

SECTION 02617 - REINFORCED CONCRETE PIPE (TONGUE AND GROOVE JOINT)

City of San Diego, CWP Guidelines

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NTS: The reinforced concrete pipe covered by this Section 02617, which conforms to ASTM C 76's D-Load Design Method, is primarily intended for gravity storm drain applications where infiltration/exfiltration and leakage can be tolerated. This pipe has a tongue and groove joint which is pointed with mortar after jointing. There is no shop testing of the joint and field leakage testing is normally not required.

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PART 1 -- GENERAL

1.1 WORK OF THIS SECTION

- A. The WORK of this Section includes providing reinforced concrete pipe (tongue and groove joint) intended to be used for the construction of storm drains, and related structures.

1.2 RELATED SECTIONS

- A. The WORK of the following Sections applies to the WORK of this Section. Other Sections of the Specifications, not referenced below, shall also apply to the extent required for proper performance of this WORK.
 - 1. Section 02140 Dewatering
 - 2. Section 02200 Earthwork
 - 3. Section 02730 Sanitary Sewerage System Testing
 - 4. Section 03300 Cast-in-Place Structural Concrete
 - 5. Section 03310 Cast-in-Place Sitework Concrete
 - 6. Section 03400 Precast Concrete

1.3 STANDARD SPECIFICATIONS

- A. Except as otherwise indicated in this Section of the Specifications, the CONTRACTOR shall comply with the Standard Specifications for Public Works Construction (SSPWC), as specified in Section 01090 - REFERENCE STANDARDS.

1.4 SHOP DRAWINGS AND SAMPLES

- A. The following shall be submitted in compliance with Section 01300:

1. Shop drawings showing dimensions and details of pipe joints, fittings, fitting specials, valves and appurtenances.
2. Detailed layout, spool or fabrication drawings showing pipe spools, spacers, adapters, connectors, fittings, and pipe supports.
3. Manufacturer's product data.
4. Manufacturer's installation instructions.
5. Manufacturer's certification of compliance.

1.5 FACTORY TESTING

- A. **Product Testing:** Pipe shall be tested at the factory for D-load bearing strength in compliance with SSPWC Subsection 207-2.9.2.
- B. **Witnesses:** The OWNER and the CONSTRUCTION MANAGER (at the option of either) reserve the right to witness factory tests.

1.6 FIELD TESTING

- A. **Testing:** Pipeline shall be field-tested for leakage in compliance with Section 02730.

PART 2 -- PRODUCTS

2.1 GENERAL

- A. The size, type and D-load of the reinforced concrete pipe shall conform to SSPWC Subsection 207-2.

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NTS: The Specifier shall add special considerations and criteria for joint design, for information of the pipe manufacturer, to withstand any anticipated: future settlement in soft ground; liquefaction induced by seismic activity; joint rotation which may be necessary to accommodate changes in line and grade; and other special project-specific features.

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2.2 JOINT DESIGN

- A. Joints shall be designed so as to be self-centering. Unless otherwise specified,

joints in reinforced concrete pipe shall be of the tongue and groove mortar type of joint and as shown.

PART 3 -- EXECUTION

3.1 INSTALLATION

- A. Reinforced concrete pipe shall be installed in accordance with the requirements of SSPWC Subsection 306-1.2.

**** END OF SECTION ****