

DOCUMENT 00911

ADDENDUM NUMBER 1

Issued: July 24, 2012

**Santa Rosa Aqueduct Seismic Hazard Mitigation
(Rodgers Creek Fault Crossing)**

FROM: Sonoma County Water Agency
404 Aviation Blvd.
Santa Rosa, CA 95403-9019

TO: Prospective Bidders

This Addendum forms a part of and modifies the Project Manual dated June 2012. Bidder shall acknowledge receipt of this Addendum in the space provided in Document 00400 (Bid Form).

Modified text is indicated as follows: Double-underline designates text to be inserted; ~~strikethrough~~ designates text to be deleted.

Addendum Number 1 consists of 30 pages (size 8 1/2" x 11") and 7 revised Drawings (size 11" x 17").

I. General Changes

A. No changes.

II. Changes to Prior Addenda

A. N/A.

III. Changes to Introductory Information and Bidding Requirements

A. Document 00100 (Advertisement for Bids):

1. Modify Paragraph 3. as follows:

ESTIMATED PROJECT COST RANGE: ~~\$2.0 to \$2.6~~ \$2.2 to \$2.8 million.

B. Document 00200 (Instructions to Bidders):

1. Modify Paragraph 15.D.1.b. as follows:

b. Butterfly Valves larger than 12"

C. Document 00400 (Bid Form):

1. Modify Bid Item 22 as follows:

22.	12-Inch Flexible Hose	760-780	Linear Foot		
------------	-----------------------	--------------------	-------------	--	--

2. Insert the following Bid Item as #26 [renumber remaining Bid Item accordingly]:

26.	<u>Removal of Existing 16" Water Main, as pre-approved by Owner</u>	<u>1,000</u>	<u>Linear Foot</u>		<u>\$</u>
------------	---	--------------	--------------------	--	-----------

3. Bidder shall use the revised Document 00400 (Bid Form) attached, marked "REVISED 7/24/12" in its Bid.

D. Document 00450 (Statement of Qualifications for Construction Work):

1. In Attachment "C," Part D, insert the following row in the "List of Qualifying Projects - Prime Contractor" table:

<u>Date of Completion</u>			
---------------------------	--	--	--

2. Bidder shall use the revised Document 00450 (Statement of Qualifications for Construction Work) attached, marked "REVISED 7/24/12," in its Bid.

IV. Changes to Contracting Requirements

A. Document 00510 (Notice of Award):

1. Modify document numbers in Paragraph 2. as follows:

~~00463~~ 00623
~~00465~~ 00624
~~00467~~ 00625
~~00469~~ 00626
~~00471~~ 00627
~~00473~~ 00628

B. Document 00520 (Agreement):

1. Delete third sentence of Paragraph 3.1, Contract Time, as follows:
~~As indicated in Section 01100 (Summary), the Work consists of two Phases.~~
2. Delete third paragraph and table under Paragraph 3.1, Contract Time, as follows:
~~In addition to the foregoing, Contractor shall achieve Substantial Completion for each Phase of Work within the number of Days indicated here:~~

<u>Phase</u>	<u>Description</u>	<u>Days from when the Contract Time commences to run as provided in Document 00700 (General Conditions)</u>
Phase 1	Installation of butterfly isolation valves (Bid item #18) and related Work, as described in Document 01100 (Summary), paragraph 1.7D.2	60
Phase 2	All Work other than Phase 1 Work	240

3. Delete Paragraph 3.2.2 [renumber remaining paragraph accordingly]:
~~3.2.2 Six hundred fifty dollars (\$650.00) for each Day that expires after the time specified herein for Contractor to achieve Substantial Completion of Phase 1, until achieved.~~
4. In Paragraph 3.3, Service Reduction Damages, modify paragraph following Paragraph 3.3.2 as follows:
For Shutdown No. 1, time will be computed from when Owner notifies Contractor that the pipeline has been dewatered to when the Contractor has completed final water-tight

connections. For Shutdown No. 2, time will be computed from the moment the isolation valves (installed prior to Shutdown No. 2) are closed.

5. New Bid Item 26 will be added to and corrected estimated quantity for Bid Item 22 will be included in the final Contract Documents.

V. Changes to Conditions of the Contract

A. Document 00700 (General Conditions):

1. Modify Paragraph 16.7.D as follows:
16.7.D Contractor stipulates that it shall comply with all applicable wage and hour laws, including without limitation Labor Code Sections 1813 and 1815.

VI. Changes to Specifications

A. Section 01100 (Summary):

1. Modify Paragraph 1.4 D.17 as follows:
17. 36-Inch Steel Pipe. The unit price paid under this item shall be the full payment for providing 36-inch steel pipe, including bends, lining and coating, geotextile wrap, excavation and required field screening of trench spoils, backfill, spoils off-haul to designated disposal site, Hazardous Waste Testing, Handling, Stockpiling, Transporting and Disposal plan as described in Section 02110, removal of ancillary utilities, surface restoration, restriping, repair or replacement of traffic loops, accessories, disinfection, hydrostatic testing, removal and disposal of existing abandoned 4" gas main as necessary, welding inspection, coating and lining inspection, and water service repair replacement. For the purposes of payment, this item will be measured by the linear foot of pipe installed.
2. Insert the following after Paragraph 1.4 D.25 as Bid Item 26 [renumber remaining Bid Item accordingly]:
26. Removal of Existing 16" Water Main. The unit price paid under this item shall be the full payment for excavating, removing, disposing, backfilling up to final AC surfacing, and plugging cut ends of remaining pipe sections, the existing 16" water main, as pre-approved by Owner. In no case will Owner pay for removal if Work is not pre-approved. For the purposes of payment, this item will be measured by the linear foot of pipe removed.
3. Delete Paragraph 1.7 B [renumber remaining paragraphs accordingly]:
~~B. Phase 1 shall consist of installation of isolation valves (Bid item #18) and related Work as described under paragraph 1.7D.2 below. Phase 2 shall consist of all Work other than Phase 1 Work. Refer to Document 00520 (Agreement) for Liquidated Damages associated with Phase Work.~~
4. Modify title of Paragraph 1.7 D.2 as follows:
2. Shutdown No. 1-(Phase 1):
5. Modify Paragraph 1.7 D.2.b.1) as follows:
1) Upon completion of Owner dewatering, Owner will notify Contractor of the start time from when shutdown time will be computed.
6. Insert the following after 1.7 D.2.c:
d. Shutdown No. 1 shall occur between November 15th and March 31st.

7. Insert the following after Paragraph 1.7 D.4.a. [renumber remaining paragraphs accordingly]:
 - b. Complete meter turnout installation at Sotoyome Street and abandonment at Talbot Avenue (meter vault, valve removal, and plug) before installing new 36-inch steel water pipe crossing at existing 24-inch water line at approximate station 8 + 23.
 8. Modify Paragraph 1.7 D.4.c. as follows:
 - c. Any interruption of water laterals and sewer laterals shall last no longer than 4 hours. Otherwise these services shall remain in service throughout the Work.
- B. Section 02110 (Excavation, Removal, and Handling of Hazardous Materials):
1. Insert the following after Paragraph 1.1 A.1. as Paragraph 1.1 B [renumber remaining paragraphs accordingly]:
 - B. Payment:
 1. Payment for additional costs to handle, stockpile, and transport any materials under this Section 02110 which are determined not to be suitable for direct disposal at the Sonoma County Central Landfill will be paid for as extra Work per provisions of Section 01250 (Modification Procedures).
 2. Modify Paragraph 1.2 A.1.a.1) as follows:
 - 1) ~~A Certified Industrial Hygienist-California-licensed engineer or geologist~~ shall prepare and stamp the Plan.
 3. Modify Paragraph 1.2 A.1.b.7) as follows:
 - 7) Sampling and analysis plan for characterizing the trench-excavated soil that field screening has indicated fails to meet requirements for direct disposal at the designated disposal site. The sampling and analysis plan shall describe soil sampling methods (including frequency of samples to be collected) and analytical methods for testing of soil samples.
 4. Modify Paragraph 1.3 A.1 as follows:
 1. A known contamination plume originating 300 feet east of the Site at a former dry cleaner on Farmers lane has been identified as potentially impacting the area. The chlorinated solvent, tetrachlorethylene (PCE) has been found in trace amounts during the groundwater and soil characterization phase. Samples from the area have been collected, ~~and tested, and found to be allowable suitable~~ for off haul to the Sonoma County Central Landfill as indicated in the letter included at the end of this Section 02110. ~~City of Santa Rosa also has a pond site on 35 Stony Point Road that will accept clean fill.~~
 5. Modify Paragraph 3.2 A.10. as follows:
 10. Transport the affected soil to an appropriate licensed treatment, recycling and/or disposal facility in accordance with CCR Title 23, Division 3, Chapter 15 (Discharges of Waste to Land).
 - ~~a. Transport to the Sonoma County Central Landfill shall comply with the letter included at the end of this Section 02110.~~
 - ~~b. Transport to City of Santa Rosa pond #2 shall comply with the City of Santa Rosa requirements (a copy will be provided to Contractor).~~

6. Delete last line of section as follows:
~~SONOMA COUNTY CENTRAL LANDFILL SOIL DISPOSAL LETTER FOLLOWS THIS SECTION~~
 7. Move disposal letter attachment (from Sonoma County Central Landfill) to Section 02320 (Trenching, Backfilling, and Compacting for Utilities).
- C. Section 02285 (Abandonment of Water Pipeline):
1. Delete Paragraph 2.2 in its entirety [renumber remaining paragraphs accordingly]:
2.2 MATERIALS
 - A. Concrete:
 1. Class "A" PCC
 2. Minimum compressive strength of 3000 psi at 28 days
 3. Minimum 6 sacks cement per cubic yard
 4. Maximum slump of 4 inches, as determined in accordance with ASTM C143
- D. Section 02320 (Trenching, Backfilling, and Compacting for Utilities):
1. Modify Paragraph 3.2 B. as follows:
B. See Section 02110 (Excavation, Removal, and Handling of Hazardous Materials) if ~~contaminated~~ soils determined not to be suitable for direct disposal at the designated disposal site are encountered.
 2. Modify Paragraph 3.1 A. as follows:
~~Remove and dispose of unsuitable materials as determined by Owner to a site provided by Contractor~~ Transport to the Sonoma County Central Landfill shall comply with the letter included at the end of this Section 02320.
 3. Insert the following after "END OF SECTION:"
SONOMA COUNTY CENTRAL LANDFILL SOIL DISPOSAL LETTER FOLLOWS THIS SECTION
 4. Insert disposal letter attachment (from Sonoma County Central Landfill), moved from Section 02110 (Excavation, Removal, and Handling of Hazardous Materials).
- E. Section 09900 (Paints and Protective Coatings):
1. Modify Paragraph 1.5 A.2 as follows:
 2. Exterior Coating System Technical Requirements:
 - a. Exterior/Outside coating system (OCS) shall be ANSI/AWWA C222, C210, or C205, as indicated.
- F. Section 13423 (Flow Meters):
1. Modify Paragraph 1.1 B.1.d.1) as follows:
 - 1) For meters under 20 inches: ~~gpm cfs~~
 2. Modify Paragraph 1.3 A.1.b.1) as follows:
 - 1) For meters under 20-inches: list in ~~gpm cfs~~
 3. Delete Paragraph 2.3 A [renumber remaining paragraphs accordingly]:
~~A. Flow signal totalizer:~~
 1. ~~Direct output read in mgd on the totalizer.~~
 4. Delete Paragraph 2.3 B.1. [renumber remaining paragraphs accordingly]:
~~1. For City of Santa Rosa:~~
 5. Delete Paragraph 2.3 B.3.:
~~1. Mag type:~~
 6. Delete Paragraph 2.3 C.3:
~~3. Digital display:~~

- a. Flow: gpm.
- b. Total flow: gallons.

G. Section 15051 (Basic Piping Materials and Methods):

1. Delete Paragraph 3.5 B.3.a.18 in its entirety [renumber remaining paragraphs accordingly]:
 - ~~18. All joints, including welds, are to be left exposed for examination during the test.~~

H. Section 15105 (Steel Pipe):

1. Insert the following title after Paragraph 1.4 B.1 and before current Paragraph 1.4 B.2 as 1.4 C [renumber remaining paragraphs accordingly]:
 - C. Material Testing and Inspection:
 - 21. Tensile and Bend tests...
2. Modify Paragraph 2.2 D. as follows:
 - D. Yield Strength: The Yield Strength shall be 36 ksi minimum. The yield strength shall not exceed ~~42~~ 48 ksi.

I. Section 15107 (Ductile Iron Pipe):

1. Delete Paragraph 2.4 A in its entirety [renumber remaining paragraphs accordingly]:
 - ~~A. Glass Lining:~~
 - ~~1. Minimum two-coat process:~~
 - ~~a. Base coat heated to solidly fuse glass to pipe surface.~~
 - ~~b. Subsequent coat(s) heated to form integral bond with preceding coat.~~
 - ~~2. Final finish parameters:~~
 - ~~a. Thickness: 8-12 mils.~~
 - ~~b. Hardness: Above 5 on MOHS scale.~~
 - ~~c. Density: 2.5-3.0 grams per cubic centimeter.~~
 - ~~d. Metal to lining bonding: Capable of withstanding strain of 0.0001 in/in without damage to lining.~~
 - ~~3. Complete compatibility between fittings and piping.~~
2. Delete Paragraph 2.4 D.1 in its entirety [renumber remaining paragraphs accordingly]:
 - ~~1. Protect exterior surfaces of pipes protected by polyethylene tape, in accordance with ANSI/AWWA C213, or coal tar epoxy, in accordance with ANSI/AWWA C214.~~
3. Delete Paragraph 2.5 A.2 in its entirety [renumber remaining paragraphs accordingly]:
 - ~~2. Glass lining:~~
 - ~~a. Quality control: The finished coating will meet the following requirements:~~
 - ~~1) Thickness: 0.008 to 0.012 inch.~~
 - ~~2) Hardness: 5 to 6 on the Mohs Scale.~~
 - ~~3) Density: 2.5 to 3.0 grams per cubic centimeter,~~
 - ~~(a) Measured in accordance with ANSI/ASTM D792.~~
 - ~~4) Glass capable of withstanding thermal shock of 350°F.~~
 - ~~(a) From 430°F to 80°F.~~
 - ~~(b) Without crazing, blistering, or spalling.~~
 - ~~5) No visible loss of surface gloss in the lining after immersion of a normal production run sample:~~
 - ~~(a) In an 8% sulphuric acid solution,~~
 - ~~(b) At 148°F,~~
 - ~~(c) For a period of 10 minutes.~~
 - ~~6) Lining materials shows a weight loss of not more than 3 milligrams per square inch.~~

~~(a) When tested in accordance with ANSI/ASTM C283.~~

~~7) After application of the glass lining material, the metal wall of the piping item will have a thickness of not less than Pressure Class 350.~~

~~8) Preparation of piping items:~~

~~(a) Interior surfaces of the ductile iron piping items are to be machined smooth and grit blasted to white metal before application of the glass lining material.~~

~~(b) Factory assembled flanges on piping items are to be screwed on, unless otherwise specified.~~

~~(c) Bolt holes and flange faces are to be aligned before application of the glass lining.~~

~~b. Application of lining material:~~

~~1) The lining materials to be factory applied to chemically clean ductile iron.~~

~~2) After application of the coating, the parts are to be placed in a specially designed furnace for this purpose and brought up to a temperature that melts the glass and fuses the material to the base metal.~~

~~3) Continue firing of the piece until fusion has completely taken place and the coating has an integral molecular bond with the metal.~~

~~c. Field testing:~~

~~1) Pinholes, crazing, or fish scales which expose the metal substrate will be cause for rejection of the items.~~

~~2) Interior surfaces of glass lined items are to be glass smooth.~~

J. Section 15113 (Butterfly Valves):

1. Modify Paragraph 2.1 A.1 as follows:

1. Potable Water:

a. For 12" valves:

1) Victaulic: Firelock Series 705

2) Henry Pratt Company: 2FII

3) Or Approved Equal

b. For valves larger than 12":

1) Henry Pratt Company: Groundhog

e. 2) No Substitutions.

VII. Changes to Drawings

A. Delete Drawing G-1 and replace with attached Drawing G-1, marked "07-24-12 ADDENDUM 1."

B. Delete Drawing C-1 and replace with attached Drawing C-1, marked "07-24-12 ADDENDUM 1."

C. Delete Drawing C-2 and replace with attached Drawing C-2, marked "07-24-12 ADDENDUM 1."

D. Delete Drawing C-4 and replace with attached Drawing C-4, marked "07-24-12 ADDENDUM 1."

E. Delete Drawing C-5 and replace with attached Drawing C-5, marked "07-24-12 ADDENDUM 1."

F. Delete Drawing D-1 and replace with attached Drawing D-1, marked "07-24-12 ADDENDUM 1."

- G. Delete Drawing D-2 and replace with attached Drawing D-2, marked "07-24-12 ADDENDUM 1."
-

VIII. Question(s)/Answer(s)

Owner's responses to Bidder questions shall be for the purposes of interpretation and clarification of the Contract Documents only, and shall not be construed as changing, superseding, or contradicting any express term in the Contract Documents. If any Bidder believes that a response to a question warrants a change in any term in the Contract Documents, the Bidder shall so request the change be made in writing addressed to Owner and received no later than the latest date for submitting Bidder questions. In the absence of a change in any term of the Contract Documents, the express terms of the Contract Documents shall have precedence. Bidder questions are listed below verbatim.

A. Ghilotti Construction, Co.

1. Improvement plans identify an existing 4" abandoned Gas main parallel to our new trench and a 16" water main not sure if abandoned or in service.

A). Please clarify if we will be required to remove the 4" gas main during trenching operations as we encounter and please clarify what type of pipe & coatings exist on this gas main. Has this main been cleared for removal through PG&E?

Owner's response: Answered in this Addendum above.

B). Please clarify if this 16" WM is abandon and will we be required to remove as we encounter during our trenching operation. If so identify what type of pipe material we will encounter. If this main is still in service will the City be able to reduce the pressure if necessary?

Owner's response: Answered in this Addendum above.

2. Spec Section 02110; Excavation, Removal and Handling of Hazardous Materials. Please clarify if this section is only required if we encounter potentially contaminated soils? This specification is not clear and identifies a known contamination site on Farmers lane not near this project. Clarify if we encounter this work will this be paid as extra work? Is soils testing required if we do not encounter potentially contaminated soils?

This section also identified potential dump sites; is this related to both clean and contaminated soils?

Owner's response: Answered in this Addendum above.

3. Section 02240 Dewatering; specification required Analytical testing of water before discharge. If there is no indication of contamination are we required to perform this testing? Is the testing paid in the dewatering plan implementation item or in the contaminated ground water disposal item? SCWA has obtained the Santa Rosa Discharge Permit for the disposal of water. Can the Contractor use this discharge permit for water disposal or must we acquire and pay for a discharge permit?

Owner's response: This is in the Bidding Documents.

4. Spec Section 15051-3.5 item 18; states All Joints including welds are to be left exposed for examination during the test. We believe this to be the Hydrostatic test? The specification requires all welds testing by Magnetic Particle or Dye Penetrate means. There is Zero Leakage requirement during testing procedures. Therefore, we are asking

this means and methods requirement be removed from the specification since we are entirely responsible for all other requirements.

Owner's response: Answered in this Addendum above.

5. Section 15107; Ductile Iron Pipeline Section 2.4; This states Glass Linings and Corrosion Protection Coatings that are not consistent with section 2.5; Linings and Coatings. Please clarify what sub-section we are to used to determine the lining & coating of the pipe.

Owner's response: Answered in this Addendum above.

6. The district has identified possible sewer laterals repair areas in bid item #13. Plan sheet G-1 Service note 1; states water services distributed shall be replaced form the main to the meter routed over the pipeline. Please either identify the locations and sizes where this exists or provide a bid item similar to the sewer lateral item.

Owner's response: This is in the Bidding Documents.

7. Plan Sheet D-1 By Pass Manifold Vault Structure and D-2 vault structures. Please clarify the depth of this structure since this detail is not to scale.

Owner's response: Answered in this Addendum above.

8. Please clarify if SCWA will complete the hot tap tie in at 22+63 as similar to the connection at station 1+97. Is the contractor responsible for excavation/backfill/shoring?

Owner's response: Answered in this Addendum above.

9. Plan Sheet C-5 Pipe Schedule references the bedding material requirements by the station; specifically station 4+95 and 21+70 the schedule require typical bedding materials but the plans indicate CLSM be placed in these areas. Clarify what plan we are to use during the bid process.

Owner's response: Bid per Bidding Documents.

10. I have read through section 01415 (Regulatory Requirements - Funding) but I do not see the instructions on good faith efforts for the referenced project as stated in the Instructions to Bidders, page 00200 - 7. Please advise.

Owner's response: This is in the Bidding Documents (Section 01415 [Regulatory Requirements - Funding], Paragraph 1.4).

11. Station 8+23 plan note states to verify this utility and relocate if still in service, remove if abandoned. This existing utility is a 24" water main. The cost to relocate this utility will be greater than if we have to abandon in place. Please either confirm what is required at bid time or add a bid item to relocate. If this work is not necessary the District does not pay for this work.

Owner's response: Answered in this Addendum above.

12. Plan Sheet D-2, detail 3; Water Meter Installation; Please provide the following information;
 - a). Vault lid details (none shown)
 - b). Vault depth including profile view.

c). Note on detail states to provide space in lieu of PRV to be provided by CSR. Who is CSR and will this agency install the unit?

Owner's response: Answered in this Addendum above.

13. Please indicate the depth of the existing 36" WM at the tie in location and at the 12" cit in tee on Sotoyome Street. This work is shown on sheet C-5.

Owner's response: As-built drawings provided in the Bidding Documents. Reference Document 00320 (Geotechnical Data and Existing Conditions) and Owner's website: [Santa Rosa Aqueduct Seismic Hazard Mitigation \(Rodgers Creek Fault Crossing\)](#)

14. Please clarify bid item #13; 4" sewer lateral repair; Is this work required where the sewer lateral crosses the new 36" aqueduct? Is the repair only required for the portion of the sewer lateral that crosses the new pipeline or is the contractor required to replace the entire lateral from the main to the rightaway?

Owner's response: This is in the Bidding Documents.

15. Please clarify the requirements for trench restoration for the work on Plan Sheet C-5 Sotoyome Street. The Trench details do not address this area.

Owner's response: Answered in this Addendum above.

16. Please provide a detail per section #15106 for the Low Friction Wrap around the pipeline. Details are missing in the Trench sections on plan sheet D-1.

Owner's response: Answered in this Addendum above.

17. Per section 02285-1.3b System Density; Minimum Density of 38 PCF. 38 PCF comes out to +/- 300PSI. Under 2.2 Materials requires a minimum strength of 3000 PSI. Please clarify if this is a clerical error and modify to meet SCWA actual requirements.

Owner's response: Answered in this Addendum above.

B. Northwest Pipe Company

1. On Section 09900 Paints and Protective Coatings, on page 7/14 of the drawing schedule, calls for the pipe coating at sta 5+45 to sta 19+50 to be Fusion Bonded Epoxy/Polyurethane and at sta 3+72 to sta 3+98 and sta 21+43 to sta 21+67 to be Fusion bonded Epoxy/Cement. It contradicts the specified coating on page 09900-3 paragraph 1.5A2a which calls for Polyurethane coating only. On same page 7/14 of the drawing schedule, it calls for Epoxy lining. Again, it contradicts the pipe lining specified on page 09900-3 paragraph 1.5A1b which is both Epoxy and Polyurethane. We need clarification what material to use for both lining and coating for the pipe. Our recommendation, would be to use Polyurethane lining and coating for the pipe.

Owner's response: Answered in this Addendum above.

2. On Section 09900 Paints and Protective Coatings, page 09900-5, paragraph 2.2A2a the specs calls for Polyurethane lining to be 50mils with 100% solids. As per AWWA C222 it recommends Polyurethane to be 20 mils with 100% solids, and there is some economic benefits as well to adopt the recommended lining thickness.

Owner's response: Bid per Bid Documents.

3. On Sections 09900 Paints and Protective Coatings, page 09900-5, Paragraph 2.2B2a the specs calls for Polyurethane coating to be 50mils with 100% solids. As per AWWA C222,

it recommends Polyurethane to be 25mils with 100% solids, and there is some economic benefits as well to adopt the recommended coating thickness.

Owner's response: Bid per Bid Documents.

4. On Section 09900 Paints and Protective Coatings, page 09900-4 Section 2.1B2 We recommend alternative materials Durashield 210 from Lifelast, and Carboline Polyclad 777 from Carboline to be added as alternate products. And this products have been used successfully on several pipe projects. Attached are technical informations on the DuraShield 210 and Polyclad 777, and list of projects that they have used these products successfully.

Owner's response: Bid per Bid Documents.

5. On Section 15105 Steel Pipe, page 15105-3 paragraph 1.4B3b, hammering is not recommended because of possible damage on the pipe, and suggest a different method of inspection.

Owner's response: Bid per Bid Documents.

6. On Section 15105 Steel Pipe, page 15105-4 paragraph 2.2D Here the specs calls for 36ksi min and 42 ksi max. That requirement is unattainable in steel manufacturing and suggest that you remove the min and max requirement. Advice you talk to Christine Coldburn at Nucor Corp (205-250-7400) in Birmingham, Alabama, which is our steel producer. She acknowledges that 6ksi differential in steel yield range is beyond their manufacturing capabilities.

Owner's response: Answered in this Addendum above.

C. Ameron

1. Can you please confirm to all bidders that the steel cylinder OD you are specifying for the new 36" pipe is 37.875" per the Pipe Schedule shown on Drawing C-5? There seems to be some confusion to the OD/ID of the new pipe because it is painted in & out.

Owner's response: Answered in this Addendum above.

END OF DOCUMENT

DOCUMENT 00400

BID FORM

To be submitted as part of Envelope "A" by the time and date specified in Document 00200 (Instructions to Bidders), paragraph 1.

TO THE HONORABLE BOARD OF DIRECTORS OF THE SONOMA COUNTY WATER AGENCY

THIS BID IS SUBMITTED BY:

(Firm/Company Name)

RE: CONTRACT NUMBER 60-64-7 #1, SANTA ROSA AQUEDUCT SEISMIC HAZARD MITIGATION (RODGERS CREEK FAULT CROSSING)

1. The undersigned Bidder proposes and agrees, if this Bid is accepted, to enter into an agreement with the Sonoma County Water Agency, a public agency of the State of California ("Owner") in the form included in the Contract Documents, Document 00520 (Agreement), to perform and furnish all Work as specified or indicated in the Contract Documents for the Contract Sum and within the Contract Time indicated in this Bid and in accordance with all other terms and conditions of the Contract Documents.
2. Bidder accepts all of the terms and conditions of the Contract Documents, Document 00100 (Advertisement for Bids), and Document 00200 (Instructions to Bidders), including, without limitation, those dealing with the disposition of Bid Security. This Bid will remain subject to acceptance for 90 Days after the day of Bid opening.
3. In submitting this Bid, Bidder represents:
 - (a) Bidder has examined all of the Contract Documents and all of the Addenda (receipt of all of which is hereby acknowledged). The Addenda are listed below.

Addendum Number	Addendum Date	Signature of Bidder

- (b) Bidder has visited the Site and performed all tasks, research, investigation, reviews, examinations, and analysis and given notices, regarding the Project and the Site, as set forth in Document 00520 (Agreement), Article 5.

- (c) Bidder names the manufacturer of the following items, to be furnished under the Contract Documents:

SECTION NUMBER	ITEM	MANUFACTURER
15105	Steel Pipe	

- (d) Bidder has given Owner prompt written notice of all conflicts, errors, ambiguities, or discrepancies that it has discovered in or among the Contract Documents and as-built drawings and actual conditions and the written resolution thereof through Addenda issued by Owner is acceptable to Contractor.

4. Based on the foregoing, Bidder proposes and agrees to fully perform the Work within the time stated and in strict accordance with the Contract Documents for the following sums of money listed in the following Schedule of Bid Prices:

SCHEDULE OF BID PRICES

All Bid items, including lump sums and unit prices, must be filled in completely. Bid items are described in Section 01100 (Summary of Work). Quote in figures only, unless words are specifically requested.

ITEM	DESCRIPTION	ESTIMATED QUANTITY	UNIT	UNIT PRICE	TOTAL
1.	Bonds	XXXXXX	Lump Sum	XXXXX	\$
2.	Insurance	XXXXXX	Lump Sum	XXXXX	\$
3.	Safety Program and Implementation	XXXXXX	Lump Sum	XXXXX	\$
4.	Construction Material Waste Management Plan and Implementation	XXXXXX	Lump Sum	XXXXX	\$
5.	Installation, Operation, and Maintenance Manuals	XXXXXX	Lump Sum	XXXXX	\$
6.	Storm Water Pollution Prevention Plan and Implementation	XXXXXX	Lump Sum	XXXXX	\$
7.	Mobilization/ Demobilization	XXXXXX	Lump Sum	XXXXX	\$
8.	Shoring and Bracing	XXXXXX	Lump Sum	XXXXX	\$
9.	Dewatering Plan	XXXXXX	Lump Sum	XXXXX	\$
10.	Dewatering Plan Implementation	XXXXXX	Lump Sum	XXXXX	\$

ITEM	DESCRIPTION	ESTIMATED QUANTITY	UNIT	UNIT PRICE	TOTAL
11.	36-Inch Pipe Abandonment	XXXXXX	Lump Sum	XXXXX	\$
12.	Abandon City Meter Vault	XXXXXX	Lump Sum	XXXXX	\$
13.	4-Inch Sewer Lateral Repair	25	Each		
14.	Meter Vault	XXXXXX	Lump Sum	XXXXX	\$
15.	Bypass Manifold Vault	2	Each		
16.	Cathodic Protection System	XXXXXX	Lump Sum	XXXXX	\$
17.	36-Inch Steel Pipe	1,877	Linear Foot		
18.	36-Inch Butterfly Valve	2	Each		
19.	24-Inch Hot Tap	2	Each		
20.	24-Inch Gate Valve	2	Each		
21.	24-Inch DIP	65	Linear Foot		
22.	12-Inch Flexible Hose	760 <u>780</u>	Linear Foot		
23.	Flexible Hose Base Trailer	XXXXXX	Lump Sum	XXXXX	\$
24.	Contaminated Groundwater Disposal	21,000	Gallon		
25.	Electrical Work	XXXXXX	Lump Sum	XXXXX	\$
26.	<u>Removal of Existing 16" Water Main, as pre-approved by Owner</u>	<u>1,000</u>	<u>Linear Foot</u>		<u>\$</u>
27.	All Other Work	XXXXXX	Lump Sum	XXXXX	\$
TOTAL BID PRICE					\$
28.	Contingency Reserve	XXXXXX	XXXXXX	XXXXX	\$22,500.00
*TOTAL					\$

Total: _____
 (Words)

* Basis of Award

SCHEDULE OF ALTERNATES

The price of the Bid for each alternate will be the amount to be added to or deducted from the price of the base Bid if the Owner selects the alternate.

29.	Alternate No. 1: (2,100 foot length of 12" flexible hose, required fittings, and reel):	XXXXXX	Lump Sum	XXXXX	\$ (add)
30.	Alternate No. 2: (additional 2,100 foot length of 12" flexible hose, required fittings, and reel):	XXXXXX	Lump Sum	XXXXX	\$ (add)

5. Subcontractors for work included in all Bid items are listed on the attached Document 00430 (Subcontractors List).
6. The undersigned Bidder understands that Owner reserves the right to reject this Bid.
7. If written notice of the acceptance of this Bid, hereinafter referred to as Notice of Award, is mailed or delivered to the undersigned Bidder within the time described in paragraph 2 of this Document 00400 or at any other time thereafter unless the Notice of Award is withdrawn, the undersigned Bidder will execute and deliver the documents required by Document 00200 (Instructions to Bidders) within the times specified therein. These documents include, but are not limited to, Document 00520 (Agreement), Document 00610 (Construction Performance Bond), and Document 00620 (Construction Labor and Material Payment Bond).
8. Notice of Award or request for additional information may be addressed to the undersigned Bidder at the address set forth below.
9. The undersigned Bidder herewith encloses cash, a cashier's check, or certified check of or on a responsible bank in the United States, or a corporate surety bond furnished by a surety authorized to do a surety business in the State of California, in form specified in Document 00200 (Instructions to Bidders), in the amount of ten percent (10%) of the Total Bid Price and made payable to "Sonoma County Water Agency."
10. The undersigned Bidder agrees to commence Work under the Contract Documents on the date established in Document 00700 (General Conditions) and to complete all work within the time specified in Document 00520 (Agreement). The undersigned Bidder acknowledges that Owner has reserved the right to delay or modify the commencement date. The undersigned Bidder further acknowledges Owner has reserved the right to perform independent work at the Site, the extent of such work may not be determined until after the opening of the Bids, and that the undersigned Bidder will be required to cooperate with such other work in accordance with the requirements of the Contract Documents.
11. The undersigned Bidder agrees that, in accordance with Document 00700 (General Conditions), liquidated damages for failure to complete all Work in the Contract within the time specified in Document 00520 (Agreement) shall be as set forth in Document 00520 (Agreement).
12. The names of all persons interested in the foregoing Bid as principals are:

(IMPORTANT NOTICE: If Bidder or other interested person is a corporation, give the legal name of corporation, state where incorporated, and names of president and secretary thereof; if a partnership, give name of the firm and names of all individual co-partners composing the firm; if Bidder or other interested person is an individual, give first and last names in full).

NAME OF BIDDER: _____
licensed in accordance with an act for the registration of Contractors, and with
license number: _____ Expiration: _____.

Where incorporated, if applicable

Principals

I certify (or declare) under penalty of perjury under the laws of the State of California that the foregoing is true and correct.

Signature of Bidder

Date of Execution

Place of Execution

NOTE: If Bidder is a corporation, set forth the legal name of the corporation together with the signature of the officer or officers authorized to sign contracts on behalf of the corporation. If Bidder is a partnership, set forth the name of the firm together with the signature of the partner or partners authorized to sign contracts on behalf of the partnership.

Business Address:

Contractor's Representative(s), (name, title):

Officers authorized to sign contracts:

Signature of Officer

Title

Date of Execution

Place of Execution

Telephone Number(s):

Fax Number(s):

Email address(es):

Date of Bid:

END OF DOCUMENT

DOCUMENT 00450

STATEMENT OF QUALIFICATIONS FOR CONSTRUCTION WORK

STATEMENT OF QUALIFICATIONS CHECKLIST

This checklist is for Bidder's convenience and lists some of the completed documents Bidder shall ensure are submitted with Bidder's Statement of Qualifications.

- Letter of Assurance Regarding Performance and Payment Bonds (Document 00450, Attachment "A"). Modification of this form may result in rejection of the bid as non-responsive.
- Authorization to Contact Surety Form (Document 00450, Attachment "B")
- Statement of Qualifications Questionnaire (Document 00450, Attachment "C")
- Technical Resources identification and description
- Résumés of Key Personnel
- Cal/OSHA 300A log for 2011

(This page intentionally left blank)

1. REQUIRED CONTENTS OF SOQ SUBMISSION

- A. Financial Capacity. Owner reserves the right, prior to Award, to require submittal of audited or reviewed financial statements for the three most recently completed fiscal years for Bidder and each member of any proposed consortium or joint venture, including audited or reviewed financial statements for the most recently completed fiscal year for any parent company(ies) of Bidder and each member of any proposed consortium or joint venture.
- B. Capability to Provide Required Performance and Payment Bonds.
1. Include a completed "Letter of Assurance Regarding Performance and Payment Bonds" from Bidder's Surety in the form attached to this Document 00450 as Attachment "A";
 2. Include a completed "Authorization to Contact Surety" from Bidder in the form attached to this Document 00450 as Attachment "B."
- C. Human and Physical Resources. Identify, describe, and quantify for Bidder, the following technical resources for the Work:
1. For products or materials listed in the "Major Products List" (see Section 01330 [Submittal Procedures]), provide description and location of manufacturing facilities, naming products and quantifying production capacity and current demand;
 2. Description of field organization(s), naming skills and equipment;
 3. Description of safety program, quality control procedures, and safety experience; and
 4. Evidence of a valid California contractor's license and required licenses of all persons who are Key Personnel of the Bidder or any designated Subcontractor.
- D. Completed Questionnaire. Include a completed "Statement of Qualifications Questionnaire" in the form attached to this Document 00450 as Attachment "C." Add supplementary information if necessary.
- E. Résumés of Proposed Key Personnel. Include a resume for each named Key Personnel of Bidder, and Bidder's (including but not limited to the superintendent) designated Subcontractor(s), to include the following:
1. Name and proposed assignment of Key Personnel - do not include home addresses or phone numbers;
 2. Years of experience;
 3. Education - degrees, schools, and years obtained;
 4. Professional registration(s);
 5. Fluency in English (Yes/No);
 6. Experience directly related to above proposed assignment;
 7. At least three client references, including contact names, addresses, and telephone numbers; and
 8. Description of experience requirements as required by Document 00200 (Instructions to Bidders).
- F. Litigation History. Owner reserves the right, prior to Award, to require submittal of a description of litigation history for the past five years, including names of involved parties, nature of dispute, and disposition.

2. GENERAL CONDITIONS

- A. General Conditions for Content. The SOQ shall be clear and concise to enable management-oriented personnel to make a thorough evaluation and arrive at a sound determination as to whether the SOQ meets Owner's requirements. To this end, the SOQ shall be so specific,

detailed, and complete as to demonstrate clearly and fully that the Bidder has a thorough understanding of and has demonstrated knowledge of the requirements to perform the Work (or applicable portion thereof).

- B. Explanations to SOQ. Any explanation requested by a Bidder regarding the meaning or interpretation of this Document 00450 shall be requested in writing in accordance with Document 00200 (Instructions to Bidders). Oral explanations or instructions will not be binding. Any information provided to any prospective Bidder concerning this Document 00450 will be furnished to all prospective Bidders as an Addendum to the Bidding Documents.

3. DEFINITIONS

- A. Except as set forth herein, all abbreviations and definitions of terms used in this Document 00450 are as set forth in Document 00700 (General Conditions) or Section 01420 (References and Definitions).

LETTER OF ASSURANCE REGARDING PERFORMANCE AND PAYMENT BONDS,
AUTHORIZATION TO CONTACT SURETY FORM, AND STATEMENT OF QUALIFICATION
QUESTIONNAIRE ARE ON FOLLOWING PAGES

ATTACHMENT "A" -- Letter of Assurance Regarding Performance and Payment Bonds

To Sonoma County Water Agency:

This letter is written by _____ [insert name of surety], a surety duly licensed to do business in the State of California, having a financial rating from A. M. Best Company of A or better. The purpose of this letter is to advise the Sonoma County Water Agency that this surety has agreed to provide _____ [insert name of Bidder] with the required performance and payment bonds in accordance with the requirements set forth in Documents 00610 (Construction Performance Bond) and 00620 (Construction Labor and Material Payment Bond) for the Santa Rosa Aqueduct Seismic Hazard Mitigation (Rodgers Creek Fault Crossing), if the Bid submitted by said Bidder is accepted and the Contract is awarded to said Bidder. These performance and payment bonds shall be in the minimum penal sums provided therein.

Signature of Surety's Authorized Representative

Name and Title

Date

ATTACHMENT "B" -- Authorization to Contact Surety

The Sonoma County Water Agency is hereby authorized to verify with the Surety identified in Attachment "A" that the Surety will, based upon Bid prices, issue the required bonds under the conditions stated in Attachment "A."

Signature of Bidder's Authorized Representative

Name and Title

Date

ATTACHMENT "C" -- Statement of Qualifications Questionnaire

Bidders shall complete the entire Statement of Qualification Questionnaire and submit it in accordance with Document 00200 (Instructions to Bidders) and this Document 00450. Failure to complete the questionnaire or inclusion of any false statement(s) shall be grounds for immediate disqualification. Label attachments with a reference to the related document, part, and question number.

BIDDER'S CONTACT INFORMATION

Company Name: _____

Owner of Company: _____

Contact Person: _____

Address: _____

Phone: _____ Fax: _____

PART A: GENERAL INFORMATION

Complete Part A before proceeding to Part B.

- 1. Does Bidder possess a valid and current California Contractor’s license for the Work proposed? Yes _____ No _____
- 2. Does Bidder have a minimum of \$5,000,000 general liability insurance coverage? Yes _____ No _____

Bidder will be immediately disqualified if any answer to questions 1 or 2 above is No.

- 3. Has Bidder’s license been suspended or revoked at any time in the last five years? Yes _____ No _____
- 4. Has Bidder been “default terminated” by an owner (other than for convenience), or has a Surety completed a contract for Bidder within the last five years? Yes _____ No _____
- 5. Labor Commissioner assessments or determination of ineligibility to bid:
 - a. Has Bidder had a final civil wage and penalty assessment against it from the Labor Commissioner more than twice in the last five years? Yes _____ No _____
 - b. Has Bidder been determined by the Labor Commissioner to be ineligible to bid on public contracts more than twice in the last five years? Yes _____ No _____

Bidder will be immediately disqualified if any answer to questions 3, 4, 5.a, or 5.b above is Yes.

PART B: SAFETY, PREVAILING WAGE, DISPUTES, AND BONDS

(SAFETY)

- 1. Cal/OSHA Citations and Penalties: Yes_____ No_____

If yes, please submit the following information to determine if Bidder meets the suggested safety criteria for this Project. Describe any Cal/OSHA citations and penalties that Bidder has received in the last three years. For each occurrence state whether the action by Cal/OSHA resulted in a citation, or a penalty, or both. Describe the activities that led to the action by Cal/OSHA. Provide dates, citation numbers, penalty amounts, and any other relevant information regarding the action by Cal/OSHA. Responses shall be machine written or neatly printed on company letterhead and signed by an officer of the company.

Separate sheet attached.

- 2. Experience Modification Rates:
What were Bidder’s Interstate Experience Modification Rates as established by the Workers’ Compensation Insurance Rating Bureau for the following three years?

2009: _____

2010: _____

2011: _____

Average of last three years: _____ (no rounding)

If Bidder was not eligible to obtain a formal rating from the Workers’ Compensation Insurance Rating Bureau for any of the years listed above, Bidder shall submit written documentation from its workers’ compensation insurance company that establishes what Bidder’s equivalent experience modification rate would be.

If average of last three years is greater than 1.1, Bidder shall provide an explanation here or as a separate attachment:

- 3. Total Recordable Incident Rates (RIR):
What were Bidder’s Total Recordable Incident Rates (RIR) for each of the last three complete years?

2009: _____

2010: _____

2011: _____

Average of last three years: _____ (no rounding)

- 4. Total Lost Time Incident Rates (LTIR):
What were Bidder’s Total Lost Time Incident Rates (LTIR) for each of the last three complete years?

2009: _____

2010: _____

2011: _____

Average of last three years: _____ (no rounding)

- 5. State the name of Bidder’s safety engineer/ manager or Site Safety Officer: _____
Attach a résumé or outline of this individual’s safety and health qualifications and experience.

(PREVAILING WAGE PROVISIONS)

- 6. In the past five years, has Bidder been fined, penalized or otherwise found to have violated any prevailing wage or labor code provision? If yes, attach description of each occurrence.
Yes_____ No_____

(LICENSE PROVISIONS)

- 7. In the past five years, has Bidder changed names or license numbers? If so, please state reason for change and list previous name(s) and any previous license number for any of Bidder’s principals.

Yes _____ No _____ Reason: _____

Previous name(s) and license number(s): _____

(DISPUTES)

- 8. In the past five years, has Bidder had any claims, litigation, or disputes resulting in mediation or arbitration, or termination for cause associated with any project? Yes _____ No _____
If yes, attach description of each such instance including details of total claim amount, settlement amount, and owner’s name and phone number.

(BONDING)

- 9. Bonding Capacity - Provide documentation from Bidder’s surety identifying the following:

Name of bonding company/surety: _____

Name of Surety Agent: _____

Surety Agent address: _____

Surety Agent phone number: _____

Is surety a California-admitted surety? Yes _____ No _____

Is surety listed in the current edition of the California Department of the Treasury’s Listing of approved sureties? Yes _____ No _____

List surety’s A.M. Best Rating: _____

What is Bidder’s total bonding capacity? _____

What percentage rate does Bidder pay for bonds? _____

PART C: FINANCIAL INFORMATION

- 1. Has Bidder ever reorganized under the protection of the bankruptcy laws?

Yes _____ No _____ If yes, please state when _____

- 2. If Bidder has had the general liability carrier identified in Document 00420 (Bidder Registration Form) for less than five years, please provide additional information below for balance of the past five years.

Agency Name: _____

Contact Name: _____

Phone Number: _____

Carrier: _____ Dates: _____ A.M. Best Rating: _____

Carrier: _____ Dates: _____ A.M. Best Rating: _____

Carrier: _____ Dates: _____ A.M. Best Rating: _____

3. Has Bidder ever had insurance terminated by a carrier? Yes _____ No _____
 If yes, explain on separate signed sheet marked with correlating cross-reference to this paragraph of the questionnaire.

PART D: EXPERIENCE OF PRIME CONTRACTOR

The unique nature of this Project requires prior similar experience of the firm and the Key Personnel assigned. Summarize similar project experience below and provide the detailed project information requested:

Years of Experience. List years of experience as a continuously operating entity engaged in the performance of similar work (Five years required, minimum): _____

Key Personnel. List Key Personnel who will be assigned to the Work:

Project Manager: _____

Project Superintendent: _____

Project Scheduler: _____

Qualifying Projects. List three construction projects of a similar nature and complexity, completed within the past seven years, with a contract dollar amount of at least \$1,000,000 each, including at least 1,000 feet of no less than 24-inch diameter welded steel water pipe. Names and references must be current and verifiable. If a separate sheet is used, it must contain all of the information shown on the following table:

LIST OF QUALIFYING PROJECTS - PRIME CONTRACTOR

	Project 1	Project 2	Project 3
Project Name			
Location			
Client			
Client Contact (name and phone number)			

	Project 1	Project 2	Project 3
Architect/Engineer			
Architect/Engineer Contact (name and phone number)			
Construction Manager, Project Manager, or Superintendent (name and phone number)			
Description of Project, Scope of Work Performed			
Linear feet of steel water pipe installed			
Diameter of steel water pipe installed			
Total Construction Cost			
<u>Date of Completion</u>			

PART E: ADDITIONAL EXPERIENCE REQUIREMENTS

Experience of Field Pipe Welder.

Years of Experience. List years of experience on projects of similar nature and complexity (Three years required, minimum): _____

Qualifying Projects. The field pipe welder shall have completed a minimum of three projects of similar nature and complexity. For a project to be considered of similar nature and complexity, it must include at least 1,000 feet of steel pipe butt welding of no less than 24-inch diameter steel water pipe with a wall thickness of at least 0.5 inch.

	Project 1	Project 2	Project 3
Project Name			
Location			
Client			

	Project 1	Project 2	Project 3
Client Contact (name and phone number)			
Description of Project, Scope of Work Performed			
Linear feet of butt weld on steel water pipe			
Diameter steel water pipe welded			
Pipe wall thickness			
Total Construction Cost			

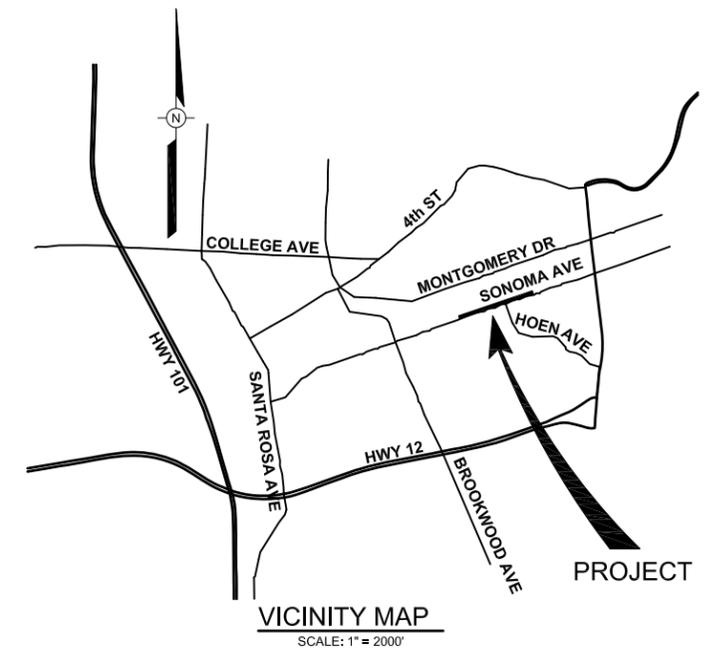
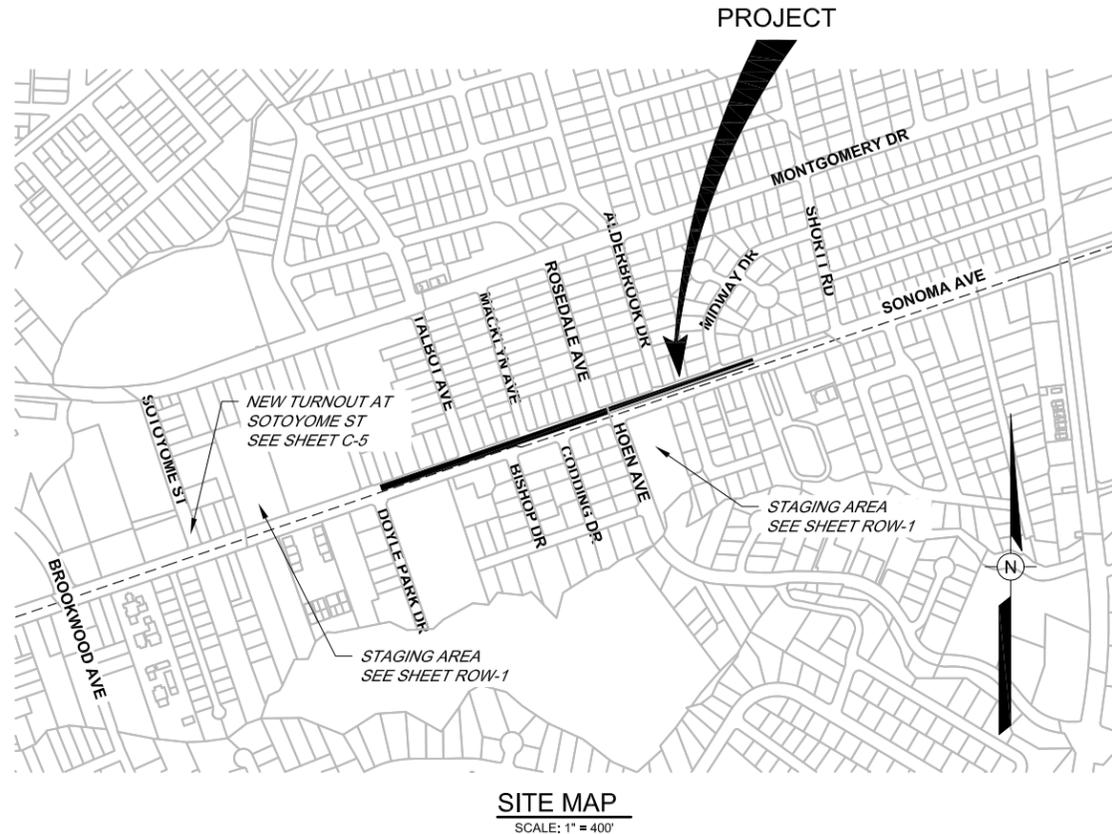
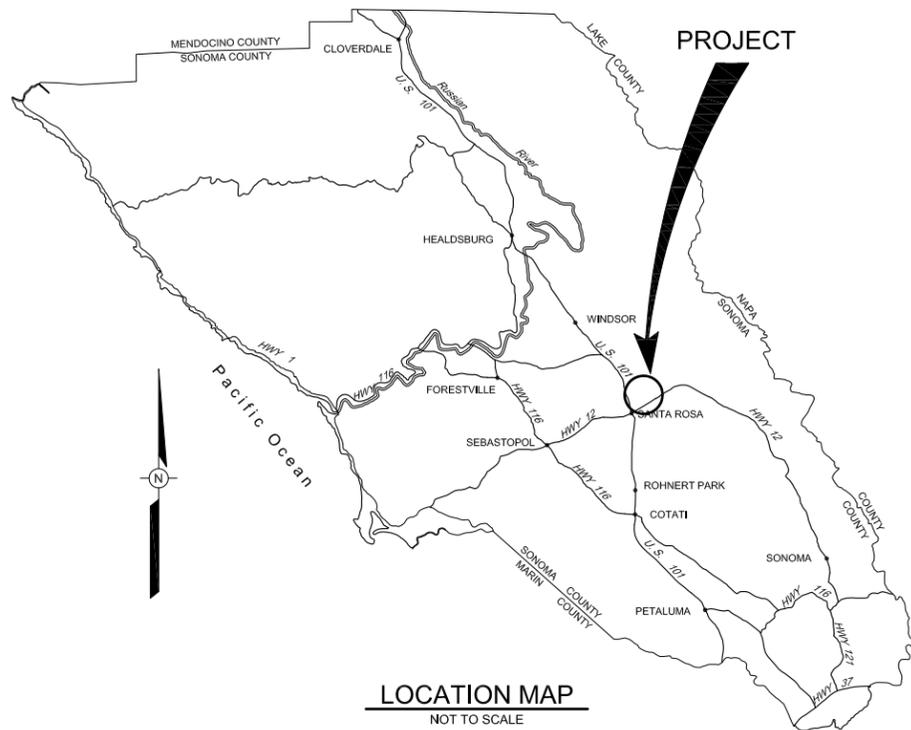
Bidder certifies, under penalty of perjury, that the foregoing information is current and accurate and authorizes the Sonoma County Water Agency, and its agents and representatives to obtain a credit report and/or verify any of the above information.

Signature

Title

END OF DOCUMENT

SONOMA COUNTY WATER AGENCY SANTA ROSA AQUEDUCT SEISMIC HAZARD MITIGATION PROJECT RODGERS CREEK FAULT CROSSING



GENERAL NOTES

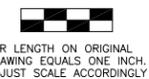
1. HORIZONTAL DATUM: CALIFORNIA COORDINATE SYSTEM 1983 (CCS83), ZONE II (1991.35)
2. VERTICAL DATUM: BASED UPON THE NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD29)
3. STATIONING: ALL STATIONING REPRESENTS HORIZONTAL MEASUREMENT AT CENTERLINE OF CONSTRUCTION
4. CENTERLINE MONUMENTS AT INTERSECTIONS OF DOYLE PARK DR, TALBOT AVE, AND HOEN AVE SHALL BE PROTECTED DURING CONSTRUCTION. IF ANY OF THESE MONUMENTS ARE DISTURBED THEY MUST BE REPLACED.
5. EXISTING FEATURES ARE INDICATED IN GRAY.
6. ALL REFERENCES TO CITY OF SANTA ROSA STANDARDS (CSR STD) ARE REFERRING TO THE CITY OF SANTA ROSA DESIGN AND CONSTRUCTION STANDARDS AVAILABLE AT THEIR PUBLIC WORKS DEPARTMENT.

SERVICE LATERAL NOTES

1. WATER SERVICES ENCOUNTERED DURING CONSTRUCTION SHALL BE PROTECTED IN PLACE WHENEVER PRACTICAL. IF DISTURBED REPLACE LATERAL FROM CORPORATION STOP ON MAIN TO WATER METER AND ROUTE OVER PIPELINE, TYPICAL, PER CITY OF SANTA ROSA STD 863. WITH CITY APPROVAL NEW SERVICES MAY BE PULLED FROM FROM METER CORP STOP. ▲
2. ALL SEWER LATERALS ENCOUNTERED DURING CONSTRUCTION SHALL BE REPAIRED PER CITY OF SANTA ROSA STD 517.

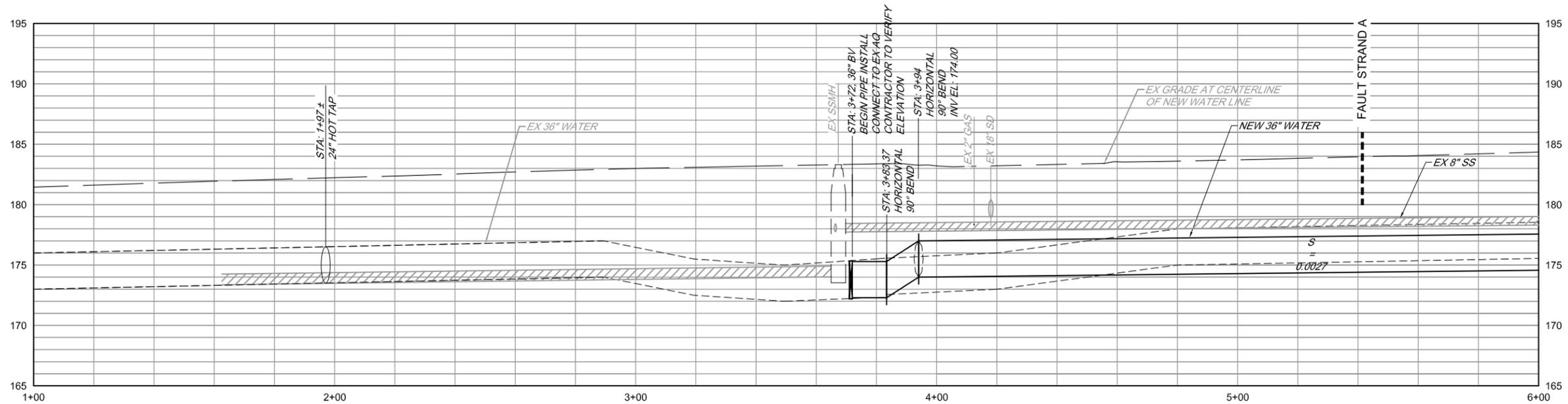
INDEX TO DRAWINGS

SHEET NUMBER	SHEET TITLE	SHEET DESCRIPTION
1	G-1	LOCATION, SITE, AND VICINITY MAPS, NOTES, AND INDEX TO DRAWINGS
2	G-2	GENERAL NOTES, SYMBOLS, AND ABBREVIATIONS
3	C-1	PLAN AND PROFILE STA 1+00 TO STA 6+00
4	C-2	PLAN AND PROFILE STA 6+00 TO STA 12+00
5	C-3	PLAN AND PROFILE STA 12+00 TO STA 17+00
6	C-4	PLAN AND PROFILE STA 17+00 TO STA 22+80
7	C-5	TURNOUT AT SOTOYOME AND PIPE SCHEDULE
8	C-6	STRIPING PLAN
9	D-1	MISCELLANEOUS DETAILS
10	D-2	VALVE, WATER METER, AND TURNOUT DETAILS
11	CP-1	CATHODIC PROTECTION ROADWAY TEST STATION INSTALLATION
12	CP-2	CATHODIC PROTECTION DETAILS
13	E-1	ELECTRICAL
14	ROW-1	RIGHT-OF-WAY TEMPORARY CONSTRUCTION EASEMENT FOR STAGING



		SCALE: AS SHOWN DATE: 06/13/2012 DRAWN: SMP REVIEWED: <i>Kent Coyne</i>		SANTA ROSA AQUEDUCT SEISMIC HAZARD MITIGATION PROJECT RODGERS CREEK FAULT CROSSING LOCATION, SITE, AND VICINITY MAPS, NOTES, AND INDEX TO DRAWINGS	
NO.	DATE	REVISION	BY	DRAWING NUMBER:	G-1
▲	07-24-12	ADDENDUM 1		FILE NAME:	7380_Gen_Adden.dwg
				CONTRACT NUMBER:	60-64-7 #1
				DRAWING NUMBER:	G-1
				SHEET 1 OF 14	

I:\SD-DATA\Proj\water transmission\pipelines\santa rosa-rr_aq_117380_RogersCreekBypass\7380_Gen_Adden.dwg

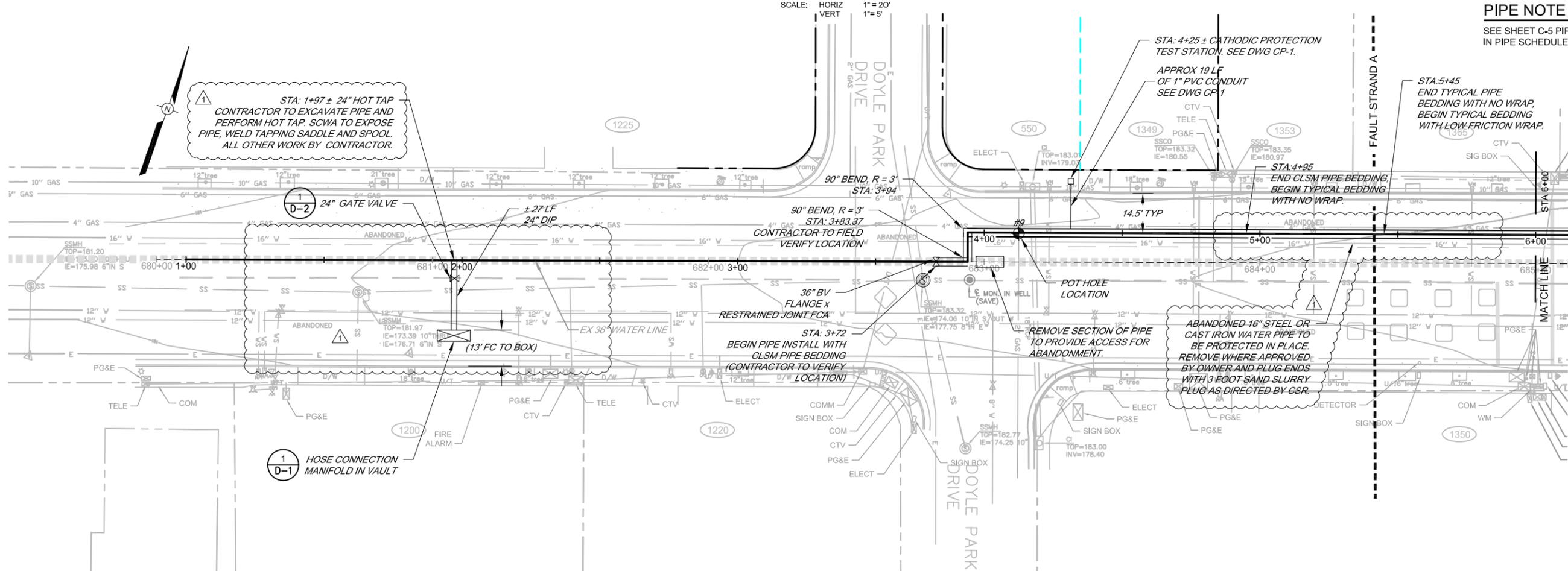


PROFILE

SCALE: HORIZ 1" = 20'
VERT 1" = 5'

PIPE NOTE

SEE SHEET C-5 PIPE SCHEDULE FOR TRANSITION
IN PIPE SCHEDULE



PLAN

SCALE: 1" = 20'



NO.	DATE	REVISION	BY
1	07-24-12	ADDENDUM 1	

SONOMA COUNTY WATER AGENCY

SCALE: AS SHOWN
DATE: 06/13/2012
DRAWN: SMP
REVIEWED: *Kent Coyne*

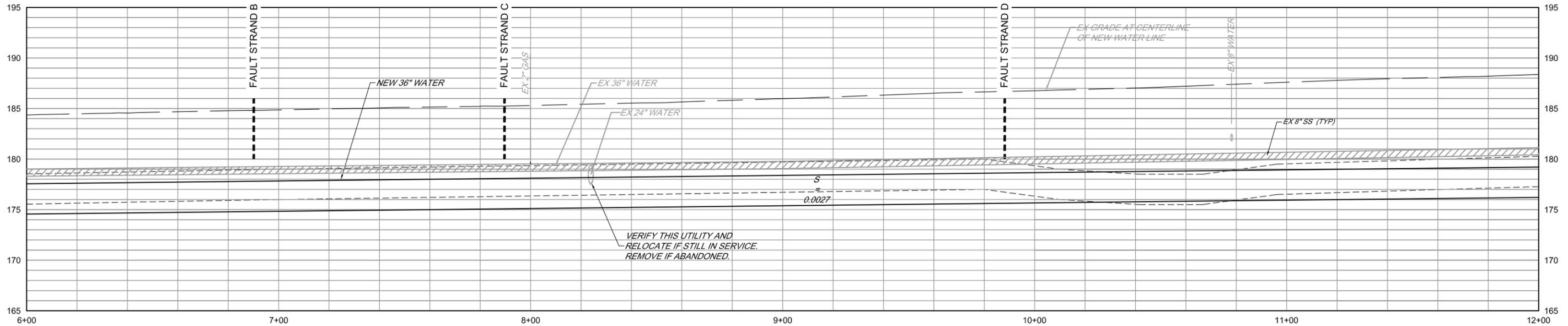
SANTA ROSA AQUEDUCT SEISMIC HAZARD MITIGATION PROJECT

RODGERS CREEK FAULT CROSSING

PLAN AND PROFILE STA 1+00 TO STA 6+00

\\SD-DATA\Proc\water_transmission\pipelines\Santa_Rosa-rr.dwg 1/7380_RogersCreekByPass\7380_Civil_Adden

BAR LENGTH ON ORIGINAL
DRAWING EQUALS ONE INCH.
ADJUST SCALE ACCORDINGLY

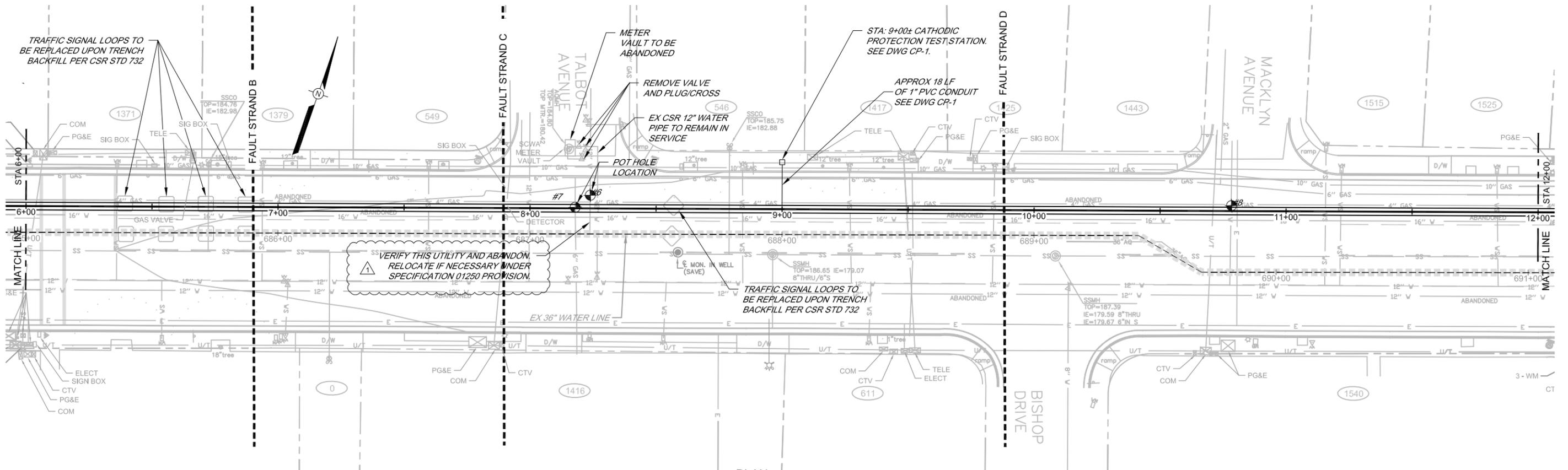


PROFILE

SCALE: HORIZ 1" = 20'
VERT 1" = 5'

PIPE NOTE

SEE SHEET C-5 PIPE SCHEDULE FOR TRANSITION
IN PIPE SCHEDULE

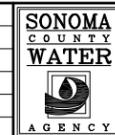


PLAN

SCALE: 1" = 20'



NO.	DATE	REVISION	BY
1	07-24-12	ADDENDUM 1	



SCALE: AS SHOWN	DATE: 06/13/2012
DRAWN: SMP	
REVIEWED: <i>Kent Coyne</i>	

SANTA ROSA AQUEDUCT SEISMIC HAZARD MITIGATION PROJECT

RODGERS CREEK FAULT CROSSING

PLAN AND PROFILE STA 6+00 TO STA 12+00

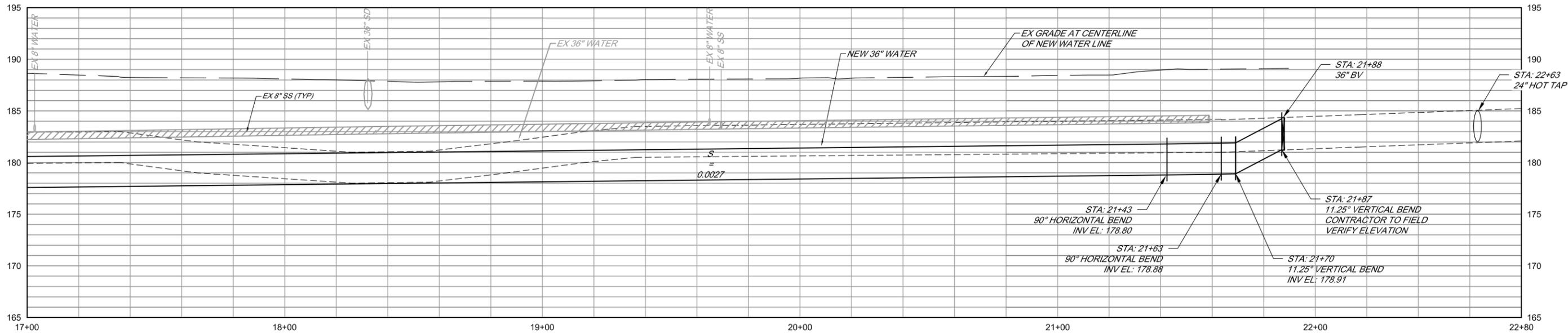
FILE NAME: 7380_Civil_Adden.dwg
CONTRACT NUMBER: 60-64-7 #1

DRAWING NUMBER: C-2

SHEET 4 OF 14

\\SD-DATA\Proc\water_transmission\pipelines\Santa_Rosa-r-r.dwg 1/7/2012 10:00:00 AM

BAR LENGTH ON ORIGINAL
DRAWING EQUALS ONE INCH.
ADJUST SCALE ACCORDINGLY

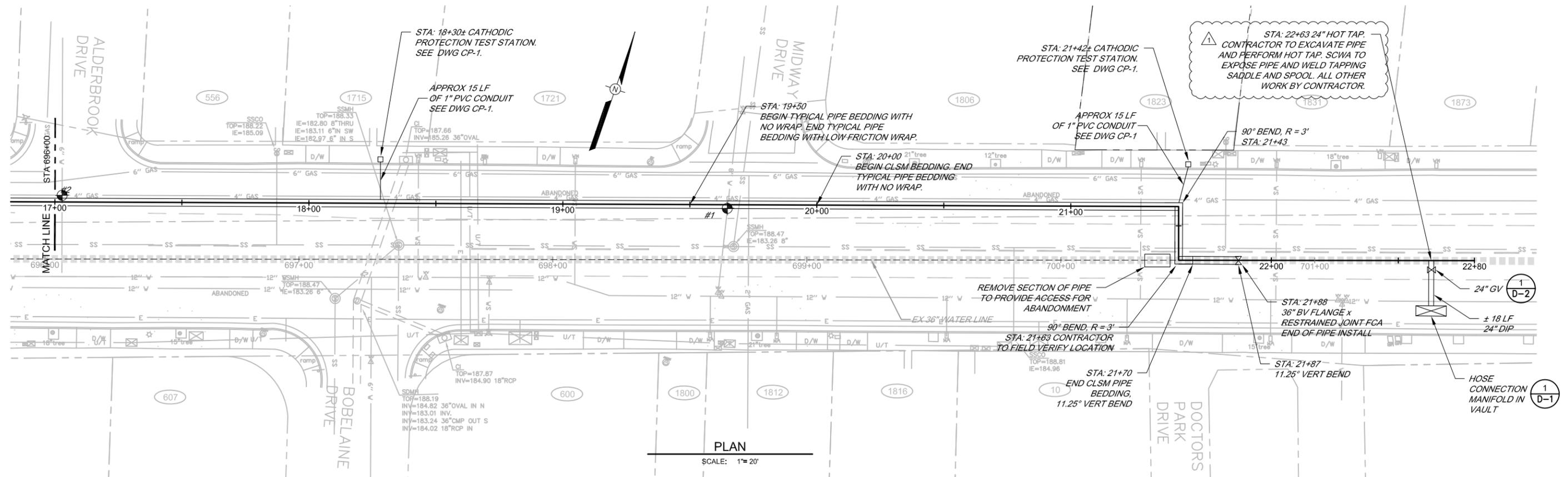


PROFILE

SCALE: HORIZ 1" = 20'
VERT 1" = 5'

PIPE NOTE

SEE SHEET C-5 PIPE SCHEDULE FOR TRANSITION
IN PIPE SCHEDULE

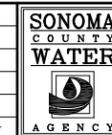


PLAN

SCALE: 1" = 20'



NO.		DATE		REVISION		BY	
07-24-12		ADDENDUM 1					



SCALE: AS SHOWN	DATE: 06/13/2012
DRAWN: SMP	
REVIEWED: Kent Coyne	

SANTA ROSA AQUEDUCT SEISMIC HAZARD MITIGATION PROJECT

RODGERS CREEK FAULT CROSSING

PLAN AND PROFILE STA 17+00 TO STA 22+80

FILE NAME: 7380_Civil_Adden.dwg
CONTRACT NUMBER: 60-64-7 #1

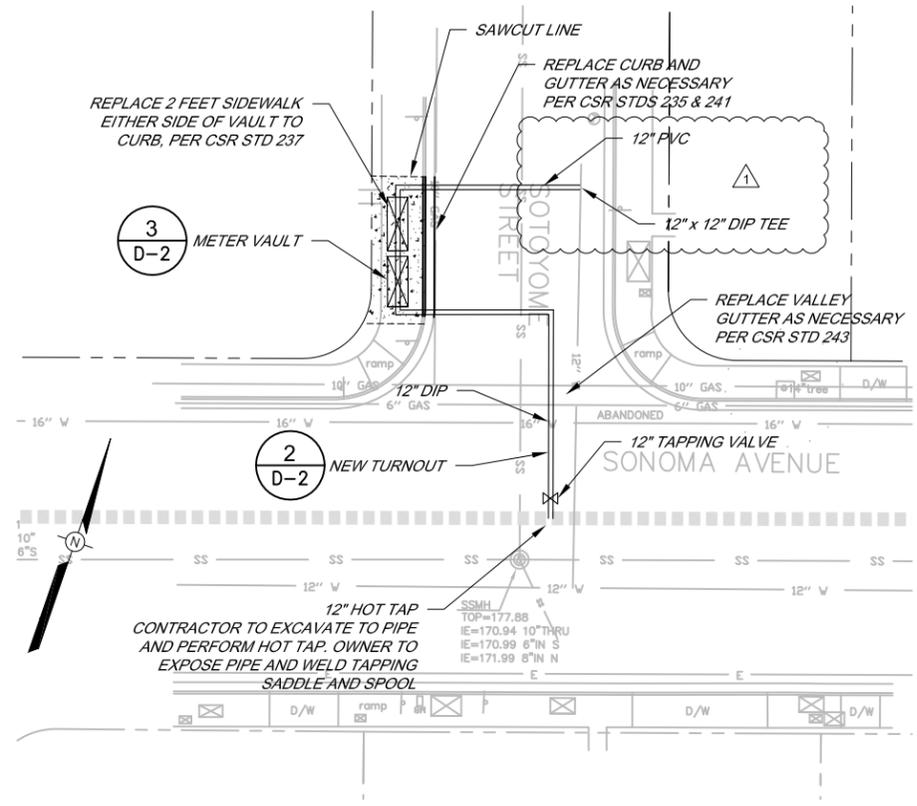
DRAWING NUMBER: C-4

C-4

SHEET 6 OF 14

\\SD-DATA\Proc\water_transmission\pipelines\Santa Rosa-r-r.dwg 17380_RodgersCreekByPass\7380_Civil_Adden

BAR LENGTH ON ORIGINAL
DRAWING EQUALS ONE INCH.
ADJUST SCALE ACCORDINGLY



PLAN VIEW - NEW TURNOUT AT SOTOYOME ROAD
SCALE: 1"=20'

36" STEEL PIPE SCHEDULE

Beg. Station	End Station	Pipe Material	Wall Thickness	Bedding Material	Geotextile wrap	Coating	Lining	Welding Requirements	Uncoated Pipe O.D.	Appurtenance	Joining/Fitter Requirements
1+00	3+72	Existing Pipe	Existing Pipe	Existing	Existing Pipe	Cement Mortar	Cement Mortar	Existing Pipe	37-7/8"		
3+72	3+98	AWWA C200/API 5L	0.75	CLSM	No wrap	Fusion Bonded Epoxy /Polyurethane or Cement	Epoxy/Poly	Full Penetration Shop welding	37-7/8"	2 x 90° Elbows	Flange x FCA
3+98	4+95	AWWA C200/API 5L	0.75	CLSM	No wrap	Cement Mortar	Epoxy/Poly	Full Penetration Field Weld	37-7/8"		
4+95	5+45	AWWA C200/API 5L	0.75	Typical	No wrap	Cement Mortar	Epoxy/Poly	Full Penetration Field Weld	37-7/8"		
5+45	19+50	AWWA C200/API 5L	0.75	Typical	Double Layer	Fusion Bonded Epoxy/Polyurethane	Epoxy/Poly	Full Penetration Field Weld	37-7/8"		
19+50	20+00	AWWA C200/API 5L	0.75	Typical	No wrap	Cement Mortar	Epoxy/Poly	Full Penetration Field Weld	37-7/8"		
20+00	21+43	AWWA C200/API 5L	0.75	CLSM	No wrap	Cement Mortar	Epoxy/Poly	Full Penetration Field Weld	37-7/8"		
21+43	21+67	AWWA C200/API 5L	0.75	CLSM	No wrap	Fusion Bonded Epoxy /Polyurethane or Cement	Epoxy/Poly	Full Penetration Shop welding	37-7/8"	2 x 90° Elbows	Flange x FCA
21+67	21+70	AWWA C200/API 5L	0.75	CLSM	No wrap	Cement Mortar	Epoxy/Poly	Full Penetration Field Weld	37-7/8"		
21+70	22+33	AWWA C200/API 5L	0.75	Typical	No wrap	Cement Mortar	Epoxy/Poly	Full Penetration Field Weld	37-7/8"		
22+33	22+80	Existing Pipe	Existing Pipe	Existing	Existing Pipe	Cement Mortar	Cement Mortar	Existing Pipe	37-7/8"		

NOTE

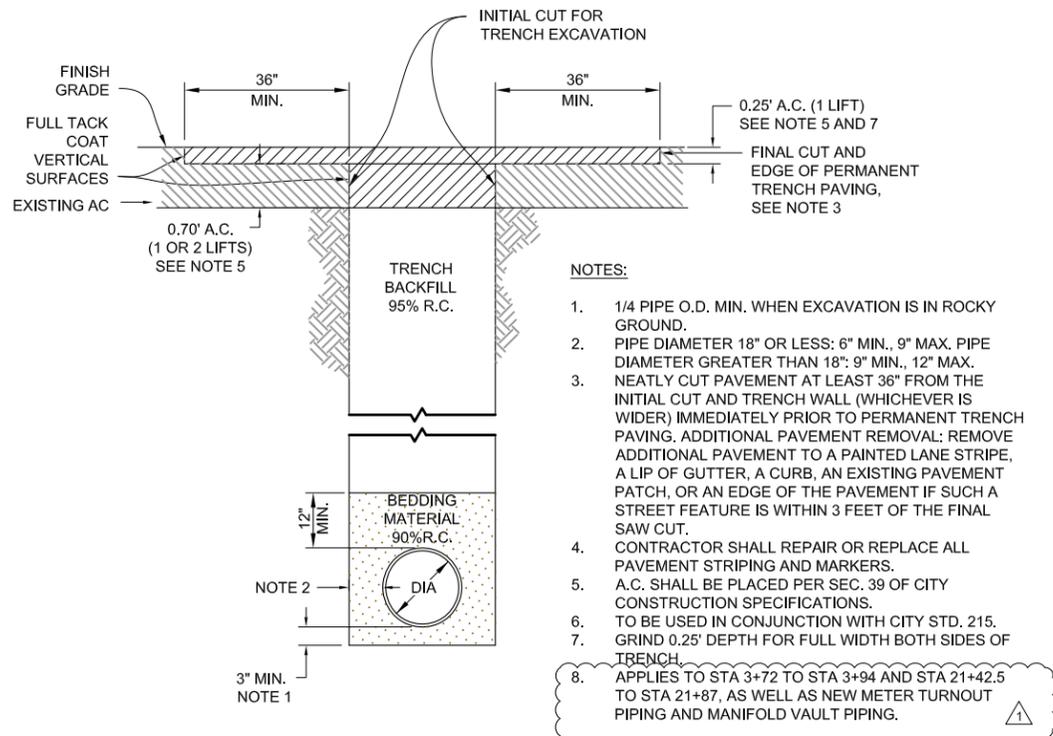
- PIPE IN ALL SECTIONS WITH FUSION BONDED EPOXY/POLYURETHANE COATING (STA 5+45 TO STA 19+50) HAS BEEN DESIGNED TO DEFORM AND ELONGATE WITHIN THE TRENCH AND BACKFILL DURING AN EARTHQUAKE. NO FITTINGS WHICH WOULD INTERFERE WITH THIS FUNCTION (BELL AND SPIGOT JOINTS, MANWAY, ETC) ARE ALLOWED IN THESE SECTIONS.

\\SD-DATA\Proc\water_transmission\pipelines\anta_rcase-rr_eq_1\7380_RogersCreekByPass\7380_Civil_Adden

BAR LENGTH ON ORIGINAL DRAWING EQUALS ONE INCH. ADJUST SCALE ACCORDINGLY

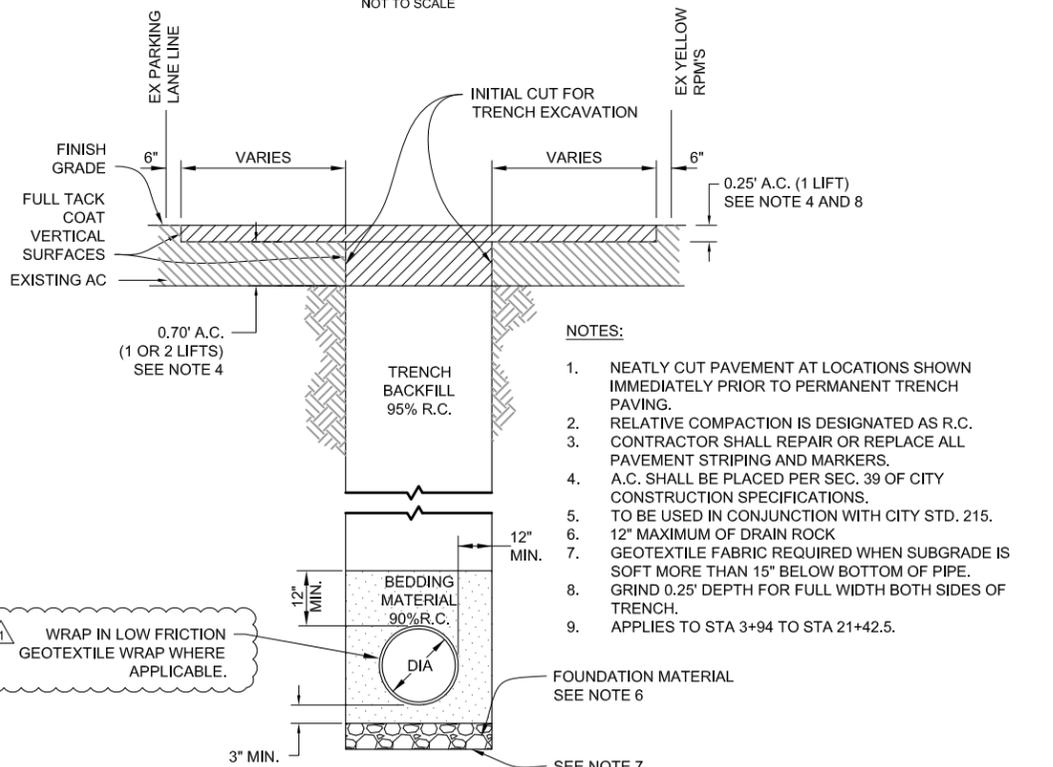


		SCALE: AS SHOWN DATE: 06/13/2012 DRAWN: SMP REVIEWED: <i>Kent Coyne</i>	SANTA ROSA AQUEDUCT SEISMIC HAZARD MITIGATION PROJECT RODGERS CREEK FAULT CROSSING TURNOUT AT SOTOYOME AND PIPE SCHEDULE		
NO. 07-24-12 DATE	ADDENDUM 1 REVISION	BY	FILE NAME: 7380_Civil_Adden.dwg CONTRACT NUMBER: 60-64-7 #1	DRAWING NUMBER: C-5	SHEET 7 OF 14



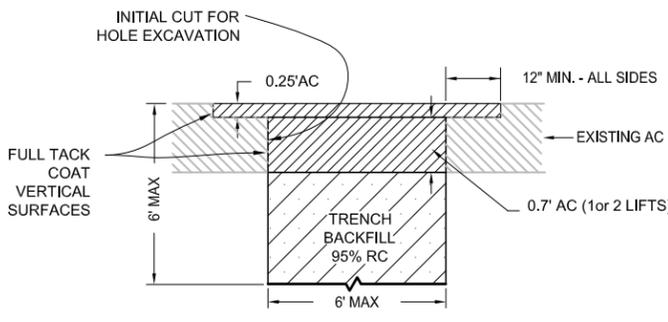
LATERAL TRENCH PAVING DETAIL

NOT TO SCALE



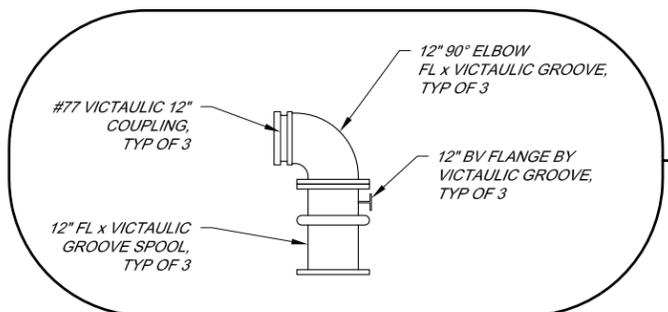
MAIN TRENCH PAVING DETAIL

NOT TO SCALE

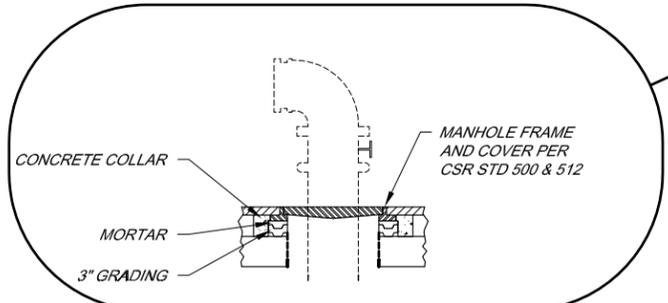


SMALL HOLE PAVING DETAIL

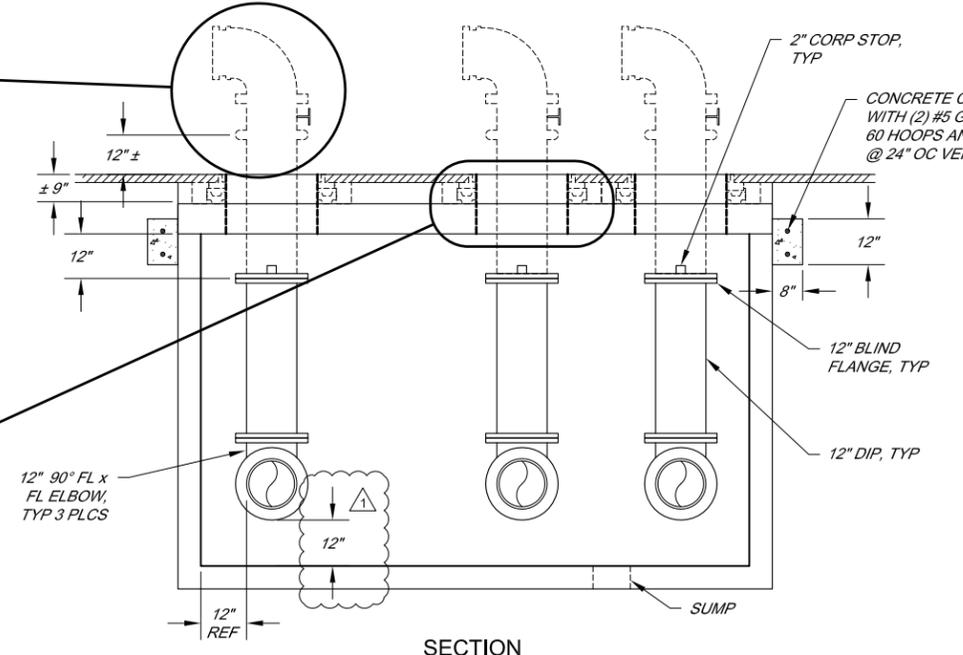
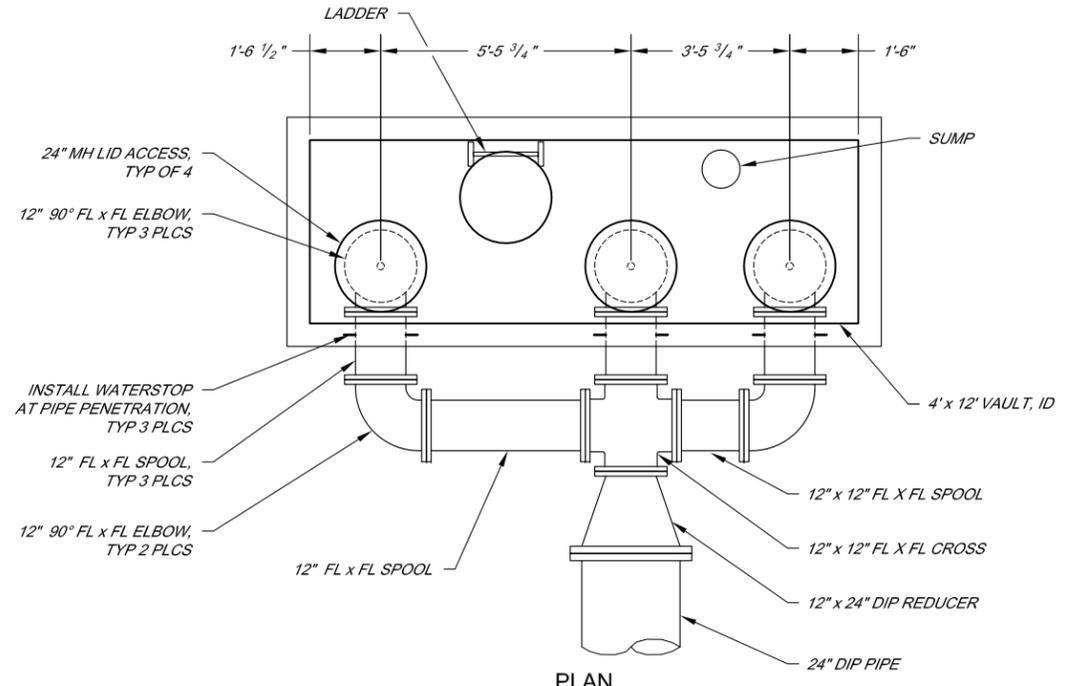
NOT TO SCALE



EMERGENCY BYPASS PIPING TO BE DELIVERED TO OWNER

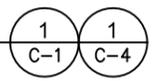


MANHOLE DETAIL



BYPASS MANIFOLD DETAIL

NOT TO SCALE



- NOTE**
1. PROVIDE VERTICAL AND LATERAL SUPPORT FOR MANIFOLD PIPING.
 2. CONTRACTOR TO COORDINATE REMAINING DIMENSIONS. DEPTH AS NECESSARY TO MAINTAIN MINIMUM COVER ON 24" DIP.

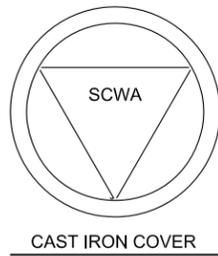
SANTA ROSA AQUEDUCT SEISMIC HAZARD MITIGATION PROJECT

RODGERS CREEK FAULT CROSSING
MISCELLANEOUS DETAILS

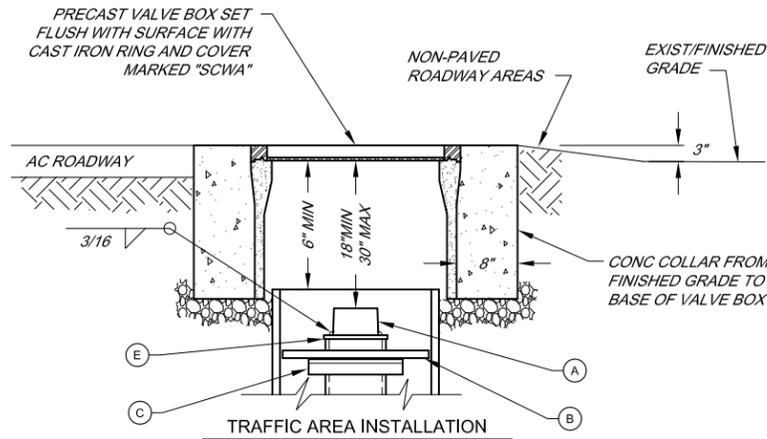
<p>BAR LENGTH ON ORIGINAL DRAWING EQUALS ONE INCH. ADJUST SCALE ACCORDINGLY</p>					SCALE: AS SHOWN DATE: 06/13/2012 DRAWN: SMP REVIEWED: <i>Kent Coyne</i>	FILE NAME: 7380_MiscDetails_Addend.dwg CONTRACT NUMBER: 60-64-7 #1	DRAWING NUMBER: D-1	SHEET 9 OF 14
NO.	DATE	REVISION	BY					
1	07-24-12	ADDENDUM 1						

NOTES (VALVE INSTALLATION)

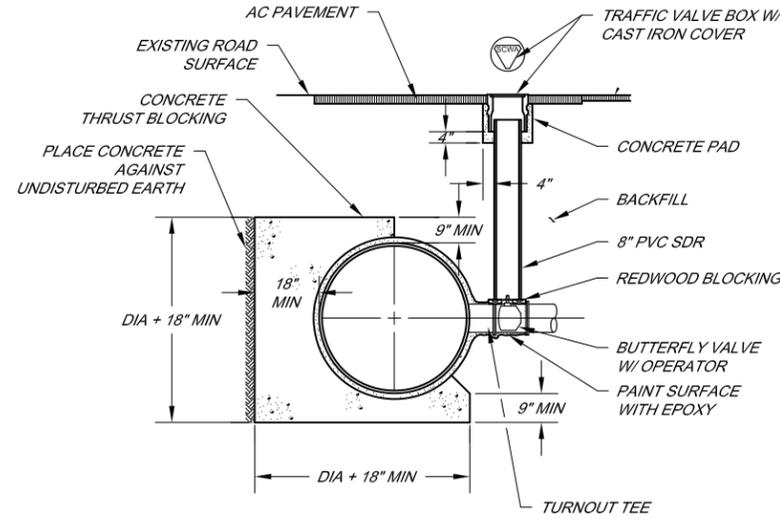
- IF VALVE IS INSTALLED SO THAT THE TOP OF THE OPERATING NUT IS LESS THAN 30" BELOW FINISHED GRADE, THE VALVE STEM EXTENSION IS NOT REQUIRED.
- LIDS & COVERS SHALL BE LETTERED "SCWA" - CONCRETE LIDS, 4" HIGH LETTERS CAST INTO CONCRETE. CAST IRON COVERS, 1" HIGH LETTERS WELDED OR CAST INTO COVER.



CAST IRON COVER



TRAFFIC AREA INSTALLATION



TURNOUT TYPE B

NOT TO SCALE

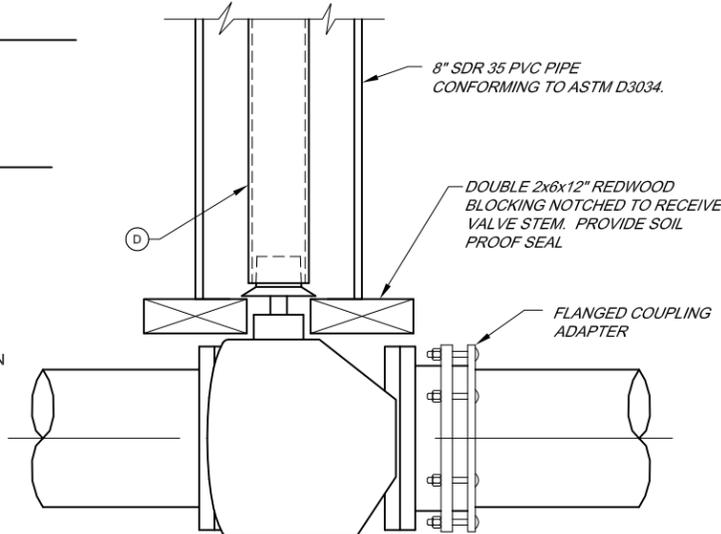
2
C-5

STEM EXTENSION FABRICATION NOTES

- ALL WELDS TO EXTENSION SHAFT SHALL BE FILLET WELD ALL AROUND.

VALVE STEM EXTENSION PARTS LIST

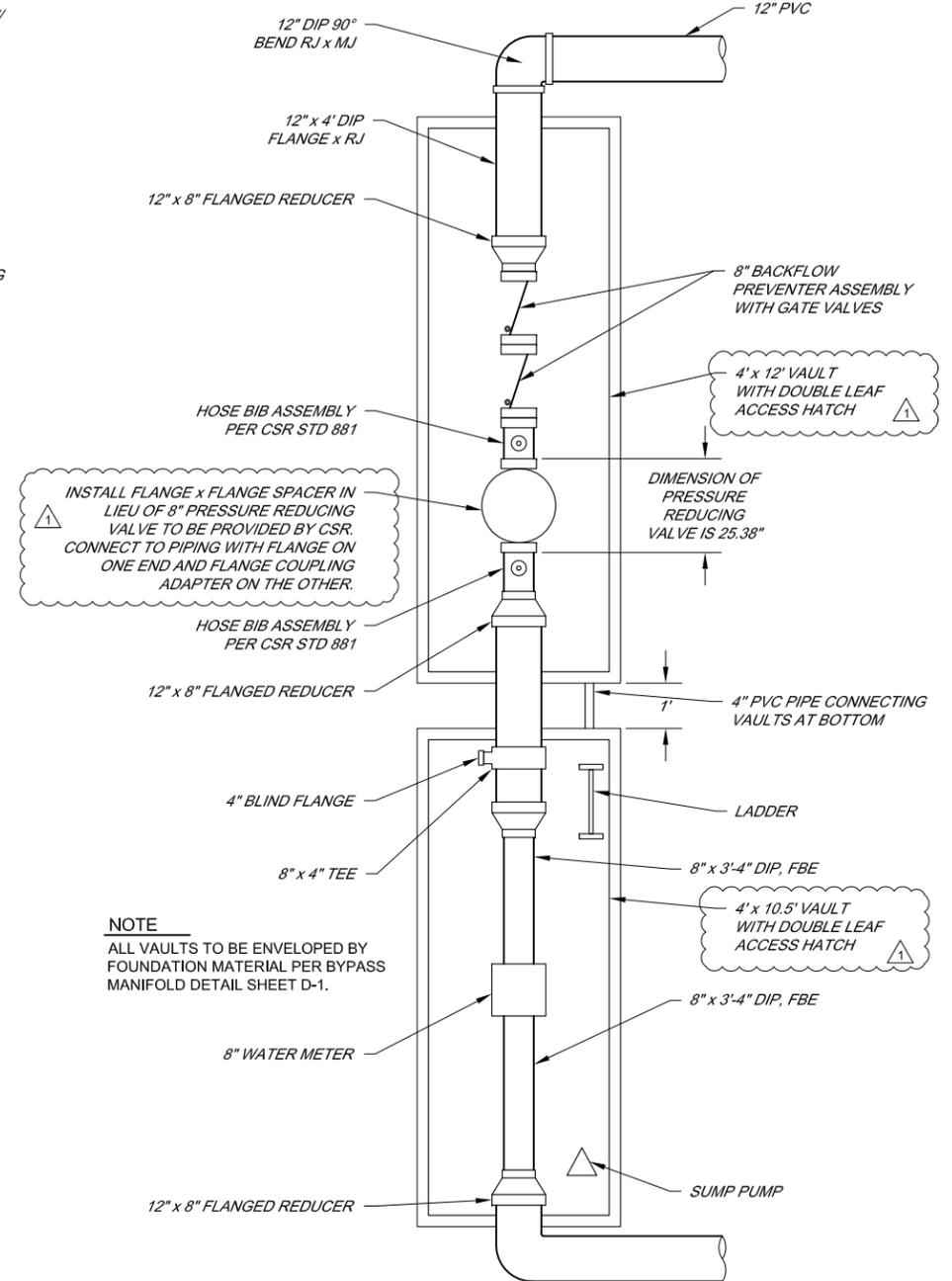
- (A) VALVE OPERATING NUT OR 1 7/8" X 1 7/8" X 2" HIGH SOLID STEEL WELDED TO TOP PLATE.
- (B) 3/16" THICK X 7 1/2" DIA FREE SPINNING GUIDE PLATE, WITH 3 5/8" DIA HOLE IN CENTER.
- (C) TWO 3/16" X 1 1/2" X 1 1/2" X 5" STEEL ANGLE WELD TO TWO SIDES OF EXTENSION SHAFT.
- (D) 2 1/2" X 3/16" SQUARE STEEL TUBING LENGTH AS REQUIRED. EDGE WELD TO TOP PLATE.
- (E) 3" X 3" X 1/4" STEEL TOP PLATE. WELD TO EXTENSION SHAFT AFTER GUIDE PLATE IS IN PLACE.



TYPICAL VALVE INSTALLATION, VALVE STEM EXTENSION AND TRAFFIC VALVE BOX RISER

NOT TO SCALE

1
VARIES



WATER METER INSTALLATION

NOT TO SCALE

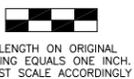
3
C-5

NOTE

ALL VAULTS TO BE ENVELOPED BY FOUNDATION MATERIAL PER BYPASS MANIFOLD DETAIL SHEET D-1.

NOTES

- DEPTH AS NECESSARY TO MAINTAIN MINIMUM COVER ON 12" DIP.
- PROVIDE VERTICAL AND LATERAL SUPPORTS FOR PIPELINE.
- CONTRACTOR TO COORDINATE REMAINING DIMENSIONS.



BAR LENGTH ON ORIGINAL DRAWING EQUALS ONE INCH. ADJUST SCALE ACCORDINGLY



		SCALE: AS SHOWN DATE: 06/13/2012 DRAWN: SMP REVIEWED: <i>Kent Coyne</i>	SANTA ROSA AQUEDUCT SEISMIC HAZARD MITIGATION PROJECT RODGERS CREEK FAULT CROSSING VALVE, WATER METER, AND TURNOUT DETAILS	
NO. 07-24-12 DATE ADDENDUM 1	REVISION	BY	FILE NAME: 7380_MiscDetails_Adden.dwg CONTRACT NUMBER: 60-64-7 #1	DRAWING NUMBER: D-2 SHEET 10 OF 14