

CALAVERAS COUNTY WATER DISTRICT  
Ebbetts Pass Water System  
Reach 3A Pipeline Replacement Project  
CCWD CIP No. 11078

**ADDENDUM 2**

Date Issued: December 2, 2015

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*\*\*\*\* Receipt of addenda must be acknowledged by Bidders on the BID FORM, Section 00410, Page 410-1; failure to acknowledge receipt may cause rejection of bid. \*\*\*\**

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1. **Bid Opening Date Change:** Amend bid openings date in first paragraph of Section 00100 and Section 00410-1.01 to read bids will be accepted **“No later than 2:00 PM local time on Thursday, January 14, 2016”**.
2. Replace Section 15095 “Water Service Lines and Appurtenances” located in the project specifications with the attached Section 15095. The District has listed Ford and Mueller as manufacturers to establish a minimum performance and characteristics for materials supplied, which may be used to determine acceptable “or-equal” products and materials.
3. Replace Section 15118 “Fire Hydrants and Assemblies” located in the project specifications with the attached Section 15118. The District has listed American Darling, M&H, and Mueller as manufacturers to establish a minimum performance and characteristics for fire hydrants supplied, which may be used to determine acceptable “or-equal” products.
4. This contract is subject to equal opportunity requirements as listed in Section 00800, SC-19.10, but bidders are not requested/required to submit this information with bid/at time of bid.

END

**SECTION 15095  
WATER SERVICE LINES AND APPURTENANCES**

**1.0 GENERAL**

1.1 Scope - This section governs materials and installation for 1-inch size standard residential water services from the main line to and including the meter box and setup for a standard 5/8"x3/4" meter. Existing, active services shall be re-connected downstream of the new meter box re-establishing water service.

1.2 Submittals – Provide shop drawings for all materials in accordance with Section 00700-7.16 and Section 00800- SC- 7.20

**2.0 MATERIALS**

2.1 Service Line Materials - Service line materials include service line pipe, service saddles, service fittings, meter stops, corporation stops, curb stops, and ball valves. All items are to be furnished as shown in the approved "Materials List" and delivered with the required markings. All materials shall comply with ANSI/NSF 61 and State of California AB 1953 "no-lead" requirement.

2.2 Approved Materials – provide materials for service lines as listed below:

ITEM	DESCRIPTION	MANUFACTURER
Tracer Wire	#12 solid copper, Type UF with 3M DBR splice kits	
Corporation Ball Stop	Conforming to AWWA C800 for use with 1" CTS P.E. Tubing	Ford FB1100-4-NL Mueller P-25028N, or equal.
Angle Meter Stop	Conforming to AWWA C800 for use with 1" CTS P.E. Tubing and 5/8"x3/4" meter	Ford BA43-342W-NL Mueller P-24258N, or equal.
Meter Valve	Conforming to AWWA C800 for use with 1" F.I.P. and 5/8"x3/4" meter	Ford B13-342W-NL Mueller B-24351N, or equal.
Meter Idlers	7-1/2" length for standard 5/8"x3/4" meter	Ford Idler-2-NL Mueller H-10887N, or equal.
Service Tubing	Flexible polyethylene tubing AWWA C901, PE 4710/3408, CTS, SDR 9, ASTM D2737	JM Eagle Pure-Core (Blue Exterior), or equal.
Insert Stiffeners	For connecting 1" CTS P.E. tubing to corporation stop and angle meter stop.	Ford Insert 52 Mueller 528705N, or equal.
Service Saddles	AWWA C800, bronze body ASTM B62; bolts and straps silicon bronze, gaskets Nitrile or EPDM	Ford S912 (C900) Ford 202B (DIP/other) Jones J-996 (C900) Mueller BR2B (DIP/other), or equal.
Meter Box	Heavy wall plastic meter box designed for 20,000-lbs vertical load and medium duty, non-deliberate traffic (black color).	Carson HW-1730-BCF (HDPE Solid Cover), or equal.

**3.0 EXECUTION**

3.1 Polyethylene Tubing - Tubing and fittings should be stored in a way that prevents damage due to crushing or piercing, excessive heat, harmful chemicals, or exposure to sunlight for prolonged periods. The manufacturer's recommendations regarding storage should be followed.

Handling operations and trench installation and backfill shall be performed with reasonable care to prevent scratches, nicks, and gouges in the tubing. Tubing cut or excessively kinked shall not be used.

Bends in PE tubing shall not occur closer than 10 diameters from any fitting or valve. The minimum radius of curvature is 30 diameters or the coil radius when bending with the coil. Bending of coiled tubing against the coil shall not go beyond straight. Polyethylene tubing that becomes kinked during handling or installation shall not be used, and care should be taken to ensure that kinking does not develop after installation. Service line from the main line tap to the angle meter stop shall be one continuous length of tubing without any splices.

PE tubing shall be installed in trench bottoms with 6 inches of bedding material to provide continuous and uniform support. The initial backfill shall be 6 inches above the tubing and shall be free from rock, stones, and debris.

3.2 Service Saddles - The service saddle shall be no closer than 18 inches to a valve, coupling, joint, or fitting, unless it is at the end of the main. The surface of the pipe shall be free of all loose material and have a clean, hard surface before placing the saddle. The service saddle shall be tightened firmly to ensure a tight seal; however, care shall be used to prevent damage or distortion of either the pipe, corporation stop, or service saddle by over- tightening. The drilling of the pipe shall be performed in accordance with the manufacturer's instructions.

3.3 Fittings, Angle Meter Stops, and Boxes - Installation of fittings, meter stops, and boxes shall be as recommended by the manufacturer. Pipe or fittings made of nonferrous metals (bronze) shall be isolated from ferrous metals with insulating unions or couplings as directed by the District.

3.4 Hydrostatic Testing & Disinfection - The Contractor shall hydrostatic test and disinfect all service appurtenances at the same time as the main line; the service line shall be thoroughly flushed after disinfection until obtaining a safe, normal operating chlorine residual.

#### **END OF SECTION**

**15118**  
**FIRE HYDRANT ASSEMBLIES**

**1.0 GENERAL**

1.1 Scope - This specification governs materials and installation for fire hydrant assemblies including main line tee, 6-inch ductile iron branch line, 6-inch gate valve for isolation, fire hydrant and all other items as shown on the Details W04, W04A, and W04B. Fully mechanically restrain all joints. Pipe, fittings and other piping materials shall conform to Section 15095 and gate valves to Section 15109. Provide trench bedding and backfill according to Section 02315 and Standard Detail G05. Fully mechanically restrain all pipe and fittings. Fire hydrants for high pressure service conditions include an additional pressure reducing valve located inside a vault as shown in Detail W04B.

1.2 Submittals – For fire hydrants, submit manufacturer’s certification of conformance with AWWA C502, latest revision; provide standard data, UL/FM approvals, pressure ratings, test data, materials and parts lists, and internal and external coating information. Additional submittal requirements shall be in accordance with Section 00700-7.16 and Section 00800- SC- 7.20.

**2.0 MATERIALS**

2.1. Fire Hydrants – Hydrants shall comply in all respects to AWWA C502 for dry barrel type as manufactured by American Darling Model B-84-B-5, M&H Model 129, Mueller Super Centurion 250, or equal. All components shall conform to ANSI/NSF-61. Hydrants shall have 5-1/4” main valve opening 3-way with two 2-1/2” hose nozzles and one pumper nozzle. Upon vehicular impact, safety flange ring at base of above ground hydrant assembly and internal stem coupling shall break away to allow above ground hydrant assembly to separate cleanly from buried standpipe without damage to internal parts with main valve remaining closed without loss of water. Hydrants shall have 6-inch mechanical joint or flanged shoe with interior and exterior fusion bonded epoxy coating per AWWA C550 or equal. Interior and exterior above and below ground line coated with catalyzed epoxy primer (NSF61 listed and AWWA C550 compliant); exterior above ground surfaces shall have finish coat of catalyzed polyurethane (yellow). Hydrants shall be rated for a working pressure of 250-psig and hydrostatically tested according to AWWA C502 to 500-psig; first, for testing of the main valve seat, a hydrostatic test at 500-psig shall be made with main valve closed with pressure applied through the shoe inlet; a second test shall be made with the main valve open and the entire hydrant and drain valves subject to a pressure of 500-psig. Fire hydrants shall be provided with a ten-year limited warranty free of defects in materials and workmanship.

**3.0 EXECUTION**

3.1 Examination of Material - Prior to installation, all hydrants shall be inspected for direction of opening, nozzle threading, operating-nut, and cap-nut dimensions, tightness of pressure-containing bolting, cleanliness of inlet elbow, handling damage, and cracks. Defective hydrants shall be corrected or held for inspection by the District.

3.2 Placement of Hydrant – Within the public right-of-way, the final location and placement of the fire hydrant shall be approved by the agency having jurisdiction over the right-of-way, Caltrans in highway and Public Works on other roads. If replacing an existing hydrant, placement shall be in same location as the existing ones. All hydrants shall stand plumb with their nozzles parallel with or at right angles to the curb and with pumper nozzle facing the curb.

3.3 Assembly Installation – Assemble the hydrant in accordance to the manufacturer’s instruction and with the following:

- Shoe of hydrant to be anchored on a concrete thrust block.
- Hydrant positioned so that bolts between extension piece and hydrant are accessible, both top and bottom, within limits shown on the Standard Drawings. If hydrant level is too high or low, it shall be corrected.
- All underground iron fittings shall be wrapped with polyethylene; but shall not obstruct the hydrant drain ports.

3.4 Testing - Hydrants shall be tested at the same time as the main; dry-barrel hydrants shall have the drain valves tested in the following manner:

- Following the pressure test, open fire hydrant valve a few turns and allow hydrant to fill until water is at bottom of nozzle.
- Close hydrant valve and observe water level drop. If water level drop is not detectable, the hydrant has failed the drainage test.
- If the hydrant fails the drainage test, the drain valve may be clogged or backfill material does not permit free drainage. The Contractor shall make the necessary corrections and repairs to correct improper drainage.

**END OF SECTION**