

PART E
SPECIFICATIONS

PART E - SPECIFICATIONS

GENERAL

E1. APPLICABLE SPECIFICATIONS, STANDARD DETAILS AND DRAWINGS

- E1.1 *The City of Winnipeg Standard Construction Specifications* in its entirety, whether or not specifically listed on Form B: Prices, shall apply to the Work.
- E1.1.1 *The City of Winnipeg Standard Construction Specifications* is available in Adobe Acrobat (.pdf) format on the Information Connection page at The City of Winnipeg, Corporate Finance, Materials Management Division internet site at <http://www.winnipeg.ca/matmgt>.
- E1.1.2 Further to GC:2.4(d), Specifications included in the Bid Opportunity shall govern over *The City of Winnipeg Standard Construction Specifications*.

E2. PROTECTION OF EXISTING TREES

- E2.1 The Contractor shall take the following precautionary steps to prevent damage from construction activities to existing boulevard trees within the limits of the construction area:
- a) The Contractor shall not stockpile materials and soil or park vehicles and equipment on boulevards within 2 metres of trees.
 - b) Trees identified to be at risk by the Contract Administrator are to be strapped with 25 x 100 x 2400mm wood planks, or suitably protected as approved by the Contract Administrator.
 - c) Excavation shall be performed in a manner that minimizes damage to the existing root systems. Where possible, excavation shall be carried out such that the edge of the excavation shall be a minimum of 1.5 times the diameter (measured in inches), with the outcome read in feet, from the closest edge of the trunk. Where roots must be cut to facilitate excavation, they shall be pruned neatly at the face of excavation.
 - d) Operation of equipment within the dripline of the trees shall be kept to the minimum required to perform the Work required. Equipment shall not be parked, repaired, refuelled; construction materials shall not be stored, and earth materials shall not be stockpiled within the driplines of trees. The dripline of a tree shall be considered to be the ground surface directly beneath the tips of its outermost branches. The Contractor shall ensure that the operations do not cause flooding or sediment deposition on areas where trees are located.
 - e) Work on-Site shall be carried out in such a manner so as to minimize damage to existing tree branches. Where damage to branches does occur, they shall be neatly pruned.
- E2.2 All damage to existing trees caused by the Contractor's activities shall be repaired to the requirements and satisfaction of the Contract Administrator and the City Forester or his designate.
- E2.3 No separate measurement or payment will be made for the protection of trees.
- E2.4 Elm trees cannot be trimmed between April 1 and July 31, inclusive.

E3. TRAFFIC CONTROL

E3.1 Further to clauses 3.6 and 3.7 of CW 1130-R1:

- (a) In accordance with the Manual of Temporary Traffic Control, the Contractor ("Agency" in the manual) shall make arrangements with the Traffic Services Section of the City of Winnipeg to place all temporary regulatory signs. The Contractor shall bear all costs associated with the placement of temporary traffic control devices by the Traffic Services Section of the City of Winnipeg in connection with the Works undertaken by the Contractor.

E4. TRAFFIC MANAGEMENT

E4.1.1 Should the Contractor be unable to maintain an existing access to a residence or business, he shall review the planned disruption with the business or residence and the Contract Administrator, and take reasonable measures to minimize the impact. The Contractor shall provide a minimum of 24 hours notification to the affected residence or business and the Contract Administrator, prior to disruption of access.

E4.1.2 Pedestrian and ambulance/emergency vehicle access must be maintained at all times.

E5. WATER USED BY CONTRACTOR

E5.1 Further to clause 3.7 of CW 1120-R1, the Contractor shall pay for all costs associated with obtaining water in accordance with the Waterworks By-law. Sewer charges will not be assessed for water obtained from a hydrant.

E6. SURFACE RESTORATIONS

E6.1 Further to clause 3.3 of CW 1130-R1, when Total Performance is not achieved in the year the Contract is commenced, the Contractor shall temporarily repair any Work commenced and not completed to the satisfaction of the Contract Administrator. The Contractor shall maintain the temporary repairs in a safe condition as determined by the Contract Administrator until permanent repairs are completed. The Contractor shall bear all costs associated with temporary repairs and their maintenance.

E7. ADJUSTMENT OF WATERMAIN VALVE BOXES AND CURB STOP BOXES

E7.1 This Specification shall amend CW 3210-R5.

E7.2 Replace clauses 9.6, and 9.8 with the following:

"Adjustment of Existing Watermain Valve Boxes and Curb-Stop Boxes

Existing **watermain valve boxes and curb stop boxes** within the limit of the Works shall be raised or lowered such that the top surface of the box is flush with the new finished grade of the pavement, sidewalk or boulevard. This shall include any required concrete removal and/or earth excavation necessary to complete the adjustment, and the replacement of said materials in a manner satisfactory to the Contract Administrator.

Where the existing watermain valve box or curb stop box is not adjustable or has been damaged, the Contractor shall install the appropriate extendible sections. Supply and installation of watermain valve box and curb-stop box extendible sections shall be paid for in accordance with this specification.

As determined by the Contract Administrator watermain valve boxes and curb-stop boxes damaged by the Contractor shall be repaired to the satisfaction of the Contract Administrator at the Contractor's expense."

E7.3 Replace clause 12.5 with the following:

"Adjustment of Existing Watermain Valve Boxes

Adjustment of existing watermain valve boxes will be not be measured for payment. Payment for this Work shall be included in the price bid for construction of concrete sidewalks."

E7.4 Replace clause 12.7 with the following:

"Adjustment of Existing Curb Stop Boxes

Adjustment of existing curb stop boxes will be not be measured for payment . Payment for this Work shall be included in the price bid for construction of concrete sidewalks."

E7.5 Replace clause 12.13 with the following:

"Installation of Extendible Sections for Curb Stop Boxes

Installation of extendible sections for curb stop boxes will be measured on a unit basis. The number to be paid for shall be the total number of extendible sections for curb stop boxes supplied **and installed** in accordance with this Specification and accepted by the Contract Administrator."

E7.6 Replace clause 13.13 with the following:

"Installation of Extendible Sections for Curb Stop Boxes

Installation of extendible sections for curb stop boxes will be paid for at the Contract Unit Price for "Installation of Curb Stop Box Extendible Sections", measured as specified herein, which price shall be payment in full for performing all operations herein described and all other items incidental to the Work included in this Specification."

E8. INSTALLATION AND ADJUSTMENT OF CURB INLETS

E8.1 This Specification shall amend CW 3210-R5.

E8.2 Add the following to the first paragraph of section 3 "Description":

"and the installation of curb inlet boxes."

E8.3 Replace the reference to "*shall conform with Specification CW 2410*" in clauses 5.3, 5.5, and 5.7.1 with "***shall conform with those products listed as Approved Products for Underground Use in the City of Winnipeg found on the City of Winnipeg, Materials Management web site at: <http://www.city.winnipeg.mb.ca/matmgt/info.stm>.***"

E8.4 Replace "SD-107" with "**AP-007**", "SD 104" with "**AP-004**", "SD-106" with "**AP-005**", "SD-100" with "**AP-001**", and "SD-109" with "**AP-011**", as they appear in clauses 5.3, 5.5, 5.6 and 5.7.1. In Clause 5.6 delete "*and SD-111*".

E8.5 Replace the second paragraph of clause 9.9.1 with the following:

"For curb inlets with inlet box, the adjustment shall be considered to include the supply and

*placing of reinforcing steel and concrete as required to cast the existing frame into the existing inlet box, in accordance with the Drawings and the requirements of Specification CW 3310. **As required, new inlet box covers shall be supplied in accordance with AP-015 and paid for separately.** For curb inlets with catchbasin, the adjustment of the existing catchbasin shall be done in accordance with Section 9.2 of this Specification.”*

E8.6 Add the following to section 9 “Construction Methods”:

“9.13 Installation of Curb Inlets with Inlet Boxes

Installation of curb inlets with inlet boxes to grade shall include the supply of all materials, and the installation of the complete curb inlet structure in accordance with the Drawings, Standard Details SD-221 or SD-222, and this Specification, to the satisfaction of the Contract Administrator, excepting the installation of the curb inlet box connection pipe.

The installation shall be considered to include the excavation for the inlet box, the construction of the inlet box complete with the curb inlet frame, the inlet box cover, and the backfilling around the inlet box. The excavation shall not extend more than 300 mm beyond the limits of the inlet box. Backfilling and compaction shall be done in accordance with Specification CW 2030.

9.14 Curb Inlet Box Connection Pipe

Installation of connection pipe and connection to a catchbasin shall be done in accordance with clause 3.11 of Specification CW 2130-R6.”

E8.7 Add the following to section 12 “Method of Measurement”:

“12.15 Curb Inlets with Inlet Boxes

Curb inlets will be measured on a unit basis. The number to be paid for shall be the total number of curb inlets with inlet boxes supplied and installed in accordance with this Specification and accepted by the Contract Administrator.

12.16 Curb Inlet Box Connection Pipe

Construction of connection pipe between the curb inlet box and the catchbasin will be measured on a linear measure basis. The length to be paid for shall be the total number of metres constructed in accordance with this Specification and accepted by the Contract Administrator, measured horizontally, at grade, above the centre line of the pipe, and measured from the centre of the inlet box to the centre of the catchbasin, as computed by measurements made by the Contract Administrator.

Fittings for curb inlet box connection pipe will be included in the pay item for “Curb Inlet Box Connection Pipe.

Tying into catchbasins from the curb inlet box will be included in the pay item for “Curb Inlet Box Connection Pipe.”

12.17 Supply of Curb Inlet Frames

Supply of curb inlet frames will be measured on a unit basis. The number to be paid for shall be the total number of curb inlet frames supplied in accordance with this Specification and accepted by the Contract Administrator.

12.18 Supply of Curb Inlet Box Covers

Supply of curb inlet box covers will be measured on a unit basis. The number to be paid for shall be the total number of curb inlet box covers supplied in accordance with this Specification and accepted by the Contract Administrator. ”

E8.8 Replace item ii) in clause 13.8 with the following:

“ii) Adjustment of Curb Inlet and Inlet Box”

E8.9 Add the following to section 13 “Basis of Payment”:

“13.15 Curb Inlets with Inlet Boxes

Curb inlets with inlet boxes will be paid for at the Contract Unit Price for "Curb Inlets with Inlet Boxes", measured as specified herein, which price shall be payment in full for performing all operations herein described and all other items incidental to the Work included in this Specification.

13.16 Curb Inlet Box Connection Pipe

Construction of connections from inlet boxes will be paid for at the Contract Unit Price per metre for "Curb Inlet Box Connection Pipe", measured as specified herein, which price shall be payment in full for performing all operations herein described and all other items incidental to the Work included in this Specification.

13.17 Supply of Curb Inlet Frames

Supply of curb inlet frames will be paid for at the Contract Unit Price for "Supply of Curb Inlet Frames", measured as specified herein, which price shall be payment in full for performing all operations herein described and all other items incidental to the Work included in this Specification.

13.18 Supply of Curb Inlet Box Covers

Supply of inlet box covers will be paid for at the Contract Unit Price for "Supply of Inlet Box Covers", measured as specified herein, which price shall be payment in full for performing all operations herein described and all other items incidental to the Work included in this Specification.“