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## Meter Installation and Service Lateral Phase 3 Project RFP Addendum #3

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**Project Description:**

RFP to provide the installation of approximately 4,750 service laterals including excavation, valve installation and abandonment, new piping, angle stops, meter boxes, backfill and surface restoration. In addition, this project includes the installation of approximately 3,150 meters and meter interface units, and 2,000 new or reconfigured backflow prevention assemblies and all related appurtenances to support the continued return of metered potable water service to the Paradise Irrigation District (PID, or DISTRICT). The project includes public notification of all scheduled work as it is conducted.

**For:**

Paradise Irrigation District  
6332 Clark Rd  
Paradise CA 95969

**Proposals Due:**

1:00 pm, Friday April 28, 2023

**Addendum #3 contains the following:**

1. Project Questions and Answers
2. Revision to Specifications
  - 00300 Bid Schedule, 01110 Scope of Work, 01130 Special Project Constraints, 01200 Measurement and Payment, 15100 PSDS HDPE, 15200 Valves and Operators, 02300 Earthwork, 03400 Precast Concrete
3. Construction Meter Agreement
4. Updated Wage Determination

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APPROVED: \_\_\_\_\_



**COLLEEN BOAK, PE**  
Project Engineer  
[colleenb@wwEngineers.com](mailto:colleenb@wwEngineers.com)

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**DATE ISSUED:** April 19, 2023

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## Additional Project Questions and Answers

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**1. Has Zenner acquired material for this project?**

*Zenner has indicated to the District that they have some stock on hand, have placed orders for more material for this project, and will be receiving more very soon. Lead times will be critical for all project equipment and materials.*

**2. Are there MBE/WBE targets?**

*There are MBE/WBE outreach requirements included in the documents. Please pay specific attention to the Division 00 specifications for relevant requirements.*

**3. Is the TOP encroachment permit site-specific?**

*No – The Town of Paradise will issue a general permit for the entire town based on traffic control inspection needs.*

**4. When is the last day for questions? Can this be moved closer to bid time (1 week before bid)?**

*The last day for question submission was April 6, 2023. The District considered changing this date but elected to leave it as originally advertised.*

**5. Are the majority of reconnect locations at the backflow?**

*Yes, the majority of reconnect locations where the Contractor will connect to customer plumbing are downstream of the backflow prevention assembly. Some locations (estimated 150) will require a tie in to the upstream side of a customer-owned backflow prevention assembly.*

**6. Are there any time constraints for hot taps?**

*Yes. After 2pm the Contractor may proceed with a hot tap if permission from the Engineer is obtained. None after 3pm unless there is an emergency or other special condition.*

**7. Are there backfill testing requirements?**

*See revision to Specification Section 02300 attached to this Addendum. 10% of service lateral trenches will be tested by a third party tester, which is the responsibility of the Contractor. Testing will occur at least one day per week. Sites to be tested shall be determined by the Engineer.*

**8. How are we abandoning existing service laterals?**

*The goal of an abandonment is to close the corporation stop or install a new functional valve if the corp stop is not operable and to disconnect the service lateral piping from the main. The existing lateral piping should be demolished if its possible within the excavation for the new lateral. If the old lateral piping would require extra excavation to remove, it may be left in place after being severed. Existing angle stop should be cut off and the old lateral must be fully buried and inaccessible. The old meter box if present must be removed.*

**9. Working hours?**

*Working hours are 7am – 4pm. There is allowance for some work not requiring inspection (clean-up, prep, etc.) may be conducted outside of those hours. Emergency work can go past 4 as necessary if there is a leak, install issue, or need to stay beyond 4pm to restore water service to a customer.*

**10. Does PID pay for materials (water services & appurtenances) stored onsite?**

*PID will not pay for materials stored on site for this contract. Payment will be made once install is complete.*

**11. The Engineer's estimate for Phase 1 was approximately \$18M. However, the Engineer's estimate for Phase 2 is approximately \$54M. How did the Owner arrive at the Engineer's estimate of \$54M for Phase 2? Has the scope of work increased 300% to account for difference in the Engineer's estimate between Phase 1 and Phase 2?**

*Please refer to the Project Documents for this project as well as the previous Project Documents available on the District's website for comparative quantities between Phase 2 and Phase 3. Documents are located here: [www.pidwater.com/rfp](http://www.pidwater.com/rfp).*

**12. Another pre-bid conference is requested. If this is possible can the bid date be extended for advertising for GFE requirements?**

*At this time, the District does not intend to hold a second pre-bid conference or extend the bid due date.*

**13. Is it the Contractor's responsibility for relocating or repairing any property owner irrigation systems that need to be adjusted due to meter and backflow installation?**

*As described in the scope of work, the Contractor may need to cut customer plumbing back to provide space for the full length of the meter and backflow installation and complete the reconnection to that customer plumbing.*

**14. Is there a cutoff time for hot taps or other critical items of work?**

*Please see the answer to question 6.*

**15. Will the Contractor be charged by PID for construction water?**

*Yes, PID issues construction water meters for use on hydrants to Contractors. Information on the issuance and cost of hydrant meters can be found here: <https://www.pidwater.com/service>*

*There is additional \$31.97 fee for the Town of Paradise Hydrant Use Permit not included in the pricing shown on the website.*

*The Construction Meter Agreement form is attached for reference.*

**16. If the Contractor provides notification to a property owner for one of the three-time frames listed in section 01130-1.3-A, are they held to working in that time frame only? For example, if notification was given to be at a location from 1PM – 4PM but the crew finishes up earlier than expected at the previous site are they allowed to start sooner than 1PM?**

*The Contractor shall not start work earlier than the scheduled and noticed time period, unless they are able to make contact with the homeowner on site and obtain specific permission to do so. Permission from the homeowner must be documented and Engineer must be informed of the change.*

- 17. Appendix A quote from Zenner does not include pricing for the Zenner infrastructure and Section 11930-1.1-D states the Contractor is responsible for subcontracting the installation of the centralized transmission infrastructure (collectors, repeaters, Acer's, antennas, etc.). Please confirm that this infrastructure was previously installed under the phase 2 contract.**

*Confirmed, central infrastructure referenced in the question was installed as part of Phase 2 and is not a component of this project. This reference was included as an error.*

- 18. If there is a problem with the existing IWS backflows that are to be used for the reconfigure items B4A – B4C, who is responsible for repairing the backflow and how does this get measured and paid for?**

*The District will issue a 3<sup>rd</sup> Addendum to address this question.*

- 19. Will di-electric unions be required when tying brass backflows into customer sites that are iron pipe?**

*Yes, dielectric unions will be required in this circumstance.*

- 20. Will all meter and backflows be installed at service lateral locations that are installed under this contract? If installed at previously installed service lateral locations from Phase 1 or 2, can you provide an estimated quantity?**

*Yes, all meters covered in this project will be at locations where a service lateral is also being installed under this contract. Backflows may be installed at locations where a service and meter have previously been installed. This number is estimated at 500 as included in the Scope of Work.*

- 21. With a bid date of April 28th and wanting to start installing service laterals by July 2023 that doesn't leave much time for material lead times. Will the NTP be adjusted if material lead times take longer?**

*The District may adjust NTP according to material lead times.*

- 22. Can you provide an estimated quantity of locations that would fall within the Caltrans right of way for encroachment permits?**

*There are an estimated 30 remaining service laterals to be completed within the Caltrans right of way.*

- 23. Will the District consider waiving the mandatory Pre-Bid meeting for MISLR 3.**

*At this time, the District has elected not to waive this requirement.*

- 24. Will the Contractor be required to obtain Pollution Liability Insurance per SC-6.03-M?**

*This requirement does currently apply per the Project Documents.*

- 25. Will the Contractor be required to obtain Builder's Risk Insurance per SC-6.04?**

*This requirement does currently apply per the Project Documents.*

- 26. Please extend the bid due date to allow the Contractor the required DBE 30 day advertisement period.**

*At this time, the District has elected not to extend the bid due date.*

- 27. Please extend the RFI due date.**

*At this time, the District has elected not to extend the due date for questions.*

- 28. Please add a potholing bid item to locate existing utility crossings for the service lateral installation.**

*The District does not intend to add a separate bid item for potholing of utilities.*

- 29. Can the owner please provide the addresses/locations prior to bid so a strategic plan can be established by the Contractors bidding the project? (including the urgent and non-urgent addresses).**

*The District will provide the list of work site addresses to the successful bidder once NTP has been issued.*

- 30. 01130 1.2 A 3 states that one project area must be completed before beginning the next area. Will the Owner allow the Contractor some leeway in beginning the next project area before the area the Contractor is working in is completed? Can the Contractor work in multiple areas at once? This will help expedite the project and allow for a more streamlined project.**

*The District will allow concurrent work at multiple addresses within the same general area or street provided all open work and service interruptions can be completed by the end of the workday. The District does not currently plan to allow Contractor crews to work in separate work zones except for Priority addresses.*

- 31. Has the Owner applied for the Caltrans Encroachment Permit required for this project?**

*No, the District has not obtained an encroachment permit from Caltrans for this project phase.*

- 32. What is the cost of the encroachment permit to the Contractor from the Town of Paradise?**

*This question was answered in Addendum 1 issued on 4/7/23 and located at [www.pidwater.com/rfp](http://www.pidwater.com/rfp)*

- 33. Please provide the SWPPP level determination for this project.**

*This must be determined by the Contractor in their efforts to develop a SWPPP.*

- 34. Please confirm that geotechnical and compaction testing will be provided by the Owner.**

*Please see the answer to question 7.*

- 35. 02200 3.7 states that where existing service laterals cannot be reused, they are to be abandoned. Under what bid item is this paid?**

*Bid item B.1c in the Bid Form is "Abandon Existing Corporation Stop"*

- 36. Please provide a dewatering allowance for spec section 02300 3.3.**

*A dewatering allowance will not be provided separate from the SWPPP development and execution.*

- 37. Currently brass service material lead time is running between 30-36 weeks. Will reasonable adjustments to project duration and/or NTP be given to accommodate these long lead time items?**

*Please see the answer to question 21.*

- 38. Per section B.1b of the schedule of values, nominal main size was supplied for all hot tap locations. Is pipe type (I.E. C900, DICL, CI, AC or OD Steel) known at each of these locations? If so, can it please be provided.**

*The District's GIS mapping will be provided to the successful Contractor upon contract execution. Contractor will be required to confirm pipe size and material at each location. The GIS should not be relied upon for material or main size.*

- 39. Please provided clarification of term "bulleted angle stops" and/or manufacturer / parts number.**

*A bullet refers to a lock placed on the angle stop to prevent water usage. Component part number can be found in Specification Section 15200.*

- 40. Is an estimated count of wye services available? If so, can it please be broken down by size of service lateral?**

*The current project phase has installed approximately 30% double or "banked" services which use a common corporation stop and lateral piping before splitting at a wye according to the District's standard details. Service lateral pipe sizes for new double services are shown in the Standard Details.*

- 41. Will an individual Public Works permit be required for each address? If not, how many lateral will be aloud on a single Permit?**

*Please see the answer to question 3.*

- 42. Are all work locations withing the City of Paradise working limits? If not, how many locations will require a Butte County Permit?**

*There are no locations anticipated to need a Butte County permit. All locations are within the Paradise Irrigation District service area. A District Boundaries Map is available at the following location:*

<https://www.pidwater.com/open>

- 43. Will compaction testing of subgrade be required? If so, will this be the Contractor's responsibility to perform or coordinate?**

*See answer to question 7.*

- 44. Will City of Paradise Building department require additional permitting and inspection for plumbing work performed post meter?**

*No additional permitting is required for establishing a reconnection to customer plumbing.*

- 45. What are the disinfection requirements associated with these installations?**

*See technical specifications in the Project Documents for disinfection requirements.*

- 46. Per Paradise Irrigations District – Pipeline Installation Procedures and Specification – Division VIII HDPE Service Line 8.03 ( e ), will water quality testing be required at each service lateral installation? If so, please clarify the testing requirements.**

*No, water quality testing will not be required. Disinfection procedures and requirements are described in the technical specifications of the Project Documents.*

- 47. Is hydrostatic pressure testing required for water service installations 2” or less?**

*Newly installed pipe must be pressurized and free of visible or perceptible leaks prior to backfill. Contractor shall be responsible for any leaks resulting from installations performed by the Contractor.*

- 48. For the backflow only installation and backflow reconfigurations, what are the flushing and testing requirements?**

*Flushing and testing requirements are the same for all backflow installation types. All backflow assemblies must be flushed according to the project technical specifications and tested by certified personnel when any work is conducted which results in an interruption of pressure to a backflow prevention assembly.*

- 49. Are there any known hazardous or contaminated soil conditions that may require special handling by the Contractor?**

*There are no such hazards known by the District at this time.*

- 50. Striping restoration does not seem to be covered in any item in the schedule of values. Please advise if striping restoration cost should be carried by the Contractor and if so to what item.**

*Striping restoration is included in the Town of Paradise Standard Details for asphalt restoration. Contractor shall be responsible for the restoration of striping with like materials. The exception to this is where thermoplastic striping was present before the Camp Fire, striping can be replaced with paint. New thermoplastic striping must be replaced in kind. Anywhere a legend is disturbed by the work in this contract the full legend must be replaced.*

- 51. Supplemental condition 6.04. Since nothing is being ‘built’, can the Builders Risk requirement be waived? The general liability policy will cover all of the work.**

*At this time, the requirement for Builder’s Risk coverage will remain in effect.*

- 52. Please clarify what is the expectation of performance for the Contractor as it pertains to as-builts for these installations.**

*Please reference Specification Sections 01130 Special Project Constraints and 01330 Submittal Procedures for reporting requirements in lieu of traditional as-builts. Contractor shall be required to collect detailed installation record information containing all required metrics as outlined in the Project Documents, the format of which shall be approved by the Engineer, in Mobile MMS. All such data shall be complete, correct, and associated by address. All other reporting and data requirements outlined in the Project Documents shall be met (schedule, public notification log, etc).*



**53. Will GIS mapping be required for any of these installations?**

*Inspectors will collect GPS data during installations. No GIS mapping will be required of the Contractor.*

**54. Is the owner willing to provide the Work Site Locations prior to bidding to assist the bid process? Are the Work Site Locations broken down in Division Boundaries? This may help better understand how many working yards are needed and where the best locations may be.**

*Work site locations will be released to the successful bidder following award.*

**55. Can you provide the streets that are listed as Arterial Roadways within the Town of Paradise and impacted by this contract?**

*Arterial roadways identified by the Town of Paradise include the following:*

*Skyway, Clark, Pentz, Wagstaff, Bille, Elliott, Pearson*

*It should be noted that active work on roadways in the Town of Paradise is underway and this list is not exclusive as conditions change.*

**56. Can you provide the anticipated costs associated with the required Encroachment Permit with the Town of Paradise? If cost is unknown, is it possible for the owner to provide an Allowance for the Town of Paradise Encroachment Permit?**

*The answer to this question is contained in Addendum 1.*

**57. Can you provide the anticipated costs associated with the required Encroachment Permit Caltrans for work on Clark Road below Pearson Road and within the Caltrans right of way? If cost is unknown, is it possible for the owner to provide an Allowance for the Caltrans Encroachment Permit?**

*Please see revised specifications.*

**58. Will the District accept a sublimit of insurance (such as \$5,000,000) for the perils of earthquake and flood for this project?**

*At this time, the District does not intend to revise its insurance requirements.*

**59. Can you clarify that the “One Crew” working non-contiguous locations is expected to meet a minimum production rate of (20) project sites per week, per crew; and the “Two Crews” working on the pre-organized assigned project sites are expected to meet a production rate of 15 project sites per week, per crew? It would appear that the non-contiguous crew working on priority addresses would complete less sites due to location and synergy alone.**

*See revised specifications.*

**60. Can the date to submit pre bid RFI's be extended by one week to allow for additional investigation of the project site and project specifications?**

*At this time the District does not intend to extend the due date for pre-bid RFIs.*

**61. Is excavation in solid rock expected and how will the Contractor be compensated for rock excavation?**



*It is not expected at this time that the Contractor will encounter excavation in solid rock.*

- 62. Will the District consider adding a supplemental bid item for rock excavation? Bid items B.1e (Open Trench Installation) & C.1 (Additional Pipe Installation) contain the risk of excavation in solid rock. With the site being all of Paradise and no soil report provided, how can the costs of excavation in rock be accurately priced?**

*It is not expected at this time that the Contractor will encounter excavation in solid rock.*

- 63. Can the District provide a map of the existing water mains with size and type of pipe?**

*The District website contains public maps of the water system. The District does not currently intend to release further system mapping prior to award. Access to shapefiles will be shared during construction.*

- 64. Meter Interface Units have a much longer lead time than water meters. Contractors are required to complete a specific number of sites per month. Will a site be considered complete without the Meter Interface Unit?**

*No, a site will not be considered complete until an MIU has been installed and the meter is functioning per manufacturer specifications. The District understands lead times for materials may differ and will be critical to this project.*

- 65. Section 02300 Part 3.10 H 1 shows the required frequency of test for trenches. Service laterals will be installed each workday. Will the District require a quality control technician to perform compaction testing every day we are working?**

*See answer to question 7.*

- 66. Is this project subject to Buy America or Buy American requirements?**

*Please refer to the Division 00 Specifications for this and similar project requirements.*

- 67. Regarding the Caltrans Encroachment Permit for Clark Road, has the District started the application process? Does the District know what will be required as part of the permit (example: QC, QA, backfill, trench pavement, striping, abandonment, striping)?**

*The District has not yet started the process of obtaining encroachment permits for these locations.*

- 68. Section 02300 Part 3.3 C discusses ground water. Is ground water expected? Has ground water been encountered on any of the previous phases?**

*Groundwater has been encountered infrequently in other project phases. At this time, the District does not expect groundwater to be encountered regularly.*

- 69. Bid Item B.5 (Connect to Customer Plumbing) – are there any existing lead lines and/or service lines that we are to connect/tie-in to?**

*The District is not currently aware of any lead pipe or service lines within its system.*

- 70. Bid Item B.5 (Connect to Customer Plumbing) – are we required to install additional and/or new lead lines and/or service lines to the tie in location (front of the house or back of the house)? If so, what size and type of material?**

*The District is not currently aware of any lead pipe or service lines within its system.*

- 71. If additional lead lines and/or service lines are required, what is the preferred method of installation (open trench or horizontal/directional drilling)?**

*No lead lines will be installed by the District or its Contractors.*

- 72. Bid Schedule 2 – C.1 (Additional Pipe Installation) – Need clarification on what this optional work bid item entails (i.e. size, material type, etc.).**

*Please see Section 01110 1.1C of the Project Documents for a description of the work entailed in this optional bid item.*

- 73. Bid Schedule 2 – C.2 (Encased Pipe Installation) – Need clarification on what this optional work bid item entails (i.e. size, material type, casing type, etc.).**

*Please see Section 01110 1.1C of the Project Documents for a description of the work entailed in this optional bid item.*

- 74. Are there any additional charges beyond the Zenner quote that we need to be aware of? Such as shipping costs or misc. support?**

*Market rate shipping costs will apply above the costs included in the quotation. The District is not currently aware of any other related costs at this time.*

- 75. Is the centralized infrastructure (repeaters, collectors, ACERs, antennas, etc.) installed by Zenner in Phase 2 sufficient to support additional meters installed as part of phase 3?**

*Yes, the existing centralized infrastructure for the AMI system installed as part of Phase 2 is sufficient to support additional meters installed as part of Phase 3.*

- 76. What are the lead times for meters, MIU's, lid locks and programmers? If we placed an order June 5th, what could we have by July 24th?**

*Current lead times for all Zenner equipment in the quote included in the RFP are estimated at 6-8 weeks per Zenner personnel.*

## Revisions to Specifications

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*See attached*

NOTE TO BIDDER: Use BLACK ink for completing this Bid Form.

**SECTION 00300**

**BID FORM**

To: Paradise Irrigation District

Address: 6332 Clark Road,  
Paradise, CA 95969

Project Identification: Meter Installation and Service Lateral Replacement Phase 3 Project

**1. BIDDER'S DECLARATION AND UNDERSTANDING.**

1.1 This Bid is genuine and not made in the interest of or on behalf of any undisclosed person, firm, or corporation and is not submitted in conformity with any agreement or rules of any group, association, organization, or corporation; Bidder has not directly or indirectly induced or solicited any other Bidder to submit a false or sham Bid; Bidder has not solicited or induced any person, firm, or corporation to refrain from bidding; and Bidder has not sought by collusion to obtain for itself any advantage over any other Bidder or over OWNER.

1.2 In submitting this Bid, Bidder acknowledges and accepts CONTRACTOR's representations as more fully set forth in the Agreement Form.

1.3 In submitting this Bid, Bidder certifies Bidder is qualified to do business in the state where the Project is located as required by laws, rules, and regulations or, if allowed by statute, covenants to obtain such qualification prior to contract award.

**2. CONTRACT EXECUTION AND BONDS.**

2.1 The undersigned Bidder agrees, if this Bid is accepted, to enter into an Agreement with OWNER on the form included in the Bidding Documents to perform and furnish Work as specified or indicated in the Bidding Documents for the Contract Price derived from the Bid and within the Contract Times indicated in the Agreement and in accordance with the other terms and conditions of the Bidding Documents.

2.2 Bidder accepts the terms and conditions of the Bidding Documents.

**3. INSURANCE.**

00300-1

3.1 Bidder further agrees that the Bid amount(s) stated herein includes specific consideration for the specified insurance coverages.

4. CONTRACT TIMES.

4.1 Bidder agrees to accept Contract Times set forth in the Agreement Form.

5. LIQUIDATED DAMAGES.

5.1 Bidder accepts the provisions in the Agreement Form as to liquidated damages.

6. ADDENDA.

Bidder hereby acknowledges that it has received Addenda Nos. \_\_\_\_\_,

\_\_\_\_\_ (Bidder shall insert number of each Addendum received) and agrees that Addenda issued are hereby made part of the Bidding Documents, and Bidder further agrees that this Bid includes impacts resulting from said Addenda.

7. SUBCONTRACTORS.

7.1 Bidder agrees to submit with their Bid a listing of all subcontracting firms or businesses that will be awarded subcontracts for portions of the Work which equal or exceed one-half of one percent of the Total Contract Price.

8. SALES AND USE TAXES.

8.1 The Bidder agrees that all federal, state, and local sales and use taxes are included in the stated Bid prices for the Work.

9. BID

9.1 Bidder agrees to accept as full payment for the proposed Work within the Bidding Documents, based upon the undersigned's own estimate of quantities and costs and including sales, consumer, use, and other taxes, and overhead and profit, the bid quantities and totals stated in the following Bid Schedule 1 – General and Site Specific Work.

9.1.1 Bidder proposes to accept full payment for the Unit Price Work proposed herein the amount computed under the provisions of the Bidding Documents and based on the following unit price amounts, it being expressly understood that the unit prices are independent of the exact quantities involved. Bidder agrees that the unit prices represent a true measure of the labor, materials, and services required to furnish and

00300-2

install the item, including all allowances for overhead and profit for each type and unit of Work called for in these Bidding Documents.

9.1.2 Award will be based solely on Bid Schedule 1 – General and Site Specific Work, exclusive of Bid Schedule 2 – Optional Work.

Bid Schedule 1 – General and Site Specific Work					
Section A - General Work					
Item No.	Description	Qty	Unit	Unit Price	Extended Total Amount
A1	PROJECT MOBILIZATION AND DEMOBILIZATION	1	LS	\$	\$
Item A.1 Subtotal					\$
Item No.	Description	Qty	Unit	Unit Price	Extended Total Amount
A2	PROJECT TRAFFIC CONTROL	1	LS	\$	\$
Item A.2 Subtotal					\$
Item No.	Description	Qty	Unit	Unit Price	Extended Total Amount
A3	SWPPP	1	LS	\$	\$
Item A.3 Subtotal					\$
Item No.	Description	Qty	Unit	Unit Price	Extended Total Amount
A4	PUBLIC NOTIFICATIONS	1	LS	\$	\$
Item A.4 Subtotal					\$
Section B - Individual Site Work					
Item No.	Description	Qty	Unit	Unit Price	Extended Total Amount

00300-3

<b>B.1</b>	<b>REPLACE SERVICE LATERAL</b> - <i>furnish and labor, equipment, and materials necessary to complete installation</i>				
<b>B.1a</b>	<b>Excavate Corporation Stop</b>	5950	EA	\$	\$
<b>B.1b</b>	<b>Hot Tap Saddle Connection or Tee</b>	<i>See below for breakdown of main and service sizes. Shall include all labor, equipment and materials to install hot tap connection.</i>			
(1)	TEE for 1" service connection to water main diameter <4", service sizes ranging from 1"–2"	100	EA	\$	\$
(4)	4" Main x 1" Service - Saddle	275	EA	\$	\$
(5)	4" Main x 1.5" Service - Saddle	5	EA	\$	\$
(6)	4" Main x 2" Service - Saddle	90	EA	\$	\$
(7)	6" Main x 1" Service - Saddle	435	EA	\$	\$
(8)	6" Main x 1.5" Service - Saddle	5	EA	\$	\$
(9)	6" Main x 2" Service - Saddle	370	EA	\$	\$
(10)	8" Main x 1" Service - Saddle	250	EA	\$	\$
(11)	8" Main x 1.5" Service - Saddle	5	EA	\$	\$
(12)	8" Main x 2" Service - Saddle	90	EA	\$	\$
(13)	10" Main x 1" Service - Saddle	90	EA	\$	\$
(14)	10" Main x 1.5" Service - Saddle	5	EA	\$	\$
(15)	10" Main x 2" Service - Saddle	20	EA	\$	\$
(16)	12" Main x 1" Service - Saddle	170	EA	\$	\$

00300-4



(17)	12" Main x 1.5" Service - Saddle	2	EA	\$	\$
(18)	12" Main x 2" Service - Saddle	35	EA	\$	\$
(19)	14" Main x 1" Service - Saddle	5	EA	\$	\$
(20)	14" Main x 1.5" Service - Saddle	2	EA	\$	\$
(21)	14" Main x 2" Service - Saddle	2	EA	\$	\$
(22)	16" Main x 1" Service - Saddle	15	EA	\$	\$
(23)	16" Main x 1.5" Service - Saddle	2	EA	\$	\$
(24)	16" Main x 2" Service - Saddle	5	EA	\$	\$
(25)	18" Main x 1" Service - Saddle	4	EA	\$	\$
(26)	18" Main x 1.5" Service - Saddle	2	EA	\$	\$
(27)	18" Main x 2" Service - Saddle	5	EA	\$	\$
(28)	20" Main x 1" Service - Saddle	4	EA	\$	\$
(29)	20" Main x 1.5" Service - Saddle	2	EA	\$	\$
(30)	20" Main x 2" Service - Saddle	5	EA	\$	\$
<b>B.1c</b>	<b>Abandon Existing Corporation Stop</b>	1,900	EA	\$	\$
<b>B.1d</b>	<b>Trenchless Installation of New HDPE Service Lateral (1", 1.5", or 2")</b>	42,000	LF	\$	\$
<b>B.1e</b>	<b>Open Trench Installation of New HDPE Service Lateral (1", 1.5", or 2")</b>	78,000	LF	\$	\$

00300-5

B.1f	Asphalt Restoration - 3" lift	475,000	SF	\$	\$
B.1g	Asphalt Base Restoration - 2" lift	15,000	SF	\$	\$
B.1h	Concrete Restoration	5,000	SF	\$	\$
Item B.1 Subtotal					\$
Item No.	Description	Qty	Unit	Unit Price	Extended Total Amount
B.2	INSTALL METER BOX - Furnish all labor, equipment, and materials necessary to install meter boxes				
B.2a	Box and Lid for ¾" and 1" Meters	4,375	EA	\$	\$
B.2b	Traffic Rated Box and Lid for ¾" and 1" Meters	150	EA	\$	
B.2c	Box and Lid for 1.5" and 2" Meters	210	EA	\$	\$
B.2d	Traffic Rated Box and Lid for 1.5" and 2" Meters	15	EA	\$	
Item B.2 Subtotal					\$
Item No.	Description	Qty	Unit	Unit Price	Extended Total Amount
B.3	INSTALL METER AND METER INTERFACE UNIT (MIU) Furnish all labor, equipment, and materials necessary to install meters and MIUs				
B.3a	¾" Meter and MIU	2,650	EA	\$	\$
B.3b	1" Meter and MIU	350	EA	\$	\$
B.3c	1½" Meter and MIU	100	EA	\$	\$
B.3d	2" Meter and MIU	50	EA	\$	\$
				Item B.3 Subtotal	\$

00300-6

Item No.	Description	Qty	Unit	Unit Price	Extended Total Amount
B.4	<b>INSTALL BACKFLOW PREVENTER ASSEMBLY</b> - <i>Furnish all labor, equipment, and materials necessary to install backflow preventer assemblies</i>				
B.4a	Reconfigured 1" RP Backflow Preventer	580	EA	\$	\$
B.4b	Reconfigured 1.5" RP Backflow Preventer	10	EA	\$	\$
B.4c	Reconfigured 2" RP Backflow Preventer	10	EA	\$	\$
B.4d	New 1" RP Backflow Preventer	1350	EA	\$	\$
B.4e	New 1½" RP Backflow Preventer	25	EA	\$	\$
B.4f	New 2" RP Backflow Preventer	25	EA	\$	\$
				<b>Item B.4 Subtotal</b>	\$
Item No.	Description	Qty	Unit	Unit Price	Extended Total Amount
B.5	REPAIR BACKFLOW DEVICE	300	EA		
				<b>Item B.5 Subtotal</b>	\$
Item No.	Description	Qty	Unit	Unit Price	Extended Total Amount
B.6	CONNECT TO CUSTOMER PLUMBING	2,650	EA		\$
				<b>Item B.6 Subtotal</b>	\$
Item No.	Description	Qty	Unit	Unit Price	Extended Total Amount
B.7	<b>FURNISH AND INSTALL BOLLARD</b>				

00300-7

<b>B.7a</b>	<b>Permanent Bollard (Detail 2600A)</b>	80	EA	\$	\$
<b>B.7b</b>	<b>Removable Bollard (Detail 2600A)</b>	20	EA	\$	\$
<b>Item B.7 Subtotal</b>					\$
<b>Bid Schedule 1 Total (Basis for Award)</b>					
<b>Total Cost (Combine Items A.1-B.7)</b>				\$	

All other associated items of work and incidentals that are required to complete this project and provide a fully functioning facility in accordance with the contract documents are considered to be included in the Bid Schedule items and no additional compensation will be made by the District.

## 9.2 Caltrans Encroachment Permit Allowance - Bid Schedule 2

9.2.1 Bidder shall include an allowance in the below amount within their total bid price to accommodate unknown costs related to obtaining Caltrans Encroachment Permits for project sites on Clark Road in Paradise, below Pearson. Billing against this allowance will be based upon actual costs and any unused amount shall not be billed to the District. proposes to accept full payment for the Unit Price Work proposed herein the amount computed under the provisions of the Bidding Documents and based on the following unit price amounts, it being expressly understood that the unit prices are independent of the exact quantities involved. Bidder agrees that the unit prices represent a true measure of the labor, materials, and services required to furnish and install the item, including all allowances for overhead and profit for each type and unit of Work called for in these Bidding Documents.

9.2.2 Award will be based solely on Bid Schedule 1 – General and Site Specific Work, exclusive of Bid Schedule 2 – Caltrans Encroachment Permit Allowance and Bid Schedule 3 – Optional Work.

<b>Bid Schedule 2 – Caltrans Encroachment Permit Allowance</b>			
<b>Item No.</b>	<b>Description</b>	<b>Allowance to include in Bid</b>	<b>Extended Total Amount</b>
<b>C.1</b>	<b>Caltrans Encroachment Permit Allowance</b>	\$100,000.00	\$

00300-8

### 9.3 Optional Work- Bid Schedule 3

9.3.1 Bidder proposes to accept full payment for the Unit Price Work proposed herein the amount computed under the provisions of the Bidding Documents and based on the following unit price amounts, it being expressly understood that the unit prices are independent of the exact quantities involved. Bidder agrees that the unit prices represent a true measure of the labor, materials, and services required to furnish and install the item, including all allowances for overhead and profit for each type and unit of Work called for in these Bidding Documents.

9.3.2 Award will be based solely on Bid Schedule 1 – General and Site Specific Work, exclusive of **Bid Schedule 2 – Caltrans Encroachment Permit Allowance and Bid Schedule 3 - Optional Work.**

Bid Schedule 3 – Optional Work					
Item No.	Description	Qty	Unit	Unit Price	Extended Total Amount
<b>D.1</b>	<b>Additional Pipe Installation</b>	1	LF	\$	\$
<b>D.2</b>	<b>Encased Pipe Installation</b>	1	LF	\$	\$
<b>D.3</b>	<b>Standby Time</b>	1	30 minutes	\$	\$
<b>D.4</b>	<b>Remobilization to Project Site</b>	1	EA	\$	\$

### 10. SURETY.

10.1 If Bidder is awarded a construction contract from this Bid, the surety who provides the Performance and Payment Bond(s) shall be:

Whose address is

\_\_\_\_\_

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

### 11. LICENSE.

11.1 Class \_\_\_\_\_, California Contractor License No.: \_\_\_\_\_.

00300-9

12. BIDDER.

An Individual

By \_\_\_\_\_  
(Individual's name and signature)

A Partnership

By \_\_\_\_\_  
(Partnership name)

\_\_\_\_\_  
(Name and signature of general partner)

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

A Corporation

By \_\_\_\_\_  
(Corporation name)

\_\_\_\_\_  
(State of incorporation)

By \_\_\_\_\_  
(Name and signature of person authorized to sign)

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

(Corporate Seal)

00300-10

A Joint Venture

By \_\_\_\_\_  
(Business name)

\_\_\_\_\_  
(Name and signature of person authorized to sign)

By \_\_\_\_\_  
(Business name)

\_\_\_\_\_  
(Name and signature of person authorized to sign)

(Each joint venturer must sign. The manner of signing each individual, partnership, and corporation that is a party to the joint venture should be in the manner indicated above.)

Name, Phone Number, and Address for receipt of official communications and for additional information on this Bid:

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

SUBMITTED ON \_\_\_\_\_, 20\_\_.

+ + END OF SECTION + +

00300-11



**SECTION 01110  
SUMMARY OF WORK**

**PART 1 - GENERAL**

**1.1 LOCATION AND DESCRIPTION OF WORK**

Work included in this contract includes General Work described in Section A, Site Specific Work described in Section B, and Optional Work described in Section C.

**A. General Work:**

1. Project Mobilization and Demobilization–Mobilization for the project as a whole shall include all labor and equipment necessary to assemble in the vicinity of the project and stage said labor and equipment in order to make ready to perform the work. Demobilization for the project as a whole shall include removal of the same once either work had been completed. This shall include any necessary storage or laydown areas, establishment of a local project office, or any related arrangements. The DISTRICT will not provide any temporary storage for materials, parking, or other staging needs. This item assumes the total project work includes 5,250 individual project sites.
2. Traffic Control – CONTRACTOR shall be responsible for execution of Traffic Control in accordance with all federal, state and local guidelines as required to complete all Contract Work. CONTRACTOR shall execute an encroachment permit with the Town of Paradise to accommodate this work.
3. Storm Water Pollution Prevention Plan (SWPPP) – This project is estimated to disturb in excess of 5 acres of total area. CONTRACTOR shall provide all labor, materials and resources to fully comply with applicable local, State and Federal regulations and requirements for water pollution prevention and control including the development and execution of a SWPPP. CONTRACTOR shall be responsible throughout the duration of the project for installing, constructing, inspecting, maintaining, replacing, removing, and disposing of temporary water pollution control practices specified in the SWPPP.
4. Public Notifications – (see Specification Section 01130)
  - a. Two-Week Advanced Notification

Two-week advanced notification requires a phone call/message for each assigned address using DISTRICT provided contact info AND a door hanger (or printed notice attached to a stake if no structure is present on site). The phone call/message and printed notice shall indicate planned work with a minimum of 2 weeks between the time notice is given and the time work takes place. Such notice must not be less specific than a one week period of time in which the work is planned.

- b. 48-Hour Advanced Notification

01110-1

48-Hour advanced notification requires a phone call/message for each assigned address using DISTRICT provided contact info AND a door hanger (or printed notice attached to a stake if no structure is present on site). The phone call/message and printed notice shall indicate planned work with a minimum of 48 hours and maximum of 72 hours between the time notice is given and the specific date and time window in which the work will take place.

- c. CONTRACTOR shall renotify customers using the methods described above as necessary to accommodate changes in planned construction due to field conditions, customer issues, and/or DISTRICT designated priority assignments.
- d. Content of printed materials shall be provided by the DISTRICT in PDF format with fillable fields for dates/times to be used by the CONTRACTOR. DISTRICT reserves the right to update contact information and/or public messaging information intermittently.
- e. CONTRACTOR shall maintain a detailed log of all public notifications. Data shall be broken down by address, date/time, notification type, success of any phone contact/messages left, type of printed notice left on site, and any other pertinent data. This shall be updated daily and maintained on Microsoft Sharepoint or a similar DISTRICT approved document sharing tool for regular viewing access by the ENGINEER and/or DISTRICT staff.

B. Site Specific Work

Individual Site SCOPE OF SERVICES					
Category	B1	B2	B3	B4	B5
Quantity	Replace Service Lateral	Meter Box Installation	Meter and MIU Installation	Install or Reconfigure Backflow Preventer Assembly	Tie In to Customer Plumbing
1600	X	X			
2000	X	X	X	X	X
1000	X	X	X		
150	X	X	X		X
500				X	X
<b>5,250</b>	<b>total locations where work will take place</b>				

01110-2

1. Replace Service Lateral

Field assess each assigned location and open Underground Service Alert ticket. Determine locations of existing infrastructure (service lateral, corporation stop, main, meter, any existing backflow device.)

a. Excavate Corporation Stop or Gate Valve

CONTRACTOR shall use hydraulic means of excavating at the main to expose the corporation valve or other valve serving as a corporation stop.

b. Hot Tap Saddle Connection or Tee –

Reuse existing corporation stop or other main connection valve if possible. In order to be reusable, the existing valve must meet the following criteria established by the DISTRICT:

- 1) Valve must be in operable condition.
- 2) If the service is a single service, the valve must be a minimum  $\frac{3}{4}$ " in size.
- 3) If the service is a double or banked service (two meters fed from a common lateral connection through a wye), the valve must be a minimum 1  $\frac{1}{4}$ " in size.

If the existing corporation stop is not reusable according to the above criteria, CONTRACTOR shall hot tap the water main and install a new service saddle and corporation stop. Installation of a hot tap requires the abandonment of the existing corporation stop and lateral (see Item 2c below for further detail). A new hot tapped connection shall be adjacent to the existing lateral, but not less than 24" from the existing corporation stop, a weld, or pipe joint unless approved by the ENGINEER.

If the main is under 4 inches in size and a hot tap is not possible for the assigned size of service lateral, CONTRACTOR shall coordinate with ENGINEER to arrange a main shutdown facilitated by the DISTRICT. Only DISTRICT Operations staff may exercise main valves. Any such outage shall be coordinated 72 hours in advance of the time of work to ensure DISTRICT Operations staff is available.

- 1) Any public notifications necessary beyond the addresses for which work has been assigned resulting from a main shutdown shall be the responsibility of the DISTRICT.
- 2) A tee shall be installed in the main alignment using flex couplings to allow for the installation of the corporation stop valve and service lateral during the outage facilitated by the DISTRICT.
- 3) If there are several such laterals requiring tee installations along a length of main, work on these laterals shall be done simultaneously during the main outage facilitated by the DISTRICT. If there are a larger number of service laterals requiring an outage on one main than can be accomplished in one work

01110-3

day, CONTRACTOR may coordinate multiple outages with the ENGINEER and group the work into the minimum number and duration of main outages.

- 4) Excavation and preparatory work shall be done in advance by the CONTRACTOR wherever possible to allow the shortest possible main outage to install the flex couplings, tees, and valves. The main may be put back into service by the DISTRICT as soon all valves have been installed and closed.
- 5) Flushing and bacterial testing resulting from a main outage shall be the responsibility of the DISTRICT. Typical disinfection processes required for service lateral installation shall be the responsibility of the CONTRACTOR.

c. Abandon Existing Corporation Stop Valve and Lateral

If the existing corporation stop is determined to be of insufficient size, poor condition, or unacceptable orientation, and a new hot tap and service saddle are installed, the existing lateral and corporation stop must be abandoned.

- 1) The existing valve shall be turned to the off position to cease the flow of water to the existing service lateral. If the valve is successfully closed, cut the service lateral piping 6" downstream of the closed valve.
- 2) If the existing valve is not able to fully close, exercise the valve to the extent possible to stem the flow of water, cut the pipe 6" downstream of the valve and install a new ball valve and any required fittings which can then be operated to the closed position.
- 3) If the main and/or valve are determined by the CONTRACTOR to be of poor enough condition that the proposed abandonment will likely result in a failure or leak, ENGINEER shall be informed by the CONTRACTOR immediately and may give direction to leave the existing lateral in place without abandonment.

d. Trenchless Installation of New HDPE Service Lateral

Install new HDPE service lateral pipe by the trenchless method of "pulling" the new service lateral piping into place. Install the pipe in 1", 1.5", or 2" size as directed for each site. Services may be installed by trenchless methods where possible and open trenched methods where trenchless methods are not possible.

- 1) Existing corporation stop must be reusable.
- 2) The existing lateral must be polymer, copper, or steel and bedded in sand.

If these conditions are met, the existing service lateral piping may be disconnected from the valve and used to "pull" the new HDPE piping into the existing alignment.

- 3) New HDPE piping must be protected from dirt or debris during the "pull".

01110-4

- 4) If the "pull" fails, contractor must instead excavate and install using the Trenched Installation method. CONTRACTOR shall not be entitled to any additional compensation for a failed "pulling" operation but shall instead bill for the Trenched Installation.
  - 5) Install tracer wire from the main to the angle stop of the new service lateral, duct-taped and configured along the alignment of the lateral (see Section 15100). Tracer wire shall make positive contact with either the metallic main, or an existing tracer wire on the main. Connectivity of tracer wire shall be tested, confirmed, and documented by the CONTRACTOR. Tracer wire termination shall be wrapped around the angle stop inside the meter box and accessible above grade.
- e. Open Trench Installation of New HDPE Service Lateral
- Install new HDPE service lateral pipe in 1", 1.5", or 2" size as directed for each site. Services may be installed by trenchless methods where possible and open trenched methods where trenchless methods are not possible. Excavate along an alignment perpendicular to the main/roadway for the installation of the new service lateral. Install service lateral piping in accordance with Standard Details.
- 1) If the existing service is configured as a "double service" (See Standard Detail PID-06) install new HDPE piping in a "double service" configuration with 2" HDPE and a wye to serve both meters. If service is a single service configuration (see Standard Detail PID-05), install 1" HDPE.
  - 2) Work includes excavation, demolition as necessary, installation of pipe, tracer wire, angle stop, disinfection, and all necessary fittings and components.
  - 3) Work includes shoring as may be required.
  - 4) Work includes trench backfill with ENGINEER approved sand bedding and pipe zone fill, and asphalt base (AB) for the remainder. All backfill materials must be compacted according to specifications.
  - 5) Install tracer wire from the main to the angle stop of the new service lateral, duct-taped and configured along the alignment of the lateral (see Section 15100). Tracer wire shall make positive contact with either the metallic main, or an existing tracer wire on the main. Connectivity of tracer wire shall be tested, confirmed, and documented by the CONTRACTOR. Tracer wire termination shall be wrapped around the angle stop inside the meter box and accessible above grade.

CONTRACTOR Install angle stop up to the future meter location. CONTRACTOR shall engage the services of an engineer or surveyor (EIT, PE, LSIT, or PLS), approved by the ENGINEER, who shall be responsible for determining the location of the new or future meter and backflow installation in the field. This determination for each site

01110-5

must be completed in advance of any mobilization of the CONTRACTOR's crew to complete installations.

CONTRACTOR shall be responsible for ensuring the angle stop is installed per PID Standard Details and at the correct elevation, orientation, and location to allow for meter and backflow installation at every work site, regardless of whether the CONTRACTOR has been assigned the meter and backflow installation at that work site.

Future meter and backflow locations shall be assumed to be the same as existing meter locations with allowable adjustments up to 3 linear feet in any direction without ENGINEER approval. CONTRACTOR shall consider the following DISTRICT criteria for placement of angle stop valves as it relates to future meter box, meter and backflow installations:

- Meters and backflows shall be accessible by the DISTRICT for future maintenance.
- Meters and backflows shall be installed outside of fenced areas.
- Meters and backflows shall be installed outside of vehicular and pedestrian paths of travel.
- Meters and backflows shall not be obscured by landscaping.
- Meter box and backflow locations shall be a minimum of 2' from all other utilities and a minimum of 3' from hydrants or utility poles.
- Meter and backflow should be installed with the minimum impact to private or public property.
- In commercial applications, CONTRACTOR shall evaluate the meter/backflow installation location for bollard installation as may be needed to protect the above grade appurtenances if they will be directly adjacent to parking or a drive aisle. ENGINEER shall be notified of any proposed bollard location for review and approval.
- CONTRACTOR shall notify ENGINEER of any sites requiring DISTRICT Operations staff input (see Section 01130) to determine installation location due to inability to locate existing infrastructure, utility conflicts, customer landscaping/fencing or other installations, unforeseen conflicts.
- If the service lateral is assigned without the installation of a meter, the angle stop shall have a bullet installed to lock the valve from usage. These services will be installed with a meter box only.

f. Asphalt Restoration

CONTRACTOR shall saw cut and repair or replace asphalt as necessary to facilitate the installation of service laterals, meters, or backflows.

01110-6

- 1) This work may include roadways, sidewalks, driveways, curbs, gutters, or other asphalt surface treatments.
- 2) Asphalt shall be replaced in accordance with the Town of Paradise Standard Details included in the Contract Documents.
- 3) Any striping legend damaged or affected by paving work shall be restored in entirety.
- 4) Temporary patching of roadways may be allowed to wait for required atmospheric conditions for asphalt pavement. Temporary patching must be installed in a workmanlike fashion, in accordance with industry standards and maintained to that level until such time as the permanent patch may be installed.
- 5) Arterial roadways in the Town of Paradise require two 3" lifts of asphalt, all other surface streets require a single 3" lift.

g. Asphalt Base (AB) Restoration

CONTRACTOR shall remove and replace gravel or asphalt base (AB) in unpaved roadways or driveways as necessary to facilitate the installation of service laterals, meters or backflows.

- 1) This work may include roadways, driveways, shoulders, or other graveled areas.
- 2) AB shall be replaced in a manner that matches the original. If in a roadway, compaction requirements of the Town of Paradise Standard Details must be met.
- 3) A minimum 2" lift shall be placed for all AB repair or replacement.

h. Concrete Restoration

- 1) CONTRACTOR shall saw cut and replace any concrete disturbed, damaged, or removed in order to facilitate the installation of service laterals, meters, or backflows.
- 2) This work may include concrete sidewalks, driveways, curbs, gutters, retaining walls or other concrete appurtenances.
- 3) Concrete shall be replaced in accordance with the Town of Paradise Standard Details included in the Contract Documents.

01110-7



2. Install Meter Boxes

Install meter box in accordance with PID Standard Details with grade sloped to drain a minimum of 6" in all directions around the box and the angle stop at a relative depth allowing for proper installation of the meter within the box.

- a. All valving within the box shall have sufficient clearance to operate.
- b. Meter box lids should fit well and should not extend above the lip of the meter box by more than ¼".
- c. Meter boxes shall be installed and supported with proper backfill materials and compaction to prevent settling, free of debris and/or standing water within the box.
- d. If the work address is part of a banked set of services, CONTRACTOR shall install the adjacent meter boxes with grade set level between the boxes, installed with a 24" distance from meter centerline to meter centerline.

3. Install Meter and Meter Interface Unit (MIU)

Install Meter, MIU, and all required valves, fittings, and components along with any related work necessary to meet the DISTRICT's Standard Details and manufacturer recommendations for the meter and MIU.

- a. Meter size shall be assigned for each site by the ENGINEER.
- b. Meters and MIUs shall only be installed by CONTRACTOR personnel trained by the manufacturer of the DISTRICT's current metering infrastructure, Zenner USA. Certification or other proof of training by these personnel must be provided to the ENGINEER.
- c. MIU Installation – the Meter Interface Unit shall be installed on each meter according to manufacturer instructions (Zenner USA) and attached to the underside of the meter box lid as shown in the Standard Details and outlined in the Specifications.
- d. Work includes demolition of existing meter boxes and/or meters and equipment as necessary.

4. Install Backflow Preventer Assembly

- a. Reconfigured Backflow Devices - For an estimated 600 of the 2000 sites assigned to the CONTRACTOR for installation of a backflow preventer assembly, a reduced pressure principle backflow preventer (RP) assembly with galvanized piping set at an approximate 30" height will already be present – this is referred to as an Interim Water Service Device or IWS and were installed by the DISTRICT originally to provide emergency access to water after the Camp Fire Disaster. Where these devices are found to be present, the CONTRACTOR shall remove the assembly and disassemble it. Galvanized piping shall be salvaged and returned to the DISTRICT

01110-8

Corporation Yard (6334 Clark Road, Paradise CA ) at an interval/time/date as arranged with the ENGINEER. The remaining brass RP backflow body shall be reconfigured by the contractor with new brass pipe, fittings, valves and components to match the DISTRICT's Standard Details and reinstalled on the same service. The assembly shall be reinstalled as described in Standard Detail PID-15 with permanent piping connections installed on each side.

- b. New Backflow Devices – As an estimated 1400 sites assigned to the CONTRACTOR for backflow prevention assembly installation, there will be no IWS device present. CONTRACTOR shall install a new backflow preventer device according to the Standard Details.
- c. At approximately 500 work sites the CONTRACTOR will be assigned the installation of only a backflow preventer assembly. These sites will already have a new Zenner PMF-type meter installed. CONTRACTOR shall connect to the existing meter and proceed with installation of the assigned backflow preventer device in accordance with the Standard Details.
- d. Backflow preventer device size for each site shall be assigned by the ENGINEER.
- e. If any backflow prevention device other than an reduced pressure principle device (RP) or double check (DC) is present, CONTRACTOR shall notify ENGINEER and not commence installation of a meter or meter box until notice to proceed is given by ENGINEER.
- f. For any site at which space or other physical constraints prevent the installation of the backflow according to the configuration shown in the Standard Details, consult the ENGINEER for direction and preferred configuration/location of the backflow. For any site where the CONTRACTOR has been assigned the service lateral and meter installation, this must be taken into account and planned for by the CONTRACTOR at the time of the service installation. However, at the estimated 500 sites where only a backflow prevention assembly will be installed, there may be space or configuration restrictions requiring the ENGINEER's direction.
- g. Perform standard testing on all installed or reconfigured backflow prevention devices. Testing must be performed by a CA NV AWWA Certified Backflow Prevention Assembly Tester. Once all plumbing components are installed, perform standard backflow device testing and return to service within a maximum duration of 4 hours to ensure minimum disruption of water service.
- h. Upon completion of testing, pressurize the backflow device by slowly opening the customer side valve. Relief valves damaged in the process of testing the device shall be repaired/replaced and the backflow device tested again at the CONTRACTOR's expense. If a backflow device fails that has been installed under this contract, the device shall be repaired or replaced as necessary to ensure the installation of an operable and compliant device. This repair or replacement shall take place same day to minimize disruption of water service.

01110-9

- i. It shall be the CONTRACTOR's responsibility to document the passing results of the backflow test on a blue tag affixed to the backflow device (see Section 15200) as well as to maintain Microsoft Excel-based records of all backflow prevention tests and to convey all records to ENGINEER and PID on a weekly basis. Each backflow test record must include the following information at minimum:
    - 1) Date
    - 2) Time
    - 3) Address of test
    - 4) Size of backflow preventer device
    - 5) Serial number of backflow assembly
    - 6) Result of test
    - 7) Retest results if necessary
  - j. All backflow preventer assemblies installed by the CONTRACTOR, either new or reconfigured shall be installed with a new frost protection bag, secured with a zip tie or similar fastener as approved by the ENGINEER. If there is an existing backflow preventer frost protection bag in place that is in functional condition as determined by the INSPECTOR, it shall be salvaged and returned to the DISTRICT. If an existing frost protection bag is in deteriorated condition as determined by the INSPECTOR it shall be disposed of by the CONTRACTOR.
5. Repair Backflow Device
- a. If CONTRACTOR is assigned a backflow device reconfiguration for an existing IWS device and finds that the backflow assembly requires repair, CONTRACTOR shall make necessary repairs in the field and retest the backflow, returning it to active and operable service and recording all test information as otherwise outlined in these project documents. Said repair shall take place same day in order to minimize outages to customers.
  - b. New backflow prevention assemblies provided and installed by the CONTRACTOR which are found upon installation to require repair shall be the responsibility of the CONTRACTOR at no additional cost to the District.
6. Connect to Customer Plumbing
- a. An estimated 2,000 work sites will be assigned to the CONTRACTOR for the installation of a service lateral, meter, and backflow assembly. CONTRACTOR shall install the assigned work items at this location per Standard Details. If the property owner was tied into active water service at the start of work or has underground plumbing up to the location of the existing meter or IWS device, CONTRACTOR shall be responsible for installing a connection to the customer's plumbing using ENGINEER approved fittings.

01110-10

- b. An estimated 150 work sites will be assigned to the CONTRACTOR for the installation of a service lateral and meter, where the customer has exercised their option to install and own their own backflow preventer device. These locations will be identified to the CONTRACTOR as the backflow device at these locations should not be reconfigured or a new backflow preventer device installed.
  - 1) If the work site has a backflow device in place, the CONTRACTOR shall install the assigned work items and CONTRACTOR shall be responsible for all necessary components and work to establish a permanent plumbing connection to the existing backflow device in accordance with the Standard Details.
  - 2) If the work site does not have a backflow device in place, but is tied into active water use, the CONTRACTOR shall install the assigned work items and shall install a permanent plumbing connection to the customers plumbing. CONTRACTOR shall inform the ENGINEER of this circumstance immediately.
  - 3) If the work site does not have a backflow device in place and there is no current or active water connection the CONTRACTOR shall install the assigned work items and shall be responsible for installing a brass pipe cap where the backflow would have been connected, leaving the downstream valve in the off position.
  - 4) If a backflow preventer assembly is left with a valve turned to the off position, CONTRACTOR shall leave a door-hanger style notice, provided by the DISTRICT, on the backflow device itself. This notice shall provide information to the customer about returning their service to water.
- c. An estimated 500 work sites will be assigned to the CONTRACTOR for the installation of a backflow preventer assembly only. If the property owner was tied into active water service at the start of work or has underground plumbing up to the location of the existing meter or IWS device, CONTRACTOR shall be responsible for installing a permanent connection to the customer's plumbing using ENGINEERING approved fittings.
- d. CONTRACTOR shall not be responsible for reconnecting to above-grade customer plumbing or hoses, however if this situation is encountered, ENGINEER or INSPECTOR should be informed immediately. CONTRACTOR shall install assigned work items with a brass cap.
- e. CONTRACTOR may be required to move customer owned backflow preventer assemblies back and adjust associated plumbing in order to install the meter within the allowable space at the site in compliance with DISTRICT standards. Additional trenching, pipe and fittings required to accomplish this adjustment for an average distance of 3 linear feet shall be considered in the unit price and shall not result in extra cost.
- f. CONTRACTOR may be required to pipe back to a customer's plumbing to make a connection if site constraints required an adjustment of the meter and backflow location from preexisting location. An average of 3 linear feet of trenching and

01110-11

plumbing to accomplish this reconnection shall be considered in the unit price for the customer tie in and shall not result in extra cost.

- g. If any service has a bullet in the angle stop the CONTRACTOR shall remove the bullet with a bullet key in order to exercise the angle stop and proceed with the assigned installations. Upon completion of work, CONTRACTOR shall replace the bullet to lock the angle stop in the closed position.
- h. Backflow preventer assemblies shall be installed level and supported with proper backfill materials and compaction to prevent settling.

#### 7. Bollard Installation

CONTRACTOR shall install permanent or removable bollards to protect backflow preventer assemblies where directed by the ENGINEER. Final locations and type of bollard (removeable or permanent) shall be determined in the field and approved in advance by the ENGINEER or DISTRICT. Contractor shall propose locations for bollard installations where backflow preventers must be installed directly adjacent to parking areas or drive aisles in commercial applications. Bollards (both removable and permanent) shall be installed in accordance with Standard Detail 2600A and shall include all labor, equipment and materials.

#### C. CALTRANS ENCROACHMENT PERMIT – CONTRACTOR shall obtain necessary Caltrans Encroachment permits in order to complete work within the Caltrans Right of Way on Clark Road south of Pearson.

##### 1. Additional Pipe Installation – Customer Side Plumbing

CONTRACTOR may be directed by the ENGINEER depending on site circumstances to install HDPE piping on the customer side of a meter/backflow assembly to connect to or reroute customer plumbing. This work shall include and necessary fittings as needed. Piping can be assumed to be 1" HDPE requiring standard backfill and installation in accordance with DISTRICT's standard details.

#### D. OPTIONAL WORK ITEMS – the following are optional scope items with unit costs to be exercised at the DISTRICT's discretion.

##### 1. Additional Pipe Installation – Customer Side Plumbing

CONTRACTOR may be directed by the ENGINEER depending on site circumstances to install HDPE piping on the customer side of a meter/backflow assembly to connect to or reroute customer plumbing. This work shall include and necessary fittings as needed. Piping can be assumed to be 1" HDPE requiring standard backfill and installation in accordance with DISTRICT's standard details.

##### 2. Encased Pipe Installation

CONTRACTOR may be directed by the ENGINEER to install encased piping between a meter and backflow assembly to a location designated by the ENGINEER or by the

01110-12

DISTRICT. This work can be assumed to be 1" HDPE with schedule 40 galvanized encasement with minimum annular space in accordance with Standard Detail PID-15 and shall include all fittings as necessary.

3. Standby Time

The CONTRACTOR may encounter on site conditions requiring response by ENGINEER, DISTRICT Operations staff, or other coordination which may result in time when no work may be performed until direction is given or resolution is reached.

- a. CONTRACTOR shall notify ENGINEER immediately if conditions arise which require ENGINEER or DISTRICT response. Notification must be made both in writing and via phone call.
- b. The first 60 minutes after such notification is made in writing shall not be compensated to allow for typical response and resolution time. Thereafter, CONTRACTOR may bill for Standby Time in 30 minute increments if no work can be completed until direction or resolution is provided.
- c. DISTRICT reserves the right to direct the CONTRACTOR to move on to another site rather than incur Standby Time.
- d. CONTRACTOR shall document all instances of Standby Time with timestamped duration, cause and resolution. These data points shall be coordinated and shared with INSPECTOR on site.
- e. CONTRACTOR shall not proceed with work at these locations without written direction from the ENGINEER.

4. Remobilization

The CONTRACTOR may encounter on site conditions requiring response by DISTRICT ENGINEER, Operations staff, or other coordination which may result a need to move on from an assigned site until such time as direction is given.

- a. CONTRACTOR shall notify ENGINEER immediately if conditions arise which require ENGINEER or DISTRICT response. Notification must be made both in writing and via phone call.
- b. DISTRICT reserves the right to direct the CONTRACTOR to move on to another site rather than incur Standby Time.
- c. CONTRACTOR may bill for individual instances of remobilization where such direction has been given by the ENGINEER.
- d. CONTRACTOR shall not remobilize to the site in question until direction to do so has been given in writing by the ENGINEER.

E. The Work is located in Paradise, CA at various locations throughout the DISTRICT's Service Area, as designated by the ENGINEER. Work Site locations will be provided in a

01110-13

list at the beginning of the project, organized by Work Zones. CONTRACTOR must complete the work in the order given. The DISTRICT or ENGINEER may adjust the order of the list intermittently.

- F. The CONTRACTOR shall be responsible for the execution of Traffic Control as necessary, in order to complete the Work safely, in compliance with all local, State, and Federal regulations. The CONTRACTOR must obtain an Encroachment Permit from the Town of Paradise in order to execute the assigned work.
- G. The CONTRACTOR shall staff the project at a level to support of the installation of an average of 60 assigned work locations per work week.
- H. The Work will be constructed under one contract. The Contract Documents include the following:
  - 1. Volume 1 – Bid Documents, Specifications, and Standard Details.

## 1.2 COORDINATION

- A. The CONTRACTOR shall be solely responsible for coordination of all of the Work of this Contract.
- B. The CONTRACTOR shall supervise, direct and cooperate fully with all Subcontractors, manufacturers, fabricators, suppliers, distributors, installers, testing agencies and all others whose services, materials or equipment are required to ensure completion of the Work within the Contract Time.
- C. Work of Others:
  - 1. The CONTRACTOR shall engage with Zenner USA for the necessary staff training in addition to procurement of Meters, MIUs and associated components necessary for installation of metered service connections. A quotation for these unit prices has been included for reference and use.
  - 2. The CONTRACTOR shall cooperate with and coordinate CONTRACTOR's Work with the work of any other contractor, utility service companies, or PID's employees performing work at the site.
  - 3. The CONTRACTOR shall also coordinate their Work with the work of others to assure compliance with schedules.
  - 4. The CONTRACTOR shall attend and participate in all project coordination or progress meetings and report on the progress of all Work and compliance with schedules.
  - 5. If any part of the work depends upon the work of others for proper execution or results, the CONTRACTOR shall inspect and promptly report to the ENGINEER any apparent discrepancies or defects in such work of others that render it unsuitable for such proper execution and results.
  - 6. Failure of the CONTRACTOR to so inspect and report shall constitute an acceptance of the work of others as fit and proper except as to defects which may develop in the work of others after execution of the work by the CONTRACTOR.
- D. Interference with work on utilities:

01110-14



1. The CONTRACTOR shall cooperate fully with all utility forces of the DISTRICT or forces of other public or private agencies engaged in the relocation, altering, or otherwise rearranging of any facilities which interfere with the progress of the work.
2. The CONTRACTOR shall schedule the work so as to minimize interference with said relocation, altering, or other rearranging of facilities.

E. Responsibility for Damage:

1. The CONTRACTOR shall not be responsible for damage done by CONTRACTORS not under their jurisdiction.
2. The CONTRACTOR will not be liable for any such loss or damage, unless it is through the negligence of the CONTRACTOR.
3. The CONTRACTOR shall be responsible for the restoration of project sites that are disturbed in the course of work. This shall include any areas outside the extents shown on the Standard Details.

### 1.3 SITE CONDITIONS

A. Site Investigation and Representation

1. The CONTRACTOR acknowledges that it has satisfied itself as to the nature and general location of the work, the general and local conditions, particularly those bearing upon availability of transportation, disposal, handling and storage of materials, availability of labor, water, electric power, roads, and uncertainties of weather, or similar physical conditions at the site, the conformation and conditions of the ground, the character of equipment and facilities needed preliminary to and during the prosecution of the work and all other matters which can in any way affect the work or the cost thereof under this Contract.
2. The CONTRACTOR further acknowledges that it has satisfied itself as to the character, quality, and quantity of surface and subsurface materials to be encountered from inspecting the site and from evaluating information derived from exploratory work that may have been done by PID or included in these Contract Documents. Any failure by the CONTRACTOR to become acquainted with all the available information will not relieve the CONTRACTOR from responsibility for properly estimating the difficulty or cost of successfully performing the work.
3. Field Verification:
  - a. Before undertaking each part of the work, the CONTRACTOR shall carefully study and compare the Contract Documents and check and verify pertinent figures shown thereon and all applicable field measurements.
  - b. As the work proceeds, the CONTRACTOR shall field verify the depth and location of all buried utilities, and existing systems, and location of hazardous waste and contaminants.
  - c. The CONTRACTOR shall promptly report in writing to the ENGINEER any conflict, error, or discrepancy which the CONTRACTOR may discover and shall obtain a written interpretation or clarification from the ENGINEER before proceeding with any work affected thereby.

B. Existing Utilities and Improvements

01110-15

1. Location of Underground Utilities:
  - a. It shall be the responsibility of the CONTRACTOR to determine the exact location of all utilities and their service connections in addition to the demarcation and management of all Underground Service Alerts (USAs)
  - b. All potholing or other procedures for verifying utility location shall be performed by the CONTRACTOR as necessary to prepare for excavation.
  - c. The CONTRACTOR shall ascertain the locations of underground utilities the locations of their service laterals work and of service laterals or appurtenances of any other underground utilities which can be inferred from the presence of visible facilities such as buildings, meters and junction boxes prior to doing work that may damage such utilities or interfere with their service.
  - d. Utilities Not Shown:
    - 1) Attention is directed to the existence of underground utilities not identified in the Contract Documents, located in the vicinity of the Contract Work. It is the responsibility of the CONTRACTOR to make all reasonable efforts to locate, support and protect in place any underground utilities encountered in the course of work.
    - 2) If the CONTRACTOR discovers underground a utility not indicated by USA, the CONTRACTOR shall immediately give the ENGINEER and the Utility Company written notification of the existence of such utility.
    - 3) Such utilities shall be located and protected from damages as directed by the ENGINEER and the cost of such work will be paid for as extra work as provided in the General Conditions.
2. Utility Coordination:
  - a. The CONTRACTOR shall notify Underground Service Alert (USA) at least 4 days prior to excavation of each project site location, telephone (800) 642-2444.
  - b. The CONTRACTOR shall also contact all utility owners not registered with USA but known to have utilities in the project area to field locate underground utilities at least 4 days prior to excavation.
    - 1) CONTRACTOR shall coordinate directly with the Town of Paradise to locate and protect traffic loops in place. Traffic loops are not included in the USA process. CONTRACTOR shall be responsible for the repair of traffic loops if damaged during the course of work.
  - c. The CONTRACTOR shall notify all owners of utilities when the Work is in progress and shall make arrangements as necessary to make any emergency repairs.
3. Utility Protection and Damage:
  - a. Existing utilities that are shown or that are made known and located to the CONTRACTOR prior to excavation, and that are to be retained, and all utilities that are constructed during excavation operations shall be properly supported and protected from damage during the progress of the work.
  - b. Should any damage to a utility occur during the progress of the work, the CONTRACTOR shall notify PID and the utility at once and render all assistance possible to repair the damage and restore the service, at the expense of the CONTRACTOR.

01110-16

- c. No extra compensation will be made for the repair of any services or utility damaged by the CONTRACTOR nor for any damage incurred through neglect or failure to provide adequate protection to existing utilities.
  - d. The provisions of this Section shall not be abated even in the event such damage occurs after backfilling or is not discovered until after completion of the backfilling.
  - e. Damaged water pipelines will be repaired by PID at the CONTRACTOR's expense. If the CONTRACTOR fails to pay the cost of repairs to water pipelines within thirty days of receipt of the invoice, PID reserves the right to withhold the amount owed from the CONTRACTOR's Progress Payment.
  - f. Damage Report:
    - 1) In the event that the CONTRACTOR damages any underground utilities not identified by the USA process or depicted on the Service Map with reasonable accuracy (within 3 feet of actual location) or any lateral service the location of which could not be inferred by the CONTRACTOR, a written report thereof shall be made immediately to the ENGINEER.
    - 2) The CONTRACTOR's report shall also advise the ENGINEER of any schedule delays. Compensation for such delays will be determined in accordance with the General Conditions. The CONTRACTOR shall be entitled to no other compensation for any such damage.
  - 4. All utilities encountered along the line of the work shall remain continuously in service during all work under the Contract or unless other arrangements satisfactory to the ENGINEER are made with the owner of said utilities.
- C. CONTRACTOR's Responsibility for Utility Facilities and Service
- 1. Where the CONTRACTOR's operations could cause damage or inconvenience to railway, telephone, television, power, oil, gas, water, sewer, or irrigation systems, the CONTRACTOR shall make all arrangements necessary for the protection of these utilities and services and shall notify ENGINEER at least 24 hours in advance.
  - 2. The CONTRACTOR shall be solely and directly responsible to the owner and operators of such properties for any damage, injury, expense, loss, inconvenience, delay, suits, actions, or claims of any character brought because of any injuries or damage which may result from the construction operations under this Contract.
  - 3. Neither the PID nor its officers or agents shall be responsible to a utility owner for damages as a result of the CONTRACTOR's failure to protect utilities encountered in the work.
  - 4. In no event shall interruption of any utility service be allowed outside working hours unless granted by the owner of the utility and approved by the ENGINEER.
  - 5. No sand, mud, rocks or other construction debris shall be disposed of in the sanitary sewers or storm sewers.
  - 6. The CONTRACTOR shall replace, at its own expense, any and all existing utilities or structures removed or damaged during construction, to their existing condition unless otherwise provided for in these Contract Documents.
  - 7. The CONTRACTOR shall repair or replace, at its own expense, all pavement damaged during the construction, to its existing condition unless otherwise provided for in these Contract Documents.

01110-17

- D. Names of Known Utilities Serving the Area
1. The following is a list of the known public utilities serving the area:
    - a. Water – Paradise Irrigation District
    - b. Sewer – None
    - c. Stormwater – Town of Paradise
    - d. Communications – AT&T, Comcast
    - e. Electric – PG&E
    - f. Gas – PG&E
- E. Railroads
1. The CONTRACTOR shall not perform work or occupy any part of railroad property without a permit authorizing the same.
- F. Interfering Structures
1. The CONTRACTOR shall take necessary precautions to prevent damage to existing structures whether on the surface, above ground, or underground.
  2. The CONTRACTOR shall protect all existing structures, trees, shrubs, and other items on the project site that are to be preserved, by substantial barricades or other devices commensurate with the hazard, from injury or destruction by vehicles, equipment, workmen, or other agents.
  3. Where existing fences, gates, buildings, retaining wall, or any other structure must be removed to properly carry out the work, or are damaged during the work, they shall be restored at the CONTRACTOR's expense to their original condition or better.
  4. Without additional compensation, the CONTRACTOR may remove and replace in a condition as good as or better than original, any small structures such as fences, and signposts that interfere with the CONTRACTOR's operations. All removal and replacement of small structures, included but not limited to fences and signposts, will first be approved by ENGINEER.
- G. Field Determinations
1. At each assigned address, the CONTRACTOR shall identify whether an RP, DC, or no backflow device is present.
  2. The CONTRACTOR shall locate each service lateral in the field.
  3. The CONTRACTOR shall locate each angle stop in the field.
- H. Field Relocation
1. During the progress of construction, it is expected that minor relocations of the work will be necessary.
  2. Such relocations shall be made only by direction of the ENGINEER.
  3. If existing structures are encountered that will prevent construction as specified notify the ENGINEER before continuing with the work in order that the ENGINEER may make such field revisions as necessary to avoid conflict with the existing structures.
  4. If the CONTRACTOR shall fail to notify the ENGINEER when an existing structure is encountered, and shall proceed with the work despite this interference, CONTRACTOR shall do so at their own risk and at no additional cost to PID.

01110-18

5. Any CONTRACTOR request(s) for additional compensation or contract time resulting from necessary field relocations will be considered as set forth in the General Conditions.
6. If the CONTRACTOR fails to notify the ENGINEER when a structure which interferes with construction is encountered, and proceeds with the work despite this obstruction, the CONTRACTOR shall do so at their own risk and at no additional cost to the OWNER.

#### 1.4 SEQUENCE AND PROGRESS OF WORK

- A. The CONTRACTOR shall submit a Construction Schedule covering the entire Work in accordance with Section 01320, Progress Schedule.
- B. The CONTRACTOR shall incorporate the requirements of Section 01130, Special Project Constraints, into the Construction Schedule.
- C. Alternate Sequence:
  1. The CONTRACTOR's schedule may use a different sequence from that shown or specified, if techniques and methods known to the CONTRACTOR will result in cost and time savings to the PID, and still achieve the required objective.
  2. The ENGINEER's determination on the acceptability of any alternative sequence from that shown or specified shall be final.

#### 1.5 CONTRACTOR'S USE OF WORK AND/OR STORAGE AREAS

- A. The CONTRACTOR shall be solely responsible for obtaining and paying all costs in connection with any additional work area, storage sites, access to the site or temporary right-of-way, which may be required for proper completion of the Work.
  1. It shall be understood that responsibility for protection and safe-keeping of equipment and materials on or near a project site will be entirely that of the CONTRACTOR and that no claim shall be made against PID or their authorized representatives by reason of any act.
- B. The CONTRACTOR shall be required to share use of the premises with other Contractors whose services PID has obtained or will obtain for construction of other facilities on the site.

#### 1.6 REQUIRED PERMITS

- A. The CONTRACTOR shall be responsible for obtaining an Encroachment Permit with the Town of Paradise.
- B. The CONTRACTOR shall be responsible for obtaining an Encroachment Permit with Caltrans for work on Clark Road below Pearson Road and within the Caltrans right of way.

**PART 2 - PRODUCTS (NOT USED)**

**PART 3 - EXECUTION (NOT USED)**

++ END OF SECTION ++

01110-20

## SECTION 01130

### SPECIAL PROJECT CONSTRAINTS

#### **PART 1 - GENERAL**

##### 1.1 LIMIT OF CONSTRUCTION ACTIVITIES ON WORK SITE

###### A. Traffic Control:

1. Contractor shall be responsible for traffic control as necessary to safely accomplish all work. At no point may both lanes of a roadway be closed to traffic in excess of 10 minutes. If a single lane is closed, contractor must maintain flaggers in accordance with federal, state and local safety standards.
2. During non-work hours, the CONTRACTOR shall keep all lanes of traffic open and clear. All trenches shall be backfilled or covered with suitable steel plates and open to traffic. All plates shall be pinned and secured with cutback to prevent movement of plates under local traffic conditions. Local traffic may include atypical hauling, heavy trucking, and heavy equipment due to recovery operations.
3. Any cost for emergency response required by the Town of Paradise Public Works crew in off-work hours to address the movement of plates or insufficiency of roadway patching such that a hazardous condition is created will be the responsibility of the CONTRACTOR.
4. No equipment, construction material or excavated material that will interfere with traffic shall be stored on streets, shoulders, or roadways at any time.

##### 1.2 SEQUENCE OF WORK

###### A. General:

1. The DISTRICT or ENGINEER shall provide the CONTRACTOR with a prioritized list of project site locations. The DISTRICT shall retain the right to adjust the priority order of site locations at any time.
2. ENGINEER will indicate which sites require the installation of Service Lateral and Meter Box Only, Backflow only, or Service Lateral, Meter and Backflow for a full installation. The DISTRICT reserves the right to add additional work items to a project site assignment up to the time of installation.
3. The CONTRACTOR shall provide up to fourthree independent crews to approach the work in the following two groupings:
  - a. Two-Three crews shall work through the assigned project sites by means of preestablished zone groupings, completing the required work at each site within a zone area before moving to the next. This component of contractor staffing shall be sized to meet a minimum production rate of 120-180 sites completed per month or 3 sites completed per crew per day.
  - b. One crew shall be available at all times to address assignments designated as Priority by the ENGINEER. These sites may be anywhere within the DISTRICT's service area and non-contiguous to each other. Sites must be completed within 4 weeks of assignment as a Priority location. This component of contractor staffing shall be sized to meet a minimum production rate of 20-15 project sites completed per week or 3 sites per crew per day. If the production rate of the crew assigned to Priority installations exceeds the number of assigned Priority sites, this crew may be redirected intermittently to work on the regular zone addresses outlined in item 3a above as long as all Priority addresses are

01130-1

accomplished within the allowable 4 week time frame from the time they are assigned.

4. The CONTRACTOR shall supply a sufficient quantity of personnel certified to test backflow devices to allow for prompt installation, reconnection and testing of backflows where assigned. Work sites for which multiple scope items are assigned (service lateral, meter, and/or backflow) should not experience multiple service outages in order to facilitate the installation of assigned work without ENGINEER'S prior approval of special circumstances.
  5. The OWNER's water distribution system must remain operational at all times.
- B. DISTRICT or ENGINEER Assistance in the Field
1. The CONTRACTOR shall contact the ENGINEER immediately if DISTRICT assistance is required in the field for any of the following or similar circumstance:
    - a. A leak is discovered on DISTRICT OWNED FACILITIES
    - b. Site conditions require ENGINEER or DISTRICT determination of installation configuration
    - c. Resident/Customer issue or complaint preventing the continuation of work
    - d. Installation conditions outside of the Scope of Work
  2. CONTRACTOR shall allow a minimum 30-45 minutes of response time for requested assistance. CONTRACTOR shall make prompt notification of issues to the ENGINEER as they arise to facilitate the most efficient use of DISTRICT staff time where needed.
  3. DISTRICT reserves the right to charge CONTRACTOR for costs associated with the ENGINEER or DISTRICT's response to a leak, customer issue, or damage caused by the CONTRACTOR as a result of a failure to operate or conduct work within the bounds of this Contract.

### 1.3 PUBLIC NOTIFICATION REQUIREMENTS

- A. The CONTRACTOR shall be responsible for public notification of planned work at each address/work site. CONTRACTOR shall schedule each site's work within the following time windows, making every attempt to complete work within the noticed window:
- 7am-10am
  - 9am-2pm
  - 1pm-4pm
- B. The CONTRACTOR shall make two rounds of notifications for planned work as outlined below:
1. Two Week Advanced Notice – CONTRACTOR shall make notification of planned work in the area and a resulting related service outage at each address a minimum of two weeks and maximum of three weeks in advance of the date of planned work.
    - a. Notice shall include an estimate of work timing no less specific than a one-week window of time.
    - b. Notice shall be made via phone call/message to a contact number provided by the DISTRICT associated with each address, AND via weather-resistant printed notification in the form of a door hanger or if there is no structure present by means of a paper notice staked in the yard at each address.
    - c. Content and wording of notices (door hangers and printed notices) shall be provided in PDF format by the DISTRICT or ENGINEER excepting fillable date fields to be infilled by the CONTRACTOR.



2. 48 Hour Advanced Notice – CONTRACTOR shall be responsible for a second round of notice 48 hours in advance of a specific projected 4-hour time window for the work assigned at each location.
  - a. Notice shall be made via weather-resistant printed notification in the form of a door hanger or if there is no structure present by means of a paper notice staked in the yard at each address.
  - b. Content and wording of notices (door hangers and printed notices) shall be provided in PDF format by the DISTRICT or ENGINEER excepting fillable date/time fields to be infilled by the CONTRACTOR. DISTRICT reserves the right to update contact information and/or public messaging information intermittently.
- C. Changes in Scheduled Work
  1. Any changes in projected dates/times for planned work must be communicated to the ENGINEER immediately.
  2. Any changes in projected dates/times for planned work, including but not limited to field conditions, weather, and/or changes to the Priority of assigned sites by the DISTRICT, shall result in renotification of the public by the CONTRACTOR.
    - a. Any change to the schedule resulting in the inaccuracy of the original Two-week Advanced Notice or the 48 Hour Advanced Notice must be corrected by the CONTRACTOR and notice given again, resetting the time periods of notice given.
    - b. Any schedule changes minor enough to still fall within the windows given in the notices does not necessitate renotification.
    - c. Renotifications must be made in the same manner as original notification.
- D. CONTRACTOR shall maintain a detailed log of all public notifications. Data shall be broken down by address, date/time, notification type, success of any phone contact/messages left, type of printed notice left on site, and any other pertinent data. This shall be updated daily and maintained on Microsoft Sharepoint or a similar DISTRICT approved document sharing tool for regular viewing access by the ENGINEER and/or DISTRICT staff.

#### 1.4 GPS AND INSTALLATION DOCUMENTATION REQUIREMENTS

- A. The CONTRACTOR shall be responsible for documentation of all installation data, collected and stored using Mobile MMS software by Websoft Developers to interface installation data with the DISTRICT's existing GIS records. Mobile MMS installation report format shall at minimum include photos and details of all billable items of work, tests and results, site issues, preconstruction and post construction conditions. Format shall be submitted to ENGINEER for review and approval prior to the beginning of installations.
- B. Contact information for Websoft Developers is listed below:  
<https://www.websoftdev.com/>  
Owner: Sean Dingman  
(530) 759-0923

#### 1.5 PROJECT CONSTRAINTS

- A. Maintenance of PID's Operations:
  1. Constraints listed herein involve limits on activities during construction. These limits relate to the critical nature of the existing water system.

01130-3

2. Continuous operation of PID's facilities is of critical importance. Schedule and conduct activities to enable existing facilities to operate continuously, unless otherwise specified.
  3. Minimize to the greatest extent possible the duration of any interruptions to customer water service. If a customer is obviously using water at that time, inform the ENGINEER or INSPECTOR immediately. Direction may be given to move to the next project site by the ENGINEER and completed work at a later time or date.
  4. Perform Work continuously during critical connections and changeovers, and as required to prevent interruption of PID's operations.
  5. Shutdowns:
    - a. If installation of a service lateral requires the shutdown of the main, work must be coordinated and accomplished alongside DISTRICT Operations personnel. Such coordination requires a minimum 72 hour notice.
    - b. Main valves must be operated by DISTRICT Operations personnel
    - c. Coordinate proposed Work with PID and facility operations personnel before affecting shutdowns. The CONTRACTOR shall provide written confirmation of the shutdown date and time two (2) working days prior to the actual shutdown.
    - d. Under no circumstances shall the CONTRACTOR cease Work at the end of a normal working day or at the end of a working week if such actions may inadvertently cause a cessation of any facility operating process, in which case, remain onsite until necessary repairs are complete. This shall include interruptions to customer water service unless otherwise approved by the ENGINEER or PID.
  6. Do not close lines, open valves, shut down equipment, or take other action which would affect the operation of existing systems, except as specifically required by the Contract Documents and after approval of the ENGINEER.
  7. Do not proceed with Work affecting a facility's operation without obtaining the DISTRICT's advance approval of the need for and duration of such Work.
- B. Relocation of Existing Facilities:
1. During construction, it is expected that minor relocations of Work will be necessary.
  2. Provide complete relocation of existing structures and Underground Facilities, including piping, utilities, equipment, structures, electrical conduit wiring, electrical duct bank, and other necessary items.
  3. Use only new materials for relocated facility. Match materials of existing facility, unless otherwise shown or specified.
  4. Perform relocations to minimize downtime of existing facilities.
  5. Install new portions of existing facilities in their relocated position prior to removal of existing facilities, unless otherwise accepted by OWNER.
- C. Leaks on Mains:
1. Extreme care shall be taken when excavating existing water mains. If excavating by hydraulic means, water pressure shall not be applied directly to the pipe or used to clean the pipe to remove coatings.
  2. Leaks discovered on mains shall be reported to the INSPECTOR or ENGINEER immediately. Leak repairs shall be made by DISTRICT Operations staff.
  3. The DISTRICT reserves the right to charge the CONTRACTOR for all leak repair costs resulting from negligent work by the CONTRACTOR.
- D. Overtime:
1. Conduct Work outside regular working hours only on prior written consent of OWNER to meet Project schedule and avoid undesirable conditions.

01130-4

2. All overtime Work by the CONTRACTOR necessary to conform to the requirements of this Section and related Sections shall be performed by the CONTRACTOR, at no cost to the OWNER and shall be performed in accordance with the General Conditions. The CONTRACTOR shall make no claims for extra compensation as a result thereof.
- E. Ongoing Recovery Operations:
1. Due to the nature of ongoing recovery operations, hazardous tree removal and reconstruction within the Town of Paradise, CONTRACTOR will be required to coordinate and adjust work sequencing to accommodate a variety of activities in proximity to project sites. Every effort shall be made by the CONTRACTOR to avoid interrupting or otherwise preventing other entities from completing their work. If any interruption to the sequencing or timing of contract work is necessary due to these other activities, inform ENGINEER immediately.
- F. In Road Work:
1. Contractor shall be responsible for executing Traffic Control for all in-road work according to all local, state, and federal regulations and safety standards.
  2. Open trench work will not be allowed within the public easement along Clark Road, south of Pearson without a CALTRANS Encroachment permit, to be obtained by the CONTRACTOR
- G. Permitting: Work shall be conducted under the Encroachment Permit obtained by the Contractor from the governing agency whose right-of-way is encroached upon (Town of Paradise). The Contractor is responsible for complying with all applicable conditions listed on the governing agency encroachment permit including payment for inspections by the governing agency.

## 1.6 CONSTRUCTION SEQUENCING CONSTRAINTS

- A. The locations where work will be completed as part of this CONTRACT will be selected and prioritized by ENGINEER or the DISTRICT in order to support ongoing operations and/or rebuilding of the Town of Paradise following the Camp Fire.
1. The CONTRACTOR will be provided with a prioritized list of locations where work is to be completed, and the scope of the work to be completed at each site.
  2. For two of the CONTRACTOR's crews, sites will be organized by location into Zones. Work through the zones must be completed in the order of zones provided by the DISTRICT or ENGINEER. A third CONTRACTOR crew will receive assignments of PRIORITY addresses which may be located anywhere within the DISTRICT's service area. These Priority sites must be completed within 4 weeks of assignment to the contractor. If these Priority sites are caught up, this third crew may also work through the regular listed locations alongside the first two crews.
  3. Adherence to this prioritized list of project locations is of critical importance. CONTRACTOR is required to coordinate with ENGINEER if any deviation from this prioritized sequence becomes necessary.
  4. Priority order on the list of assigned locations may be adjusted by the DISTRICT at any time.

**PART 2 - PRODUCTS (NOT USED)**

**PART 3 - EXECUTION (NOT USED)**

+ + END OF SECTION + +

01130-6

## **SECTION 01200**

### **MEASUREMENT AND PAYMENT**

#### **PART 1 - GENERAL**

##### **1.1 GENERAL**

- A. Payment will be made at the unit price bid for each item listed on the bidding form or as extra work as provided in the General Conditions.
- B. No initial progress payment will be made prior to acceptance by the ENGINEER of the Construction Schedule and the list of anticipated submittals.
- C. No subsequent progress payment will be made prior to receipt by the ENGINEER of the monthly update of the Construction Progress Schedule, as specified in Sections 01310, Project Meetings and 01320, Progress Schedule.
- D. No subsequent progress payment will be made prior to receipt by the ENGINEER of Certified Payrolls for the previous month.

##### **1.2 DESCRIPTION OF GENERAL AND WORK SITE SPECIFIC UNIT PRICE BID ITEMS – SCHEDULE 1**

- A. Item A.1, Project Mobilization and Demobilization:

Mobilization for the project as a whole shall include all labor and equipment necessary to assemble in the vicinity of the project and stage said labor and equipment in order to make ready to perform the work. Demobilization for the project as a whole shall include removal of the same once either work had been completed. This item assumes the total project work includes 5,250 individual project sites.

- 1. Measurement and Payment: This item shall be paid as a 60%/40% split between Mobilization prior to commencement of the work and Demobilization following Final Project Completion and project acceptance by the owner. Demobilization shall include submission of complete and correct Record Drawings to the OWNER.

- B. Item A.2, Project Traffic Control:

This item shall cover traffic control costs for the entire project scope. It shall include all labor, materials, equipment, and supplies necessary to properly execute Traffic Control as needed at each project site, in accordance with all local, state, and federal regulations and safety standards. Conditions at each location will vary, requiring Traffic Control measures to be adjusted appropriately. Traffic control requirements are subject to terms of encroachment permits obtained by the CONTRACTOR as may be necessary to execute the contract work. Considerations shall be made for other Recovery-related operations taking place throughout the Town of Paradise. CONTRACTOR shall not impede such activities and shall take extra precautions to plan Traffic Control and in road work to accommodate such activities.

- 1. Measurement and Payment: The CONTRACTOR shall be paid as a percentage of overall project completion. If at any point the ENGINEER determines that Traffic Control is not being implemented regularly in accordance with the Contract

01200-1

Documents, payment for this item may be withheld until such time as corrections in methods and execution are made.

C. Item A.3, Storm Water Pollution Prevention Plan (SWPPP):

This item shall cover the development of a Storm Water Pollution Prevention Plan (SWPPP), implementation, and maintenance of all required measures throughout the project duration in accordance with the specifications and contract documents. It shall include all professional services, labor, materials, equipment, and supplies necessary to develop the plan, meet the developed plan requirements, respond to weather events, and maintain best management practices (BMPs) in accordance with all federal, state, and local stormwater and environmental requirements and as specified. Conditions at each work site location will vary, requiring SWPPP measures to be adjusted appropriately.

1. Measurement and Payment: The CONTRACTOR shall be paid as a percentage of overall project completion. If at any point the ENGINEER determines that the SWPPP plan and best management practices are not being implemented regularly in accordance with the Contract Documents, payment for this item may be withheld until such time as corrections in methods and execution are made.

D. Item A.4, Public Notifications:

This item shall cover the CONTRACTOR's required public notification efforts for all project sites in accordance with the project scope and specifications. This shall include all professional services, labor, materials, equipment, and supplies necessary to execute public notifications as specified in advance of work taking place at each location, renotification as necessary, and maintenance of a notification log accessible by the ENGINEER or DISTRICT and updated daily. Notification language will be provided by the DISTRICT with fillable fields for time and date to be used and implemented by the CONTRACTOR. Such content may be updated by the DISTRICT at any time.

1. Measurement and Payment: The CONTRACTOR shall be paid as a percentage of overall project completion. If at any point the ENGINEER determines that the public notifications are not being implemented regularly or as specified in accordance with the Contract Documents, payment for this item may be withheld until such time as corrections in methods and execution are made.

E. Item B.1a, Excavate Corporation Stop

This item will include all labor, materials, equipment, and supplies required to excavate and expose the corporation stop at a project site location identified by the OWNER for service lateral replacement. The CONTRACTOR shall assess the corporation stop according to specified DISTRICT criteria for reuse. A standard pothole may be assumed to be a total of 16sf in size, regardless of the shape or configuration of the pothole. Excavations outside that scale resulting from mismarked utilities or other items outside the contractor's control may result in the billing of more than one pothole for a project site.

1. Measurement and Payment: The CONTRACTOR shall be paid at the unit price included in the Bid Form for each site excavation of the corporation stop directed by the ENGINEER, regardless of whether work was completed at the site following the assessment of the main and valve at that location. Each instance shall be documented and agreed to in the field between the CONTRACTOR and the

ENGINEER. It is anticipated that up to 4,750 sites will require exploratory excavation of the corporation stop for assessment.

F. Item B.1b, Furnish and Install Hot Tap Saddle Connections or Tees:

This item shall include all labor, equipment, materials, and supplies necessary to install hot tap saddle connections or tees given the main and lateral size configurations called out in the Bid Form 00300, Schedule 1 and in accordance with the Standard Details included in these Contract Document. For a tee, this shall include all labor and equipment necessary to coordinate with the ENGINEER and DISTRICT Operations 72 hours in advance to accommodate a main shutdown for tee installation as specified.

Each main must be assessed to determine the appropriate size service saddle or tee as may be required for the application. Main materials and sizes vary (OD, Standard, etc) and must be field verified. For each project site location identified by the OWNER, the CONTRACTOR will make a determination upon excavation and assessment of the existing corporation stop, whether the existing valve may be adapted and used, or whether a new hot tap will be necessary. Main depth will vary. Service lateral size will be determined as a combination of assignment and field conditions as approved by the ENGINEER.

1. Measurement and Payment: The CONTRACTOR shall be paid at the unit price included in the Bid Form for each hot tap or tee installed, based on main and lateral size at that location. Each instance shall be documented and agreed to in the field between the CONTRACTOR and the ENGINEER. It is anticipated that up to 2,000 sites will require a hot tap or tee to facilitate installation of the new service lateral at that location.

G. Item B.1c, Abandon Existing Corporation Stop:

Where a corporation stop is determined according to DISTRICT specified criteria as ineligible for reuse and a hot tap or tee are installed, CONTRACTOR shall attempt abandonment of the existing service lateral corporations stop valve as specified and in accordance with the contract documents. This item shall include all labor, equipment, materials, and supplies necessary to accomplish the abandonment of the existing service lateral as specified.

1. Measurement and Payment: The CONTRACTOR shall be paid at the unit price included in the Bid Form for each abandonment accomplished. Each instance shall be documented in the field between the CONTRACTOR. It is anticipated that up to 1900 sites will require a service lateral/corporation stop abandonment.

H. Item B.1d, Furnish and Install Replacement Service Laterals (Trenchless Installation):

This item shall include all labor, equipment, materials, and supplies required to install replacement service laterals throughout PID's service area, as identified by the ENGINEER, using trenchless or "pulling" methodology. Where trenchless installation is used, depth of service line and fill material will match existing conditions. Trenchless Installation of the service lateral will consist of removing the existing lateral and pulling the replacement lateral into its place while maintaining in-situ backfill conditions. Service laterals installed shall be High-density Polyethylene (HDPE) in 1", 1.5", or 2" sizes, as assigned or determined by the ENGINEER based on field conditions and in accordance with Specification Sections 01130, 15100, and 15100 PSDS HDPE - SL. For bidding purposes, CONTRACTOR may assume an average service lateral length of 25 ft and an average buried depth of 3 ft. Conditions will vary and final configuration, size, and

01200-3

location of each lateral will be determined by the ENGINEER. New service lateral piping will be connected to an existing corporation stop or a new hot tap installed in accordance with Standard Details included in the Contract Documents, including the installation and conductivity testing of tracer wire.

1. Measurement and Payment for Item B.1d: Trenchless Installation

Payment for the total linear footage at each location where work is completed shall be at the unit price per linear foot (LF) for Item B.1d included in the Bid Form for each service lateral installed at the direction of the ENGINEER. Measurements of the actual linear footage of pipe installed will be taken in the field at each location and agreed to between the CONTRACTOR and the ENGINEER. Payment for service lateral installation is contingent upon completion of site restoration, final grading and removal of materials and spoils from each site.

I. Item B.1e, Furnish and Install Replacement Service Laterals (Open Trench Installation):

This item shall include all labor, equipment, materials, and supplies required to install replacement service laterals throughout PID's service area, as identified by the ENGINEER, using a trenched methodology. Service laterals installed shall be High-density Polyethylene (HDPE) in 1", 1.5", or 2" sizes, as assigned or determined in the field by the ENGINEER based on field conditions and in accordance with Specification Sections 01130, 15100, and 15100 PSDS HDPE - SL. For bidding purposes, CONTRACTOR may assume an average service lateral length of 25 ft and an average buried depth of 3 ft. Conditions will vary and final configuration, size, and location of each lateral will be determined by the ENGINEER on site. New service lateral piping will be connected to an existing corporation stop or a new hot tap and installed in accordance with Standard Details included in the Contract Documents, including the installation and conductivity testing of tracer wire.

1. Measurement and Payment for Item B.1e: Open Trench Installation

Payment for the total linear footage at each location where work is completed shall be at the unit price per linear foot (LF) for Item B.1e included in the Bid Form for each service lateral installed at the direction of the ENGINEER. Measurements of the actual linear footage of pipe installed will be taken in the field at each location and agreed to between the CONTRACTOR and the ENGINEER. Payment for service lateral installation is contingent upon completion of site restoration, final grading and removal of materials and spoils from each site.

J. Item B.1f, Asphalt Restoration:

This item shall include all labor, materials, equipment, and supplies necessary to restore or replace asphalt damaged or removed from each project site location resulting from the execution of contract work. This shall include the restoration of asphalt pavement per Specification Section 02770 as well as the Standard Details included in the Contract Documents. A temporary cold patch may be made and maintained, to be replaced with a full hot-mix asphalt (HMA) patch at the earliest opportunity. This shall include the replacement of striping and/or painted legends as may be affected by the work, and in accordance with Standard Details.

1. Measurement and Payment: The CONTRACTOR shall be paid at the unit price per square foot (SF) for a 3" lift included in the Bid Form for each site identified by the OWNER where contract work is executed and resulting in the removal of or damage to existing asphalt paving. Payment shall not be made for asphalt restoration until such time as HMA is fully restored as well as any required striping. Each instance of

01200-4



asphalt restoration shall be measured, documented and agreed to in the field between the CONTRACTOR and the ENGINEER. It is anticipated that up to 4,750 sites will require Asphalt Restoration. It can be assumed that an average of 125 square feet of asphalt may be required at a site where restoration is required.

K. Item B.1g, Asphalt Base Restoration:

This item shall include all labor, materials, equipment, and supplies necessary to restore or replace asphalt roadway base or gravel roadway material damaged or removed from a roadway at a project site location resulting from the execution of contract work. Asphalt base must be compacted to 95% relative compaction in a minimum compacted 2" lift where replaced and matched to surrounding grade. This item is specific to restoration of unpaved roadways or driveways.

1. Measurement and Payment: The CONTRACTOR shall be paid at the unit price per square foot (SF) for a 2" compacted lift included in the Bid Form for each site identified by the OWNER where contract work is executed and resulting in the removal of or damage to existing gravel or asphalt base in a roadway. Each instance of asphalt base restoration shall be measured, documented and agreed to in the field between the CONTRACTOR and the ENGINEER.

L. Item B.1h, Concrete Restoration:

This item shall include all labor, materials, equipment, and supplies necessary to restore or replace concrete damaged or removed from a project site location resulting from the execution of contract work. This shall include the restoration of concrete according to Specification Section 03300 and 03900 as well as the Standard Details included in the Contract Documents.

1. Measurement and Payment: The CONTRACTOR shall be paid at the unit price per square foot (SF) included in the Bid Form for each site identified by the OWNER where contract work is executed and resulting in the removal of or damage to existing concrete flatwork. Each instance of concrete restoration shall be measured, documented and agreed to in the field between the CONTRACTOR and the ENGINEER.

M. Item B.2, Furnish and Install Meter Box and Cover:

This item shall include all labor, materials, equipment, and supplies necessary to excavate, install base rock, and install a standard or traffic rated meter box sized for either ¾" to 1" meter assemblies or 1½" to 2" meter assemblies in accordance with the Standard Details. This item shall include the removal and disposal of any remaining meter box or meter still in place following the Camp Fire of 2018. No payment shall be made for this item of work until the required grade and clearance surrounding the meter box installation have been deemed acceptable by the ENGINEER, including the housekeeping of the project site.

1. Measurement and Payment: The CONTRACTOR shall be paid at the unit price included in the Bid Form for each installation of a meter box and lid of the appropriate size and type as assigned by the ENGINEER and in accordance with the Contract Documents. Each instance shall be documented and agreed to in the field between the CONTRACTOR and the ENGINEER. It is anticipated that up to 4,750 sites will require the installation of a meter box and cover.

01200-5

N. Item B.3, Furnish and Install Meter and Meter Interface Unit (MIU):

This item shall include all labor, materials, equipment, and supplies necessary to install an operating Zenner flowmeter and Meter Interface Unit (MIU), including any accessories or required fittings, per the Standard Details and in accordance with manufacturer recommendations. Installation shall be completed by personnel trained and certified by the manufacturer in the installation of Zenner equipment. Size of meter to be installed at each location shall be determined and assigned by the ENGINEER.

1. Measurement and Payment: The CONTRACTOR shall be paid at the unit price included in the Bid Form for each installation of a flow meter and MIU, according to size installed as directed by the ENGINEER for each site. It is anticipated that up to 2,650 sites will require a ¾" flow meter, 350 sites will require a 1" flow meter, 100 sites will require a 1.5" flow meter, and 50 sites will require a 2" flow meter, for a total of 3,150 sites.

O. Item B.4, Furnish and Install Backflow Prevention Assembly:

This item shall include all materials and parts necessary to install or reconfigure a reduced pressure principle (RP) backflow prevention device at each address assigned. It is estimated that up to 600 sites will already have a temporary backflow prevention assembly in place with galvanized piping. These existing temporary devices shall be removed and reconfigured by the CONTRACTOR match specifications and Standard Details. CONTRACTOR shall reinstall these devices in place as assigned for that site, with any galvanized piping and usable frost bags salvaged and returned to the DISTRICT. CONTRACTOR shall provide, install and connect new backflow device assemblies for the remaining quantity of sites, approximately 1,400. This shall include the installation of a new frost protection bag on each backflow prevention assembly, new or reconfigured.

This item shall also include all labor equipment and materials required to test and record the result for each RP backflow prevention assembly installed new or reconfigured under this contract. Testing shall be accomplished by a person or persons trained and certified to do so by the CA NV chapter of the American Water Works Association (CA NV AWWA). This shall include documentation as required by the Specifications and transmitted to the ENGINEER before payment can be made.

1. Measurement and Payment: The CONTRACTOR shall be paid at the unit price included in the Bid Form for furnishing (as appropriate) and installing and a backflow prevention assembly in accordance with the Contract Documents, according to the size of device installed at each site and whether it was a new device or reconfiguration. Each instance shall be documented and agreed to in the field between the CONTRACTOR and the ENGINEER. It is anticipated that up to 1,350 locations will require a new 1" RP device, 25 locations will require a new 1½" RP device, and 25 locations will require a new 2" RP device, for a total of 1,400 new devices provided by the CONTRACTOR, with 600 total device reconfigurations estimated.

P. Item B.5, Repair Backflow Device

This item shall include all labor, equipment, and supplies necessary to furnish and install backflow assembly repair kits at backflow devices assigned for reconfiguration which require repair and/or have failed testing in order to return them to compliant and operable service.

01200-6

1. Measurement and Payment: The CONTRACTOR shall be paid at the unit price included in the Bid Form for each instance of a backflow device repair on a reconfigured backflow prevention assembly. Each instance shall be documented and agreed to in the field between the CONTRACTOR and the ENGINEER. It is anticipated that up to 300 sites may require a repair.

Q. Item B.6, Connect to Customer Plumbing

This item shall include all labor, equipment, and supplies including all necessary fittings to connect newly installed infrastructure (meter or backflow) to below grade customer plumbing in accordance with standard details and specifications. Customer plumbing configurations and materials may vary at each site.

1. Measurement and Payment: The CONTRACTOR shall be paid at the unit price included in the Bid Form for each instance of a customer tie in in accordance with the Contract Documents. Each instance shall be documented and agreed to in the field between the CONTRACTOR and the ENGINEER. It is anticipated that up to 2,650 sites will require a customer tie in.

R. Item B.7, Furnish and Install Bollard

This item shall include all labor, equipment, and supplies to install permanent or removable bollards as directed by the ENGINEER and in accordance with Detail 2600A. Conditions may vary where installations are directed.

1. Measurement and Payment: The CONTRACTOR shall be paid at the unit price included in the Bid Form for each instance of a permanent or removable bollard in accordance with the Contract Documents. Each instance shall be documented and agreed to in the field between the CONTRACTOR and the ENGINEER. It is anticipated that up to 100 sites will require the installation of one or more bollards.

1.3 DESCRIPTION OF CALTRANSE ENCROACHMENT PERMIT ALLOWANCE BID ITEM – SCHEDULE 2

A. Item C.1, Caltrans Encroachment Permit Allowance

This item shall include all labor, equipment, and materials to obtain required Caltrans Encroachment Permits for assigned locations within the Caltrans Right of Way for service lateral installations. This shall include obtaining the permit and any inspection or other requirements imposed by the permit.

1. Measurement and Payment: The CONTRACTOR shall be paid according to documented actual costs associated with each permit successfully obtained, approved, and executed. Any unused dollars left in this allowance shall not be paid to the CONTRACTOR. Each instance shall be documented and agreed to between the CONTRACTOR and the ENGINEER. This item shall only be exercised at the OWNER's assignment of applicable project sites and scope.

1.4 DESCRIPTION OF OPTIONAL WORK UNIT PRICE BID ITEMS – SCHEDULE 3

A. Item D.1, Additional Pipe Installation – Customer Side Plumbing

01200-7

This item shall include all labor, equipment, and supplies to install additional linear footage of HDPE piping on the customer side of the meter or backflow prevention assembly depending on the site, as directed by the ENGINEER, including all necessary fittings to make permanent connections. Conditions may vary where installations are directed, but CONTRACTOR may assume 1" HDPE piping, a bury depth of 3ft, standard backfill, and no tracer wire.

1. Measurement and Payment: The CONTRACTOR shall be paid at the unit price included in the Bid Form for each linear foot (LF) of additional piping installed on the customer side of the meter and backflow assembly in accordance with the Contract Documents. Each instance shall be documented and agreed to in the field between the CONTRACTOR and the ENGINEER. This item shall only be exercised at the OWNER's discretion and as directed by the ENGINEER.

B. Item D.2, Encased Pipe Installation

This item shall include all labor, equipment, and supplies to install additional linear footage of HDPE piping encased in schedule 40 galvanized pipe with minimal annular space as shown in the Standard Details, as directed by the ENGINEER, including all necessary fittings to make permanent connections. Conditions may vary where installations are directed, but CONTRACTOR may assume a bury depth of 3ft, and no tracer wire.

1. Measurement and Payment: The CONTRACTOR shall be paid at the unit price included in the Bid Form for each linear foot (LF) of additional encased piping installed in accordance with the Contract Documents. Each instance shall be documented and agreed to in the field between the CONTRACTOR and the ENGINEER. This item shall only be exercised at the OWNER's discretion and as directed by the ENGINEER.

C. Item D.3, Standby Time

This item shall encompass all labor, material, and equipment costs for a 30 minute period associated with standby time for a crew, as may be directed by the ENGINEER and as specified in the project documents. CONTRACTOR shall not bill for the first 60 minutes from the time of issue notification as specified, but may bill for every 30 minute increment thereafter. CONTRACTOR shall be responsible for all required documentation as specified for an instance of standby time.

1. Measurement and Payment: The CONTRACTOR shall be paid at the unit price included in the Bid Form for each 30 minute increment of standby time following the first 60 minutes after written and verbal notification of work stoppage. Each instance shall be documented and agreed to in the field and in writing between the CONTRACTOR and the ENGINEER. This item shall only be exercised at the OWNER's discretion and as directed by the ENGINEER.

D. Item D.4, Remobilization

This item shall encompass all labor, material, and equipment costs associated with remobilization of a crew to a project site after an initial attempt to complete assigned work. This shall not include costs associated with initial mobilization to a project site for the completion of assigned work. CONTRACTOR shall not be due any remobilization costs resulting from a failure to mobilize with all required labor, equipment, or materials and preparatory site assessment/USA markings as outlined in the project documents.

01200-8

1. Measurement and Payment: The CONTRACTOR shall be paid at the unit price included in the Bid Form for each instance of crew remobilization. Each instance shall be documented and agreed to in writing between the CONTRACTOR and the ENGINEER prior to remobilization. This item shall only be exercised at the OWNER's discretion and as directed by the ENGINEER.

#### 1.5 PROGRESS PAYMENTS

- A. Progress Payment Request Submittal:
  1. Unless otherwise mutually agreed, by the 25th of each month, the CONTRACTOR shall prepare and submit monthly progress payment requests for work completed through the 25th day of the previous month.
  2. Said payment request shall be based on the breakdown of activities as specified in the Bid Form.
  3. The monthly schedule update shall be submitted as part of the monthly progress payment report.
- B. The ENGINEER will review progress payment requests and make a determination of the actual unit quantities based on an approximate measurement of all materials supplied and work performed in the field.
- C. In the event that the CONTRACTOR fails to provide the OWNER with an acceptable Monthly Contract Record Drawing Submittal in accordance with Section 01330, the OWNER shall deduct compensation for such monthly submittal as provided in Section 01320. Said deduction shall become the sole property of the OWNER.
- D. Retention:
  1. From the amount thus determined, five percent thereof will be deducted as retention by OWNER for performance security.
  2. Acceptance of separate components shall not operate to release performance retention.
  3. The amount of all payments previously made to the CONTRACTOR and any amounts due the OWNER from the CONTRACTOR for supplies, materials, services, damages, or otherwise deductible under the terms of the contract will be deducted from the remainder.
  4. The remaining amount will be paid as a progress payment by the OWNER to the CONTRACTOR on the third Friday of the succeeding month or as soon thereafter as is practical.
- E. In addition to the retention under Paragraph D above, the whole or part of any payment of the estimated amount due the CONTRACTOR may be withheld as an additional retention if such course be deemed necessary to protect the OWNER from loss due to the CONTRACTOR's failure to perform any of the following: (1) meet CONTRACTOR's payment obligations; (2) execute the work; (3) correct defective work; (4) settle damages as provided; or (5) produce substantial evidence that no stop notices will or have been filed, and/or if it has been determined that unpaid balances may be insufficient to complete the work.
- F. All material and work covered by progress payments thereupon become the sole property of the OWNER, but this provision shall not be construed as relieving the CONTRACTOR from sole responsibility for all materials and work upon which payments have been made or the restoration of any damaged work or as a waiver of the OWNER's

01200-9

right to require fulfillment of all of the contract terms. Said CONTRACTOR's obligation extends through the close of the warranty period.

G. Payment for Materials:

1. At their sole discretion, the ENGINEER will approve items for which partial payment is to be made.
2. Proper storage and protection of materials shall be provided by the CONTRACTOR. Final payment shall be made only for materials actually incorporated in the work and, upon acceptance of the work, all materials remaining for which advance payments had been made shall revert to the CONTRACTOR, unless otherwise agreed, and partial payments made for these items shall be deducted from the final payment for the work.

**1.6 FINAL PAYMENT**

- A. Upon the completion of the work as determined by the ENGINEER, a Notice of Acceptance will be issued and recorded with the County.
- B. The OWNER will pay to the CONTRACTOR within 60 days after filing of the Notice of Acceptance, or as soon thereafter as practicable, the remaining amount due the CONTRACTOR including retainage, less all prior payments and advances whatsoever to or for the account of the CONTRACTOR for supplies, materials, services, damages, stop notices, or otherwise deductible under the terms of the contract.
- C. All prior estimates and payments including those relating to extra work shall be subject to correction by this payment, which throughout this contract is called "Final Payment".

**1.7 RELEASE OF CLAIMS:**

- A. Neither the final payment nor any part of the retained percentage shall become due until the CONTRACTOR shall have delivered to the OWNER a complete release of all claims against the OWNER arising under and by virtue of this contract and related to undisputed amounts, including claims of Subcontractors and suppliers of either materials or labor.
- B. If disputed contract claims in stated amounts are unresolved 35 days after issuance of the Notice of Acceptance, a progress payment of undisputed amounts and retained funds will be made by OWNER upon receipt of a release specifically excluding the disputed contract claims.
- C. Claims by the OWNER against the CONTRACTOR for liquidated damages or actual damages or other causes will be a valid basis for withholding of funds by the OWNER.
- D. Upon resolution of disputed claims, the CONTRACTOR shall execute a supplemental release and, upon delivery the OWNER will make final payment.

**PART 2 - PRODUCTS (NOT USED)**

**PART 3 - EXECUTION (NOT USED)**

+ + END OF SECTION + +

01200-10

**PART 2 - PRODUCTS (NOT USED)**

**PART 3 - EXECUTION (NOT USED)**

+ + END OF SECTION + +

01200-11

## **SECTION 15100 PSDS HDPE – SL**

### **PIPING SYSTEM DATA SHEET – HDPE SERVICE LATERALS**

#### **1.0 Installation Standards**

- 1.01 Material and Fittings. Copper Tubing Size (CTS) High-density Polyethylene (HDPE) will be allowed for services up to and including 2" in diameter (meter service connections larger than 2" diameter shall not be constructed as part of this contract.)
- 1.02 High Density Polyethylene Pipe (HDPE) shall be manufactured in accordance with ASTM D2737. Resin used in the manufacture of the pipe shall be listed as meeting the requirements of National Sanitation Foundation (NSF) 61.
- 1.03 HDPE pipe shall be rated for 200 psi, SDR 9.
- 1.04 Size appropriate Stainless Steel stiffening inserts shall be used wherever compression fittings are used.
- 1.05 Unless otherwise specified or approved by the District, compression fittings (Ford Meter Box Company or PID approved equal) are to be used for connecting HDPE tubing to other appurtenances. Pack joint fittings are not allowed.
- 1.06 An approved tubing cutter shall be used to prepare HDPE tubing for fitting attachment. Any other cutting method, such as knife and hacksaw cuts, will not be allowed. Ream pipe ends and ensure cut ends are free of chips and burrs.
- 1.07 All material is to be stored in a clean, dry location, away from contaminants or corrosive materials.

#### **2.0 Installation**

- 2.01 New hot-tapped connections to water mains are to be done only at the direction of the ENGINEER where existing corporation stop valves cannot be reused. Connections must be 2 inches and smaller and placed horizontally at 0° with spring line of water main in accordance with Details PID-05 through PID-15.
- 2.02 Unless otherwise specified by the ENGINEER, the order of connections shall be followed as shown in Standard Details PID-05 through PID-15.
- 2.03 Clean, select backfill is to be used, free from rocks and roots or any object that may cause a puncture or deformation in the tubing. Single sack slurry mix may be used as an alternate method of backfill, with a strength of no greater than 100 psi.
- 2.04 Service lines shall be laid at right angles to the water main and run directly to the termination point selected in the field by PID. Deviations from this orientation must be approved by the ENGINEER.

15100 PSDS COP-SL



- 2.05 Service lines shall be installed in a manner that does not exert stress on pipe or fittings.
- 2.06 A 12 AWG solid copper tracer wire with type UF insulation shall be installed per Standard Details PID-05 through PID-15 and Specification Section 15100.
- 2.07 Following installation and before backfill is placed, CONTRACTOR shall pressurize service lateral with water and wait 5 minutes then inspect all fittings and pipe for any visible signs of leakage. This shall be observed by the ENGINEER and its completion documented.

### **3.0 Cleaning and Disinfection**

- 3.01 Before disinfecting, clean all foreign matter from pipe.
- 3.02 Disinfecting Procedure: Prior to installation spray or swab interior of pipe and fittings with disinfecting solution ensuring all wetted area have been disinfected.
- 3.03 Following the disinfection process, flush pipelines with potable water for long enough to ensure 3 times the volume of the pipe has passed through the pipe. Provide hoses, temporary pipes, ditches, and other conduits as needed to dispose of flushing water without damage to adjacent properties.
- 3.04 Disinfecting Solutions: Minimum free chlorine concentration of 100 ppm.

### **4.0 Parts Specifications**

**PIPE:** Copper Tubing Size (CTS) HDPE pipe, CenFlo (or District approved comparable) meeting ASTM D2737 CTS, rated for 200 psi, SDR 9, size-appropriate stainless-steel inserts.

#### **FITTINGS:**

*Note: All fittings must meet lead-free requirements.*

#### **Ford Meter Box Company or District Approved Equivalent**

Curb Stop: FIP X FIP

- 1" B11-444
- 1.5" B11-666
- 2" B11-777

Corporation Stop: MIP x COMP

- 1" FB1100-4-Q
- 1.5" FB1100-6-Q
- 2" FB1100-7-Q

Adaptor: MIP X COMP

- .75" C14-33-Q
- 1" C14-44-Q
- 1.5" C14-66-Q
- 2" C14-77-Q

Reducer Coupling: FIP

15100 PSDS COP-SL

- .75" X 1" C11-43

Coupling: FC x FIP

- .75" X 1" C01-34

Romac Industries

Service Saddle Style 202S

Tap Clamp Style CL1

Brass MIP plugs .75", 1", 1.5" and 2"

PVC MIP plugs .75", 1", 1.5" and 2"

All pipe and fittings are Copper Tubing Size

Stainless steel insert stiffeners shall be approved by PID

See Section 15100 for additional allowable fittings as approved by the ENGINEER.

+ + END OF SECTION + +

15100 PSDS COP-SL

**SECTION 15200  
VALVES AND OPERATORS**

**PART 1 - GENERAL**

**1.1 SUBMITTALS**

- A. Shop Drawings:
  - 1. Product data sheets for make and model.
  - 2. Complete catalog information, descriptive literature, specifications, and identification of materials of construction.
- B. Tests and inspection data.
- C. Operation and Maintenance Data as specified in Section 01330, SUBMITTAL PROCEDURES.

**1.2 PRODUCT DELIVERY, STORAGE, AND HANDLING**

- A. In accordance with manufacturer's directions.

**PART 2 - PRODUCTS**

**2.1 GENERAL**

- A. All valves shall be the same size as the pipe in which they are installed, unless specifically noted otherwise on the Drawings.
- B. All valves shall include all appurtenant parts (handwheels, valve stems, operating nut, etc.) for a complete operating valve.
  - 1. Valve shall be, as much as practical, fully factory assembled.
- C. All valves shall open by turning counter-clockwise. Maximum force required for operation shall be 40 lbs.
- D. All valves shall be installed in place with enough clearance to be easily operable in the future, considering any required tools or access requirements.
- E. All materials used in construction, modification or repair of Paradise Irrigation District water supply facilities shall be NSF 61 certified. No chemical, material, lubricant, or product may be used in the production, treatment, or distribution of drinking water that will result in contact with the drinking water, including process media, protective materials, joining and sealing materials, pipes and related products, and mechanical devices used in treatment/ transmission/ distribution systems, that has not been tested and certified as meeting the specifications of NSF International/ American National

15200-1

Standard Institute (NSF/ANSI) 61-2005 / Addendum 1.0-2005 (Drinking Water System Components – Health Effects).

- F. All materials used in construction, modification, or repair of Paradise Irrigation District water supply facilities shall comply with the requirements set forth in California Assembly Bill 1953 (AB 1953). AB 1953 prohibits the introduction of any pipe, pipe or plumbing fitting, or fixture that is not lead free into a public water system, or any plumbing in a facility providing water for human consumption.
- G. Where Lead-Free Bronze or Brass is specified, materials shall be in compliance with California Health & Safety Code Section 116875. Not more than a weighted average of 0.25 percent of the wetted surface of the valve shall be lead.
- H. Coatings and Linings:
  - 1. Provide factory-applied coatings as described herein.
  - 2. Where liquid epoxy coatings are specified, coatings shall conform to AWWA C550.
- I. Nuts, Bolts and Washers
  - 1. Hex Bolts: ASTM A320/A320M, Type 304 stainless steel, Grade B8, Class 2
  - 2. Nuts: ASTM F594, Type 304 stainless steel, Grade B8, Class 2
  - 3. Washers: Type 304 stainless steel

## 2.2 BALL VALVES

- A. **BAV-01LF:** Lead-Free Ball Valve, 2 inches and smaller:
  - 1. Service: Potable Water, Angle Stop
  - 2. Features:
    - a. Solid one-piece tee-head and stem
    - b. Padlock wing for locking valve in closed position
    - c. Dual EDPM O-rings in the stem
    - d. Molded EDPM rubber seats with reinforcing ring support
    - e. Fluorocarbon-coated brass ball
    - f. The letters "NL" are cast into the main body for lead free identification.
    - g. All brass that comes in contact with potable water conforms to AWWA standard C800 (ASTM B584, UNS C89833). Brass components that do not come in contact with potable water conform to AWWA Standard C800 (ASTM B62 and ASTM B584, UNS C83600, 85-5-5-5).
  - 3. Manufacturer and Products:
    - a. Ford Meter Box Company 1" BA43-444W-Q
    - b. Ford Meter Box Company 1.5" BFA43-666W-Q
    - c. Ford Meter Box Company 2" BFA43-777W-Q
    - d. Highfield Lockseal Assembly 93210140
    - e. Or District Approved Equal
- B. **BAV-02LF:** Lead-Free Ball Valve, 2 inches and smaller:
  - 1. Service: Potable Water, Customer Valve

15200-2

2. Features:
  - a. Lead Free forged copper silicon alloy body and adapter
  - b. Machine chrome plated lead free brass ball
  - c. All wetted surfaces that come in contact with potable water are certified to NSF/ANSI standards 61 and 372.
  - d. PTFE stem packing seal, thrust washer, and seats
  - e. Temperature Range: -40°F to 400°F
  - f. Rated 600 psig WOG, 150 psig WSP
  - g. Zinc-coated steel hand lever operator with vinyl grip
3. Manufacturer and Products:
  - a. Threaded:
    - 1) WATTS LFFBV-3C
    - 2) Or Equal as approved by PID
    - 3) Or District Approved Equal

C. **CRP-01:** Ball Corporation Valve 1 Inch to 2 Inch:

1. Features:
  - a. Rated 300 psi working pressure
  - b. All brass that comes in contact with potable water conforms to AWWA Standard C800 (ASTM B584, UNCS C89833)
  - c. "NL" cast into body for lead-free identification
  - d. Ends are integral or secured with adhesive to prevent unintentional disassembly
  - e. Spring tip gasket provides hydraulic seal
2. Manufacturers and Products:
  - a. Ford Meter Box Company 1" FB1100-4-Q-NL
  - b. Ford Meter Box Company 1-1/2" FB1100-6-Q-NL
  - c. Ford Meter Box Company 2" FB1100-7-Q-NL
  - d. Or District Approved Equal

## 2.3 BACKFLOW PREVENTERS

A. **BFP-01:** Reduced-Pressure Principle Backflow Prevention Assembly:

1. Service: Water.
2. Materials:
  - a. Main valve body and access covers: Low lead cast bronze (ASTM B584)
  - b. Seat Ring and Internal Polymers: Noryl
  - c. Seat Disc Elastomers: silicone
  - d. Fasteners and Springs: Stainless Steel, 300 series
  - e. Ball Valve Handles: Stainless Steel
3. Features:
  - a. Two check valves with an independent relief valve between the valves,
  - b. Two tightly closing resilient-seated shut-off valves
  - c. Test cocks, in accordance with AWWA C511
  - d. Rated 175 psi maximum working pressure,

15200-3

- e. Meets requirements of USC Foundation for Cross-Connection Control and Hydraulic Research.
- f. Ends: as required for installation as shown on Standard Details
- g. Coatings and Linings (steel and cast iron):
  - 1) Liquid epoxy, 12 mil minimum, for valve interior and exterior.
  - 2) For potable water applications, epoxy lining shall be NSF 61 approved.
- 4. Manufacturers and Products:
  - a. Wilkins 975XL2 (1"–2")
  - a.b. Or District Approved Equal

## 2.4 OPERATORS:

- A. General:
  - 1. Operator force not to exceed 40 pounds under any operating condition, including initial breakaway.

## 2.5 ACCESSORIES

- A. T-Handled Operating Wrench:
  - 1. One each steel operating wrench, length varies, may utilize extensions where required.
  - 2. Manufacturers and Products:
    - a. Mueller; No. A-24610.
    - b. Clow No.; F-2520.
    - c. Or District Approved Equal.
- B. Cast Iron Valve Box: Designed for traffic loads, sliding type, with minimum of 6-inch ID shaft.
  - 1. Box: Concrete with cast iron ring with minimum depth of 9 inches.
  - 2. Lid: Cast iron, minimum depth 3 inches, marked WATER.
  - 3. Extensions: Cast iron.

## **PART 3 - EXECUTION**

### 3.1 PREPARATION

- A. Cleaning:
  - 1. Clean all mating faces of valve (threads, flange faces, etc.) prior to assembly.
  - 2. Remove all debris from valve body prior to assembly.
  - 3. Take extra care to clean mating faces of existing pipe and fittings which may have corrosion, dirt, debris and mineral build-up which should be removed for a proper fit.
- B. Apply joint compound, lubricant, thread sealing tape or compound etc. as recommended by valve manufacturer for proper installation prior to installation.

15200-4

- C. Install valves in accordance with the following schedule and as noted on the Drawings:

### 3.2 INSTALLATION

- A. Install valves per manufacturer's recommendations.
- B. Install valves so handles operate from fully open to fully closed without encountering obstructions.
- C. Install valves in location and orientation for easy access for routine operation and maintenance. Access should be such that an operator can operate the valve without special accommodations or equipment.
- D. For installation of meters that are to be connected with a locked angle stop, the bullet shall be removed using a bullet key and the bullet shall be replaced on the angle stop upon completion of work.
- E. For backflow preventer installation the device shall be a minimum of 12 inches (12") above grade and not more than fifteen inches (15") above grade measured from the bottom of the device with a minimum of twelve inches (12") side clearance. The grade beneath the backflow preventer shall be compacted and level in measuring this clearance.

### 3.3 TESTS AND INSPECTION

- A. Valve may be either tested while testing pipelines, or as a separate step.
- B. Test that valves open and close smoothly under operating pressure conditions.
- C. Count and record number of turns to open and close valve, account for any discrepancies with manufacturer's data.
- D. For all newly installed backflow preventer devices or devices for which assembly was modified, the device shall be tested by a certified CA-NV AWWA Backflow Prevention Assembly Tester, to ensure that the backflow preventer is functioning properly prior to activation of service.
  - 1. The results of each individual test shall be documented including but not limited to the following information:
    - a. Address
    - b. Date
    - c. Time
    - d. Serial number of the device tested
    - e. Size of the device tested
    - f. Results of test

15200-5

2. All such test records shall be provided to the ENGINEER for conveyance to Paradise Irrigation District. Test records for backflow devices shall be provided to the ENGINEER monthly, along with the CONTRACTOR's pay application.
3. If a backflow preventer device fails the required testing, it must either be repaired or replaced and retested until a passing result is certified and recorded.
4. CONTRACTOR shall install on each backflow device a backflow inspection tag meeting the following requirements and must be approved by the ENGINEER:
  - a. Light blue in color or as approved by the ENGINEER
  - b. 15 pt Vinyl Plastic with 1/4" brass metal eyelet
  - c. 26 gauge galvanized wire attachment
  - d. 2-5/8 " x 5-1/4" dimensions
  - e. The following minimum information shall be recorded on the tag:
    - 1) Make
    - 2) Model
    - 3) Size
    - 4) Serial Number
    - 5) Expiration Date
    - 6) Tester Signature
    - 7) State Certification Number
    - 8) Passed or Failed Determination
    - 9) Notes

+ + END OF SECTION + +

15200-6



## **SECTION 02300**

### **EARTHWORK**

#### **PART 1 - GENERAL**

##### **1.1 COORDINATION**

- A. Prior to excavation, CONTRACTOR shall provide normal notice to Underground Service Alert (USA North 811) at 1-800-624-2444.

##### **1.2 DESCRIPTION**

- A. Section includes: All excavating, backfilling, filling, grading, subgrade preparation and disposing of earth materials as may be required. It also includes all temporary means needed to prevent discharge of sediment to watercourses from dewatering systems or erosion.

##### **1.3 REFERENCES**

- A. American Society for Testing and Materials (ASTM)
  - 1. ASTM C33, Standard Specification for Aggregate Material.
  - 2. ASTM D422, Method for Particle-Size Analysis of Soils.
  - 3. ASTM D423, Liquid Limit of Soils.
  - 4. ASTM D427, Shrinkage Factors of Soils.
  - 5. ASTM D698, Test Method for Laboratory Compaction Characteristics of Soil.
  - 6. ASTM D1556, Test Method for Density and Unit Weight of Soil in Place by the Sand-Cone Method.
  - 7. ASTM D2922, Test Methods for Density of Soil and Soil-Aggregate in Place by Nuclear Methods (Shallow Depth).
  - 8. ASTM D2166, unconfined compressive strength of soils.
- B. Occupational Safety and Health Administration (OSHA)
  - 1. Title 29, Code of Federal Regulations, Part 1926

##### **1.4 SYSTEM DESCRIPTION**

- A. Permits and Regulations:
  - 1. Perform excavation Work in compliance with applicable requirements of governing authorities having jurisdiction.
  - 2. CONTRACTOR shall obtain all necessary permits for Work in roads, rights-of-way, railroads, etc. Also, obtain permits as required by local, state and federal agencies for discharging water from excavations, for erosion control, and for prevention of air and water pollution.

#### **PART 2 - PRODUCTS**

##### **2.1 MATERIALS**

- A. General:

02300-1

1. No material shall be placed without the approval of the ENGINEER.
- B. Pipe Locating Wire:
  1. Pipe locating wire shall be AWG No. 12, solid copper wire with type UF insulation, attached to the pipe at a minimum 3 ft interval with a minimum of one full wrap of duct tape.
  2. Install wire connector and provide at least three wraps of 6-mil PVC electrical tape insulation around where connections are made, or wrap bare wire where present with three wraps of 6-mil PVC electrical tape.
- C. Fill Material:
  1. Classification:
    - a. Fill adjacent to structures to a distance measured horizontally from the structure that is equal to the depth from the finished grade is classified as Select Fill.
    - b. Outside these limits, the fill is classified as Common Fill, unless otherwise specified.
  2. Common Fill:
    - a. Common Fill materials shall consist of soils obtained from on-site excavations or off-site sources that are uniformly mixed, contain no organic material, and have been passed through a 3" screen.
    - b. If on-site material is unsuitable as determined by the ENGINEER, imported fill shall be used.
  3. Select Fill:
    - a. Select fill or backfill is material selected by the ENGINEER from the excavation.
    - b. Select material shall be free of organic or other unsuitable materials and shall not contain rocks, or unbroken masses of soil larger than 4" in greatest dimension.
- D. Aggregate Base:
  1. Dry Weather - Base rock shall conform to provisions of Section 26, California Department of Transportation Standard Specifications for 3/4" maximum Class 2 aggregate. Aggregate bedding shall be placed in twelve (12) inch layers and compacted.
  2. Wet Weather - Base rock shall be 3/4" crushed basalt, to be approved by District/Owner and Engineer. Aggregate bedding shall be placed in twelve (12) inch layers and compacted.
- E. Sand:
  1. Natural or manufactured granular material, containing no organic material.
    - a. Sand Bedding shall be 1/4" minus in size, free of clay and organic material and of such size that 100% will pass through a #4 sieve and not more than 5% would pass through a #200 sieve. Material must meet the approval of the OWNER or ENGINEER and shall be placed to a depth of four (4) inches below the grade of the bottom of the pipe, evenly distributed, placed, and compacted to support the pipe levelly along its length prior to placement of pipe. When rocky trenching conditions are encountered, over-excavation and over-sanding in compacted layers, as specified by the ENGINEER, may be required.
    - b. Sand placed in the pipe zone above the pipe shall not exceed a 12 inch lift without compaction.

02300-2

## **PART 3 - EXECUTION**

### **3.1 PREPARATION**

- A. Inspection:
  - 1. Provide ENGINEER with sufficient notice and with means to examine the areas and conditions under which excavating, filling, and grading are to be performed.
  - 2. ENGINEER will notify CONTRACTOR if conditions are found that may be detrimental to the proper and timely completion of the Work.
  - 3. Do not proceed with the Work until unsatisfactory conditions have been corrected in a manner acceptable to ENGINEER.
- B. Potholing:
  - 1. Excavate and backfill test pits to determine conditions or location of the existing utilities and structures. Efforts to keep size of pothole excavation as small as possible shall be taken.
  - 2. Define the location of each existing facility involved within the area of excavation for Work under this Contract.
  - 3. Exercise care during such location work to avoid damaging and/or disrupting the affected facility.
  - 4. CONTRACTOR is responsible for repairing at their expense, or covering the cost of OWNER provided repairs resulting from damage to any structure, piping, or utility caused by their Work.
- C. Temporary Fencing:
  - 1. Furnish and install a temporary fence surrounding unattended excavations and work areas, including the stockpile and storage areas.
  - 2. Provide fence openings only at vehicular, equipment and worker access points.

### **3.2 EROSION CONTROL**

- A. General: Implement the construction procedures outlined herein to assure minimum damage to the environment during construction. Take all additional measures required to conform to the requirements of applicable local and state codes and regulations.
  - 1. Make provisions to regulate drainage, avoid erosion and minimize damage to vegetation.
  - 2. Where areas must be cleared for storage of materials or temporary structures, provisions will be made for regulating drainage and controlling erosion, subject to the ENGINEER'S approval.
  - 3. Remove only those shrubs and grasses that must be removed for construction. Protect the remainder to preserve their erosion-control value.
- B. Control Measures: Apply measures to control erosion and to minimize the siltation of the existing gutters, drainage ditches, stormwater facilities/structures, waterways, and natural ponding areas. Such measures include, but are not limited to, the use of berms, baled straw silt barriers, gravel or crushed stone, mulch, slope drains and other methods.
  - 1. Install erosion and sediment control practices according to applicable local and state standards, codes and specifications. The practices will be maintained in effective working condition during construction and until the drainage area has been permanently stabilized.

02300-3

2. Temporary measures will be coordinated with the construction of permanent drainage facilities and other Work to the extent practicable to assure economical, effective, and continuous erosion and siltation control.
  3. CONTRACTOR will provide special care and erosion control measures in areas with steep slopes (exceeding 2:1 slope). Disturbance of vegetation will be kept to a minimum to maintain stability.
  4. After stabilization, remove all straw bale dikes, debris, etc., from the site and return area to pre-excavation condition.
- C. Dust Control:
1. Prevent blowing and movement of dust from exposed soil surfaces and access roads to reduce on- and off-site damage and health hazards.
  2. Control may be achieved by irrigation in which the site is sprinkled with water until the surface is moist.
  3. Repeat the process as needed.
- D. Failure to Comply: In the event CONTRACTOR repeatedly fails to satisfactorily control erosion and siltation, PID reserves the right to employ outside assistance or to use its own forces to provide the corrective measures indicated. The cost of such work, plus engineering costs, will be deducted from monies due CONTRACTOR.

### 3.3 DEWATERING

- A. General:
1. Continuously control all water during the course of construction, including surface water and ground water, to prevent any damage to any excavation or to the construction activities occurring within those excavations.
  2. Maintain all dewatering systems full time (24-hours/day) during the entire time the excavation is open. Do not shut down dewatering systems at night, on weekends or on holidays, or any other time the excavation is open.
  3. Each excavation will be kept dry during subgrade preparation and continually thereafter until the pipe to be installed therein is inspected by the ENGINEER and backfill operations have been completed.
  4. Provide adequate alarm, monitoring and back-up systems for all dewatering systems to maintain control of all water during all times any excavation is open.
  5. Disposal of water used in the course of hydraulic excavation shall be the responsibility of the CONTRACTOR and shall be in accordance with all local, state, and federal requirements.
  6. Water introduced to excavations as a result of pipe leaks discovered or caused by the course of Work shall be controlled and removed by the CONTRACTOR to be disposed of in accordance with the requirements as outlined above.
- B. Surface Water:
1. Provide and maintain adequate drainage and dewatering system to prevent surface water from entering excavations and to remove and dispose of all rainwater entering excavations, trenches, or other parts of the Work.
  2. Keep the different working areas on the site free of surface water at all times. Special care will be taken to eliminate depressions that could serve as mosquito pools.
  3. The diversion and removal of surface water will be performed in a manner that will prevent the accumulation of water behind temporary structures or at any other locations within the construction area where it may be detrimental.

02300-4

C. Ground Water:

1. Provide, operate and maintain dewatering system to permit excavation and subsequent construction activities in a dry, safe environment.
2. System shall be of sufficient size and capacity to maintain groundwater level a minimum of 2 feet below the lowest point of excavation.
3. Contractor shall make an assessment of the potential for dewatering induced settlement of surrounding soils and structures. Contractor shall provide all necessary equipment and facilities, including re-injection wells, cutoff walls, infiltration trenches, etc, to prevent damage to adjacent structures.

D. Disposal of water:

1. Disposal of discharge water shall conform to any and all applicable permit requirements, local, state, and federal requirements.

### 3.4 EXCAVATION SUPPORT SYSTEMS

A. Trench Support

1. Provide, install and maintain trench shields for all trench excavations for which trench shields are required (at a minimum, as required by OSHA).
2. Follow all OSHA guidelines and other applicable laws and ordinances.
3. Elevation of Bottom:
  - a. Excavation of earth material below the bottom of a shield will not exceed the limits established by ordinances, codes, laws and regulations.
  - b. When using a shield for pipe installation, the bottom of the shield will not extend below the mid-diameter of installed pipe at any time.
  - c. When using a shield for the installation of structures, the bottom of the shield shall not extend below the top of the bedding for the structures.
4. Moving Shield: When a shield is removed or moved ahead, extreme care will be taken to prevent the movement of pipe or structures or the disturbance of the bedding for pipe or structures. Pipe or structures that are disturbed are to be removed and reinstalled at the CONTRACTOR's expense to the satisfaction of the ENGINEER.

B. Removal of Excavation Support

1. Completely remove all excavation support unless ENGINEER specifically \_ requests excavation support to remain in place after backfill material is properly placed.
2. Remove all excavation support in a manner that will maintain support as excavation is backfilled and will not leave voids in the backfill.

### 3.5 EXCAVATION

A. General:

1. Material removed: Excavations include earth, sand, clay, gravel, hardpan, boulders, rock, pavements, rubbish and all other materials within the excavation limits.
2. Excavations for pipelines may be open excavations. Provide excavation protection system(s) required by ordinances, codes, law and regulations to prevent injury to workmen and to prevent damage to new and existing structures or pipelines. Unless shown or specified otherwise, protection system(s) will be utilized under the following conditions.
  - a. Excavation Less Than 5' deep: Excavations in stable rock or in soil conditions where there is no potential for a cave-in as determined by a competent person

may be made with vertical sides. Under all other conditions, excavations will be sloped and benched, shielded, or shored and braced.

- b. Excavations 5' or greater: Excavations will be sloped and benched, shielded or shored and braced according to OSHA standards or as designed and stamped by a registered professional geotechnical engineer.
- c. Excavation protection system(s) will be installed and maintained in accordance with manufacturer data or design by a registered professional geotechnical engineer.

B. Pipe Trench Excavation:

- 1. Trenches for 6" and larger water mains shall have a width equal to the outside diameter of the pipe plus twelve (12) inches. Trenches for water mains smaller than 6" and service laterals may be narrower, depending on local conditions and approval of the ENGINEER for each circumstance but must allow for proper bedding of the pipe or service lateral with a minimum 4" encasement of sand both below the pipe and horizontally on each side.
- 2. The bottom of the trench shall be excavated to a depth of 4" below the bottom of the pipe and trench depth maintained deep enough to provide a minimum of 30" of cover over the pipe.
- 3. Sufficient for shoring and bracing or shielding and dewatering.
- 4. Sufficient to allow thorough compaction of backfill adjacent to bottom half of pipe.

C. Subgrades:

- 1. Subgrades for trench bottoms shall be firm, dense, and thoroughly compacted and consolidated; free from mud, muck, and other soft or unsuitable materials; and remain firm and intact under all construction operations.
- 2. Subgrades that are otherwise solid, but which become soft or mucky on top due to construction operations, shall be reinforced with select fill.
- 3. The finished elevation of stabilized subgrades shall not be above original subgrade elevations.

D. Material Storage: Stockpile satisfactory excavated materials in approved areas, in a manner that facilitates good housekeeping and removal of excess materials, until required for backfill or fill. Place, grade, and shape stockpiles for proper drainage if left in place for longer than one work day.

- 1. Locate and retain soil materials away from edge of excavations.
- 2. Locate and retain soil materials in a manner that does not impact private property or landscaping.
- 3. Dispose of excess soil material and waste materials as specified hereinafter.

### 3.6 PLACEMENT OF FILL AND BACKFILL

A. General:

- 1. Backfill excavations as promptly as Work permits, but not until completion of the following:
  - a. Acceptance by the ENGINEER of construction below finish grade.
  - b. Inspection, testing, approval, and recording of locations of underground piping.
  - c. Removal of shoring and bracing and backfilling of voids with satisfactory materials.
  - d. Removal of trash and debris.
- 2. Remove and replace fill containing organic materials or other unacceptable material with approved fill material, as specified.

02300-6

3. Compact all fill and backfill as specified in Subsection 3.7.
- B. Backfill in Pipe Trenches:
1. Unless otherwise directed by the ENGINEER, place all pipe on a minimum 4" thick layer of ENGINEER approved Sand bedding. The compacted sand bedding shall extend 12" minimum above the top of the pipe.
  2. Install bedding as follows:
    - a. Spread pipe bedding sand and grade to provide a uniform and continuous support beneath the pipe at all points between pipe joints.
    - b. Compact bedding sand as necessary or as directed by the ENGINEER in order to accomplish uniform support for the pipe prior to placement of pipe.
    - c. Deposit and compact sufficient bedding material under and around each side of the pipe to hold the pipe in proper position and to maintain alignment during subsequent bedding operations.
    - d. Bedding material shall be deposited and compacted uniformly and simultaneously on each side of the pipe to prevent lateral displacement. Then place and compact the bedding material to an elevation 12" above the top of pipe.
  3. Above the level of bedding, place Aggregate Base Rock conforming to provisions of Section 26, California Department of Transportation Standard Specifications for  $\frac{3}{4}$  maximum Class 2 aggregate or Engineered fill as reviewed and approved by the ENGINEER. "3/4" Crushed Basalt" base rock shall be used in wet weather conditions or as directed by the ENGINEER. Compact in a maximum of 12" lifts.
- C. Marking Tape:
1. Continuously install marking tape along centerline of all buried piping, on top of last lift of pipe zone material unless otherwise shown. Coordinate with piping installation drawings. Install in accordance with manufacturer's recommendations.
    - a. Metallic Marking Tape: Install with water main piping. Join ends with clips provided by the manufacturer.
- D. Pipe-Locating Wire:
1. Pipe-locating wire shall be provided for the entire length of all installed pipelines and shall be continuous along pipe length.
  2. Locating wire shall be laid along the top of the pipe, without hindering the operation of the corporation stop. Wire shall extend to the end of the pipe, and be wrapped twice around the base of the angle stop, accessible and visible within the meter box and shall not be run through angle stop eyelets to maintain operability of the angle stop valve.

Stub the pipe-locating wire up with the end of the pipe into the meter box and accessible as described above. Sufficient excess length shall be provided at terminal connections to allow continuation of the pipe-locating wire to the terminal connection.
  3. Locating wire shall be installed in such a manner as to maintain conductivity with the tracer wire or metallic pipe at the main, whichever is present. Conductivity shall be tested by the CONTRACTOR on site following installation and results documented for each service lateral prior to placement of backfill.
  4. Locating wire installation shall be fully documented including photos for each installation.
  5. Wire splices shall be made with compression fittings or soldering; wrapped with Tac-Tape, Aqua-Seal, or equal, and wrapped with electrical tape. Prevent bare copper wire from contacting metallic appurtenances including, but not limited to, pipe, buried valves, or fittings.

02300-7

- E. Resume backfilling operations using the techniques described above to complete the pipe zone backfill. ENGINEER will approve the pipe zone backfill prior to initiating the trench zone backfill.
- F. Replacement of Unacceptable Excavated Materials: In cases where over-excavation for the replacement of unacceptable soil materials is required, backfill the excavation to the required subgrade with select backfill material and thoroughly compact.

### 3.7 COMPACTION

- A. General:
  - 1. Compaction by inundation with water will not be permitted. "Jetting" of any backfill material or process is prohibited.
  - 2. Provide equipment capable of discing, aerating, and mixing the soil to ensure reasonable uniformity of moisture content throughout the material and to reduce the moisture content by air drying, if necessary.
  - 3. Perform compaction with equipment suitable for the type of fill material being placed. Select equipment that is capable of providing the minimum density required by these Specifications. Use hand-operated compacting equipment within a distance of 3 feet from the wall of any below grade structure. Between 3 feet and 12 feet adjacent to below grade structures, compaction may be completed with lightweight compaction equipment weighing less than 15,000 pounds. Beyond 12 feet adjacent to below grade structures, there are no equipment weight restrictions. Provide equipment that is capable of compacting in restricted areas next to structures and around piping.
- B. Compaction Density Requirements: The degree of compaction required for several types of fill is listed below. Moisten or aerate material as necessary to provide the moisture content specified, or if not specified, that will facilitate obtaining the specified compaction.

MATERIAL	Required Minimum Density (ASTM D 1557)	Maximum Uncompacted Lift*
Common Fill/Prepared Subgrade:	90%	8"
Select Fill/Trench Backfill above pipe:		
More than 2 feet below final grade	90%	8"
Less than 2 feet below final grade	95%	8"
Aggregate Base:	95%	12"
Granular Bedding	90%	6"
Sand	90%	6"
Slurry	n/a	n/a

\*Where large areas of backfill allow for use of large, heavy equipment, ENGINEER may, at their option, allow uncompacted lifts up to 12".

- C. Moisture Content: All fill and backfill shall be prepared and thoroughly mixed to achieve optimum moisture content,  $\pm 3\%$ , with the following exception: On site clayey soils optimum to  $+3\%$ .

02300-8



D. Testing: Testing will be as specified under Paragraph 3.10, "Field Quality Control".

### 3.8 GRADING

A. General:

1. Uniformly grade areas within limits of grading under this Section, including adjacent transition areas.
2. Smooth subgrade surfaces within specified tolerances and compact with uniform levels or slopes between points where elevations are shown or between such points and existing grades.

B. Adjacent to Structures: Grade areas adjacent to structures including meter boxes and backflow assemblies to drain away from structures and to prevent ponding. Ground surface beneath backflow devices should not be mounded or left concave to achieve the required vertical clearance called out in the Standard Details.

C. Pavements: Shape surface of areas under pavement to line, and grade and cross-section with finish surface not more than 1/2" above the required subgrade elevation.

D. Compaction: After grading, compact subgrade surfaces to the depth and percentage of maximum density for each area classification.

<b>Area</b>	<b>Required Minimum Density (ASTM D 1557)</b>
Beneath Pavement	95%
Landscaped and other areas	85%

### 3.9 PAVEMENT BASE COURSE

A. Installation must be in accordance with Standard Details included in these Contract Documents or as noted below if no reference is given in said Details.

B. Shoulders:

1. Place shoulders along edges of base course to prevent lateral movement.
2. Construct shoulders of acceptable soil materials, placed in such quantity to compact to thickness of each base course layer.
3. Compact and roll at least a 12" width of shoulder simultaneously with compacting and rolling of each layer of base course.

C. Placing:

1. Place base course material on prepared subgrade in layers of uniform thickness conforming to indicated cross-section and thickness.
2. Maintain optimum moisture content for compacting base material during placement operations.

### 3.10 FIELD QUALITY CONTROL:

A. General: CONTRACTOR required testing of materials by an ENGINEER approved testing laboratory, testing for moisture content during placement and compaction of fill materials, and of compaction requirements for compliance with technical requirements of the Specifications.

02300-9

- B. The CONTRACTOR shall retain one or more independent testing agencies to perform all quality control testing required for all materials except portland cement concrete. The required testing is for soil, aggregates, imported gravel, aggregate base, asphalt concrete, and CLSM. Each independent testing agency shall perform the testing under the supervision of an engineer registered in California. Technicians performing the testing shall be certified to operate the equipment and have at least 1 full year of experience in the type of tests being performed.
- C. A Quality Control Plan shall be submitted by the CONTRACTOR to the ENGINEER at least 30 days before field testing is required. It shall include the names, addresses, and phone number of the companies, the major personnel that will be involved, and resumes of the individuals that will be supervising and performing the tests. Copies of certificates held by the companies and the testing personnel shall be included.
- D. CONTRACTOR's independent testing agency shall perform all field and laboratory testing as described in these Specifications. Test shall include specific gravity, sand equivalent, durability, abrasion resistance, soundness, gradation, compaction curves, lab and field moisture contents, compressive strength, and field density. Other tests shall be performed by the CONTRACTOR's independent testing agency as may be required to meet the Specifications. Mix design testing for portland cement concrete, CLSM, and asphalt concrete shall also be performed by the CONTRACTOR. Field testing for portland cement concrete will be performed by the ENGINEER.
- E. CONTRACTOR shall schedule all lab testing so that materials arriving at the site have been approved by the ENGINEER for use on the Project.
- F. All lab tests shall be performed on Samples obtained from the source of actual material that will be used on the Project. No test results more than 90 days old shall be submitted for review.
- G. The location of field density tests shall be determined by the ENGINEER.
- H. Frequency of tests: Frequency will be not less than as follows:
  - 1. For trenches:
    - a. Service Laterals: **One nuclear gage test per service lateral trench. 10% of service lateral trenches shall be tested. Testing shall take place at minimum once per week. Locations to be tested shall be selected by the Engineer.**
    - b. In open fields: 2 locations every 1,000 linear feet, for each layer
    - c. Along dirt, gravel, or paved roads or off traveled right-of-way: 2 locations every 500 linear feet, for each layer
  - 2. For structural backfill: 1 every 50 cubic yards.
  - 3. In embankment or fill: 1 every 200 cubic yards.
  - 4. Base material: 1 every 50 cubic yards.
  - 5. Paved Areas, Subgrade **(other than service lateral trenches):** 1 every 500 square feet, but in no case less than 3 tests, for each layer.
- I. The ENGINEER may modify the frequency or spacing of tests to provide for testing at specific structures or locations where the ENGINEER deems additional testing is required. The CONTRACTOR shall perform such additional testing up to 10 percent above the frequency and total number of tests specified at no additional cost to PID.

02300-10

- J. Verbal and hand-written test results shall be provided to the ENGINEER and CONTRACTOR immediately following the field testing. Written test data sheets shall be provided to the ENGINEER not more than 24 hours following completion of the field test. Typed lab test results shall be provided to the ENGINEER not more than 7 calendar days following completion of the tests; however, the results must be reviewed and approved by the ENGINEER prior to placing the material in the trenches or incorporating it in the Work.
- K. Any location where a failing test occurs shall be recompacted and retested until a passing test is obtained. Specified testing values are minimums and no tests shall be accepted below the specified minimums. No material shall be placed over the failing test area until the failing material is recompacted and a passing test is obtained, and the area is approved by the ENGINEER. The limits of the failing test shall be assumed to be halfway between the failing location and the nearest passing location. Additional tests may be taken to determine the limits of unsatisfactory compaction.
- L. At the first of each month, the CONTRACTOR shall provide to the ENGINEER a typed summary of all tests performed for the previous month including test location by GPS location, accurate to within one linear foot, depth below finished grade, material tested, wet density, moisture content, dry density, maximum density curve used, and percent relative compaction. Lab test results shall also be included in the monthly report with clear description of material tested, intended use on the Project, and a statement of compliance or noncompliance with the Project Specifications.
- M. Any material which does not meet the Specifications shall be removed from the site and replaced with material which is in compliance.
- N. Material which has been softened or modified prior to placing the overlying lift shall be removed down to material which is in compliance.

### 3.11 DISPOSAL OF EXCAVATED MATERIALS

- A. Material removed from the excavations that does not conform to the requirements for fill or is in excess of that required for backfill shall be hauled away from the Work site and disposed of by CONTRACTOR in compliance with ordinances, codes, laws and regulations at no additional cost to PID.
- B. CONTRACTOR is responsible for disposal of excess material. A disposal location will not be provided or arranged by PID.

+ + END OF SECTION + +

02300-11

## **SECTION 03400**

### **PRECAST CONCRETE**

#### **PART 1 - GENERAL**

##### **1.1 DESCRIPTION**

- A. Section includes all plant-precast products, including, but not limited to, meter boxes, meter box covers, vaults, and wheel stops.

##### **1.2 SYSTEM DESCRIPTION**

- A. Precast products shall be designed for the indicated service, the loadings specified in the Contract Documents, and all transportation, handling, and erection loads, in accordance with requirements and recommendations of the references.
  - 1. Precast products not subjected to traffic loads shall be designed to meet or exceed the requirements of ACI 318-14.
  - 2. Precast products subjected to traffic loads shall be designed to meet or exceed the requirements of the current AASHTO LRFD Bridge Design Specifications.
  - 3. Liquid containing precast products shall be designed for the additional requirements of ACI 350-06.
- B. If precast products are proposed as substitutes for cast-in-place designed structures, such precast products shall meet the above requirements and any other requirements for which the cast-in-place structures were designed by the ENGINEER. Such products shall be designed by an engineer licensed to practice in the State of California.
- C. Items located in or adjacent to traffic areas shall be designed to resist AASHTO HL93 loading, unless otherwise indicated.
- D. Lifting inserts shall have a minimum safety factor of 4.

##### **1.3 QUALIFICATIONS**

- A. Manufacturer:
  - 1. Manufacturer shall have at least 5 years experience in the design and manufacture of precast concrete products substantially similar to those required for this project.
- B. Installer:
  - 1. Precast Items shall be installed by the Manufacturer or by CONTRACTOR in accordance with the manufacturer's specifications.

##### **1.4 SUBMITTALS**

- A. Shop Drawings:
  - 1. Submit to the ENGINEER for review, shop drawings of the proposed details, and design calculations; all calculations and shop drawings shall be stamped and signed by a Civil or Structural Engineer registered in the State of California.
  - 2. Material cut sheets and specifications.
  - 3. All dead, live and other applicable loads used in the design.

03400-1

4. Applicable standards (from "References") met by the item(s).
  5. Setting plans locating and designating all items furnished by the manufacturer, with all major openings shown and located.
  6. Details to indicate quantities, location and type of reinforcing and prestressing steel.
  7. Sections and details showing connections, edge conditions, support conditions, and connections of the items.
  8. Description of all embeds, including stripping, lifting and erection inserts, with piece mark and location, including those cast into products or sent loose to the job site.
  9. Description and drawings of all frames and covers.
  10. Dimensions and special finishes.
- B. Mix Designs: Submit all precast mix designs for approval. Mix designs shall be prepared by an independent testing facility or qualified employee of the Precast Manufacturer.
- C. Design Modifications:
1. Submit design modifications necessary to meet performance requirements and field conditions. All design modifications must be reviewed and approved by PID or ENGINEER prior to installation.
  2. Variations in details or materials shall not adversely affect the appearance, durability or strength of products.
  3. Maintain general design concept without altering size of members, profiles and alignment unless otherwise approved by the Architect/Engineer.

#### 1.5 QUALITY ASSURANCE

- A. In-Plant Quality Control
1. The Manufacturer shall have an established PCI quality control program in effect prior to bidding. If requested, a copy of this program shall be submitted to the ENGINEER.
  2. Testing of materials and inspection of production techniques shall be the responsibility of the Manufacturer's Quality Control Department.
  3. Keep quality control records available for two years after final acceptance.
  4. Keep certificates of compliance available for five (5) years after final acceptance.
- B. All other testing and inspection, if any, to be provided by PID or ENGINEER.

#### 1.6 PRODUCT DELIVERY, STORAGE, AND HANDLING

- A. Handle and transport products in a position consistent with their shape and design in order to avoid excessive stresses or damage.
- B. Lift or support products only at the points shown on the Shop Drawings.
- C. Installer shall be responsible for the replacement or repair of damage to items except that caused by others.
- D. After items are installed in their final positions, the CONTRACTOR shall be responsible for their protection. The CONTRACTOR shall be responsible for the repair of any damage to the items caused by someone other than the Manufacturer/Installer.

## **PART 2 - PRODUCTS**

### **2.1 CONCRETE MATERIALS**

- A. Portland Cement ASTM C150 Type I, II or III cement.
- B. Aggregates:
  - 1. Fine and coarse aggregate for mix shall conform to ASTM C33 or C330.
  - 2. Aggregates shall be clean, hard, strong, durable, inert, and free of staining and deleterious materials.
- C. Water Potable, free from deleterious material.
- D. Admixtures:
  - 1. Conforming to ASTM C260 and/or ASTM C494.
  - 2. Calcium chloride or admixtures containing chlorides shall not be used.
- E. Concrete Strength: Concrete strength shall be determined by design with a minimum 28-day design strength of 4,000 psi.

### **2.2 STEEL MATERIALS**

- A. Products:
  - 1. Structural Shapes, Bars & Plates (1.6mm and thicker): ASTM A36
  - 2. Pipe: ASTM A53 Grades A or B
  - 3. Tube Steel: ASTM A500 Grades A or B
  - 4. Reinforcing Steel: ASTM A615 Grades 300 & 420 or ASTM A706
  - 5. Prestressing Strand: ASTM A416 Grade 270, low relaxation
  - 6. Deformed Steel Bar Mats: ASTM A184
  - 7. Deformed Bar Anchors: ASTM A496
  - 8. Deformed Welded Wire Fabric: ASTM A497
  - 9. Plain Welded Wire Fabric: ASTM A185
  - 10. Welded Headed Studs: AWS D1.1 Type B
  - 11. Standard Machine Bolts: ASTM A307 Grade A or SAE J429 Grade 2
  - 12. Standard Studs/Threaded Round Stock: ASTM A307 Grade C, ASTM A572 Grade 345
  - 13. Nuts for Standard Machine Bolts and Threaded Studs: ASTM A563 Grade A Hex Nuts
  - 14. High Strength Bolts: ASTM A325 Type 1, ASTM A449 Type 1, or SAE J429 Grade 5
  - 15. Nuts for High-Strength Bolts and Threaded Studs: ASTM A563 Grade DH Heavy Hex Nuts
  - 16. Coil Rods and Bolts: ASTM A108 - SAE 1016 to 1026,  $F_u/F_y = 480/380$  MPa minimum
  - 17. Coil Nuts for Coil Rods and Bolts: Nuts passing a proof load stress of 80 ksi, based on the tensile stress area of the matching coil rods and bolts.
  - 18. Carbon Steel Castings: ASTM A27 Grade 415-205
- B. Protective Coatings:
  - 1. All connection hardware permanently exposed to weather after completion shall be protected. All connection hardware not exposed to weather after completion may be uncoated, except as otherwise explicitly required by the contract drawings. Fasteners can have either an electroplated zinc or cadmium coating.
  - 2. Alkyd Rust Inhibitive Primers (shop primers such as red iron oxide) :
    - a. Tnemec Series FD88 Azerox Primer
    - b. Ameron 5105

03400-3

- c. Weld-Thru Primer, Red, 2-0101 & Gray, 2-0102
- 3. Zinc Coatings:
  - a. Hot-Dip Galvanizing: ASTM A123, or ASTM A153
  - b. Electroplated Zinc for Steel Products and Steel Hardware: ASTM B633
  - c. Zinc Rich Paints: DOD-P-21035
- 4. Cadmium Coatings:
  - a. Electrodeposited Coatings of Cadmium: ASTM B766

## 2.3 MISCELLANEOUS PRODUCTS

- A. Grout:
  - 1. Cement Grout: Portland cement, sand and water sufficient for placement and hydration.
  - 2. Non-Shrink Grout: Premixed, packaged non-ferrous aggregate shrink resistant.
  - 3. Epoxy Resin Grout: Two-component mineral-filled resin: ASTM C881.
- B. Joint Sealing Compound: The joint sealing compound shall be a permanently flexible plastic material complying in every detail to Federal Specification SS S-00210 (GSA-FSS) dated July 26, 1965. "Quickseal" or approved equal.
- C. Frames and Covers:
  - 1. All frames and covers shall not be located in the path of traffic unless approved by PID.
  - 2. Vaults shall be provided with fabricated steel frames and covers as specified and shall be built up so that the cover is flush with the surrounding surface unless otherwise specified.
  - 3. Non-Traffic Rated Meter Box:
    - a.  $\frac{3}{4}$ " to 1" meters – Jensen Precast ~~Brooks 37MB-Body~~HN1222 Meter Box
    - b. 1- $\frac{1}{2}$ " to 2" meters – Jensen Precast ~~Brooks 66MB-Body~~HPC1730 Meter Box
    - c. Or other PID approved meter box
  - 4. Non-Traffic Rated Meter Box Cover:
    - a.  $\frac{3}{4}$ " to 1" meters – Jensen Precast HPC1222-L01 Meter Box Lid
    - b. 1- $\frac{1}{2}$ " to 2" meters – Jensen Precast HPC1730-T22-L02 Meter Box Lid
    - 4.c. Or other PID approved meter box lid
  - 5. Traffic Rated Meter Box and Cover:
    - a.  $\frac{3}{4}$ " to 1" Meters
      - 1) Christy B1017 and steel cover with AMR opening
      - 2) Jensen Precast HT1324 meter box and HT1324-L01 lid
      - 2)3) Or other District approved equal
    - b. 1- $\frac{1}{2}$ " to 2" Meters
      - 1) Christy B1730 and steel cover with AMR opening
      - 2) Jensen Precast HT1730 meter box and HT1730-L01 lid
      - 3) Or other PID approved traffic rated meter box and cover.

## 2.4 FABRICATION

- A. Unless otherwise noted, precast concrete structure dimensions called out on the Drawings are interior dimensions.
- B. Manufacturing procedures shall be in general compliance with PCI MNL-116.

03400-4

- C. Manufacturer shall provide for those openings 10 in. or larger, round or square as shown on the drawings. Other openings shall be located and field drilled or cut by the trade requiring them after the units have been erected. Openings and/or cutting of prestressing strand shall be approved by ENGINEER and manufacturer before drilling or cutting.
- D. Forms:
  - 1. Forms for precast products shall be rigid and constructed of materials that will result in finished products conforming to the profiles, dimensions and tolerances indicated by this Section, the Contract Documents and the reviewed Shop Drawings.
  - 2. Construct forms to withstand vibration method selected.
  - 3. Release agents shall be applied and used according to manufacturer's instructions.
- E. Plastic Liner:
  - 1. Where called for on the Drawings, provide cast-in-place plastic liner system.
  - 2. Install liner system per manufacturer's instructions.
  - 3. Follow all requirements of Specification Section 06640, Plastic Liner for Concrete Pipe and Structures.
- F. Concreting:
  - 1. Batching of Concrete shall be in accordance with approved Mix Design(s).
  - 2. Convey concrete by methods which will prevent separation, segregation or loss of material.
  - 3. Consolidate all concrete in the form to minimize honeycombing or entrapped air.
- G. Curing: Procedures sufficient to ensure specified concrete strength of all products must be employed. Stripping of a panel shall not occur until concrete strength is sufficient to prevent cracking or damage of the panel.
- H. Manufacturing Tolerances:
  - 1. Cross Sectional Dimensions:
    - a. Less than 24 inches:  $\pm 1/4"$
    - b. 24 to 36 inches:  $\pm 3/8"$
    - c. Over 36 inches:  $\pm 1/2"$
  - 2. Length:
    - a. Less than 25 ft:  $\pm 1/2"$
    - b. 25 to 50 ft:  $\pm 3/4"$
    - c. Over 50 ft:  $\pm 1"$
  - 3. Variation from square or designed skew (difference in length of two diagonal measurements): Max.  $\pm 3/4"$
- I. Identification: Mark each precast item to correspond to identification mark on Shop Drawings for product location, and with casting date.

## **PART 3 - EXECUTION**

### **3.1 PREPARATION**

- A. Access: Clear unloading areas and access roadways to point of component placement shall be provided and maintained by the CONTRACTOR. The CONTRACTOR shall provide

03400-5



all required traffic controls, barricades, warning lights and/or signs to ensure a safe installation.

- B. Sitework: The CONTRACTOR shall excavate and prepare the subgrade, including 2 inches of base rock graded level and to the proper elevation.
- C. Installer Responsibility: Prior to installation of the precast products, notify the CONTRACTOR of any discrepancies discovered which affect the work under this contract.

### 3.2 INSTALLATION

- A. General: Precast products shall be lifted with suitable lifting devices at points provided by the Manufacturer to prevent excessive stresses or damage to the products. Brace and secure items before unhooking.
- B. Sitework:
  - 1. Openings or "knockouts" shall be located as shown on the drawings and shall be sized sufficiently to permit passage of the largest dimension of pipe and/or coupling flange. Upon completion of installation, all voids or openings in the vault walls around pipes shall be filled with 4,000-psi concrete or mortar, using an approved epoxy for bonding concrete surfaces.
  - 2. All joints between precast sections shall be made watertight using preformed mastic material. The sealing compound shall be installed according to the manufacturer's recommendations to provide a watertight joint which remains impermeable throughout the design life of the structure. All joints shall be filled with dry-pack non-shrink grout. If plastic liner system is used, after the joint has been made and is cured, install plastic liner weld strip at all joints and seams.
  - 3. Frames and covers shall be built up so that the cover is flush with the surrounding surface unless otherwise specified. The CONTRACTOR is responsible for placing the cover at the proper elevation where paving is to be installed and shall make all necessary adjustments so that the cover meets these requirements.
  - 4. After the structure and all appurtenances are in place and approved, and after any required disinfection or testing, backfill shall be placed to the original ground line or to the limits designated on the plans.

### 3.3 FIELD QUALITY CONTROL

- A. Meter boxes should be stored, transported, handled and installed in a manner that protects them from chipping or damage.
- B. Meter box lids shall fit well enough to fully close, easily open, present a flat surface, and keep debris or excess water from entering the meter box.
- C. Hydrostatic Testing:
  - 1. All Manholes, Wetwells, Junction Boxes, vaults or other water bearing structures shall be hydrostatically tested prior to acceptance.
  - 2. Test Procedure:
    - a. Plug all inlets and outlets with temporary plugs
    - b. Fill water bearing structure with clean, potable water
    - c. Let stand for 24 hours, if desired, to allow for "soaking-in"
    - d. Fill to rim elevation
    - e. Let stand for a minimum of 2 hours

03400-6

- f. Check distance from rim to water surface
  - g. Calculate water loss. Leakage in each manhole may not exceed 0.1-gallon per hour per foot of water depth during the test.
- 3. Repair all structures which do not meet the above test requirements with a method approved by the ENGINEER and re-test until passing.

#### 3.4 PATCHES AND REPAIRS:

- A. Patching of products, when required, shall be performed to industry standards for structural concrete. Repairs shall be sound, permanent and flush with adjacent surface.

#### 3.5 WARRANTY:

- A. All labor and materials under the Precast Manufacturers contract shall be warranted by the Precast Manufacturer for a period of one (1) year after substantial completion.

+ + END OF SECTION + +

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## Construction Meter Agreement

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*See attached*

**PARADISE IRRIGATION DISTRICT  
CONSTRUCTION WATER AGREEMENT**

THIS AGREEMENT is made and entered into by and between the PARADISE IRRIGATION DISTRICT (PID) and \_\_\_\_\_(Customer).

**RECITALS**

WHEREAS, PID owns certain water, water rights, and facilities all of which are for use on lands within its boundaries; and

WHEREAS, Customer desires to purchase water from PID's system for the use in constructing

Project Location: \_\_\_\_\_

**AGREEMENT**

NOW, THEREFORE, the parties hereto agree as follows:

1. **Sale of Water; Price:** PID agrees to sell to Customer during the term of this Agreement water to be taken from a fire hydrant only for use in the construction of the project. The price for the water shall be three times the highest tier of the current Business/Commercial Quantity Charge (**currently \$4.83 per 100 cubic feet**).
2. **Location; Changes:** Subject to the approval of the Paradise Fire Department (PFD), the fire hydrant location shall be \_\_\_\_\_. The location may be changed only with the advance approval of PID and PFD, and subject to an additional charge of **\$30.00** by PID. Fire hydrant meter installation, relocation and removal shall be by PID.
3. **Payment:** Upon execution of this Agreement, Customer will pay to PID a service charge of the current monthly 2" Business/Commercial Service Charge (**currently \$229.03**), the Town of Paradise Hydrant Use Permit (**\$31.97**), and a **\$2,000.00 deposit** which will be held by PID until the termination of this Agreement at which time it will be refunded to Customer (without interest), minus the following charges:
  - A. a. Amounts due for water used.
  - B. b. Amounts due for any relocation of the meter.
  - C. c. Any costs to replace, or repair damage to, the meter, hydrant or related PID facilities.
  - D. d. Any other expenses for which Customer may be responsible.
4. **Customer's Responsibilities:** Customer shall comply with all applicable laws, regulations and permits. In particular, Customer shall not connect the hydrant water supply to any potable water system or use hydrant water for any purposes requiring potability. Customer shall use proper tools including an approved hydrant wrench. Customer shall ensure traffic safety at hydrant sites and on any roads where the water is used. Customer shall also ensure that the use of water under this Agreement does not result in pollution of streams, groundwater supplies or other sites. Customer shall not waste or make unreasonable use of water supplied under this Agreement. Customer shall be solely responsible for any damage caused by water delivered under this Agreement and shall hold PID, its officers and employees, free and harmless from any and all liability in the event Customer suffers damage from not receiving water, or from receiving inadequate water or pressure under this Agreement. It is further understood and agreed that Customer will hold PID, its officers and employees free and harmless from any and all liability and damages caused to any third person as a result of Customer's operations under this Agreement or as a result of the use of said water.

Customer shall be responsible for any loss of or damage to, the meter, hydrant and related PID facilities, including loss or damage due to theft or vandalism or any cause other than the sole negligence of PID.

Customer shall produce evidence satisfactory to PID of liability insurance covering Customer's operations under this Agreement, with policy limits of not less than \$1,000,000.00 (ONE MILLION DOLLARS).

The location of the installation and removal of any meter on a hydrant shall be sent to the Paradise Fire Department by PID.

1. **Control of Water Supply:** It is understood and agreed by Customer that water will not be supplied hereunder if there is a shortage of water within the PID, and that this Agreement shall not create nor convey any right, title, or interest, legal or equitable in or to the property, pipelines, water or water rights of PID, and shall not interfere with the full, free and unobstructed use and disposition thereof by PID. PID shall have full control of the distribution of water and the right to establish and enforce such rules and regulations as it may deem expedient. SEE ATTACHED REGARDING METHOD OF CONNECTION.
2. **Term of Agreement; Termination:** Customer shall notify PID promptly in writing if Customer completes the use of water prior to that date in which case this Agreement shall terminate upon PID's removal of the meter and refund of the unused deposit. PID may terminate this Agreement without notice if Customer violates any of its provisions, or if PID's operational needs require such termination in PID's judgment. Termination of this Agreement shall not terminate Customer's responsibility to reimburse or indemnify PID for damages caused during its term.
3. **Contact Persons:** All notices or other communications under this Agreement shall be directed to the Parties through their respective contact persons, as follows:

PID:  
Name John LaBonte  
Address: 6332 Clark Rd  
Paradise CA 95969  
Telephone: (530) 877-4971  
Facsimile: (530) 876-0483

Customer:  
Name: \_\_\_\_\_  
\_\_\_\_\_  
Telephone: \_\_\_\_\_  
Facsimile: \_\_\_\_\_

Dated: \_\_\_\_\_

PARADISE IRRIGATION DISTRICT

By \_\_\_\_\_  
CUSTOMER

By \_\_\_\_\_

METER NO. \_\_\_\_\_ Gals./Cu.Ft.

Date Installed \_\_\_\_\_

Finish Reading \_\_\_\_\_

Date Removed \_\_\_\_\_

Start Reading \_\_\_\_\_

Refund Made \_\_\_\_\_ \$

**Total Used** \_\_\_\_\_

Effective 09/01/2022

cc: Paradise Fire Department

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

## Updated Wage Determination

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*See attached*

"General Decision Number: CA20230007 04/14/2023

Superseded General Decision Number: CA20220007

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: Contracts subject to the Davis-Bacon Act are generally required to pay at least the applicable minimum wage rate required under Executive Order 14026 or Executive Order 13658. Please note that these Executive Orders apply to covered contracts entered into by the federal government that are subject to the Davis-Bacon Act itself, but do not apply to contracts subject only to the Davis-Bacon Related Acts, including those set forth at 29 CFR 5.1(a)(2)-(60).

If the contract is entered into on or after January 30, 2022, or the contract is renewed or extended (e.g., an option is exercised) on or after January 30, 2022:	<ul style="list-style-type: none"><li>. Executive Order 14026 generally applies to the contract.</li><li>. The contractor must pay all covered workers at least \$16.20 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in 2023.</li></ul>
If the contract was awarded on or between January 1, 2015 and January 29, 2022, and the contract is not renewed or extended on or after January 30, 2022:	<ul style="list-style-type: none"><li>. Executive Order 13658 generally applies to the contract.</li><li>. The contractor must pay all covered workers at least \$12.15 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on that contract in 2023.</li></ul>

The applicable Executive Order minimum wage rate will be adjusted annually. If this contract is covered by one of the Executive Orders and a classification considered necessary for performance of work on the contract does not appear on this wage determination, the contractor must still submit a conformance request.

Additional information on contractor requirements and worker protections under the Executive Orders is available at <http://www.dol.gov/whd/govcontracts>.

Modification Number	Publication Date
0	01/06/2023
1	01/13/2023
2	01/20/2023
3	02/03/2023
4	03/03/2023
5	03/10/2023
6	03/17/2023
7	03/31/2023
8	04/07/2023
9	04/14/2023

ASBE0016-001 02/01/2023

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
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Asbestos Workers/Insulator  
(Includes the application of  
all insulating materials,  
Protective Coverings,  
Coatings, and Finishes to all  
types of mechanical systems)

Area 1.....	\$ 80.91	23.82
Area 2.....	\$ 62.26	23.82

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ASBE0016-007 01/01/2021

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.....	\$ 30.45	10.60
AREA 2.....	\$ 36.53	9.27

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BOIL0549-002 01/01/2021



	Rates	Fringes
BOILERMAKER		
(1) Marin & Solano Counties..	\$ 49.62	41.27
(2) Remaining Counties.....	\$ 45.60	38.99

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BRCA0003-001 08/01/2022

	Rates	Fringes
MARBLE FINISHER.....	\$ 39.20	18.31

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BRCA0003-004 05/01/2022

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.....	\$ 49.32	22.65
AREA 2.....	\$ 53.69	26.03

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.

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BRCA0003-008 07/01/2022

	Rates	Fringes
TERRAZZO FINISHER.....	\$ 41.93	18.98
TERRAZZO WORKER/SETTER.....	\$ 56.84	27.53

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BRCA0003-010 04/01/2022

	Rates	Fringes
TILE FINISHER		
Area 1.....	\$ 31.12	16.11
Area 2.....	\$ 30.90	17.87
Area 3.....	\$ 33.86	17.74
Area 4.....	\$ 31.89	17.18
Tile Layer		
Area 1.....	\$ 51.02	19.35
Area 2.....	\$ 50.66	20.77
Area 3.....	\$ 55.41	20.87
Area 4.....	\$ 52.28	20.79

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

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BRCA0003-014 08/01/2022

	Rates	Fringes
MARBLE MASON.....	\$ 56.98	28.54

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CARP0034-001 07/01/2021

	Rates	Fringes
Diver		
Assistant Tender, ROV		
Tender/Technician.....	\$ 54.10	34.69
Diver standby.....	\$ 60.51	34.69
Diver Tender.....	\$ 59.51	34.69
Diver wet.....	\$ 103.62	34.69
Manifold Operator (mixed gas).....	\$ 64.51	34.69
Manifold Operator (Standby).	\$ 59.51	34.69

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  
221 ft.-deeper \$5.00 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.

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CARP0034-003 07/01/2021

	Rates	Fringes
Piledriver.....	\$ 54.10	34.69

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CARP0035-001 08/01/2020

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.....	\$ 52.65	31.26
Area 3.....	\$ 47.27	31.26
Area 4.....	\$ 45.92	31.26
Drywall Stocker/Scrapper		
Area 1.....	\$ 26.33	18.22
Area 3.....	\$ 23.64	18.22
Area 4.....	\$ 22.97	18.22
-----		
CARP0035-009 07/01/2020		

Marin County

	Rates	Fringes
CARPENTER		
Bridge Builder/Highway Carpenter.....	\$ 52.65	30.82
Hardwood Floorlayer, Shingler, Power Saw Operator, Steel Scaffold & Steel Shoring Erector, Saw Filer.....	\$ 52.80	30.82
Journeyman Carpenter.....	\$ 52.65	30.82
Millwright.....	\$ 52.75	32.41
-----		
CARP0035-010 07/01/2020		

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.....	\$ 28.76	22.53
Lead Installer.....	\$ 32.21	23.03
Master Installer.....	\$ 36.43	23.03
Area 2		
Installer.....	\$ 26.11	22.53
Lead Installer.....	\$ 29.08	23.03
Master Installer.....	\$ 32.71	23.03
Area 3		
Installer.....	\$ 25.16	22.53
Lead Installer.....	\$ 27.96	23.03
Master Installer.....	\$ 31.38	23.03
-----		
CARP0046-001 07/01/2021		

El Dorado (West), Placer (West), Sacramento and Yolo Counties

	Rates	Fringes
Carpenters		
Bridge Builder/Highway Carpenter.....	\$ 54.85	31.49
Hardwood Floorlayer, Shingler, Power Saw Operator, Steel Scaffold & Steel Shoring Erector, Saw Filer.....	\$ 49.12	31.49
Journeyman Carpenter.....	\$ 48.97	31.49
Millwright.....	\$ 51.47	33.08

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.

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CARP0046-002 07/01/2021

Alpine, Colusa, El Dorado (East), Nevada, Placer (East),  
Sierra, Sutter and Yuba Counties

	Rates	Fringes
Carpenters		
Bridge Builder/Highway Carpenter.....	\$ 54.85	31.49
Hardwood Floorlayer, Shingler, Power Saw Operator, Steel Scaffold & Steel Shoring Erector, Saw Filer.....	\$ 47.77	31.49
Journeyman Carpenter.....	\$ 47.62	31.49
Millwright.....	\$ 50.12	33.08

-----  
CARP0152-003 07/01/2020

Amador County

	Rates	Fringes
Carpenters		
Bridge Builder/Highway Carpenter.....	\$ 52.65	30.82
Hardwood Floorlayer, Shingler, Power Saw Operator, Steel Scaffold & Steel Shoring Erector, Saw Filer.....	\$ 45.57	30.82
Journeyman Carpenter.....	\$ 45.42	30.82
Millwright.....	\$ 47.92	32.41

-----  
CARP0180-001 07/01/2021

Solano County

	Rates	Fringes
Carpenters		

Bridge Builder/Highway Carpenter.....	\$ 54.85	31.49
Hardwood Floorlayer, Shingler, Power Saw Operator, Steel Scaffold & Steel Shoring Erector, Saw Filer.....	\$ 55.00	31.49
Journeyman Carpenter.....	\$ 54.85	31.49
Millwright.....	\$ 54.95	33.08

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CARP0751-001 07/01/2021

Napa and Sonoma Counties

	Rates	Fringes
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Carpenters

Bridge Builder/Highway Carpenter.....	\$ 54.85	31.49
Hardwood Floorlayer, Shingler, Power Saw Operator, Steel Scaffold & Steel Shoring Erector, Saw Filer.....	\$ 55.00	31.49
Journeyman Carpenter.....	\$ 54.85	31.49
Millwright.....	\$ 54.95	33.08

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CARP1599-001 07/01/2020

Butte, Glenn, Lassen, Modoc, Plumas, Shasta, Siskiyou, Tehama  
and Trinity Counties

	Rates	Fringes
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Carpenters

Bridge Builder/Highway Carpenter.....	\$ 52.65	30.82
Hardwood Floorlayer, Shingler, Power Saw Operator, Steel Scaffold & Steel Shoring Erector, Saw Filer.....	\$ 45.57	30.82
Journeyman Carpenter.....	\$ 45.42	30.82
Millwright.....	\$ 47.92	32.41

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ELEC0180-001 06/01/2021

NAPA AND SOLANO COUNTIES

	Rates	Fringes
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CABLE SPLICER.....	\$ 59.69	3%+24.38
ELECTRICIAN.....	\$ 53.06	3%+24.38

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ELEC0180-003 12/01/2022

NAPA AND SOLANO COUNTIES

	Rates	Fringes
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Sound & Communications

Installer.....	\$ 46.64	25.30
Technician.....	\$ 53.64	25.51

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.

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ELEC0340-002 02/01/2018

ALPINE, AMADOR, BUTTE, COLUSA, EL DORADO, GLENN, LASSEN, NEVADA, PLACER, PLUMAS, SACRAMENTO, TRINITY, YOLO, YUBA COUNTIES

	Rates	Fringes
Communications System		
Sound & Communications		
Installer.....	\$ 29.35	3%+15.35
Sound & Communications		
Technician.....	\$ 33.75	3%+15.35

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/TRANSFERENCE 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.

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ELEC0340-003 08/01/2022

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.....	\$ 45.06	34.09
Sierra Army Depot, Herlong..	\$ 48.83	18.54
Tunnel work.....	\$ 41.01	18.54

CABLE SPLICER: Receives 110% of the Electrician basic hourly  
rate.

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ELEC0401-005 01/01/2022

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.....	\$ 42.50	20.95

ZONE RATE:

70-90 miles - \$8.00 per hour  
91+ miles - \$10.00 per hour

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ELEC0551-004 06/01/2022

## MARIN AND SONOMA COUNTIES

	Rates	Fringes
ELECTRICIAN.....	\$ 55.60	28.06
-----		
ELEC0551-005 12/01/2022		

## MARIN &amp; SONOMA COUNTIES

	Rates	Fringes
Sound & Communications		
Installer.....	\$ 46.64	25.30
Technician.....	\$ 53.64	25.65

## 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.

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ELEC0659-006 01/01/2023

## DEL NORTE, MODOC and SISKIYOU COUNTIES

	Rates	Fringes
ELECTRICIAN.....	\$ 43.97	19.26
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ELEC0659-008 02/01/2023		

## DEL NORTE, MODOC &amp; SISKIYOU COUNTIES

	Rates	Fringes
Line Construction		
(1) Cable Splicer.....	\$ 67.80	4.5%+22.15
(2) Lineman, Pole Sprayer,		
Heavy Line Equipment Man....	\$ 60.54	4.5%+22.15
(3) Tree Trimmer.....	\$ 37.84	4.5%+14.30
(4) Line Equipment Man.....	\$ 53.82	4.5%+19.40
(5) Powdermen,		
Jackhammermen.....	\$ 40.37	4.5%+14.30
(6) Groundman.....	\$ 33.37	4.5%+14.30
-----		
ELEC1245-004 06/01/2022		

## ALL COUNTIES EXCEPT DEL NORTE, MODOC &amp; SISKIYOU



	Rates	Fringes
LINE CONSTRUCTION		
(1) Lineman; Cable splicer..	\$ 64.40	22.58
(2) Equipment specialist (operates crawler tractors, commercial motor vehicles, backhoes, trenchers, cranes (50 tons and below), overhead & underground distribution line equipment).....	\$ 50.00	21.30
(3) Groundman.....	\$ 38.23	20.89
(4) Powderman.....	\$ 51.87	18.79

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

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ELEV0008-001 01/01/2023

	Rates	Fringes
ELEVATOR MECHANIC.....	\$ 77.61	37.335+a+b

FOOTNOTE:

- a. 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.
- b. PAID HOLIDAYS: New Year's Day, Memorial Day, Independence Day, Labor Day, Veterans' Day, Thanksgiving Day, Friday after Thanksgiving, and Christmas Day.

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ENGI0003-008 08/01/2022

	Rates	Fringes
Dredging: (DREDGING: CLAMSHELL & DIPPER DREDGING; HYDRAULIC SUCTION DREDGING:)		
AREA 1:		
(1) Leverman.....	\$ 55.15	35.46
(2) Dredge Dozer; Heavy duty repairman.....	\$ 50.19	35.46
(3) Booster Pump Operator; Deck Engineer; Deck mate; Dredge Tender; Winch Operator.....	\$ 49.07	35.46
(4) Bargeman; Deckhand; Fireman; Leveehand; Oiler..	\$ 45.77	35.46
AREA 2:		
(1) Leverman.....	\$ 57.15	35.46
(2) Dredge Dozer; Heavy duty repairman.....	\$ 52.19	35.46
(3) Booster Pump Operator; Deck Engineer; Deck mate; Dredge Tender; Winch Operator.....	\$ 51.07	35.46
(4) Bargeman; Deckhand; Fireman; Leveehand; Oiler..	\$ 47.77	35.46

## 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: 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 Northeastern border with  
Shasta County

Area 2: Remainder

TUOLUMNE COUNTY:

Area 1: Except Eastern part

Area 2: Eastern part

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ENGI0003-019 06/29/2020

SEE AREA DESCRIPTIONS BELOW

	Rates	Fringes
OPERATOR: Power Equipment (LANDSCAPE WORK ONLY)		
GROUP 1		
AREA 1.....	\$ 39.95	30.28
AREA 2.....	\$ 41.95	30.28
GROUP 2		
AREA 1.....	\$ 36.35	30.28
AREA 2.....	\$ 38.35	30.28
GROUP 3		
AREA 1.....	\$ 31.74	30.28
AREA 2.....	\$ 33.74	30.28

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

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ENGI0003-038 06/29/2020

""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.....	\$ 51.42	31.15
GROUP 2.....	\$ 49.89	31.15
GROUP 3.....	\$ 48.41	31.15
GROUP 4.....	\$ 47.03	31.15
GROUP 5.....	\$ 45.76	31.15
GROUP 6.....	\$ 44.44	31.15
GROUP 7.....	\$ 43.30	31.15
GROUP 8.....	\$ 42.16	31.15
GROUP 8-A.....	\$ 39.95	31.15
OPERATOR: Power Equipment		
(Cranes and Attachments -		
AREA 1:)		
GROUP 1		
Cranes.....	\$ 52.30	31.15
Oiler.....	\$ 43.79	31.15
Truck crane oiler.....	\$ 46.08	31.15
GROUP 2		
Cranes.....	\$ 50.54	31.15
Oiler.....	\$ 42.83	31.15
Truck crane oiler.....	\$ 45.07	31.15
GROUP 3		
Cranes.....	\$ 48.80	31.15
Hydraulic.....	\$ 44.44	31.15
Oiler.....	\$ 42.55	31.15
Truck crane oiler.....	\$ 44.83	31.15
GROUP 4		
Cranes.....	\$ 45.76	31.15
OPERATOR: Power Equipment		
(Piledriving - AREA 1:)		
GROUP 1		
Lifting devices.....	\$ 52.64	31.15
Oiler.....	\$ 43.38	31.15
Truck Crane Oiler.....	\$ 45.66	31.15
GROUP 2		
Lifting devices.....	\$ 50.82	31.15
Oiler.....	\$ 43.11	31.15
Truck Crane Oiler.....	\$ 45.41	31.15
GROUP 3		
Lifting devices.....	\$ 49.14	31.15
Oiler.....	\$ 42.89	31.15
Truck Crane Oiler.....	\$ 45.12	31.15
GROUP 4		
Lifting devices.....	\$ 47.37	31.15
GROUP 5		
Lifting devices.....	\$ 44.73	31.15
GROUP 6		
Lifting devices.....	\$ 42.50	31.15
OPERATOR: Power Equipment		
(Steel Erection - AREA 1:)		
GROUP 1		
Cranes.....	\$ 53.27	31.15
Oiler.....	\$ 43.72	31.15
Truck Crane Oiler.....	\$ 45.95	31.15
GROUP 2		
Cranes.....	\$ 51.50	31.15
Oiler.....	\$ 43.45	31.15
Truck Crane Oiler.....	\$ 45.73	31.15
GROUP 3		
Cranes.....	\$ 50.02	31.15
Hydraulic.....	\$ 45.07	31.15

Oiler.....	\$ 43.23	31.15
Truck Crane Oiler.....	\$ 45.46	31.15
GROUP 4		
Cranes.....	\$ 48.00	31.15
GROUP 5		
Cranes.....	\$ 46.70	31.15
OPERATOR: Power Equipment (Tunnel and Underground Work - AREA 1:)		
SHAFTS, STOPES, RAISES:		
GROUP 1.....	\$ 47.52	31.15
GROUP 1-A.....	\$ 49.99	31.15
GROUP 2.....	\$ 46.26	31.15
GROUP 3.....	\$ 44.93	31.15
GROUP 4.....	\$ 43.79	31.15
GROUP 5.....	\$ 42.65	31.15
UNDERGROUND:		
GROUP 1.....	\$ 47.42	31.15
GROUP 1-A.....	\$ 49.89	31.15
GROUP 2.....	\$ 46.16	31.15
GROUP 3.....	\$ 44.83	31.15
GROUP 4.....	\$ 43.69	31.15
GROUP 5.....	\$ 42.55	31.15

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 (scrappers); 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 fire tender; 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

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#### 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;

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#### PILEDRIERS

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

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#### 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

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#### AREA DESCRIPTIONS:

POWER EQUIPMENT OPERATORS, CRANES AND ATTACHMENTS, TUNNEL AND UNDERGROUND [These areas do not apply to Piledrivers and Steel Erectors]

AREA 1: DEL NORTE, HUMBOLDT, LAKE, MENDOCINO

AREA 2 -NOTED BELOW

THE REMAINING COUNTIES ARE SPLIT BETWEEN AREA 1 AND AREA 2 AS NOTED BELOW:

DEL NORTE COUNTY:

Area 1: Extreme Southwest corner  
Area 2: Remainder

HUMBOLDT COUNTY:  
Area 1: Except Eastern and Southwestern parts  
Area 2: Remainder

LAKE COUNTY:  
Area 1: Southern part  
Area 2: Remainder

MENDOCINO COUNTY:  
Area 1: Central and Southeastern Parts  
Area 2: Remainder

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IRON0118-012 01/01/2023

ALPINE, LASSEN, MODOC, SISKIYOU and TRINITY COUNTIES

	Rates	Fringes
IRONWORKER.....	\$ 41.00	33.70

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IRON0118-013 01/01/2023

AMADOR, BUTTE, COLUSA, EL DORADO, GLENN, MARIN, NAPA, NEVADA,  
PLACER, PLUMAS, SACRAMENTO, SHASTA, SIERRA, SOLANO, SONOMA,  
SUTTER, TEHAMA, YOLO and YUBA COUNTIES

	Rates	Fringes
IRONWORKER.....	\$ 46.20	34.30

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LAB00067-003 03/04/2023

AREA ""1"" - MARIN and NAPA COUNTIES

AREA ""2"" - ALPINE, AMADOR, BUTTE COLUSA EL DORADO, GLENN,  
LASSEN, MODOC, NEVADA, PLACER, PLUMAS, SACRAMENTO, SHASTA,  
SIERRA, SISKIYOU, SOLANO, SONOMA, SUTTER, TEHAMA, TRINITY,  
YOLO, AND YUBA COUNTIES

	Rates	Fringes
LABORER (ASBESTOS/MOLD/LEAD LABORER)		
Marin and Napa Counties.....	\$ 35.25	27.09
Remaining Counties.....	\$ 34.25	27.09

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LAB00067-005 06/27/2017

AREA ""A"" - ALAMEDA, CONTRA COSTA, 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, NEVADA,  
PLACER, PLUMAS, SANCREMENTO, SAN BENITO, SAN JOAQUIN, SANTA  
CRUZ, SIERRA, SHASTA, SISKIYOU, STANISLAUS, TEHAMA, TRINITY,  
TULARE, TUOLUMNE, YOLO AND YUBA COUNTIES

	Rates	Fringes
LABORER (TRAFFIC CONTROL/LANE CLOSURE)		
Escort Driver, Flag Person		
Area A.....	\$ 29.54	22.17
Area B.....	\$ 28.54	22.17
Traffic Control Person I		
Area A.....	\$ 29.84	22.17
Area B.....	\$ 28.84	22.17
Traffic Control Person II		
Area A.....	\$ 27.34	22.17
Area B.....	\$ 26.34	22.17

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.

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LAB00185-002 07/01/2022

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.....	\$ 35.29	25.21

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LAB00185-005 07/01/2021

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.....	\$ 42.00	25.71
GROUP 2.....	\$ 41.77	25.71
GROUP 3.....	\$ 41.52	25.71
GROUP 4.....	\$ 41.07	25.71
GROUP 5.....	\$ 40.53	25.71
Shotcrete Specialist.....	\$ 42.52	25.71

#### TUNNEL AND SHAFT CLASSIFICATIONS

GROUP 1: Diamond driller; Groundmen; Gunite and shotcrete nozzlemen

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

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LAB00185-006 06/25/2018

ALPINE, AMADOR, BUTTE, COLUSA, EL DORADO, GLENN, LASSEN, MODOC, NEVADA, PLACER, PLUMAS, SACRAMENTO, SHIASTA, SIERRA, SISKIYOU, SUTTER, TEHAMA, TRINITY, YOLO, YUBA COUNTIES

	Rates	Fringes
LABORER (CONSTRUCTION CRAFT		
LABORERS - AREA B:)		
Construction Specialist		
Group.....	\$ 30.49	23.20
GROUP 1.....	\$ 29.79	23.20
GROUP 1-a.....	\$ 30.01	23.20
GROUP 1-c.....	\$ 30.01	23.20
GROUP 1-e.....	\$ 30.34	23.20
GROUP 1-f.....	\$ 30.37	23.20
GROUP 2.....	\$ 29.64	23.20
GROUP 3.....	\$ 29.54	23.20
GROUP 4.....	\$ 23.23	23.20
See groups 1-b and 1-d under laborer classifications.		
LABORER (GARDENERS,		
HORTICULTURAL & LANDSCAPE		
LABORERS - AREA B:)		
(1) New Construction.....	\$ 29.54	23.20
(2) Establishment Warranty		
Period.....	\$ 23.23	23.20
LABORER (GUNITE - AREA B:)		
GROUP 1.....	\$ 29.75	22.31
GROUP 2.....	\$ 29.25	22.31
GROUP 3.....	\$ 28.66	22.31
GROUP 4.....	\$ 28.54	22.31
LABORER (WRECKING - AREA B:)		
GROUP 1.....	\$ 29.79	23.20
GROUP 2.....	\$ 29.64	23.20

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.

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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 toppler; 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 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".

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#### GUNITE LABORER CLASSIFICATIONS

GROUP 1: Structural Nozzleman

GROUP 2: Nozzleman, Gunman, Potman, Groundman

GROUP 3: Reboundman

GROUP 4: Guniting laborer

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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)

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LAB00185-008 07/01/2021

	Rates	Fringes
Plasterer tender.....	\$ 35.82	28.45

Work on a swing stage scaffold: \$1.00 per hour additional.

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LAB00261-002 06/28/2021

MARIN COUNTY

	Rates	Fringes
LABORER (TRAFFIC CONTROL/LANE CLOSURE)		
Escort Driver, Flag Person..	\$ 34.48	26.21
Traffic Control Person I....	\$ 34.78	26.21
Traffic Control Person II...	\$ 32.28	26.21

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.

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LAB00261-004 07/01/2021

MARIN COUNTY

	Rates	Fringes
Tunnel and Shaft Laborers:		
GROUP 1.....	\$ 42.00	25.71
GROUP 2.....	\$ 41.77	25.71
GROUP 3.....	\$ 41.52	25.71
GROUP 4.....	\$ 41.07	25.71
GROUP 5.....	\$ 40.53	25.71
Shotcrete Specialist.....	\$ 42.52	25.71

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 nozzle man; 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

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 \* LAB00261-007 07/01/2022

MARIN COUNTY

	Rates	Fringes
LABORER		
Mason Tender-Brick.....	\$ 36.54	25.21

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 LAB00261-010 06/25/2018

MARIN COUNTY

	Rates	Fringes
LABORER (CONSTRUCTION CRAFT LABORERS - AREA A:)		
Construction Specialist		
Group.....	\$ 31.49	23.20
GROUP 1.....	\$ 30.79	23.20
GROUP 1-a.....	\$ 31.01	23.20
GROUP 1-c.....	\$ 30.84	23.20
GROUP 1-e.....	\$ 31.34	23.20
GROUP 1-f.....	\$ 31.37	23.20
GROUP 2.....	\$ 30.64	23.20
GROUP 3.....	\$ 30.54	23.20
GROUP 4.....	\$ 24.23	23.20
See groups 1-b and 1-d under laborer classifications.		
LABORER (GARDENERS, HORTICULTURAL & LANDSCAPE LABORERS - AREA A:)		
(1) New Construction.....	\$ 30.54	23.20
(2) Establishment Warranty Period.....	\$ 24.23	23.20
LABORER (GUNITE - AREA A:)		
GROUP 1.....	\$ 30.75	22.31
GROUP 2.....	\$ 30.25	22.31
GROUP 3.....	\$ 29.66	22.31
GROUP 4.....	\$ 29.54	22.31
LABORER (WRECKING - AREA A:)		
GROUP 1.....	\$ 30.79	23.20
GROUP 2.....	\$ 30.64	23.20

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.

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## 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 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".

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## GUNITE LABORER CLASSIFICATIONS

GROUP 1: Structural Nozzleman

GROUP 2: Nozzleman, Gunman, Potman, Groundman

GROUP 3: Reboundman

GROUP 4: Guniting 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)

LAB00261-015 07/01/2021

	Rates	Fringes
Plasterer tender.....	\$ 35.82	28.45

Work on a swing stage scaffold: \$1.00 per hour additional.

LAB00324-004 06/28/2021

NAPA, SOLANO, AND SONOMA, COUNTIES

	Rates	Fringes
LABORER (TRAFFIC CONTROL/LANE CLOSURE)		
Escort Driver, Flag Person..	\$ 33.48	26.21
Traffic Control Person I....	\$ 33.78	26.21
Traffic Control Person II...	\$ 31.28	26.21

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 06/25/2018

NAPA, SOLANO, AND SONOMA COUNTIES

	Rates	Fringes
Tunnel and Shaft Laborers:		
GROUP 1.....	\$ 37.82	24.11
GROUP 2.....	\$ 37.59	24.11
GROUP 3.....	\$ 37.34	24.11
GROUP 4.....	\$ 36.89	24.11
GROUP 5.....	\$ 36.35	24.11
Shotcrete Specialist.....	\$ 38.34	24.11

## TUNNEL AND SHAFT CLASSIFICATIONS

GROUP 1: Diamond driller; Groundmen; Gunitite and shotcrete  
nozzlemen

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;  
Gunitite & 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

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LAB00324-010 07/01/2022

SOLANO AND SONOMA COUNTIES

	Rates	Fringes
LABORER		
Mason Tender-Brick.....	\$ 35.84	25.91

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LAB00324-013 06/25/2018

NAPA, SOLANO, AND SONOMA COUNTIES

	Rates	Fringes
LABORER (CONSTRUCTION CRAFT		
LABORERS - AREA B:)		
Construction Specialist		
Group.....	\$ 30.49	23.20
GROUP 1.....	\$ 29.79	23.20
GROUP 1-a.....	\$ 30.01	23.20
GROUP 1-c.....	\$ 29.84	23.20
GROUP 1-e.....	\$ 30.34	23.20
GROUP 1-f.....	\$ 29.37	23.20
GROUP 2.....	\$ 29.64	23.20
GROUP 3.....	\$ 29.54	23.20
GROUP 4.....	\$ 23.23	23.20

See groups 1-b and 1-d under laborer classifications.

LABORER (GARDENERS,  
HORTICULTURAL & LANDSCAPE

LABORERS - AREA B:)		
(1) New Construction.....	\$ 29.54	23.20
(2) Establishment Warranty		
Period.....	\$ 23.23	23.20

LABORER (GUNITITE - AREA B:)		
GROUP 1.....	\$ 29.75	22.31
GROUP 2.....	\$ 29.25	22.31
GROUP 3.....	\$ 28.66	22.31
GROUP 4.....	\$ 28.54	22.31

LABORER (WRECKING - AREA B:)

GROUP 1.....	\$ 29.79	23.20
GROUP 2.....	\$ 29.64	23.20

#### 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.

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GROUP 2: Semi-skilled wrecker (salvaging of other building materials)

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LAB00324-019 07/01/2021

	Rates	Fringes
Plasterer tender.....	\$ 35.82	28.45
Work on a swing stage scaffold: \$1.00 per hour additional.		

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PAIN0016-004 01/01/2023

MARIN, NAPA, SOLANO & SONOMA COUNTIES

	Rates	Fringes
Painters:.....	\$ 47.42	27.28

PREMIUMS:

EXOTIC MATERIALS - \$1.25 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

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PAIN0016-005 01/01/2023

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.....	\$ 53.03	28.84

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PAIN0016-007 01/01/2023

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:.....	\$ 38.23	22.05

SPRAY/SANDBLAST: \$0.50 additional per hour.

EXOTIC MATERIALS: \$1.25 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.

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PAIN0016-008 01/01/2023

MARIN, NAPA, SOLANO AND SONOMA COUNTIES

	Rates	Fringes
SOFT FLOOR LAYER.....	\$ 55.25	32.63

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PAIN0169-004 01/01/2023

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.....	\$ 55.77	32.45

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\* PAIN0567-001 07/01/2022

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.....	\$ 33.15	14.29
Spray Painter & Paperhanger..	\$ 34.81	14.29

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.

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PAIN0567-007 07/01/2022

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.....	\$ 34.27	16.47

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PAIN0567-010 07/01/2022

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.....	\$ 38.92	14.99
(2) Steeplejack - Taper, over 40 ft with open space below.....	\$ 40.42	14.99

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PAIN0767-004 01/01/2023

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.....	\$ 43.15	33.72

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.

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PAIN1176-001 07/01/2022

HIGHWAY IMPROVEMENT

	Rates	Fringes
Parking Lot Striping/Highway Marking:		
GROUP 1.....	\$ 40.83	17.62
GROUP 2.....	\$ 34.71	17.62
GROUP 3.....	\$ 35.11	17.62

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

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PAIN1237-001 01/01/2023

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.....	\$ 46.24	25.96

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PLAS0300-003 07/01/2018

	Rates	Fringes
PLASTERER		
AREA 295: Alpine, Amador, Butte, Colusa, El Dorado, Glenn, Lassen, Modoc, Nevada, Placer, Plumas, Sacramento, Shasta, Sierra, Siskiyou, Solano, Sutter, Tehema, Trinity, Yolo & Yuba Counties.....	\$ 32.70	31.68
AREA 355: Marin.....	\$ 36.73	31.68
AREA 355: Napa & Sonoma Counties.....	\$ 32.70	31.68

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PLAS0300-005 07/01/2016

	Rates	Fringes
CEMENT MASON/CONCRETE FINISHER...	\$ 32.15	23.27

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PLUM0038-002 07/01/2022

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 research facilities as well as refrigeration pipefitting, service and repair work - MARKET RECOVERY RATE.....	\$ 69.70	46.38
(2) All other work - NEW CONSTRUCTION RATE.....	\$ 82.00	48.18

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PLUM0038-006 07/01/2022

MARIN & SONOMA COUNTIES

	Rates	Fringes
Landscape/Irrigation Fitter (Underground/Utility Fitter).....	\$ 69.70	33.15

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PLUM0228-001 01/01/2023

BUTTE, COLUSA, GLENN, LASSEN, MODOC, PLUMAS, SHASTA, SIERRA,  
SISKIYOU, SUTTER, TEHAMA, TRINITY & YUBA COUNTIES

	Rates	Fringes
PLUMBER.....	\$ 44.75	37.89

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PLUM0343-001 07/01/2022

NAPA AND SOLANO COUNTIES

	Rates	Fringes
PLUMBER/PIPEFITTER		
Light Commercial.....	\$ 30.85	20.40
All Other Work.....	\$ 58.00	40.48

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.

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PLUM0350-001 08/01/2021

EL DORADO COUNTY (Lake Tahoe area only); NEVADA COUNTY (Lake  
Tahoe area only); AND PLACER COUNTY (Lake Tahoe area only)

	Rates	Fringes
PLUMBER/PIPEFITTER.....	\$ 47.54	17.11

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PLUM0355-001 07/01/2022

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.....	\$ 32.22	17.55

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PLUM0442-003 01/01/2023

AMADOR (South of San Joaquin River) and ALPINE COUNTIES

	Rates	Fringes
PLUMBER.....	\$ 50.75	35.14

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PLUM0447-001 07/01/2022

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.....	\$ 58.37	28.00
Light Commercial Work.....	\$ 36.23	17.72

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ROOF0081-006 08/01/2022

MARIN, NAPA, SOLANO AND SONOMA COUNTIES

	Rates	Fringes
Roofer.....	\$ 50.27	20.66

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ROOF0081-007 08/01/2022

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.....	\$ 43.13	19.71
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SFCA0483-003 01/01/2023		

MARIN, NAPA, SOLANO AND SONOMA COUNTIES

	Rates	Fringes
SPRINKLER FITTER (Fire Sprinklers).....	\$ 72.59	36.95
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SFCA0669-003 04/01/2023		

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.....	\$ 46.46	27.39
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SHEE0104-006 06/29/2020		

MARIN, NAPA, SOLANO SONOMA & TRINITY COUNTIES

	Rates	Fringes
Sheet Metal Worker Mechanical Contracts \$200,000 or less.....	\$ 55.92	45.29
All other work.....	\$ 64.06	46.83
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SHEE0104-009 07/01/2021		

AMADOR, COLUSA, EL DORADO, NEVADA, PLACER, SACRAMENTO, SUTTER,  
YOLO AND YUBA COUNTIES

	Rates	Fringes
SHEET METAL WORKER.....	\$ 47.85	41.90
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SHEE0104-010 07/01/2020		

ALPINE COUNTY

	Rates	Fringes
SHEET METAL WORKER.....	\$ 43.50	37.42
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SHEE0104-011 07/01/2020		

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).....	\$ 44.45	35.55
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SHEE0104-014 07/01/2020

MARIN, NAPA, SOLANO, SONOMA AND TRINITY COUNTIES

	Rates	Fringes
SHEET METAL WORKER (Metal Decking and Siding only).....	\$ 44.45	35.55
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SHEE0104-019 07/01/2020		

BUTTE, GLENN, LASSEN, MODOC, PLUMAS, SHASTA, SIERRA, SISKIYOU AND TEHAMA COUNTIES

	Rates	Fringes
SHEET METAL WORKER		
Mechanical Jobs \$200,000 & under.....	\$ 35.16	35.88
Mechanical Jobs over \$200,000.....	\$ 46.60	40.21
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TEAM0094-001 07/01/2022		

	Rates	Fringes
Truck drivers:		
GROUP 1.....	\$ 36.95	31.14
GROUP 2.....	\$ 37.25	31.14
GROUP 3.....	\$ 37.55	31.14
GROUP 4.....	\$ 37.90	31.14
GROUP 5.....	\$ 38.25	31.14

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); Lowbedk 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

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WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

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Note: Executive Order (EO) 13706, Establishing Paid Sick Leave for Federal Contractors applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2017. If this contract is covered by the EO, the contractor must provide employees with 1 hour of paid sick leave for every 30 hours they work, up to 56 hours of paid sick leave each year. Employees must be permitted to use paid sick leave for their own illness, injury or other health-related needs, including preventive care; to assist a family member (or person who is like family to the employee) who is ill, injured, or has other health-related needs, including preventive care; or for reasons resulting from, or to assist a family member (or person who is like family to the employee) who is a victim of, domestic violence, sexual assault, or stalking. Additional information on contractor requirements and worker protections under the EO is available at <https://www.dol.gov/agencies/whd/government-contracts>.

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)).

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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.

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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 National Office because National Office has 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"

