

**SAN ANTONIO WATER COMPANY**  
**ADDENDUM #1**  
**3/6/2019**  
**(Sheet 1)**



RESERVOIR NO. 7 IMPROVEMENT PROJECT - CO#1701-A

**BID DUE DATE: 10 AM, MARCH 7, 2019.**

**ESTIMATED OPINION OF PROBABLE COST: \$1,000,000**

**NOTE:** Acknowledge receipt of addenda on Contract Documents sheet CP-6. Staple addendum to the back of CP Bid proposal.

**CHANGE IN CONTRACT DOCUMENTS / NOTICE TO BIDDERS**

1. See attached list of questions provided by bidders and answers.
2. See attached revised detail for construction joint Detail H sheet 3.
3. See attached specification section 09900 for painting and coating of exposed steel piping, valves and fittings.
4. See Attached revised piping detail for the offsite installation of the control valve. All piping and fittings shall be schedule 40 steel ML&C or ML&P as shown.

Prebid Meeting  
Reservoir 7  
San Antonio Water Company  
Date: February 26, 2019  
Bid Opening Date: March 7, 2019

Questions:

Q 1: Who is responsible for the County encroachment permit for the PRV installation?

A: SAWCo is responsible for obtaining and paying for the encroachment permit. The permit process has been initiated.

Q 2: Has there been any lead/asbestos testing done at the site?

A: No official testing has been conducted. Lead and Asbestos are not anticipated to be present. If Lead and Asbestos testing is required to obtain any permits, the contractor shall have the testing performed, and required reports prepared. Include the costs for this testing in bid item No. 7

Q 3: Is this a prevailing wage job?

A: No

Q 4: Who is responsible for material testing during construction?

A: Engineer/San Antonio Water Company

Q 5: Is there construction water available on site?

A: San Antonio Water Company will install a wharf head hydrant on or near the site and construction meter for contractor use.

Q 6: Will contractor be charged for water use?

A: No.

Q 7: No interior handrail is shown on plans. Does OSHA require a handrail on interior platforms?

A: No

Q 8: Can you clarify the SCADA/Antenna details? What conduit/electrical is required?

A: The existing SCADA panel, SCADA Antenna, Solar panels, and solar equipment panel are shown to be salvaged and reinstalled per the details and notes on sheet 3 of 6. Any new conduit required to fit the reinstallation and mounting brackets are the responsibility of the contractor. The reservoir level transducer installation will require a new conduit. There is no Electrical work required except reconnecting the solar power system and the SCADA system.

Q 9: What is the Engineer's Estimate?

A: \$1,000,000

Q 10: Detail 2 on Sheet 6, joint detail. Can you provide more information? What is the depth and linear quantity of removal and replacement? Where does this task occur?

A: Detail 2 on sheet 2 of 6 shows the construction and expansion joint details from the reservoir as built design drawings. Construction note 3 on sheet 2 of 6 joint indicates the location of the construction joints and the expansion joints between the sections of the reservoir floor slab and bottom slab. Bid items 13 and 14 of the bid proposal identify the approximate lineal feet of construction joint and expansion joint to be replaced. The intent is to sawcut both sides of the existing joint, chip out the existing joints, and install new polyurethane joint sealant to the dimensions required by the product manufacturer.

Q 11: Will the reservoir be drained and out of service for construction?

A: Yes.

Q 12: Is coating/painting of the exposed pipe fittings valves in the PRV vault Required.

A: Yes. The Addendum No 1 includes specifications for the metal surface preparation and coating required. See attached specification section 09900.

Q 13: Does the Company/Owner have a laydown yard available in close proximity to the job site that can be provided to the contractor?

A: No, the adjacent property is privately owned.

Q 14: Is the area on either side of the access road closest to W. Euclid Crest available for Contractor laydown?

A: San Antonio Water Company does not own any additional property surrounding the reservoir site limits.

Q 15: Construction Joint Detail H/Sheet 3. Please clarify dimensions of construction joint. The detail shows the joint tapering from water side to exterior but no dimensions are provided. Is sealant required in this joint? If so, please specify type.

A: See revised key type construction joint detail attached for clarification. No sealant is required, construct the joint radially to the reservoir, no taper is required.

Q 15: Contract documents require listing of subcontractor experience per page CP-7. Is there a form for listing subcontractor Experience on similar work?

A: List any/all subcontractors on the table provided on sheet CP-8.

Q 16: Site visit found cementitious material on surface of reservoir concrete floor. Is this material to remain or be removed?

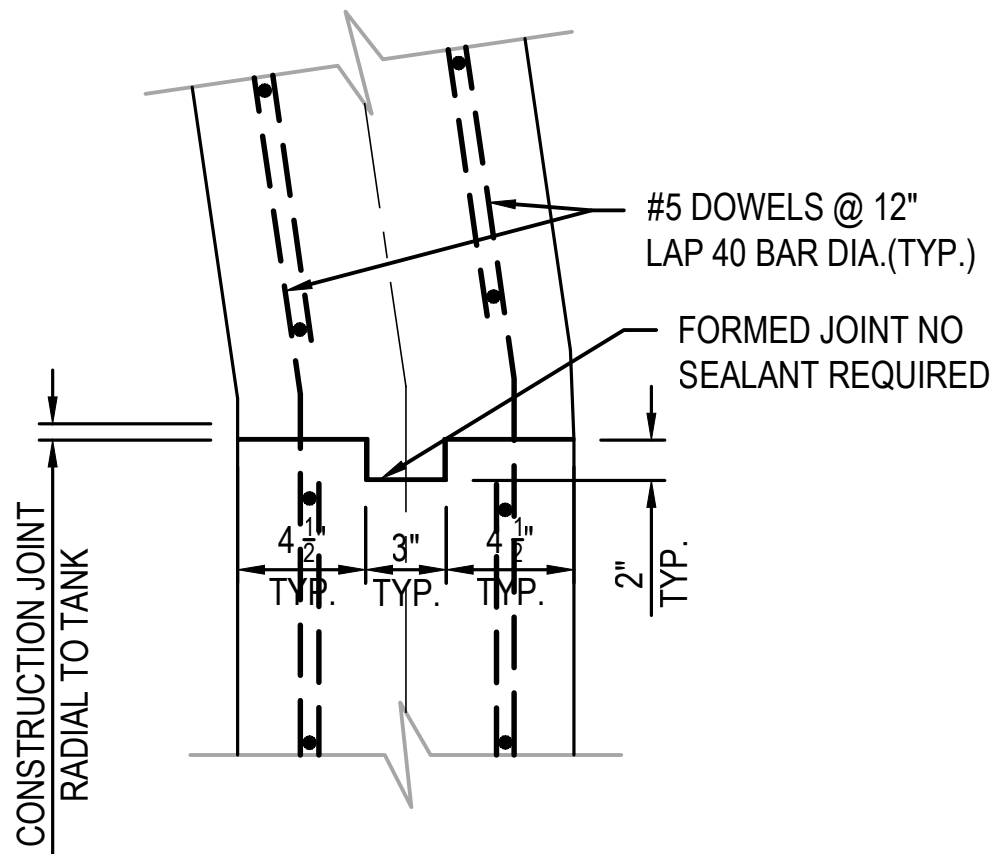
A: The reservoir is to be cleaned per specification section 10.1 with high-pressure water stream. Any remaining cementitious material not removed by the high-pressure water stream does not need to be removed.

Q 17: The drawing notes on sheet 5 of 6 call for CML&C steel piping and also for ductile iron MJ fittings, of course those fittings are not compatible with steel pipe. What material is preferred for the fittings?

A: All pipe and fittings are to be schedule 40 Steel CML&C or CML&P per the attached revised detail and construction notes.

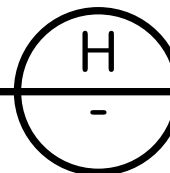
Q 18: Please confirm the type of material specified for the overflow grating. Is the grating 316L stainless steel or galvanized steel?

A: The grating and frame at the overflow weir shall be fabricated 316L stainless steel bars,  $\frac{1}{4}$ " x 2" material with  $\frac{1}{2}$  inch maximum open spacing. Fabricate the grating in 4 sections each approximately 5 feet long and 2 feet wide.



'REVISED'  
"ALL CORNERS"  
CONSTRUCTION JOINT SECTION

NOT TO SCALE



## SECTION 09900

### PAINTING AND COATING

#### PART 1 – GENERAL

##### 1.01. Description

- A. This section describes materials and application of painting and coating systems exposed metal surfaces.

##### 1.02. Submittals

- A. Shop drawings shall be submitted in accordance with **Section 30 of the General Conditions** and the following.
- B. Submit manufacturer's data sheets showing the following information:
  - 1. Recommended surface preparation.
  - 2. Minimum recommended dry-film thicknesses per coat for prime, intermediate, and finish coats.
  - 3. Percent solids by volume.
  - 4. Recommended thinners.
  - 5. Statement that the selected prime coat is recommended by the manufacturer for use with the selected intermediate and finish coats.
  - 6. Application instructions including recommended application, equipment, humidity, and temperature limitations and Material Safety Data Sheets (MSDS).
  - 7. NSF or UL certifications of coatings for use in potable water supply systems.
  - 8. Volatile Organic Compound (VOC) limitations
- C. Submit certification that all coatings conform to South Coast Air Quality Management District Rules and Regulations for products and application.

## **PART 2 - MATERIALS**

### **2.01. Color System for Coatings**

Unless noted otherwise, colors for surfaces that are to be coated shall selected by SAWCo field supervisor.

### **2.02. Deleted**

### **2.03. Exposed Metal Coating Systems**

#### **A. System No. C-1--Exposed Metal, Severely Corrosive Environment**

1. Type: Inorganic zinc prime coat with polyamide cured epoxy paint finish coat.
2. Service Conditions: Shall be used on metal structures, piping, fittings, and appurtenances subjected to continuous water condensation, or occasional immersion or splashing.
3. Surface Preparation: SSPC SP-10.
4. Prime Coat: Two-component inorganic zinc rich primer recommended by the manufacturer to be coated with polyamide epoxy paint finish coating. Minimum zinc content shall be 14 pounds per gallon. Apply to a dry-film thickness of 3 mils.
  - i. Kop-coat Carbo Zinc II HS
  - ii. Ameron Dimetcote 9
  - iii. Tnemec 90-96 Tneme-Zinc;
  - iv. International Interzinc 437 WB;
  - v. or, approved equal.
5. Intermediate Coat: Apply to a dry-film thickness of 3 mils:
  - i. Kop-coat Super Hi-gard Epoxy;
  - ii. Ameron Amerlock 400 Epoxy;
  - iii. Tnemec 69 Hi-build Epoxoline II
  - iv. International Interseal 670 HS;
  - v. or approved equal.
6. Finish Coat: Two coats of 4 mil dry-film thickness for each coat:
  - i. Kop-coat Hi-gard;
  - ii. Ameron Amerlock 400 Epoxy;
  - iii. Tnemec Series 69 Hi-build Epoxoline II
  - iv. International Interseal 670 HS;
  - v. or, approved equal.

### **2.04. DELETED**

### **2.05.**

## **PART 3 - EXECUTION**

### **3.01. Surface Preparation**

- A. General: Sandblast or prepare only as much surface area as can be coated in one day. All sharp edges, burrs, and weld spatter shall be removed. Epoxy- coated pipe that has been factory coated shall not be sandblasted.
- B. SSPC Specifications: Wherever the words "solvent cleaning," "hand tool cleaning," "wire brushing," or "blast cleaning" or similar words are used in these specifications or in paint

manufacturer's specifications, they shall be understood to refer to the applicable SSPC (Steel Structures Painting Council, Surfaces Preparation Specifications, ANSI A159.1) specifications listed below:

1. SP-1 Solvent Cleaning
2. SP-2 Hand Tool Cleaning
3. SP-3 Power Tool Cleaning
4. SP-5 White Metal Blast Cleaning
5. SP-6 Commercial Blast Cleaning
6. SP-7 Brush-Off Blast Cleaning
7. SP-8 Pickling
8. SP-10 Near White Blast Cleaning

**3.02. Sandblasting:** The Contractor shall provide suitable enclosure, exhaust system, and bag house for sandblasting operations to prevent violations of applicable air quality requirements.

**3.03. Painting Systems**

- A. All paints shall be delivered to the jobsite in the original, unopened containers. All materials of a specified painting system, including primer, intermediate, and finish coats, shall be produced by the same manufacturer. Thinners, cleaners, driers, and other additives shall be as recommended by the paint manufacturer for the particular coating system.

**3.04. Paint Mixing**

- A. Multiple-component coatings shall be prepared using all the contents of each component container as packaged by the paint manufacturer. Partial batches shall not be used. Multiple-component coatings that have been mixed beyond their pot life shall not be used. Small quantity kits for touch-up painting and for painting other small areas shall be provided. Only the components specified and furnished by the paint manufacturer shall be mixed. For reasons of color or otherwise, additional components shall not be intermixed, even within the same generic type of coating.

**3.05. Surfaces Not To Be Painted**

- A. Unless noted otherwise, the following surfaces shall not be painted and shall be fully protected when adjacent areas are painted.
1. Mortar-coated pipe and fittings
  2. Stainless Steel
  3. Metal letters
  4. Nameplates and grease fittings
  5. Aluminum grating
  6. Brass and copper tubing, submerged
  7. Buried pipe, unless specifically required in the piping specifications

**3.06. Protection of Surfaces Not To Be Painted**

- A. Hardware, lighting fixtures, switch plates, aluminum surfaces, machined surfaces, couplings, shafts, bearings, nameplates on machinery, and other surfaces not intended to be painted shall



be removed, masked, or otherwise protected. Drop cloths shall be provided to prevent paint materials from falling on or marring adjacent surfaces. Working parts of mechanical and electrical equipment shall be protected from damage during surface preparation and painting process. Openings in motors shall be safely masked to prevent paint and other materials from entering the motors. All masking materials shall be completely removed and surfaces cleaned at completion of painting operations.

### **3.07. Surfaces To Be Coated**

A. Surfaces shall be coated as described below:

1. Above Ground and Exposed Piping: Above ground and exposed piping or piping in vaults and structures shall be coated as described in the various piping specifications and as specified herein. Color shall be as specified herein or as required by the Owner's Representative.
2. Valves: Valves shall be coated as described in the various valve specifications. Above ground valves, or valves in vaults and structures, shall match the color of the connecting piping.
3. Above Ground Structural Steel and Structural Steel in Vaults: Above ground structural steel or structural steel located in vaults and structures shall be coated as described in the exposed metal coating system section.
4. Pipe Supports: Pipe supports in vaults shall be coated the same as the adjacent piping. If pipe is PVC, pipe supports shall be coated per System No. C-1.
5. Exposed Indoor Galvanized Electrical Conduit: Exposed indoor galvanized electrical conduit shall be coated per System No. C-3. Color of finish coat shall be OSHA Safety Orange.

### **3.08. Color Schedule**

A. Color Guidelines: Unless noted otherwise, surfaces that are to be coated and which require a color designation for any of the following uses, shall be coated to match the colors listed below.

B. Definitions:

1. At Grade (AtG): Facilities that are flush with streets, sidewalks, parking lots, green belts or graded areas.
2. Above Grade/Exposed (AG/E): Pipelines and other facilities that are protruding through and are located above finished grade, out of doors and not enclosed by a shelter, cover, vault or housing.
3. Enclosed (E): Pipeline and other facilities that are located above or below grade and are enclosed within a shelter, covers, or vaults.

C. Water System:

<b>Facility</b>	<b>Color</b>
Airvac Assemblies	Factory Finish
Metal Airvac Covers	Battleship Gray
Air Vents	Beige
Electric Enclosures	Factory Finish (AG/E, E)
Electric Motors	Factory Finish
Fire Hydrants	Ellis Paint Co. Hy-Lux Solventborne Enamels – 340 VOC 3119 Caterpillar Yellow
Guard Posts	Ellis Paint Co. Hy-Lux Solventborne Enamels – 340 VOC 3119 Caterpillar Yellow
Meter Box Lids	Factory Finish
Piping	Beige (AG/E) Beige or Factory Finish (E)
Pressure Vessels	Beige (AG/E) Beige or Factory Finish (E)
Pump & Pump Bases	Beige (AG/E) Beige or Factory Finish (E)
Valve Can Lids	Factory Finish
Fire Hydrant Valve Can Lids	Factory Finish
Valves Exposed (all types)	Beige (AG/E) Beige or Factory Finish (E)
Vault Hatch Lids	Factory Finish
Sampling Station Enclosures	Spraylat Powder Coatings Polyesters – PPL95219 Evergreen (Factory Finish)

\* Final color selection shall be determined by the District representative.

D. Identification (I.D.) Mark:

1. Certain facilities listed above to be coated shall have an identification system applied by the contractor at the Owner's direction.
2. Vault hatches (coated or uncoated) shall be identified with the YLWD initials and the system the facility serves (potable water or sewer). The identification mark shall be able to stand up to traffic and not pose a tripping hazard.
3. Other facilities listed above that are to be coated and/or provided with an I.D. mark shall receive a Owner supplied identification decal that consists of the Owner's logo, phone number, system identification color, and the system the facility serves.

**3.09. Field Touch Up of Shop-Applied Prime Coats**

- A. Organic Zinc Primer: Surfaces that are shop primed with inorganic zinc primers shall receive a field touchup of organic zinc primer to cover all scratches or abraded areas. Organic zinc coating system shall have a minimum volume solids of 54% and a minimum zinc content of 14 pounds per gallon. Coating shall be of the converted epoxy, epoxy phenolic, or

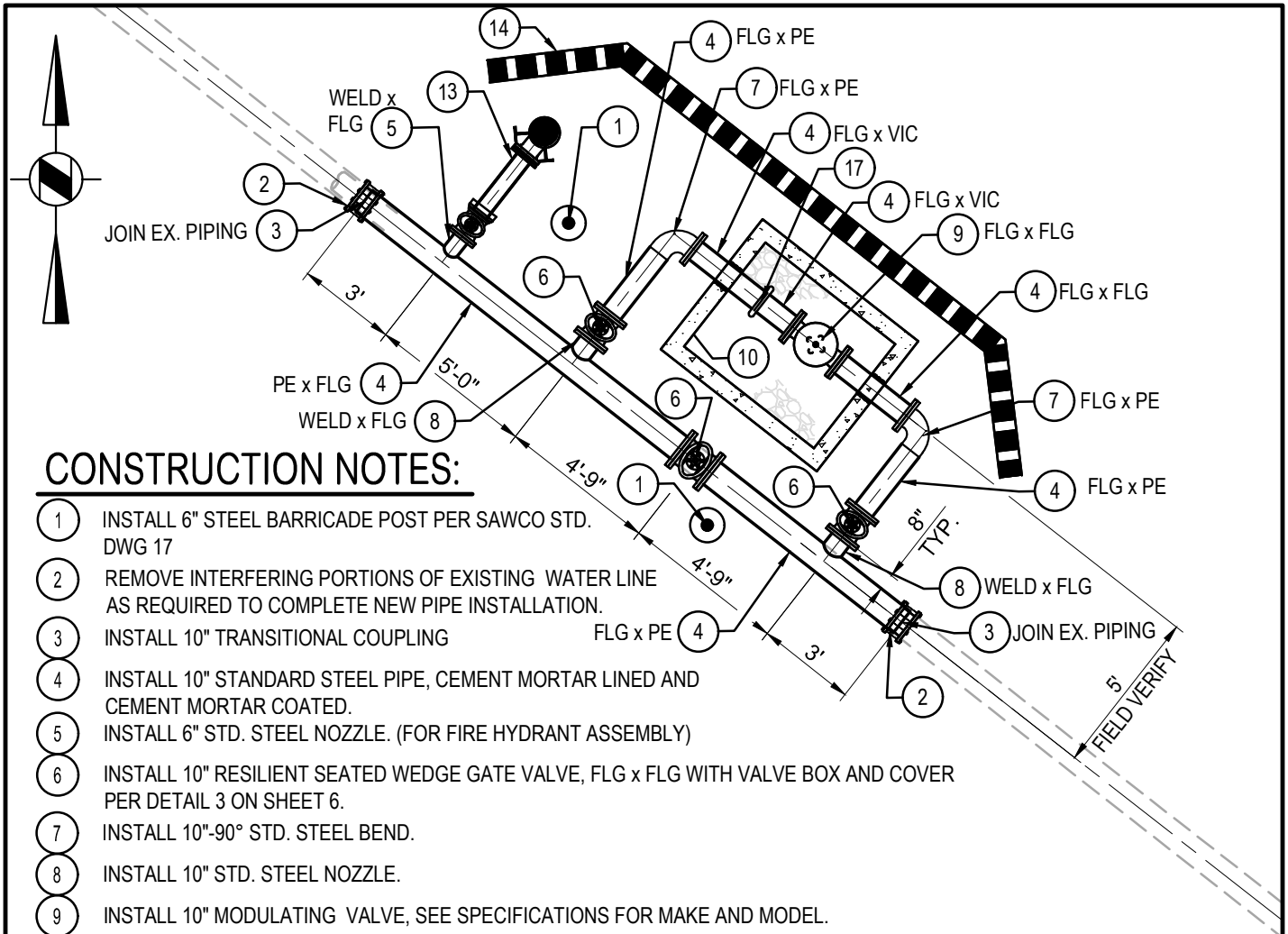
urethane type and shall be Tnemec 90-97, 3 mils; International Zinc Lock Epoxy 308, 3 mils; or for contracts between District and Contractor, approved equal. Organic zinc primer shall be manufactured by the prime coat and finish coat manufacturer.

- B. Other Surfaces: Other surfaces that are shop primed shall receive a field touchup of the same primer used in the original prime coat.

### **3.010. Dry-Film Thickness Testing**

- A. Coating Thickness Testing: Coating thickness specified for steel surfaces shall be measured with a magnetic-type dry-film thickness gage. Dry-film thickness gage shall be provided as manufactured by Mikrotest or Elcometer. Each coat shall be checked for the correct dry-film thickness. Measurement shall not be made until a minimum of eight hours after application of the coating. Non- magnetic surfaces shall be checked for coating thickness by micrometer measurement of cut and removed coupons. Contractor shall repair coating at all locations where coupons are removed.
- B. Holiday Testing: The finish coat (except zinc primer and galvanizing) shall be tested for holidays and discontinuities with an electrical holiday detector of the low-voltage, wet-sponge type. Detector shall be provided as manufactured by Tinker and Razor or K-D Bird Dog.
- C. Repair: If the item has an improper finish color, insufficient film thickness, or holidays, the surface shall be cleaned and top-coated with the specified paint material to obtain the specified color and coverage. Visible areas of chipped, peeled, or abraded paint shall be hand or power-sanded, feathering the edges. The areas shall then be primed and finish coated in accordance with the specifications. Work shall be free of runs, bridges, shiners, laps, or other imperfections.

**END OF SECTION 09900**



**CONSTRUCTION NOTES:**

- 1 INSTALL 6" STEEL BARRICADE POST PER SAWCO STD. DWG 17
- 2 REMOVE INTERFERING PORTIONS OF EXISTING WATER LINE AS REQUIRED TO COMPLETE NEW PIPE INSTALLATION.
- 3 INSTALL 10" TRANSITIONAL COUPLING
- 4 INSTALL 10" STANDARD STEEL PIPE, CEMENT MORTAR LINED AND CEMENT MORTAR COATED.
- 5 INSTALL 6" STD. STEEL NOZZLE. (FOR FIRE HYDRANT ASSEMBLY)
- 6 INSTALL 10" RESILIENT SEATED WEDGE GATE VALVE, FLG x FLG WITH VALVE BOX AND COVER PER DETAIL 3 ON SHEET 6.
- 7 INSTALL 10"-90° STD. STEEL BEND.
- 8 INSTALL 10" STD. STEEL NOZZLE.
- 9 INSTALL 10" MODULATING VALVE, SEE SPECIFICATIONS FOR MAKE AND MODEL.
- 10 INSTALL PRECAST CONCRETE VAULT PER DETAIL HEREON, SEE SPECIFICATIONS FOR MAKE AND MODEL.
- 11 3/4" GRAVEL, 12" DEEP OVER COMPACT NATIVE MATERIAL TO 90% RELATIVE DENSITY.
- 12 INSTALL NON-SHRINK, GROUT, SEAL ANNULAR OPENINGS AS REQUIRED.
- 13 INSTALL 6" FIRE HYDRANT ASSEMBLY PER SAWCO STD. DWG. 15.
- 14 CONSTRUCT CONCRETE BLOCK SLOUGH WALL PER SAN BERNARDINO COUNTY STD. DWG. 301a.
- 15 INSTALL ADJUSTABLE PIPE SUPPORT PER DETAIL 4 ON SHEET 6.
- 16 NOT USED.
- 17 INSTALL 10" VICTAULIC COUPLING, STYLE 77 OR EQUAL.

**NOTES:**

- 1. CONTRACTOR SHALL POTHOLE TO VERIFY THE LOCATION, DEPTH, AND CONDITION OF EXISTING WATER MAIN AT ALL CONNECTION POINTS.
- 2. AFTER ALL PIPE LINE IMPROVEMENTS HAVE BEEN COMPLETED, RETURN ALL STREET STRIPING TO PRE-EXISTING CONDITIONS.
- 3. ALL STATIONING SHOWN ON THESE PLANS ARE BASED ON CENTER LINE OF STREET, UNLESS NOTED OTHERWISE.
- 4. ALL STEEL PIPE AND FITTINGS ABOVE GROUND SHALL BE CEMENT MORTAR LINED AND EPOXY COATED AND ALL BELOW GROUND SHALL BE CEMENT MORTAR LINED AND CEMENT MORTAR COATED.

**OFF-SITE PIPING AND CONCRETE VAULT PLAN**

SCALE: 1/4" = 1'-0"