

July 25, 2006

SUBJECT: Route FAI Route 94/90 (Dan Ryan) Section 2003 – 029I Cook County Contract No. 62581 Item No. 1P, August 4, 2006 Letting Addendum B

NOTICE TO PROSPECTIVE BIDDERS:

Attached is an addendum to the plans or proposal. This addendum involves revised and/or added material.

1. Revised Pages 50 and 53 of the Special Provisions

Prime contractors must utilize the enclosed material when preparing their bid and must include any Schedule of Prices changes in their bidding proposal.

Bidders using computer-generated bids are cautioned to reflect any and all Schedule of Prices changes, if involved, into their computer programs.

Very truly yours,

Michael L. Hine Engineer of Design and Environment

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By: Ted B. Walschleger, P. E. Engineer of Project Management

cc: Diane O'Keefe, Region 1, District 1; Roger Driskell; R. E. Anderson; Estimates; Design & Environment File

At the option of the Contractor the grout may be applied by mechanical applicators. If this option is chosen, the sand shall be eliminated from the grout mix.

- Note 8: Rapid set materials shall be obtained from the Department's approved list of Packaged, Dry, Rapid Hardening Cementitious Materials for Concrete Repairs.
- Note 9: Cotton mats shall consist of a cotton fill material, minimum 400 g/sq m (11.8 oz/sq yd), covered with unsized cloth or burlap, minimum 200 g/sq m (5.9 oz/sq yd), and be tufted or stitched to maintain stability. Cotton mats shall be free from tears and in good condition.
- Note 10: Synthetic fibers shall be Type III according to ASTM C 1116. The synthetic fiber shall be a monofilament with a minimum length of 13 mm (0.5 in.) and a maximum length of 63 mm (2.5 in.), and shall have a maximum aspect ratio (length divided by the equivalent diameter of the fiber) of 100. The synthetic fiber shall have a minimum toughness index I<sub>20</sub> of 4.5 according to Illinois Modified ASTM C 1018. The maximum dosage rate shall not exceed 1.8 kg/cu m (3.0 lb/cu yd).

Synthetic fibers, when required, shall be added to the load after all other mix design components (with the exception of any jobsite added super plasticizer) have been batched and thoroughly mixed. If the fibers are packaged in bags, the bags shall be opened first and then discarded. Fiber only shall be added to the load in a manner that promotes consistent and effective distribution throughout the load. A minimum of 80 revolutions shall be completed at mixing speed after the addition of fiber, although additional mixing may be required to provide complete and even distribution of the fiber throughout the load.

The actual dosage rate of the fibers in the mix shall be determined in the field based on a trial batch, but shall not exceed the maximum dosage rate mentioned above.

The department will maintain an "Approved List of Synthetic Fibers".

<u>Equipment</u>: The equipment used shall be subject to the approval of the Engineer and shall meet the following requirements:

- (a) Surface Preparation Equipment. Surface preparation equipment shall be according to the applicable portions of Section 1100 and the following:
  - (1) Sawing Equipment. Sawing equipment shall be a concrete saw capable of sawing concrete to the specified depth.
  - (2) Mechanical Blast Cleaning Equipment. Mechanical blast cleaning may be performed by high-pressure waterblasting or shotblasting. Mechanical blast cleaning equipment shall be capable of removing weak concrete at the surface, including the microfractured concrete surface layer remaining as a result of mechanical scarification, and shall have oil traps.

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A trial section on the existing deck surface will be designated by the Engineer to demonstrate that the equipment, personnel and methods of operation are capable of producing results satisfactory to the Engineer. The trial section will consist of approximately 3 sq m (30 sq ft).

Once the settings for the equipment are established, they shall not be changed without the permission of the Engineer. The removal shall be verified, as necessary, at least every 5 m (16 ft) along the cutting path. If concrete is being removed below the desired depth, the equipment shall be reset or recalibrated.

If the use of hydro-scarification equipment is specified, the Contractor may use mechanical scarification equipment to remove an initial depth of concrete provided that the last 6 mm (1/4 in.) of removal is accomplished with hydro-scarification equipment. If the Contractor's use of mechanical scarifying equipment results in exposing, snagging, or dislodging the top mat of reinforcing steel, the scarifying shall be stopped immediately and the remaining removal shall be accomplished using the hydro-scarification equipment. All damage to the existing reinforcement resulting from the Contractor's operation shall be repaired or replaced at the Contractor's expense as directed by the Engineer. Replacement shall include the removal of any additional concrete required to position or splice the new reinforcing steel. Undercutting of exposed reinforcement bars shall only be as required to replace or repair damaged or corroded reinforcement. Repairs to existing reinforcement shall be according to the Special Provision for "Deck Slab Repair".

After hydro-scarification, the deck shall be vacuum cleaned in a timely manner before the water and debris are allowed to dry and re-solidify to the deck. The uses of alternative cleaning and debris removal methods to minimize driving heavy vacuum equipment over exposed deck reinforcement may be subject to the approval of the Engineer.

(2) Deck Patching. After bridge deck scarification, all designated patching, except as note below, shall be completed according to the Special Provision for "Deck Slab Repair". All full depth patching shall be completed prior to final surface preparation. When mechanical scarification is specified, partial depth patches may be fill with overlay material at the time of overlay placement.

All patches placed prior to overlay placement shall be struck off and then roughened with a suitable stiff bristled broom or wire brush to provide a rough texture designed to promote bonding of the overlay. Hand finishing of the patch surface shall be kept to a minimum to prevent overworking of the surface.

After scarification, the deck shall be thoroughly cleaned of broken concrete and other debris. The Engineer will sound the scarified deck and all remaining unsound areas will be marked for additional removal and/or repairs as applicable. If the bottom mat of reinforcement is exposed, that area shall be defined as a full depth repair.

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