

DOCUMENT 00912

ADDENDUM NUMBER 2

Issued: April 8, 2016

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

FROM: Sonoma Valley County Sanitation District
404 Aviation Boulevard
Santa Rosa, CA 95403-9019

TO: Prospective Bidders

This Addendum forms a part of and modifies the Project Manual dated March 2016. 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; ~~strikeout~~ designates text to be deleted.

Addendum Number 2 consists of 7 pages (size 8 1/2" x 11") and 0 revised Drawings.

I. General Changes

A. Contract number in the upper right corner of cover pages for Volume I, II, and III; modify as follows:

1. ~~70-712-7 #3~~ 71-712-7 #3

II. Changes to Prior Addenda

A. No changes.

III. Changes to Introductory Information and Bidding Requirements

A. Document 00010 (Table of Contents):

1. Page 5, Division 15- Mechanical; modify as follows:

Section	Title
15106	Ductile Iron Pipe
<u>15111</u>	<u>Gate Valves</u>
15112	Plug Valves

IV. Changes to Contracting Requirements

A. No changes.

V. Changes to Conditions of the Contract

- A. No changes.
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VI. Changes to Specifications

A. Section 02158 (Horizontal Directional Drilling)

1. Modify Paragraph 3.1.A as follows:

- A. Provide materials, equipment and incidentals necessary for the construction of ~~new 14-inch and 18-inch diameter~~ recycled water ~~force main pipeline~~ by horizontal directional drilling as indicated and as specified herein.

B. Section 02515 (Recycled Water Main):

1. Modify Paragraph 2.1.A.2.b as follows:

- b. DR ~~18 25~~ minimum class ~~235 165~~, unless otherwise indicated

2. Modify Paragraph 2.1.B.2. as follows:

2. Fusible PVC Pipe:

- a. AWWA C900 or ~~AWWA C905~~
b. DR ~~18 25~~ minimum class ~~235 165~~, unless otherwise indicated

3. Modify Paragraph 2.1.C.1. as follows and renumber remaining paragraphs accordingly:

C. High Density Polyethylene (HDPE) Pipe:

1. HDPE allowable use: horizontal direction drill sections only.
2. ~~4.~~ Manufacturers

4. Delete Paragraph 2.2.B in its entirety. Renumber remaining paragraphs accordingly

C. Section 02610 (Valve Covers):

1. Change the footer in this section as follows:

- a. ~~Concrete 03002- Valve Covers 02610~~

2. Insert the following after Paragraphs 1.1.A.1.e as follows:

f. Gate Valves

3. Insert the following after Paragraph 1.1.B.6 as follows:

7. Section 15111 (Gate Valves)

4. Insert the following after Paragraph 2.5 as follows and renumber the remaining accordingly:

2.6 GATE VALVE COVER

A. 10-inch minimum inside diameter and lid

B. Etched with 2-inch lettering: "SVCSGD GV"

D. Add Section 15111, Gate Valves (attached to this addendum):

1. Insert Section 15111 into Division 15, immediately after 15106 (Ductile Iron Pipe).

E. Section 15125 (Valves and Miscellaneous Piping Specialties):

1. Insert the following after Paragraph 1.1.B.3 as follows:

4. Section 15111 (Gate Valves)

2. Add the following as Paragraph 2.7.A and renumber remaining paragraphs accordingly:

- 2.7 WATER METERS

- A. 1" Meters

1. ANSI/AWWA Standard C-700 and C-710 compliant
 2. Electromagnetic Flowmeter
 3. Life Cycle - 20 years
 4. Battery Life - 20 years
 5. AMR/AMI compatible
 6. Datalog Interval - 1 hour
 7. Alarm Duration - 90 days
 8. Maximum Operating Pressure 200psi
 9. Reclaimed water service compatible
 10. Manufacturers:
 - a. Sensus, iPerl
 - b. Or Approved Equal

- B. 2" and Larger Meters

1. ~~A.~~ Accuracy tolerance: +/-2%
 2. ~~B.~~ Class D flanged ends
 3. ~~C.~~ Location: Based on manufacturer's recommendations
 4. ~~D.~~ Manufacturers:
 - a. McCrometer, McPropeller MW500 or MZ500. No substitutions

VII. Changes to Drawings

- A. Drawing C-16 (sheet 18 of 23)

1. Change note in lower right corner of drawing as follows:

- a. ~~2" meter and vault~~ 4" meter and vault

- B. Drawing D-5 (sheet 23 of 23)

1. Add Note 5 to Detail 1 as follows:

- a. Note 5 - Provide two 1" diameter RW meters assemblies at each location

VIII. Question(s)/Answer(s)

No questions received that require a response from Owner since issuance of Addendum Number 1.

END OF DOCUMENT

SECTION 15111

GATE VALVES

PART 1 GENERAL**1.1 SUMMARY**

- A. Section Includes:
 - 1. Furnish and install gate valves.
 - 2. AWWA standards apply to gate valves rated up to 200 psi for valves 12 inch and smaller, and up to 150 psi for valves 16 inch and larger.
- B. Related Sections:
 - 1. Section 01330 (Submittal Procedures).

1.2 REFERENCES

- | | |
|-------------------|---|
| A. ANSI/AWWA C500 | Metal-Seated Gate Valves for Water Supply Service |
| B. ANSI/AWWA C504 | Rubber-Seated Butterfly Valves |
| C. ANSI/AWWA C509 | Resilient-Seated Gate Valves for Water Supply Service |
| D. ANSI/AWWA C550 | Protective Interior Coatings for Valves and Hydrants |
| E. ANSI/NSF 61 | Drinking Water Systems Components-Health Effects |
| F. MSS SP-9 | Spot Facing for Bronze, Iron and Steel Flanges |
| G. MSS SP-80 | Bronze Gate, Globe, Angle and Check Valves |

1.3 DEFINITIONS

- A. OS&Y: Outside Screw and Yoke.
- B. NRS: Non-rising Stem.
- C. RS: Rising Stem.
- D. WOG: Water, Oil, and Gas.

1.4 SUBMITTALS

- A. See Section 01330 (Submittal Procedures).
- B. Product Data:
 - 1. General product information that shows that gate valves and related equipment meet all of the Specification requirements:
 - a. Pressure rating.
 - b. Valve materials.
 - c. Protective coating material for valve interior and exterior:
 - 1) Include surface preparation, material data, and application sheets, DFT.
 - 2) ANSI/NSF 61 compliance for potable water applications.
 - d. Valve actuator.
- C. Shop Drawings (for gate valves 2 inches and larger):
 - 1. Gate valve and actuator, fully dimensioned Drawing with materials listed for each component part (include ASTM Designation or equivalent).
 - 2. Flange thickness and bolt hole configuration.
 - 3. Net weight of each valve and actuator.
- D. Quality Assurance/Control Submittals:

1. Provide affidavit of compliance in accordance with AWWA C500, Section 1.4 and AWWA C509 Section 6.3.
2. Perform following tests, along with certificate of test results:
 - a. Operation test per AWWA C500 Section 5.1.1 and AWWA C509 Section 5.2.1.
 - b. Hydrostatic test per AWWA C500 Section 5.1.2 and AWWA C509 Sections 5.1.1 and 5.2.2.
 - c. Torque test per AWWA C509 Section 5.1.2.
 - d. Leakage test per AWWA C509 Section 5.1.3.
 - e. Hydrostatic shell test per AWWA C509 Section 5.1.4.
- E. Installation, Operation, and Maintenance Manuals:
 1. See Section 01330 for information required for Installation, Operation, and Maintenance Manuals.
 2. Manufacturer's Installation, Operation, and Maintenance instructions for valves and operators.
 3. Copies of all items submitted and reviewed in Section 1.4.

PART 2 PRODUCTS

2.1 ACCEPTABLE MANUFACTURERS

- A. Subject to compliance with the Contract Documents, the manufacturers listed under the specific valve types are acceptable.

2.2 VALVES: WATER AND AIR; 2-1/2 INCHES AND SMALLER

- A. Class 125 bronze gate valve.
- B. Comply with MSS SP-80.
- C. Acceptable Manufacturers:
 1. Nibco.
 2. Stockham.
 3. Or Approved Equal.
- D. Materials:
 1. Body, bonnet, wedge: Bronze.
 2. Stem: Silicon bronze.
 3. Packing: Teflon or TFE impregnated fiber.
- E. Design Requirements:
 1. 125 psi steam, 200 psi nonshock WOG.
 2. Screw in bonnet, non-rising stem, solid wedge.

2.3 VALVES: NON-POTABLE WATER; 3 TO 48 INCHES IN DIAMETER

- A. Resilient Seat Gate Valves (Non-Potable Water), 2 to 12 in diameter :
 1. Comply with AWWA C509.
 2. Materials:
 - a. Stem, stem nut: Bronze
 - 1) Wetted bronze parts in low zinc bronze.
 - 2) Aluminum bronze components: heat treated per AWWA C504.
 - b. Body, gate: Cast Iron.
 - c. Resilient seat: Styrene Butadiene Rubber (SBR).
 3. Design requirements:
 - a. 200 psi working pressure.

- b. Buried:
 - 1) NRS, O-ring, stem seal.
 - c. Exposed:
 - 1) NRS, O-ring, stem seal, handwheel, position indicator.
 - d. Counter clockwise open rotation.
 - 4. Fusion bonded epoxy coating interior and exterior except stainless steel and bearing surfaces.
 - a. AWWA C550 compliant.
 - b. NSF/ANSI-61 compliant.
- B. Resilient Seat Gate Valves (Non-Potable Water), 14 to 48 in diameter :
 - 1. Comply with AWWA C509.
 - 2. Materials:
 - a. Stem, stem nut: Bronze
 - 1) Wetted bronze parts in low zinc bronze.
 - 2) Aluminum bronze components: heat treated per AWWA C504.
 - b. Body, gate: Ductile Iron.
 - c. Resilient seat: Styrene Butadiene Rubber (SBR).
 - 3. Design requirements:
 - a. 200 psi working pressure.
 - b. Buried:
 - 1) NRS, O-ring, stem seal.
 - c. Exposed:
 - 1) NRS, O-ring, stem seal, handwheel, position indicator.
 - d. Counter clockwise open rotation.
 - 4. Fusion bonded epoxy coating interior and exterior except stainless steel and bearing surfaces.
 - a. AWWA C550 compliant.
 - b. NSF/ANSI-61 compliant.
- C. Acceptable Manufacturers:
 - 1. Clow.
 - 2. Mueller.
 - 3. American Flow Control.
 - 4. M & H.
 - 5. Or Approved Equal.

2.4 ACCESSORIES

- A. Refer to Drawings for type of actuators. Furnish actuator integral with valve.

2.5 FABRICATION

- A. General:
 - 1. Provide valves with clear waterways the full diameter of the valve.
- B. Spot valves in accordance with MSS SP-9.

PART 3 EXECUTION

3.1 INSTALLATION

- A. See AWWA C500 and AWWA C509 Section A.5 Installation.
- B. Install valves in accordance with the Manufacturer's installation instructions.

- C. Install valves with the actuator positioned as indicated, or if not shown, then in the position most convenient to operate.
- D. Where larger buried valves utilize smaller bypass valves, provide a second valve box installed over the bypass valve operating nut.
- E. Do not install gate valves inverted or with the stems sloped more than 45° from the upright unless the valve was ordered and manufactured specifically for this orientation.

END OF SECTION