



Corporate Finance Department
Materials Management Division

ADDENDUM NO. 1 BID OPPORTUNITY NO. 536-2004

Maryland Twin Bridges Rehabilitation Project – West Bridge Rehabilitation

ISSUED: February 22, 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: A20041223

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

PART B – BIDDING PROCEDURES

Revise: B2.1 to read:

The Submission Deadline is 12:00 noon Winnipeg time, March 1, 2005.

PART E – SPECIFICATIONS

Add: E4.4.1 (d) (ii) to read:

Place warning signs 200 metres up and downstream of the site and maintain these for the duration of the works to notify waterway users of the work. Signs must display black lettering on a yellow background and must be readable from 100 metres.

Add: E4.4.1 (d) (iii) to read:

Maintain an unobstructed navigation channel with a minimum vertical clearance of 5 metres above the normal summer water level between pier W-3 and W-4 at all times during periods of open water. (Current clearance from underside girder to normal summer water level is 7.0 metres)

Revise: E5.3.2 (b) (iii) to read:

- Concrete curbs and miscellaneous slabs;
- CW 3235-R5: Renewal of Miscellaneous Concrete Slabs.
- CW 3240-R5: Renewal of Existing Curbs.
- CW 3230-R4: Full Depth Patching of Existing Pavement Slabs and Joints

Revise: E7.4.12 to read:

After the hydrodemolition is completed, the deck will be inspected (by sounding) by the Contract Administrator to ensure that all partial depth deteriorated concrete has been removed. Should deteriorated concrete be found, the Contractor shall remove the areas of deteriorated concrete by additional passes of the hydrodemolition equipment or jackhammers. No additional payment will be made for removal of these areas if they total less than 5% of the deck area. If they total more than 5%, then the amount over 5% will be paid as extra work.

Add: E7.4.17 (d) (iii) to read:

There is a possibility that during hydrodemolition blow-throughs of the deck may occur. Since it is difficult to predict when, or even if, a blow-through will occur, the following contingency plan shall be undertaken by the Contractor for this eventuality:

- In instances where a blow-through of the bridge deck does occur, the Contractor will be required to halt the water jet immediately and stop the flow of water and deck solids. The latter may be accomplished by immediately placing sandbags in the location of the blow-through.

Revise: E11.2.12 (a) to read:

Latex bonding agent shall be SCP Concrete Bond, as supplied by Specialty Construction Products, Surfacrete Concentrate by Sternson, Planicrete AC by MAPEI, or equal as accepted by the Contract Administrator. Polyvinyl acetate-based latexes will not be permitted.

Revise: E11.2.16 title of clause to read:

Cement Slurry Bonding Grout

Revise: E11.3.2 (b) (i) to read:

The constituent materials shall be proportioned and combined in accordance with the approved Job Mix Formula, such as to yield a fibre-reinforced silica fume concrete, meeting the following design and performance requirements:

- 35 MPa minimum compressive strength at 28 days
- 20 mm maximum coarse aggregate size
- minimum cementitious content (including silica fume) shall be 380 kg/m³
- minimum 1.5 kg polypropylene fibres per cubic metre
- **6.5 ±1%** plastic entrained air content
- 0.38 maximum water/cementitious ratio (including silica fume)
- mix must be workable with a maximum slump 60 ± 20 mm at discharge
- temperature of concrete mix at discharge shall not exceed **18°C**
- slump retention after 45 minutes shall be a minimum of 75% of initial batching slump
- minimum specific surface, measured in accordance with Ontario Provincial Standard Specification 1350, shall be 25 mm⁻¹ in hardened concrete
- Permeability: Maximum of 1000 coulombs as a charge passed in a 6-hour test, in accordance with ASTM C1202, on a sample cured for 28 days

Revise: E11.6.4 (a) (ii) to read:

Except where demolition has been by hydrodemolition, all existing surfaces and exposed reinforcing steel are to be gritblasted to reveal a clean substrate and kept clean until concrete placement. Gritblasting shall be followed by a high pressure water wash to remove all residue.

Revise: E11.6.6 (e) (i) to read:

General

- The use of curing compound will not be allowed on concrete areas that are to receive additional concrete or waterproofing.
- Freshly finished concrete shall have either a curing compound applied or covered and kept moist by means of wet polyester blankets immediately following finishing operations and shall be maintained at above **10°C** for at least seven (7) consecutive days thereafter. Construction joints shall only be covered and kept saturated by means of wet polyester blankets for the curing period.
- Curing compounds shall be applied at the rate required by ASTM P198 for the accepted product. The compound must be applied uniformly and by roller. Spraying of the compound will not be permitted.
- Concrete shall be protected from the harmful effects of sunshine, drying winds, surface dripping, running water, vibration, and mechanical shock. Concrete shall be protected from freezing until at least 24 hours after the end of the curing period.
- Changes in temperature of the concrete shall be uniform and gradual and shall not exceed 3°C in one hour or 20°C in 24 hours.
- Formed surfaces shall receive, immediately after stripping and patching, the same curing as finished surfaces, with the exception of the bridge deck soffit surfaces.

Revise: E11.6.7 (g) (iii) to read:

The temperature of the concrete shall not be less than **10°C**, nor more than **18°C**, at the time of placing, and shall be maintained below this maximum temperature by the inclusion of ice in the mix in place of a portion of the mix water, as approved by the Contract Administrator, taking care to maintain the design water/cementitious ratio.

Revise: E11.6.7 (h) (iv) to read:

The predampened polyester curing blankets shall be a temperature of **20°C, ±5°C**, when applied to the deck.

Revise: E11.6.7 (h) (vii) to read:

As soon as the deck concrete can be walked on without damaging the surface, as approved by the Contract Administrator, the polyester curing blankets shall be covered with a layer of minimum 4-mil polyethylene film and a layer of insulated tarps (during cold weather) in order to maintain the concrete temperature of **10°C**.

Revise: E11.6.7 (i) (iii) to read:

During hot weather conditions when temperatures greater than 25°C are expected, deck concrete placement shall commence after the sun begins to set and should be completed by 10 a.m.

Add: E11.6.18 (a) to read:

There is a possibility that the work of deteriorated concrete removal of the deck will lead to full depth deck removals of small areas. If this does take place, it will be necessary to do full depth concrete deck patches. Should this concrete patch work be necessary, the concrete patch work will be considered extra work and will be paid for in accordance with GC:7, Changes in Work

Revise: E13.2.4 (a) to read:

The epoxy for epoxy injection of girder cracks shall be Kemko 068 by Chemco Systems, Inc. of Redwood City, California, SCB Concessive 1360 by Degussa Construction Chemicals of Shakopee, Minnesota, or an approved equal.

Delete: E14.2.8

Revise: E16.2.6 (a) to read:

Electrical cable shall be 12-2 Cabtyre Type SOW cable (two #12 wires and one #12 ground wire).
Incidental to this item shall be all miscellaneous electrical hardware necessary for a proper installation.
Include 90° cable fitting at junction box to prevent cable sheering.

Add: Letter from the Department of Fisheries and Oceans.

DRAWINGS

Replace: 536-2004_Drawing_B108-05-05-R0 with 536-2004_Drawing_B108-05-05-R3

Replace: 536-2004_Drawing_B108-05-06-R0 with 536-2004_Drawing_B108-05-06-R3

Replace: 536-2004_Drawing_B108-05-09-R0 with 536-2004_Drawing_B108-05-09-R3

Replace: 536-2004_Drawing_B108-05-11-R0 with 536-2004_Drawing_B108-05-11-R3

Replace: 536-2004_Drawing_B108-05-24-R0 with 536-2004_Drawing_B108-05-24-R3