

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 The version in effect three (3) Business Days before the Submission Deadline shall apply.
- E1.1.3 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:

<u>Drawing No.</u>	<u>Drawing</u>
LD-3065	2004 Stormwater Retention Basin Revetment Replacement Lake 5-16
LD-3066	2004 Stormwater Retention Basin Revetment Replacement Lake 5-17

E2. ACCESS TO THE SITE

- E2.1 Access to the site for Lake 5-16 shall be from Paddington Road.
- E2.2 Access to the site for Lake 5-17 shall be from Paddington Road and Burland Avenue.
- E2.3 Existing grassed areas disturbed or damaged by accessing the site shall be restored with sod using imported topsoil in accordance with CW 3510.
- E2.4 Costs associated with restoring disturbed or damaged existing grassed areas will not be measured for payment and shall be included with the revetment work being done.

E3. LOWERED WATER LEVEL

- E3.1 The normal water level of Lakes 5-16 and 5-17 is 228.91 metres.
- E3.2 The lake level has been lowered by the City to facilitate the required construction. The City will not be responsible for the amount of, or duration of fluctuations in ice or water levels in the event surface run-off, water main breaks or other circumstances contributing water to the lakes. During the construction period, the Contract shall be responsible for providing pumping to maintain the lake water elevation at the required level to complete the work.
- E3.3 Costs associated with maintaining the level of the lakes below the required level to facilitate construction will not be measured for payment and shall be included with the revetment work being done.

E4. LAKESHORE REVETMENT REPLACEMENT

- E4.1 Description

- E4.1.1 This Specification covers the removal of existing revetment surface course and the installation of new revetment surface course material for Lakes 5-16 and 5-17.
- E4.2 Materials
- E4.2.1 Surface Course Aggregate in accordance with clause 2.2 of CW 2165.
- E4.3 Construction Methods
- E4.3.1 Excavation of Existing Revetment Surface Course.
- (a) Remove snow and ice as required to excavate existing revetment material.
 - (b) Excavate existing revetment to the limits and depth shown on the Drawings taking care to not disturb the surrounding grassed areas.
 - (c) Fill over-excavated areas to the required limits with aggregate specified in Clause E4.2.2 of this specification.
 - (d) Take precautions to not damage or puncture the existing geotextile fabric while excavating. Excavation will be considered complete at any location where the existing geotextile fabric is exposed before the 150 millimetre depth shown on the drawings is achieved.
 - (e) Spread clean, mud and vegetation free excavated revetment material uniformly along the first 2.0 metres of existing slope below the normal water elevation level where shown on the Drawings or as directed by the Contract Administrator.
 - (f) Ensure snow and ice content is minimized in the material spread below normal water level.
 - (g) Haul excavated revetment material that is covered in mud or vegetation off the site where shown on the Drawings or as directed by the Contract Administrator.
 - (h) Dispose of excavated material at a site approved by the Contract Administrator. Promptly clean material spilled or dropped on roadways during hauling to the satisfaction of the Contract Administrator.
- E4.3.2 Placement of New Revetment Surface Course.
- (a) Place and spread new revetment surface course to a maximum depth of 150 millimetres where the existing revetment surface course was removed.
 - (b) Perform final grading of revetment surface course after all material has been placed and the grassed area above revetment has been graded to achieve a uniform, smooth, level appearance.
- E4.3.3 Grading and Restoration of Grassed Surfaces Above Revetment
- (a) Grade a maximum 1.2 metre wide strip of the existing grassed area above the top edge of the revetment to blend in with the new revetment surface course where shown on the Drawings or as directed by the Contract Administrator.
 - (b) Restore graded areas with sod using imported topsoil in accordance with CW 3510.
- E4.4 Method of Measurement and Basis of Payment
- E4.4.1 Excavation of Existing Revetment Surface Course Payment.
- (a) Excavation and spreading of existing revetment surface course below the normal water level will be measured on a volume basis and paid for at the Contract Unit Price per cubic metre for "Excavation - Remove and Spread Existing Surface Course Below Normal Water Level". Volume to be paid for will be the total number of cubic metres of existing surface course excavated and spread below normal water level in accordance with this specification, accepted and measured by the Contract Administrator.

- (b) Excavation and hauling of existing revetment surface course off site will be measured on a volume basis and paid for at the Contract Unit Price per cubic metre for "Excavation - Haul Existing Surface Course Off-Site". Volume to be paid for will be the total number of cubic metres of existing surface course excavated, hauled off-site and disposed of in accordance with this specification, accepted and measured by the Contract Administrator.
- (c) The disposal of snow and ice for the preparation and maintenance of the site shall be considered incidental to the excavation of existing revetment material and no payment will be made for such activity.
- (d) Excavated material will be measured by cross sections in its original position and the volume computed by using the method of Average End Areas.
- (e) Over-excavation beyond the specified limits will not be measured for payment and will be at the Contractor's own expense.
- (f) Restoration of existing grassed areas adjacent to the revetment disturbed by excavation will not be measured for payment and will be at the Contractor's own expense.

E4.4.2 Placement of New Revetment Surface Course

- (a) Placement of new revetment surface course will be measured on a volume basis and paid for at the Contract Unit Price per cubic metre for "Placement of New Revetment Surface Course". Volume to be paid for will be the total number of cubic metres of new surface course placed of in accordance with this specification, accepted and measured by the Contract Administrator.
- (b) Placed material will be measured by cross sections in its final position and the volume computed by using the method of Average End Areas.
- (c) Final grading of the new revetment surface course will not be measured for separate payment and shall be included with placement of new revetment surface course.
- (d) Placement of New Revetment Surface Course will be measured on a volume basis and paid for at the Contract Unit Price per cubic metre for "New Revetment Surface Course Replacement". Volume to be paid for will be the total number of cubic metres of new revetment surface course material placed in accordance with this specification, accepted and measured by the Contract Administrator.

E4.4.3 Grading and Restoration of Grassed Surfaces Above Revetment

- (a) Grading of grassed surfaces above the revetment will not be measured for separate payment and will be included with restoration.
- (b) Measurement and payment for restoration of grassed surfaces above the revetment that have been regraded will be in accordance with CW 3510.
- (c) Restoration of existing grassed areas adjacent to the revetment disturbed by excavation will not be measured for payment and will be at the Contractor's own expense.
- (d) Restoration of grassed surfaces will be measured on an area basis and paid for at the Contract Unit Price per square metre for "Sodding". Area to be paid for will be the total number of square metres of sod and imported topsoil placed in accordance with CW 3510, accepted and measured by the Contract Administrator.