



Illinois Department of Transportation

2300 South Dirksen Parkway / Springfield, Illinois / 62764

January 10, 2005

SUBJECT: FAS Route 1870
Project BRS-1870(105)
Section 03-00136-00-BR
Jackson County
Contract No. 99203
Item 68
January 21, 2005 Letting
Addendum (A)

TO PROSPECTIVE BIDDERS:

Due to clarify information necessary to revise the following:

Special Provisions: Page 3 & 4, TRAFFIC CONTROL PLAN (revised)

Special Provisions: POST-TENSIONING DECK BEAMS IN FIELD (2 pages added).

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.

Since the proposal sheets are displayed back to back, bidders are cautioned to exercise care when inserting revised and/or added special provisions into their proposals.

Please call 217-782-7806 if any of the above-described material is not included in this transmittal.

Very truly yours,

Michael L. Hine
Engineer of Design and Environment

A handwritten signature in black ink, appearing to read 'Ted B. Walschleger' followed by a small 'BE'.

By: Ted B. Walschleger
Engineer of Project Development
and Implementation

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TRAFFIC CONTROL PLAN

Description. Traffic control shall be in accordance with the applicable sections of the Standard Specifications for Road and Bridge Construction, the applicable guidelines contained in the Illinois Manual on Uniform Traffic Control Devices for Streets and Highways, these special provisions, and any special details and Highway Standards contained herein and in the plans and the Standard Specifications for Traffic Control Items.

Traffic. The road shall be closed to all traffic.

Special attention is called to Articles 107.09 and 701.03 of the Standard Specifications for Road and Bridge Construction and the following (1) Highway Standards; (2) Barricades; (3) Changeable Message Sign; and other special provisions relating to traffic control.

(1) Traffic Control and Protection Included in the Contract. Traffic control protection required under ALL the following standards will be considered included in the contract and will not be measured for payment.

- | | |
|-----------------|-----------------|
| Standard 701006 | Standard 701311 |
| Standard 701011 | Standard 701326 |
| Standard 701301 | Standard 702001 |
| Standard 701306 | Standard BLR 21 |

Traffic Control Standard 701006 shall be applied when the Contractor is performing off-road work between 2 feet outside the edge of pavement to 15 feet outside the edge of pavement. Typical application of this standard is guardrail construction.

Traffic Control Standard 701011 shall be applied where, at any time, any vehicle, equipment, workers or their activities require an intermittent or continuous moving operation on the shoulder. Traffic Control Standard 701301 shall be applied when the contractor is performing short time work operation, such as entrance work or cleaning up debris on or along the pavement.

Traffic Control Standard 701306 shall be applied where, at any time, any vehicle, equipment, men or their activities require an intermittent or continuous moving operation on the pavement where the average speed of movement is less than four miles per hour. Typical application of this standard would include placing of surface course.

Traffic Control Standard 701311 shall be applied where, at any time, any vehicle equipment, workers or their activities will require a continuous or intermittent moving operation where the average speed of movement is greater than 3 MPH, such as paint striping.

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Traffic Control Standard 701326 shall be applied where, at any time, any vehicle, equipment, workers or their activities will encroach on the pavement during widening operations.

(2) **Barricades**, to be erected by the Contractor, shall extend from shoulder break to shoulder break, Standard 702001, at each end of the construction limits or as directed by the Engineer at each end of the closed area. Two flashing lights shall be provided for each barricade located on the paved surface. Flashing lights shall be provided on both advance warning signs.

In accordance with Article 107.14 of the Standard Specifications, Type I or II barricades or vertical panels will be required at locations where construction operations result in a differential elevation between the edge of pavement and the shoulders exceeding 3 inches.

This protection shall be considered included in the contract and will not be measured for payment.

Construction signs will meet the "Standard Specification".

(3) **Changeable Message Sign**, to be supplied by the Contractor, shall be erected at locations designated herein and as approved by the Engineer. The signs shall be located at CH 7 / IL Rt 4 intersection and at CH 2 / CH 19 intersection in Randolph County.

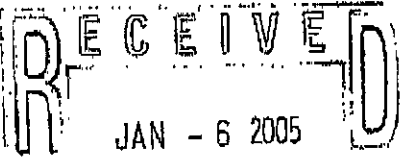
This work shall be in accordance with the Special Provisions for "Portable Changeable Message Sign" (Check Sheet #29) and the following.

Changeable message signs shall be placed at locations shown in the plans or directed by the Engineer. The message signs shall be placed outside traffic lanes but within the existing public right-of-way and shall not obstruct visibility or pedestrian movements.

The message signs shall be placed 14 days in advance of initial start-up. The message signs shall be relocated and re-programmed as project work and staging progresses or as directed by the Engineer.

Furnishing, placing and maintaining of Portable Changeable Message Signs shall not be paid for separately, but shall be considered included in the contract and will not be paid for separately.

The message boards shall remain in place and functioning at all times during the 14 days in advance of initial start-up and the thirty (30) calendar days allowed for the closure of County Highway 7 / Brick Plant Road.



DEPT. OF TRANSPORTATION
CARBONDALE/DISTRICT 9

Jackson County
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POST-TENSIONING DECK BEAMS IN FIELD

Description. This work shall consist of post-tensioning the transverse tie in precast prestressed concrete deck beams after their erection in the field.

Materials. The materials shall meet the requirements as listed below:

1. Thread bar -- ASTM A722 hot rolled and proof stressed, and ASTM A615.
2. Anchor Plates, Couplers and Nuts -- Shall exceed ACI 318 and Standard Specifications for Highway Bridges, 2002 Specifications.
3. Non-Shrink Grout -- Article 1024.01 Standard Specifications for Road and Bridge Construction, January 1, 2002.
4. Closed Cell Backer-Rod -- As manufactured by Sonneborn, Division Chem Rex Inc., 889 Valley Park Drive, Shakopee, MN 55379, or approved equal.
5. Styrofoam Seals -- 5 1/2" x 5 1/2" x 2".

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Equipment.

1. Jack -- Compact lightweight air or electric powered hydraulic containing a socket wrench and ratchet device in the jack nose to tighten the nuts as the thread bar elongates with a calibrated gage for read out of the applied force.
2. Portable Grout Mixer -- Capable of flushing out the voids to remove debris and mix and pump non-shrink grout in the tube voids.
3. Working Platform -- a platform mounted on the deck and capable of supporting two workers on the outside edge of the beam. This platform shall be used to support the workers and the jack.

Construction Requirements. The beams shall be erected with a 1 1/2" void between each beam making the deck 31'-1 1/2" wide for ten(10) 3'-0" wide beams. While erecting the beams, the Contractor shall place the 5 1/2" x 5 1/2" styrofoam-seal insuring the 3 1/2" hole is aligned with the transverse hole in the beam. The Contractor shall use an adhesive to maintain the position of the seal during the erection of the adjacent beam. After the beams are erected the Contractor shall install the 2 1/2" diameter backer rod between the beams and it shall be forced down to the bottom of the beams as shown. The backer rods are 7'-0" in length and the Contractor shall take precautions not to leave gaps between the rods.

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The thread bars shall be inserted in the outside beam and placed through the beams.

The 1 1/2" voids between the slabs shall be filled with non-shrink grout after the ends of the beams are sealed to prevent the grout from flowing on to the bearings. The grout shall be left to cure to a strength of not less than $f'c=5000$ psi. When the grout has cured the post tensioning may commence.

The Contractor shall position the work platform and mount the anchor plate nut and jack.

Initial stressing shall be done by having the bar be jacked to 33% of the transfer stress, and the nut tightened. The transfer load shall not exceed 120 kips. After the bar has been stressed to 33%, the jacking may commence for 100% of the transfer stress. The stressing shall be done in such a manner that the beams are not put in a torsional stress. No bearing anchors or any means to restrain the beams shall be done prior to the completion of the jacking operation.

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1-10-05 When the span has been post tensioned the thread bar shall be cut off to the point where the thread bar does not protrude farther than 2" back of the face of the beam. The voids for the nuts shall be grouted in the outside beams.

At the completion of the post-tensioning and prior to grouting pin; 1" backer rods shall be forced between the top of the cap and the bottom of the beam to completely seal the void under each beam. Once all voids are sealed, the pins shall be inserted and the entire voided area shall be pumped full of grout. Additionally, the void around the transverse tie rod shall be pumped full of grout. The Contractor shall pump from one end of the tie through the grout tube provided and shall continue until the grout flows out from the tube at the opposite end of the tie.

Basis of Payment. This work shall be considered incidental to the pay items of PRECAST PRESTRESSED CONCRETE DECK BEAMS, of the depth indicated, and no additional compensation will be allowed.

* Added 1-10-05