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*.
- E1.2 The following Drawings are applicable to the Work:

<i>Drawing Title</i> Cover Sheet and Location Plan	<i>Drawing No.</i> P-3246-00	<i>File Name</i> 25-2004 Drawing 00.pdf	Size A1 (841 mm x 594 mm)
Abbreviations, Key Plan, Drawing List, Details, Horiz. + Vert. Control	P-3246-01	25-2004 Drawing 01.pdf	A1
Horizontal & Vertical Alignment Sta. 0+100 to Sta. 0+220	P-3246-02	25-2004 Drawing 02.pdf	A1
Horizontal & Vertical Alignment Sta. 0+220 to Sta. 0+370	P-3246-03	25-2004 Drawing 03.pdf	A1
Horizontal & Vertical Alignment Sta. 0+370 to Sta. 0+530	P-3246-04	25-2004 Drawing 04.pdf	A1
Horizontal & Vertical Alignment Sta. 0+530 to Sta. 0+680	P-3246-05	25-2004 Drawing 05.pdf	A1
Horizontal & Vertical Alignment Sta. 0+680 to Sta. 0+830	P-3246-06	25-2004 Drawing 06.pdf	A1
Horizontal & Vertical Alignment Sta. 0+830 to Sta. 0+980	P-3246-07	25-2004 Drawing 07.pdf	A1

E2. SITE INVESTIGATION REPORT

E2.1 Further to GC:3.1, test hole logs are provided to aid in the Contractor's evaluation of the existing pavement structure. The test hole logs are tabulated and can be found in Appendix A.

E3. OFFICE FACILITIES

- E3.1 The Contractor shall supply office facilities meeting the following requirements:
 - (a) The field office shall be for the exclusive use of the Contract Administrator.
 - (b) The building shall be conveniently located near the site of the Work.

- (c) The building shall have a minimum floor area of 25 square metres, with two windows for cross ventilation and a door entrance with a suitable lock.
- (d) The building shall be suitable for all weather use. It shall be equipped with a heater and air conditioner so that the room temperature can be maintained between 16-18°C and 24-25 °C.
- (e) The building shall be adequately lighted with fluorescent fixture and have a minimum of three wall outlets.
- (f) The building shall be furnished with two desks, one drafting table, 3 m x 1.2 m table, one stool, one four-drawer legal size filing cabinet, and a minimum of 12 chairs.
- (g) A portable toilet shall be located near the field office building. The toilet shall have a locking door and be for the exclusive use of the Contract Administrator and other personnel from the City.
- (h) The field office building and the portable toilet shall be cleaned on a weekly basis immediately prior to each site meeting. The Contract Administrator may request additional cleaning when he deems it necessary.
- E3.2 The Contractor shall be responsible for all installation and removal costs, all operating costs, and the general maintenance of the office facilities.
- E3.3 The office facilities will be provided from the date of the commencement of the Work to the date the Contract is completed.
- E3.4 On a one time basis, where directed by the Contract Administrator, the Contractor shall relocate the office facilities to a location more convenient for the remaining Work.

E4. PROTECTION OF EXISTING TREES

- E4.1 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.

- E4.2 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.
- E4.3 No separate measurement or payment will be made for the protection of trees.
- E4.4 Elm trees cannot be trimmed between April 1 and July 31, inclusive.

E5. TRAFFIC CONTROL

- E5.1 Further to clauses 3.6 and 3.7 of CW 1130-R1:
 - (a) Where directed, the Contractor shall construct and maintain temporary asphalt ramps to alleviate vertical pavement obstructions such as manholes, ramp curbs and planing dropoffs to the satisfaction of the Contract Administrator. No measurement for payment will be made for this Work.
 - (b) 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.

E6. TRAFFIC MANAGEMENT

- E6.1 Further to clause 3.7 of CW 1130, the Contractor shall be responsible for maintaining:
 - (a) southbound traffic flow in two lanes for the morning peak time and one lane during the afternoon peak and off-peak times on McPhillips Street.
- E6.2 Intersecting street and private approach access shall be maintained at all times.
- E6.3 Should the Contractor be unable to maintain pedestrian or vehicular 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 24 hours notification to the affected residence or business and the Contract Administrator, prior to disruption of access.
- E6.4 Pedestrian and ambulance/emergency vehicle access must be maintained at all times.

E7. WATER USED BY CONTRACTOR

E7.1 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.

E8. SURFACE RESTORATIONS

E8.1 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.

E9. RENEWAL OF EXISTING MISCELLANEOUS CONCRETE SLABS

E9.1 Description

This Specification shall amend and supplement Specification CW 3235-R4.

- E9.2 Method of Measurement
- E9.2.1 Removal of Precast Sidewalk Blocks

Removal of existing precast sidewalk blocks in median including stockpiling or disposal will be measured on a unit basis. The number to be paid for shall be the total number of precast sidewalk blocks removed in accordance with this Specification and accepted by the Contract Administrator.

- E9.3 Basis of Payment
- E9.3.1 Removal of Precast Sidewalk Blocks

Removal of existing precast sidewalk blocks will be paid for at the Contract Unit Price per unit for the "Removal of Precast Sidewalk Blocks" 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.

E10. PORTLAND CEMENT CONCRETE PAVEMENT WORKS

E10.1 Description

This Specification shall supplement Specification CW 3310-R8 and shall be incorporated into the Specification, and should there be a variance between this Specification and CW 3310-R8, this Specification shall take precedence.

- E10.2 Construction Methods
- E10.2.1 Transverse Joints

Transverse joints on McPhillips Street shall be constructed to coincide with the existing transverse joints in the adjacent concrete lanes.

E10.2.2 Monolithic Concrete Bullnose

The Contractor shall construct monolithic concrete bullnoses at locations and to the details shown on the Drawings. All monolithic concrete bullnoses shall be constructed to the modified barrier curb detail as shown on the Drawings.

E10.2.3 Reinforced Concrete Pavement

Renewed concrete approaches shall consist of 200 mm reinforced concrete pavement constructed as per CW3310-R8, Clause 9.2.1.

E11. INSTALLATION/ADJUSTMENT OF DRAINAGE APPURTENANCES

E11.1 Description

This Specification shall amend and supplement Specification CW 2130-R7 and CW 3210-R5.

- (a) Replace the reference to "shall conform with Specification CW 2410" in CW 3210-R5 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.winnipg.mb.ca/matmgt/info.stm"
- (b) Replace "SD-107" with "AP-007", "SD-104" with "AP-004", "SD-106" with "AP-005", "SD-108" with "AP-008/009", and "SD-109" with "AP-011", as they appear in CW 3210-R5 clauses 5.3, 5.5 and 5.6. In CW 3210-R5 clause 5.6 delete "and SD-111".