

## SECTION 33 11 13.1

**WATER MAIN CONSTRUCTION**

*(Sentences and/or paragraphs that are double underlined indicate revisions that were made from the 2008 specification.)*

**PART 1 – GENERAL****1.1 DESCRIPTION**

- A. This item shall govern the construction of water mains including trenching, backfilling, pipe-laying, coupling, testing, the setting of fittings, valves and valve boxes, fire hydrants, appurtenances and wet connections. All work is to be done in accordance with the plans and specifications and paid for in accordance with the schedule of prices submitted in the Proposal.

**1.2 RELATED ITEMS**

See:

SECTION 31 78 00 - PIPE BORING, JACKING, & TUNNELING  
 SECTION 03 30 01 - CONCRETE BLOCKING OR ANCHORAGE  
 SECTION 31 23 33 - EXCAVATING, TRENCHING, & BACKFILL  
 SECTION 33 05 01 - PVC PIPE & FITTINGS  
 SECTION 33 05 02 - DUCTILE IRON PIPE  
 SECTION 33 12 16 - VALVES  
 SECTION 33 12 19 - FIRE HYDRANTS  
 SECTION 33 12 13 - WATER SERVICES

**1.3 MEASUREMENT AND PAYMENT**

- A. PIPE: Payments will be made at the price bid per foot for furnishing and installing pipe, which bid price will include all costs for the complete pipe installation including trenching, and backfill, embedment, compaction or tamping, sterilization, testing, final cleanup, and all other work not otherwise provided for in bid proposal. Pipe will be measured (by horizontal distance) from center of fitting to center of fitting, or end of pipe without deduction for the length of intermediate fittings or valves.
- B. FITTINGS: Payment will be made at the unit price bid per each for furnishing and installing fittings and joint accessories. Fittings will be measured per each.
- C. THRUST BLOCKING: Thrust blocking shall not be a measured item.
- D. SERVICES: Services shall be measured per each. Payment for each service will include the furnishing and installing pipe, which bid price will include all costs for the complete pipe installation, including line fittings, trenching, and backfill, embedment, compaction or tamping, sterilization, testing, final cleanup, and all other work not otherwise provided for in bid proposal. See Detail or SECTION 33 12 13 – WATER SERVICES for supplementary information.

**1.3 SUBMITTALS**

All submittal requirements are listed with the material specifications

## **PART 2 – PRODUCTS**

### **2.1 TESTING REQUIREMENTS**

See: SECTION 33 13 10 - HYDROSTATIC TESTING (Used for Waterlines & Sanitary Sewer Force Mains)  
SECTION 33 13 00 - DISINFECTION OF WATERLINES

## **PART 3 – EXECUTION**

### **3.1 GENERAL**

Construction methods for each material are specified in the material specifications.

- A. MINIMUM COVER: The minimum cover for water pipe less than or equal to twelve inches (12”) in diameter shall be four feet (4’) as measured from the outside top of the pipe vertically to finished ground or pavement surface elevation. The maximum cover shall be 5 feet (5’).

For water pipe greater than twelve inches (12”) in diameter, the maximum cover shall be five feet (5’) as measured from the outside top of the pipe vertically to finished ground or pavement surface.

**END OF SECTION**