



City of Estevan

Construction Specifications

SECTION 1070

ABANDONMENT AND ADJUSTMENT OF EXISTING MAINS AND APPURTANENCES

1.0 GENERAL

This section governs the requirements for the adjustment, abandonment and reconstruction of existing watermains, sewer mains, manholes, catchbasins, watermain valves, fire hydrants, water service connections and sewer service connections.

2.0 MATERIALS AND INSTALLATION

- 2.1 Frames and covers shall conform to the specification in Section 1300 - Sewer Mains and Appurtenances.
- 2.2 Precast concrete cone sections, top slabs and grade rings shall conform to the specifications in Section 1300 - Sewer Mains and Appurtenances.
- 2.3 Watermain valves, fire hydrants, water service curb stops, pipes and fittings shall conform to the specifications in Section 1200 - Water Distribution Mains and Appurtenances and Section 1400 - Water and Sewer Service Connections.
- 2.4 Sewer mains, sewer service connections and fittings shall conform to the specification in Section 1300 - Sewer Mains and Appurtenances and Section 1400 - Water and Sewer Service Connections.
- 2.5 Trench excavation and backfill shall conform to the specification in Section 1100 - Trench Excavation and Backfill.
- 2.6 Temporary water service shall conform to Section 1220 - Temporary Utility Service.
- 2.7 Location
Locate all existing manholes, catchbasins, watermain valves and water service curbstops required to be abandoned, adjusted or reconstructed.
- 2.8 Abandonment
 - .1 Where manholes or catchbasins are required to be abandoned, remove bricks, collars, waterblocks, cone sections or risers no less than 300mm below the proposed subgrade, return salvageable materials to the City Yards, block pipe connections and backfill manhole or catchbasin with unshrinkable fill.
 - .2 For watermain replacement projects where an existing watermain is to be abandoned, abandon existing valves, remove top casing, reconnect existing water services and fire hydrants to the new main and fill the abandoned main with unshrinkable fill. Provide temporary water service as required.
 - .3 Abandon existing water and sewer service connections, where required, in conformance with the City of Estevan Water and Wastewater bylaw.
- 2.9 Reconstruction
 - .1 Where reconstruction is required for watermain valves conform to the specifications in Section 1200 - Water Distribution Mains and Appurtenances and return salvageable materials to the City Yards.
 - .2 Reconstruct manholes and catchbasins in conformance with the specifications in Section 1300 - Sewer Mains and Appurtenances and return salvageable materials to the City Yards.

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2.10 Adjustments

- .1 Re-setting disturbed grout for manholes and catchbasins shall not be considered an adjustment and shall be considered incidental to the respective work item such as asphalt paving or curb, gutter or sidewalk structure.
- .2 Adjust manholes, catchbasins, watermain valves and curbstops embedded in concrete or asphalt paving or where a rim elevation change is between 40mm and 75mm by nesting, slip-in cast iron frames
- .3 Adjust manholes and catchbasin rims where a rim elevation change is greater than 75mm by excavating around the structure, removing bricks, waterblocks and precast concrete grade rings to lower the elevation or by removing bricks, waterblocks and adding precast concrete grade rings to raise the elevation. Remove cone sections where it becomes necessary and replace with riser, precast top slab and concrete grade rings. Install additional ladder rungs as required. Reset the existing frame and cover or replace if necessary and backfill with unshrinkable fill to subgrade level. Return salvageable material to the City Yards.
- .4 Adjust watermain valve boxes or curb stop boxes by excavating below collar on bottom casing and raise or lower top casing maintaining the minimum specified overlap. Use extension piece if top casing cannot be raised. Replace casings where required. Backfill to subgrade with unshrinkable fill. Provide corrosion protection as required.

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3.0 MEASUREMENT AND PAYMENT

- 3.1 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, superintendance, overhead and profit for all work incidental to the supply, installation, completion and maintenance during warranty period of the respective items:
- .1 Abandonment of manholes or catchbasins shall be paid on the basis of number of structures abandoned.
 - .2 Abandonment of existing watermains shall be paid on the following basis:
 - (1) a lump sum amount for temporary water service
 - (2) a lump sum amount for abandonment and filling existing watermain and valves
 - (3) the number of reconnected water service connections. The abandonment of existing water service connections shall be deemed incidental to the abandonment of the watermain.
 - (4) the number of reconnected fire hydrants
 - .3 Abandonment of existing water and sewer service connections shall be paid for on the basis of the number of 1.5 metre bottom width common trenches containing service connection lines.
 - .4 Reconstruction of watermain valves shall be paid for on the basis of the number and size of such valves.
 - .5 Reconstruction of manholes and catchbasins shall be based on the number of manholes and catchbasins of each type and riser diameter.
 - .6 Valve box adjustments shall be paid for on the basis of the number of valve boxes adjusted.
 - .7 Curb stop box adjustments shall be paid for on the basis of the number of curb stop boxes adjusted.
 - .8 Manhole and catchbasin adjustments shall be paid for on the basis of the number of manholes and catchbasins adjusted, within the range of specified adjustment depth.

The contract unit prices for the items shall be deemed to include all the work of this and other referenced sections incidental to a complete installation.