812-2014 ADDENDUM 1

ALLEY RENEWAL

URGENT

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

ISSUED: September 5, 2014 BY: Kevin Rae, P.Eng. TELEPHONE NO. (204) 928-8430

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

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 non-responsive.

PART A – BID SUBMISSION

Replace: 812-2014 Bid Submission with 812-2014 Addendum 1 - Bid Submission. The following is a summary of changes incorporated in the replacement Bid Submission:

Form B (R1): Provided quantity for Item A.5, Unit changed to Tonnes for item A.6.

Replace Form B Excel with Form B (R1) Excel.

PART B – BID SUBMISSION

Revise: B2.1 to read: The Submission Deadline is 12:00 noon Winnipeg time, September 10, 2014.

PART E - SPECIFICATIONS

Replace: E9. Permeable Interlocking Concrete Pavement with the following. Changes are in bold.

E9. PERMEABLE INTERLOCKING CONCRETE PAVEMENT (ADDENDUM NO.1)

DESCRIPTION

- E9.1 General
- E9.1.1 This specification covers the construction of permeable interlocking concrete pavers on permeable, open graded crushed stone bedding, base and sub-base materials.
- E9.1.2 Referenced Standard Construction Specifications
 - (a) CW 3120 -Installation of Subdrains
 - (b) CW 3130 Supply and Installation of Geotextile Fabrics

MATERIALS

E9.2 Permeable interlocking concrete pavers.

- E9.2.1 Barkman Holland Eco Concrete Paver (Autumn Brown) or approved equal.
- E9.3 Open-graded crushed stone
- E9.3.1 Materials
 - (a) Bedding layer / stone filler (No.8)
 - (b) Base (No.57)
 - (c) Sub-base (No.2)
- E9.3.2 Material Requirements
 - (a) Crushed stone materials will be approved by the Contract Administrator.
 - (b) Crushed stone materials will consist of sound durable particles produced by crushing, screening and grading of recovered materials, free from soft material that would decay or disintegrate from weathering.
 - (c) Crushed rock and crushed gravel will be free from organic or soft material that would disintegrate through decay or weathering.
 - (d) Crushed stone with 90% fractured faces, LA Abrasion <40 per ASTM C 131.
 - (e) Rounded river gravel is not an acceptable material
 - (f) All stone materials shall be washed with less than 2% passing the 0.75mm sieve.
- E9.3.3 Grading requirements
 - (a) Bedding and Stone Filler No.8 Grading Requirements

Sieve Size	Percent Passing
12.5 mm	100
9.5 mm	75 to 85
4.75 mm	5 to 15
2.36 mm	0 to 10
1.18 mm	0 to 3

(b) Base No.57 Grading Requirements

Sieve Size	Percent Passing
25 mm	100
12.5 mm	50 to 65
4.75 mm	2 to 8
2.36 mm	1 to 4
0.075 mm	0 to 2

(c) Sub-Base No.2 Grading Requirements

Sieve Size	Percent Passing
100 mm	98 to 100
75 mm	75 to 95
63 mm	40 to 60
50 mm	10 to 30
37.5 mm	5 to 15
19 mm	0 to 5
0.075 mm	0 to 3

QUALITY CONTROL

- E9.4 Open-graded crushed stone requirements
- E9.4.1 The Contract Administrator shall ensure that a minimum of one sample shall be tested for gradation and LA abrasion for sub-base and base materials and one sample for gradation for the bedding and stone filler material prior to starting construction. The materials shall be

sampled from stockpiles designated to be used for the contract and shall be tested in accordance with this Specification.

- E9.4.2 Additional testing shall be as directed by the Contract Administrator.
- E9.4.3 If one test fails to meet the requirements of this Specification, the material shall be re-tested. If the material fails a second test, the Contractor shall designate a new source for supply of the material.

CONSTRUCTION METHODS

E9.5 Procedures

- E9.5.1 The Contract Administrator is to approve the compacted subgrade prior to placement of the geotextile fabric.
- E9.5.2 Place geotextile fabric in accordance with CW 3130 Supply and Installation of Geotextile Fabrics.
- E9.5.3 Place subdrain in accordance with CW 3120 Installation of subdrains and as detailed on the drawings.
- E9.5.4 Placement of open graded sub-base and base material
 - (a) Spread and compact the sub-base **No.2** in two 200mm lifts taking care to not wrinkle or fold the geotextile.
 - (b) For each lift, make at least two passes in the vibratory mode then at least two in the static mode with a minimum 10 Tonne vibratory roller until there is no visible movement of the subbase stone **No.2**. Take care to not crush aggregate with the roller.
 - (c) The Contract Administrator is to approve each lift prior to the placement of the next.
 - (d) Spread and compact the base No.57 layer in one 100mm lift. On this layer, make at least two passes in the vibratory mode then at least two in the static mode with a minimum 10 tonne vibratory roller until there is no visible movement of the base stone. Take care to not crush the aggregate with roller.

E9.5.5 Placement of bedding laver

- (a) Spread and screed the **bedding** material.
- (b) Fill voids left by removed screed rails with the **bedding** material.
- (c) The surface tolerance of the screeded **bedding** layer shall be +/- 10 mm over a 3 m straightedge.
- (d) Do not subject the screeded bedding material to any pedestrian or vehicular traffic before paving unit installation begins.
- E9.5.6 Installing permeable interlocking concrete pavers and joint/opening fill material.
 - (a) Lay the paving units in the pattern and joint widths as recommended by the material supplier.
 - (b) Paver area is to be confirmed prior to placement of pavers to eliminate cutting of pavers.
 - (c) Fill openings and joints with bedding/stone filler material.
 - (d) Remove excess aggregate on the surface by sweeping pavers clean.
 - (e) Compact and seat the pavers into the bedding material using a low-amplitude, 75-90 Hz plate compactor capable of at least 22 kN. This will require at least two passes with the plate compactor.
 - (f) Do no compact within 2 m of the unrestrained edges of the paving units.
 - (g) Apply additional aggregate to the openings and joints if needed, filling them completely. Remove excess aggregate by sweeping then compact the pavers. This will require at least two passes with the plate compactor.
 - (h) All pavers within 2 m of the layer face must be left fully compacted at the completion of the day.

- (i) The final surface tolerance of compacted pavers shall not deviate more than +/- 10 mm under a 3 m long straightedge.
- (j) The surface elevation of pavers shall be 3 to 6 mm above adjacent drainage inlets and the concrete lane and no greater than 3 mm difference in height between adjacent pavers.

MEASUREMENT AND PAYMENT

E9.6 Crushed Stone Bedding No.8

- E9.6.1 The supplying, placing and compaction of crushed stone bedding No.8 material will be measured on a volume basis and paid for at the Contract Unit Price per cubic metre for "Supplying and Placing Crushed Stone Bedding No.8". The volume to be paid for will be the total number of cubic metres of bedding material supplied and placed in accordance with this specification, accepted and measured by the Contract Administrator. Placement of filler material between paver joints will be considered incidental to the placement of the pavers. No additional payment will be made for this material.
- E9.6.2 The volume of Bedding will be measured by cross-sections and computed by the method of Average End Areas.

E9.7 Crushed Stone Base No.57

- E9.7.1 The supplying, placing and compaction of crushed stone base No.57 material will be measured on a weight basis and paid for at the Contract Unit Price per tonne for "Supplying and Placing Crushed Stone Base No.57". The weight to be paid for will be the total number of tonnes of crushed stone base material supplied and placed in accordance with this specification, accepted and measured by the Contract Administrator.
- E9.7.2 The weight to be paid for will be the total number of tonnes of crushed stone base material as measured on a certified scale.

E9.8 Crushed Stone Sub-base No.2

- E9.8.1 The supplying, placing and compaction of crushed stone sub-base No.2 material will be measured on a weight basis and paid for at the Contract Unit Price per tonne for "Supplying and Placing Crushed Stone Sub-base No.2". The weight to be paid for will be the total number of tonnes of crushed stone sub-base material supplied and placed in accordance with this specification, accepted and measured by the Contract Administrator.
- E9.8.2 The weight to be paid for will be the total number of tonnes of crushed stone sub-base material as measured on a certified scale.

E9.9 Permeable interlocking concrete pavers

E9.9.1 The supplying and placing of permeable interlocking concrete pavers will be measured on a surface area basis and paid for at the Contract Unit Price per square metre for "Supplying and Placing Permeable Interlocking Concrete Pavers". The surface area to be paid for shall be the total number of square metres of permeable interlocking concrete pavers supplied and placed in accordance with this specification, accepted and measured by the Contract Administrator.