLUG VALVES

PART 1 GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Furnish and install plug valves.
- B. Related Sections:
 - 1. Section 01330 (Submittal Procedures).
 - 2. Section 15016 (Ductile Iron Pipe)

1.2 REFERENCES

- A. ASTM A126 Gray Iron Castings for Valves, Flanges and Pipe Fittings
- B. ASTM A536 Standard Specification for Ductile Iron Castings
- C. ASTM D2240 Standard Test Method for Rubber Property-Durometer Hardness
- D. ANSI/AWWA C504 Rubber Seated Butterfly Valves
- E. AWWA C517 Resilient-Seated Cast Iron Eccentric Plug Valves

1.3 SUBMITTALS

- A. Product Data:
 - 1. Plug valve
- B. Quality Assurance/Control Submittals:
 - 1. Test Reports:
 - a. Pressure tests for plug valves
- C. Installation, Operation, and Maintenance Manuals:
 - 1. See Section 01330 for information required for Installation, Operation, and Maintenance Manuals.
 - 2. Manufacturer's Installation, Operation, and Maintenance instructions for valves and operators.

PART 2 PRODUCTS

2.1 NON-LUBRICATED ECCENTRIC PLUG VALVES

- A. Acceptable Manufacturers:
 - 1. DeZurik
 - 2. Henry Pratt Company
 - 3. Millikin
 - 4. ValMatic
 - 5. Victaulic
 - 6. Or Approved Equal
- B. Materials:
 - 1. Body:
 - a. Cast-iron ASTM A126, Class B
 - 2. Plug:
 - a. One piece construction ductile iron

- b. ASTM A536 65-45-12 or cast iron
- c. ASTM 126 Class B
- 3. Plug facing:
 - a. Grease or petroleum-resistant resilient Neoprene or Buna-N compound
 - b. 70 Type A durometer hardness per ASTM D2240
- 4. Shaft bearing bushings:
 - a. Permanently lubricated TFE (Tetrafluoroethylene), Delrin, or approved equal stainless steel or bronze in accordance with AWWA C517
- 5. Valve seats:
 - a. Welded-in overlay of 90% nickel
 - b. Minimum Brinell hardness of 200
 - c. Minimum 1/8 inch thick
- 6. Stem seal:
 - a. Nitrile butadiene packing
 - b. Or Buna-N dual U-cups
 - c. Or bronze cartridge double O-rings with lower grit seal O-ring per Sec. 3.7 AWWA C504

2.2 ACCESSORIES

- A. Valve schedule for type of actuator as indicated.
 - 1. Furnish actuator integral with valve

2.3 DESIGN REQUIREMENTS

- A. Non-Lubricated Eccentric Plug Valves:
 - 1. Port area:
 - a. Valves 4 through 20 inch: Equal to or exceed 80% of full pipe area
 - b. Valves greater than 20 inch: 100% equivalent full pipe area
 - 2. Valve body:
 - a. Fitted with bolted bonnet
 - 3. End connections:
 - a. Compatible with piping connections
 - 4. Stem seal:
 - a. Adjustable and replaceable without disassembling valve or bonnet
 - 5. Designed for seating drip tight in any flow direction
 - 6. Rating:
 - a. 1/2 through 12 inch, 175 psi working pressure
 - 7. Actuator:
 - a. Actuator gearing in enclosure suitable for running in oil with seals on shaft to prevent entry of dirt or water
 - b. Positive identification on actuator indicating valve position
 - c. Adjustable stop to set closing torque

PART 3 EXECUTION

3.1 INSTALLATION

- A. Install per manufacturer's installation instructions.
- B. Install valves with valve stem horizontal, plug seat on inlet side and with plug rotating up into the open position for valves in horizontal lines.

- C. Install valve with actuator above pipe or plug centerline.
- D. Completely wrap buried metal with polyethylene.

END OF SECTION

SECTION 15113**BUTTERFLY VALVES****PART 1 GENERAL****1.1 SUMMARY**

- A. Section Includes:
 1. Furnish and install butterfly valves and actuators
- B. Related Sections:
 1. Section 01330 (Submittal Procedures).
 2. Section 15106(Ductile Iron Pipe)

1.2 REFERENCES

- | | | |
|----|----------------|---|
| A. | ANSI/AWWA C504 | Rubber Seated Butterfly Valves |
| B. | ANSI B16.5 | Pipe Flanges and Flanged Fittings: NPS 1/2 Through 24 |
| C. | ASTM A48 | Standard Specification for Gray Iron Castings |
| D. | ANSI/ASTM A126 | Gray Iron Castings for Valves, Flanges and Pipe Fittings |
| E. | ANSI/ASTM A276 | Standard Specification for Stainless Steel Bars and Shapes |
| F. | ANSI/ASTM A436 | Standard Specifications for Austenitic Gray Iron Castings |
| G. | ANSI/ASTM A536 | Standard Specification for Ductile Iron Castings |
| H. | ASTM A564 | Standard Specification for Hot-Rolled and Cold-Finished Age-Hardening Stainless Steel Bars and Shapes |
| I. | ANSI/AWWA C207 | Steel Pipe Flanges for Waterworks Service - Sizes 4 inch through 144 inch |

1.3 SUBMITTALS

- A. Product Data
 1. General product information that shows that butterfly valves and related equipment meet all of the Specification requirements.
 2. Butterfly valve features:
 - a. Pressure rating.
 - b. Head loss chart or curve showing the head loss through the valve as a function of the flow through the valve.
 - c. Detail of seat in body of the valve.
 - d. Detail of field adjustment of seats.
 - e. Detail of method of attachment of disc to shaft.
 - f. Detail of all bearings and stuffing boxes.
 3. Valve materials.
 4. Protective coating material for valve interior and exterior.
 - a. Include surface preparation, material data and application sheets, DFT, and NSF-61 compliance.
 5. Valve actuator.
 - a. Torque required calculations.
 - b. Torque rating.
 - c. Description.
 - d. Number of turns to open.
 - e. Lubricant type and quantity.

- B. Shop Drawings:
 - 1. Butterfly valve and actuator, fully dimensioned drawing with materials listed for each component part (include ASTM designation or equivalent).
 - 2. Flange thickness and bolt hole configuration.
 - 3. Net weight of each valve and actuator.
 - 4. See Section 15144 (Valves: Basic Requirements, if applicable).
- C. Quality Assurance/Control Submittals:
 - 1. Certificates:
 - a. "Affidavit of Compliance" with Owner in accordance with AWWA C504, Section 6.3.
 - b. Manufacturer-certified statement that proof of design tests, as stated in ANSI/AWWA C504, Section 5.2.4 were successfully performed on similar types of valves, in the sizes specified herein, within the past two years.
 - c. Manufacturer's representative-certified statement verifying that valves were installed properly.
 - 2. Test Reports:
 - a. ANSI/AWWA C504, Section 5.2:
 - 1) Performance Test.
 - 2) Leakage Test.
 - (a) Test in both directions.
 - 3) Hydrostatic Test.
 - 4) Proof of Design Test.
- D. Installation, Operation, and Maintenance Manuals:
 - 1. See Section 01330 for information required for Installation, Operation, and Maintenance Manuals.
 - 2. Manufacturer's instructions for valves and actuators.
 - 3. Copies of all items submitted and reviewed in Section 1.3.

PART 2 PRODUCTS

2.1 MANUFACTURERS

- A. DeZurik:
- B. Henry Pratt Company:
- C. Or Approved Equal

2.2 BUTTERFLY VALVE MATERIALS (ANSI/AWWA C504)

- A. Comply with ANSI/AWWA C504, Section 4.4.
- B. Materials:
 - 1. Valve bodies:
 - a. ASTM A126, Class B cast iron for 150 psi rated valves.
 - b. ASTM A536 Grade 65-45-12 ductile iron for 250 psi rated valves.
 - 2. Valve shafts:
 - a. Stainless steel, 18-8, Type 304 or Type 316.
 - 3. Valve discs:
 - a. Potable and nonpotable water:
 - 1) ASTM A48, Class 40 cast iron.
 - 2) ASTM A536, Grade 65-45-12 ductile iron.
 - 3) ASTM A436, Type 1 alloy cast iron.
 - 4. Valve seats:

- a. Potable and nonpotable water, wastewater, and air below 180Degrees Fahrenheit:
 - 1) Buna-N.
- 5. Mating surfaces:
 - a. Valves less than 30 inches: ASTM A276, 18-8, stainless steel or bronze.
- C. Design Requirements:
 - 1. Seat type: Resilient. Comply with AWWA C504.
 - 2. Exposed and submerged valves 3 through 20 IN.
 - a. Body type: Wafer or short body flange (laying length may vary from AWWA C504).
 - b. Equip wafer type with fully tapped anchor lugs drilled per ANSI B16.5.
 - 3. Direct buried valves:
 - a. All valves: Working pressure rated for 150 psi (Class 150B per AWWA C504).

2.3 MANUFACTURED UNITS

- A. Butterfly Valves:
 - 1. Rubber seated, Class 150B, conforming to AWWA C504.
 - 2. Valve discs: Seat in a position 90 degrees to pipe axis, with a rotation of 90 degrees between full open and tight closed.
 - 3. Open counter-clockwise.
 - 4. Bubble-tight test pressure shut-off rating of 150 psi.
 - 5. Bolts: Type 316 stainless steel.
 - 6. Buried valves:
 - a. 2-inch square AWWA C500 operating nut and position indicator
 - b. Equipped with worm-gear operators lubricated and selected to prevent entry of dirt or water into operator
 - c. Intended for buried service
 - d. Valve risers: non-metallic

2.4 ACCESSORIES

- A. Actuators:
 - 1. Provide all valves with an actuator, unless otherwise indicated.
 - a. Drawings specify type of actuator.
 - 2. Furnish actuator integral with valve.

2.5 FINISHES

- A. Shop Surface Preparation:
 - 1. In accordance with the printed application instructions provided by the protective coating manufacturer.
- B. Shop Finishing:
 - 1. Interior
 - a. Epoxy lining material per ANSI/AWWA C550
 - b. NSF/ANSI 61 approved
 - 2. Exterior:
 - a. Epoxy lining material per ANSI/AWWA C550
 - b. NSF/ANSI 61 approved

PART 3 EXECUTION

3.1 INSTALLATION

- A. Installation, Operation, and Maintenance Manuals must be received before valve installation begins.
- B. Support connecting piping near flange connections to prevent strain on valve body.
- C. Install valves with actuator above or at side of valve, as indicated.
- D. Install per manufacturer's installation instructions.
- E. Install valve with the normal water flow towards the flat side of the disc, if applicable.

END OF SECTION

SECTION 15115

AIR VALVES**PART 1 GENERAL****1.1 SUMMARY**

A. Related Sections:

1. Section 15106 (Ductile Iron Pipe)

1.2 REFERENCES

- | | |
|-------------------|---|
| A. ANSI/AWWA C512 | Air-Release, Air/Vacuum, and Combination Air Valve for Waterworks Service |
| B. ANSI/AWWA C550 | Protective Interior Coatings for Valves and Hydrants |
| C. ANSI/NSF 61 | Drinking Water Systems Components-Health Effects |
| D. ANSI B16.1 | Cast Iron Pipe Flanges and Flanged Fittings |
| E. ANSI 05.1 | Wood Poles - Specifications and Dimensions |
| F. NSF/ANSI-61 | Drinking Water Systems Components - Health Effects |
| G. AWPA P8 | Standard for Oil-borne Preservatives |
| H. AWPA C4 | Standard for Preservative Treatment of Poles by Pressure Processes |

1.3 SUBMITTALS**1.4 SUBMITTALS**

A. See Section 01330 (Submittal Procedures).

B. Product Data:

1. Air valves
2. Air valve vandalism enclosures
3. Materials list
4. Air capacity rating of the valve and orifice sizes
5. Wood pole vent pipe support
6. General product information that shows that valves and related equipment meet all of the Specification requirements:
 - a. Pressure rating.
 - b. Valve materials.
 - c. Protective coating material for valve interior and exterior:
 - 1) Include surface preparation, material data, and application sheets, DFT.
 - 2) ANSI/NSF 61 compliance for potable water applications.

C. Shop Drawings:

1. Air valves
2. Air valve vandalism enclosures
3. Wood pole vent pipe support
4. Air release and vacuum relief valve and actuator, fully dimensioned drawing with materials listed for each component part (include ASTM Designation or equivalent).
5. Flange thickness and bolt hole configuration.
6. Net weight of each valve.
7. Combination air and vacuum valve

8. Shutoff valve
9. Fittings
- D. Quality Assurance/Control Submittals:
 1. Certificates
 - a. Provide "Affidavit of Compliance" with Owner in accordance with AWWA C512, Section 6.3.
 2. Perform following tests, along with certificate of test results:
 - a. Shell Test:
 - 1) Hydrostatic Shell Test per AWWA C512 Section 5.1.1.
 - b. Air-release valve seat leakage test:
 - 1) Hydrostatic Test per AWWA C512 Section 5.1.2.1.
 - 2) Operational Test per AWWA C512 Section 5.1.2.2.
 - c. Air/vacuum valve and combination air valve seat leakage test:
 - 1) Leakage Test per AWWA C512 Section 5.1.3.
 - 2) Hydrostatic Test per ANSI/AWWA C512, Section 5.1.3.1.
 - 3) Low Pressure Test ANSI/AWWA C512, Section 5.1.3.2.
- E. Installation, Operation, and Maintenance Manuals:
 1. See Section 01330 for information required for Installation, Operation, and Maintenance Manuals.
 2. Manufacturer's Installation, Operation, and Maintenance instructions for valves.
 3. Copies of all items submitted and reviewed in Section 1.3.

PART 2 PRODUCTS

2.1 MANUFACTURERS AND MODELS

- A. Air Valves:
 1. Vent-O-Mat, Series RBX
 2. No Substitutions

2.2 MANUFACTURED UNITS

- A. Air Valves:
 1. General:
 - a. Ratings:
 - 1) Working water pressure: From 7 psi through 250 psi.
 - 2) Field test pressure: 150 psi for all air valves.
 - b. 2-inch, nominal size.
 - c. Intake orifice size equal to nominal size of valve
 - d. End connections:
 - 1) 2-inch valve: 2-inch NPT inlet and outlet
 - e. Test cock:
 - 1) 1/4-inch female NPT on lower flange assembly
 - f. Function:
 - 1) Single chamber design
 - 2) Combination air release and air vacuum valve with surge and waterhammer protection. Function as an air release valve to discharge small quantities of air during normal operations and large quantities of air when filling pipeline, and to admit air into pipeline when pressure in pipeline drops below atmospheric pressure.

- g. Leak tight up to 500 psi
- h. Materials:
 - 1) Floats: High density polyethylene

2.3 ACCESSORIES

- A. Isolation valve, vent piping, and valve box as indicated.

PART 3 EXECUTION

3.1 INSTALLATION

- A. Install per manufacturer's installation instructions.
- B. Install in accordance with details as indicated.
- C. Completely wrap buried metal with polyethylene.

END OF SECTION

SECTION 15125

VALVES AND MISCELLANEOUS PIPING SPECIALTIES

PART 1 GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Ball valves
 - 2. Flanged fittings
 - 3. Valve boxes
 - 4. Pressure gauges
 - 5. Banded saddles
 - 6. Water meters
- B. Related Sections:
 - 1. Section 15115 (Air Valves)
 - 2. Section 15112 (Plug Valves)
 - 3. Section 15113 (Butterfly Valves)

1.2 REFERENCES

- A. ANSI B16.5 Pipe Flanges and Flanged Fittings, Steel Nickel Alloy and Other Special Alloys
- B. ANSI/AWWA C207 Steel Pipe Flanges for Waterworks Services, Size 4 in. through 144 in.
- C. ASTM B62 Standard Specification for Composition Bronze or Ounce Metal Castings
- D. ASTM B584 Specification for Copper Alloy Sand Castings for General Applications

1.3 SUBMITTALS

- A. Product Data:
 - 1. Ball valves
 - 2. Corporation Valves
 - 3. Flanged fittings
 - 4. Valve boxes
 - 5. Water meters
- B. Shop Drawings:
 - 1. Valves and piping specialties
- C. Installation, Operation, and Maintenance Manuals:
 - 1. See Section 01330 for information required for Installation, Operation, and Maintenance Manuals.
 - 2. Manufacturer's Installation, Operation, and Maintenance instructions for valves and operators.
- D. Quality Assurance/Control Submittals:
 - 1. Test reports:
 - a. Pressure tests for fittings and piping specialties.
 - 2. Manufacturer's instructions:
 - a. Installation instructions for each product furnished

1.4 QUALITY ASSURANCE

- A. Testing: Unless otherwise specified, test each product under a test pressure of 150 psi.
- B. Interior Bronze Parts: Unless otherwise specified, conform to requirements of ASTM B584.
- C. Furnish to pipe supplier, after products are approved, face-to-face dimensions of flanged items to be installed in pipelines so that pipe may be fabricated to proper length.

1.5 DELIVERY, STORAGE, AND HANDLING

- A. Per manufacturers' recommendations.

PART 2 PRODUCTS**2.1 BALL VALVES**

- A. General:
 - 1. Bronze per ASTM B62
 - 2. Type 316 stainless steel ball and stem
 - 3. Ends: NPT
- B. Manufacturers and Models:
 - 1. Watts: B6000
 - 2. Or Approved Equal

2.2 CORPORATION VALVES:

- A. Threaded ends, NPT.
- B. Heavy cast bronze/brass body per ASTM B62.
- C. Drip-tight closure under rated pressure.
- D. 90° open to close.
- E. Manufacturers and Models:
 - 1. Mueller 300, Ball Corporation Valve.
 - 2. Ford Ballcorp.
 - 3. Or Approved Equal.

2.3 FLANGED FITTINGS

- A. Flanges:
 - 1. Conform to either ANSI/AWWA C207 Class D or ANSI B16.5 150-lb class.
 - 2. Flat faces.
 - 3. Attached with bolt holes straddling vertical axis of pipe unless otherwise indicated.
 - 4. Miscellaneous small pipes: In accordance with standards specified for these pipes.
- B. Blind Flanges:
 - 1. In accordance with ANSI/AWWA C207, or with standards for miscellaneous small pipes.
- C. Flange Coating:
 - 1. Coat machined faces of metal blind flanges and pipe flanges with a temporary rust-inhibitive coating to protect metal until installation is completed.
- D. Flange Bolts:
 - 1. Studs and bolts: Extend through nuts a minimum of 1/4 inch.
 - 2. Type 316 stainless steel.
- E. Flange Gaskets:
 - 1. For flanged joints: AWWA C207 rubber with a normal thickness of 1/8 inch.
 - 2. Extend beyond bolt circle to outside diameter of flange, with full face contact.

- 3. Blind flanges:
 - a. Gaskets covering entire inside face of blind flange
 - b. Cemented to blind flange.
 - c. Ring gaskets: Prohibited.
- 4. Manufacturers:
 - a. John Crane, Style 2160
 - b. Garlock, Style 3000
 - c. Klinger, Style C4401AS
 - d. Or Approved Equal
- F. Flange Insulating Joints:
 - 1. Where a pipe passes from exposed to buried or where existing flange insulating joints are removed, use flange insulated joints to insulate exposed pipe from buried pipe on both sides of a structure.
 - 2. Provide insulating joints between dissimilar pipes.
 - 3. Insulation: Include non-conductive full-faced gaskets and sleeves and washers for bolts.
 - 4. Provide insulating joints for flange and plain end connections.

2.4 VALVE BOXES

- A. Valve Boxes: Pre-cast Portland cement concrete
- B. Valve Box:
 - 1. Provide in non-traffic areas as shown.
 - 2. Rectangular shape with snap lock lid.
 - 3. Minimum inside dimension: as indicated.
 - 4. Injection molded polyolefin compound with fibrous inorganic component reinforcing with following minimum strength characteristics:

<i>Physical Characteristics</i>	<i>ASTM Test Criteria</i>
5. Tensile: 3,400 psi	D638
6. Compressive: 3,350 psi	D695
7. Impact Strength, Izod: 0.6 ft-lb per inch	D256
8. Durometer Hardness, Type D: 60	D2240
9. Deflection temp at 66psi: 230 °F	D648

- 10. UV degradation stabilized.
- C. Box Lids: H-20 rated
- D. Cast iron or stainless steel frame and cover stamped "SVCS D Reclaimed Water"
- E. Paint covers in accordance with Section 09900 (Paints and Coatings)
- F. Manufacturers:
 - 1. Brooks
 - 2. Christy
 - 3. Jensen
 - 4. Or Approved Equal

2.5 PRESSURE GAUGES

- A. Range: 0 – 200 psi
- B. Over pressure protection: 1.25 x full scale range
- C. Accuracy: ± 2 percent
- D. Fitting 1/4 inch brass NPT
- E. Provide as indicated

2.6 BANDED SADDLES

- A. Rated for ISO psi cold water service.
- B. Double stainless steel strap design.
- C. Tapped for NPT.
- D. Manufacturers:
 - 1. Mueller
 - 2. Smith-Blair
 - 3. Or Approved Equal

2.7 WATER METER

- A. Accuracy tolerance: +/-2%
- B. Class D flanged ends
- C. Location: Based on manufacturer's recommendations
- D. Manufacturers:
 - 1. McCrometer, McPropeller MW500 or MZ500. No substitutions.

PART 3 EXECUTION**3.1 GENERAL**

- A. Storage and Handling:
 - 1. All valves, actuators, and appurtenances shall be stored, handled and installed per manufacturer's recommendations.
 - 2. In no event should valves be stored on dirt or natural grade.
 - 3. All valves for potable water service and/or with ANSI/NSF 61 lining material shall be stored with the ends sealed until installation.
- B. Remove from jobsite and dispose of any item which does not meet the Specifications or has been rejected, at no extra cost to Owner.

3.2 INSTALLATION

- A. Install products in accordance with manufacturer's instructions.
- B. Painting Requirements:
 - 1. Comply with Section 09905 (Painting and Protective Coatings).
- C. Setting Buried Valves:
 - 1. Locate valves installed in pipe trenches where buried pipe is indicated.
 - 2. Set valves and valve boxes plumb.
 - 3. Place valve boxes directly over valves or valve operator nut with top of box being brought to surface of finished grade.
 - 4. Install in closed position.
 - 5. Place valve on firm footing in trench to prevent settling and excessive strain on connection to pipe.
 - 6. After installation, backfill up to top of box for a minimum distance of 4 ft on each side of box.
- D. Support exposed valves and piping adjacent to valves independently to eliminate pipe loads being transferred to valve and valve loads being transferred to the piping.
- E. If specified, install electric or cylinder actuators above or horizontally adjacent to valve and gear box to optimize access to controls and external handwheel.
- F. For threaded valves, provide union on one side within 2 ft of valve to allow valve removal.
- G. Install valves accessible for operation, inspection, and maintenance.

- H. Valves, specialties, water meters and appurtenances: Install per manufacturer's recommendations.
- I. Where new fittings are to be cut into or attached to existing piping or where connections are to be made to existing piping, provide necessary sleeves, flanges, nipples, couplings, and fittings, needed to accomplish cutting-in or connections, whether specifically indicated or not.
- J. Place concrete so that pipe joints and fittings will be accessible.
- K. Attachment of flanges to pipe: Conform to applicable requirement of ANSI/AWWA C207.

3.3 ADJUSTING

- A. Adjust valves, actuators and appurtenant equipment. Operate valve, open and close at system pressures.

3.4 UTILITY BOXES AND VALVE BOXES

- A. Install as indicated.

END OF SECTION