Corporate Finance Department
Materials Management Division

ADDENDUM NO. 1
BID OPPORTUNITY NO. 391-2004

BURROWS CENTRAL PARK RENOVATION PROJECTS

ISSUED: AUGUST 23, 2004
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URGENT

PLEASE FORWARD THIS DOCUMENT TO WHOEVER IS IN POSSESSION OF THE BID OPPORTUNITY

THIS ADDENDUM SHALL BE INCORPORATED INTO THE BID OPPORTUNITY AND SHALL FORM A PART OF THE CONTRACT DOCUMENTS

Template Version: 20040128

Please note the following and attached changes, corrections, additions, deletions, information and/or instructions in connection with the Bid Opportunity, and be governed accordingly. Failure to acknowledge receipt of this Addendum in Paragraph 10 of Form A: Bid may render your Bid Submission non-responsive.

PART A – BID SUBMISSION

Replace: Form B: Prices with Form B: Prices (R1).

PART E – SPECIFICATIONS

Revise: E32.2.1 (d) to read:

E32.2.1 (d) 1 Votex Bull Frog Model # VOR-0524

Revise: E32.2.1 (f) to read:

E32.2.1 (f) 1 Output Controller 120V model # VOR-0704

Add: E43 - Precast Concrete Plaza Element Base Courses (as follows)

E43. PRECAST CONCRETE PLAZA ELEMENT BASE COURSES

E43.1 Description

E43.1.1 The following list generally describes the scope of this section:

(a) Supply and installation of crushed limestone base and subbase courses

E43.2 Related Work

E43.2.1 Excavation, Removals and Site Grading (E19)

E43.3 Materials

E43.3.1 Crushed limestone base material to meet the following requirements:

(a) All Materials supplied under this Specification shall be approved by the Contract Administrator and shall be subject to inspection and testing;

(b) Crushed limestone consisting of hard, durable, angular particles, free from clay lumps, cementation, organic material, frozen material and other deleterious materials.

(c) Crushed Limestone Base Course - Gradations to be within limits specified below when tested to ASTM C136-83 and have a smooth curve without sharp breaks when plotted on semi-log grading chart. The aggregate should be crushed and have a minimum California Bearing Ratio (CBR) of sixty (60)

percent. The coarse fraction of the aggregate should have a maximum Los Angeles abrasion loss of thirty-five (35) percent. One hundred (100) percent of the material retained on the 4.75mm sieve should consist of crushed stone.

ASTM Sieve Designation	% Passing
19mm	100
4.75mm	35-70
0.425 mm	15-30
0.075 mm	8-17

(d) Crushed Limestone Subbase Course - Gradations to be within limits specified below when tested to ASTM C136-83 and have a smooth curve without sharp breaks when plotted on semi-log grading chart. The aggregate should be crushed and have a minimum California Bearing Ratio (CBR) of sixty (60) percent. The coarse fraction of the aggregate should have a maximum Los Angeles abrasion loss of forty (40) percent. One hundred (100) percent of the material retained on the 4.75mm sieve should consist of crushed stone.

ASTM Sieve Designation	% Passing
50mm	100
38mm	60-90
25mm	40-80
4.75mm	25-70
0.075mm	8-20

(e) 100-150mm Down Crushed Limestone - Gradations to be within limits specified below when tested to ASTM C136-83 and have a smooth curve without sharp breaks when plotted on semi-log grading chart. The aggregate should be crushed and have a minimum California Bearing Ratio (CBR) of sixty (60) percent. The coarse fraction of the aggregate should have a maximum Los Angeles abrasion loss of forty (40) percent. One hundred (100) percent of the material retained on the 4.75mm sieve should consist of crushed stone.

ASTM Sieve Designation	% Passing
150mm	90-100
100mm	75-90
25mm	50 max.

E43.4 Execution

E43.4.1 Verify grades of compacted subgrade (to 100% SPD) for conformity with elevations and sections before placing granular material.

E43.4.2 Excavate to the design subgrade elevation, while further ensuring that the upper layer (approximately 50mm) of organic clay as been completely removed. The exposed subgrade is expected to consist of stiff clay fill soils. Care should be taken to prevent disturbance of the subgrade and ensure that the excavations are not advanced more than required. Excavation should be completed with an excavator equipped with a smooth bucket and operated from the edge of the excavation area.

E43.4.3 Proof roll graded subgrade with a heavy non-vibratory sheepsfoot (padded) roller operating in non-vibratory mode to check for unstable areas. Excavation, proof-rolling and preparation of the subgrade should be undertaken under the direction of qualified geotechnical personnel. The exposed subgrade surface should be protected from freezing, inundation or disturbance. Where excavations are to be left open overnight, the subgrade surface should be sealed with a smooth drum roller and sloped to a low point in the excavation to facilitate removal of ponded water if necessary.

E43.4.4 Where clay is present at the subgrade elevation, and proof-rolling does not identify the presence of underlying weak zones, the subgrade surface should be uniformly compacted to a minimum of 95% of

standard Proctor maximum dry density (SPMDD, ASTM D698) using a non-vibratory sheepsfoot (padded) roller.

E43.4.5 Where silt is present at or near the subgrade level, or where proof-rolling indicated that a thin clay zone exists over a weak silt layer, special provisions should be followed to minimize disturbance of the silt and to allow for construction of a stable base. Sub-excavation of the weak area should be undertaken. The typical procedure for sub-cutting and preparing a stable base should be as follows:

(a) Excavate any weak areas to a minimum of 0.3m below the underside of the concrete slab structure with a track mounted excavator equipped with a smooth bucket and operation from the edge of the excavation.

(b) Where weak silt is present after the sub-cut, place a non-woven geotextile (AMOCO 4551 or equivalent) in accordance with the manufacturer's specifications, followed by at least 0.3m of 100-150mm down crushed limestone. Disturbance of the silt must be avoided, and where disturbance occurs, long-term performance of the slab may be affected. The crushed limestone should be placed in a manner such that construction equipment not operate directly on the subgrade surface (ie. Push rock ahead of equipment). Only low ground pressure spreading equipment (ie. A wade paddled dozer) should be allowed to operate on the 100 – 150mm down crushed limestone.

(c) The crushed stone should be provided with a nominal compactive effort and only light (low ground pressure) non-vibratory equipment should be utilized to work on and compact the crushed stone. Excessive compaction of this crushed stone should be avoided.

E43.4.6 Remove and dispose of unsuitable sub base material as per City of Winnipeg specifications and as directed by Contract Administrator on Site.

E43.4.7 Obtain approval of subgrade by Contract Administrator before placing crushed limestone base.

E43.4.8 Place crushed limestone subbase course material to a minimum compacted thickness of 200mm placed in lift thickness not exceeding 150mm. Compact to 100% of SPMDD.

E43.4.9 Place crushed limestone base course material to a minimum compacted thickness of 100mm. Compact to 100% of SPMDD.

E43.4.10 Fill materials required between the subgrade elevation and the underside of the granular section described above should consist of additional sub-base, placed in maximum 150mm thick lifts and uniformly compacted to 100% of SPMDD.

E43.5 Method of Measurement

E43.5.1 Compacted crushed limestone bases shall be measured on an area basis. The area to be paid for shall be the total number of square metres of compacted crushed limestone bases placed in accordance with this Specification and the Construction Drawings, as determined by the Contract Administrator.

E43.5.2 Removal of unsuitable subgrade and replacement with compacted crushed limestone base will be measured on a volume basis. The total number of cubic metres to be paid for shall be the total number removed and replaced in accordance with this Specification as computed from measurements made by the Contract Administrator.

E43.6 Basis of Payment

E43.6.1 Compacted crushed limestone bases will be paid for at the Contract Unit Price per square meter for "Supply and install compacted crushed limestone base courses for precast concrete plaza components", which price shall be payment in full for supply of all materials and performing all operations herein described and for all other items incidental to the Work included in this Specification.

E43.6.2 Removal of unsuitable subgrade and replacement with compacted crushed limestone base will be paid for at the contract unit price per cubic meter for "Remove and dispose of unsuitable subgrade at Plaza and replace with compacted crushed limestone base" as specified herein, which price shall be payment in full for performing all operations herein described (including salvaging mesh for reinstallation where noted) and all other items incidental to the Work included in this Specification.

DRAWINGS

Replace: Drawing 391-2004_Drawing_L13-R0 with Drawing 391-2004_Drawing_L13-R1

Replace: Drawing 391-2004_Drawing_L14-R0 with Drawing 391-2004_Drawing_L14-R1