



City of Estevan

Construction Specifications

SECTION 1200
WATER DISTRIBUTION MAINS AND APPURTENANCES

- Disinfect each length of pipe by pulling a chlorine-soaked swab through the inside of the pipe after it has been placed in its final position.

- The configuration of the swab must be of the proper dimensions to ensure firm contact with all portions of the interior of the pipe.

6.0 MEASUREMENT AND PAYMENT

- 6.1 The following work items in this section shall be paid in accordance with the Contract Unit Prices, which shall be deemed full compensation for all labour, materials, equipment, supplies, superintendence, overhead and profit for all work incidental to the supply, installation, completion and maintenance during warranty period of the respective items.
- (i) Watermain shall be paid on the basis of lineal meters of pipe of various diameters in place measured as on the Engineering Services Division's grade sheets supplied to the Contractor. The Contract Unit Price shall be deemed to include trench excavation and backfill, pipe thrust blocking, connections, pressure testing, disinfecting, flushing, restoration of surface and all work incidental to a complete installation.
 - (ii) Fittings shall be paid on the basis of size and number. The Contract Unit Price shall be deemed to include trench excavation and backfill, fitting, connections, thrust blocking, cathodic protection, pressure testing, disinfecting, flushing and all work incidental to a complete installation.
 - (iii) Valves shall be paid for as described in Fittings.
 - (iv) Hydrants shall be paid for on the basis of the number of complete assemblies. The Contract Unit Price shall be deemed to include trench excavation and backfill, riser pipe, hydrant, fittings, base, drainage sump, thrust blocking, cathodic protection, pressure testing, disinfecting, flushing, bracing, plugging drain and all work incidental to a complete installation.
- 6.2 All remaining work items described in this section shall be deemed incidental to the items in Article 6.1 of this section.

SECTION 1300
SEWER MAINS AND APPURTENANCES

1.0 GENERAL

1.1 Scope:

This specification governs the supply and installation of sanitary or storm sewer mains, special applications, manholes, catchbasins, leads and appurtenances.

1.2 Scheduling of Work:

Schedule and co-ordinate all work to minimize disruption to existing services.

Submit a proposed work schedule as may be stipulated in the Special Provisions of these specifications.

Comply with any special service interruption or other scheduling requirements stipulated within the Special Provisions and City of Estevan bylaws including notifications to customers, Engineering Services Division and Fire Department.

2.0 MATERIAL

2.1 Pipe:

.1) Reinforced Concrete Pipe:

Shall conform to ASTM C76. Non-reinforced concrete pipe shall conform to ASTM C14.

All concrete pipe shall be manufactured with sulphate resistant, Type 50 Portland Cement conforming to CSA CAN 3-A5.

.2) Polyvinyl Chloride (PVC) Pipe:

PVC gravity sewer pipe and fittings (150 mm to 375 mm diameter) shall conform to CSA B182.1-M92 and B182.2-M90, standard dimension ratio (SDR) 35 and minimum pipe stiffness of 320 kPa and ASTM D3034-89.

PVC gravity sewer pipe and fittings (450 mm to 675 mm) shall conform to CSA B182.2-M90, minimum pipe stiffness of 320 kPa and ASTM F679-89. For sizes 750 mm to 900 mm, third party independent test verification shall accompany each shipment of pipe. These sizes (750 mm to 900 mm) must also have minimum pipe stiffness of 320 kPa.

PVC profiled gravity sewer pipe and fittings (150 mm to 900 mm diameter) shall conform to CSA B182.4-M90 and shall have a minimum pipe stiffness of 320 kPa and conform to ASTM F794-93a.