

Department of Transportation

Pierre Region Office 104 S. Garfield – Bldg. A Pierre, South Dakota 57501-5405 605/773-3464 FAX: 605/773-6215

March 4, 2016

RE: ADDENDUM No. 1 PROJECTS 090E-391 & 090W-391 PCN i42M & i42N Jackson & Lyman Counties Full Depth Concrete Repair – Interstate 90

TO WHOM IT MAY CONCERN:

The following addenda to the contract shall be inserted and made part of your proposal for the above referenced projects:

<u>COVER SHEET:</u> THIS SHEET <u>MUST</u> BE SIGNED, DATED AND SUBMITTED WITH YOUR BID. NOT SUBMITTING THIS COVER SHEET WILL RESULT IN YOUR BID BEING REJECTED.

PLANS: Discard "Sheet 6" in original plan set and replace with revised "Sheet 6" supplied in the attached addenda.

The "Reflectorized Sheeting Requirements for Temporary Traffic Control Devices" plan note has been updated.

Please verify that all required information is complete prior to mailing bidding documents.

Questions regarding this addendum may be directed to: Tony Ondricek at 605-773-3464 – Senior Region Design Engineer or Vance Martin at 605-773-3464 – Region Design Engineer

Respectfully,

DEPARTMENT OF TRANSPORTATION

John Forman Pierre Region Engineer

cc: J. Humphrey – Operations K. Lewedag – DBE Coordinator J. Koch – Pierre Region Materials D. Sherman, B. Norrid – Winner Area Project File

COVER SHEET

By signing this document the Contractor acknowledges receipt of Addendum No. 1 dated March 4, 2016 for the following project:

PROJECTS 090E-391 & 090W-391 PCN i42M & I42N Jackson & Lyman Counties Full Depth Concrete Repair – Interstate 90

This cover sheet <u>must</u> accompany the Contractors other bidding documents as defined in the original proposal.

Name of Company (print or type)

By_

Signature of Company Official

Notarization is not required on this document.

Date

Title

Reflectorized Sheeting Requirements for Temporary Traffic Control Devices

Delete the first paragraph of Section 984.1 and replace with the following:

Temporary traffic control devices, including signs, drums, cones, tubular markers, barricades, vertical panels, and direction indicator barricades shall be reflectorized with sheeting applied to a satisfactory backing. For all temporary traffic control warning signs, the reflective sheeting shall meet or exceed the standards of Type VII, Type VIII, Type IX, or Type XI as defined by AASHTO M 268 (ASTM D4956). For all other temporary traffic control signs, the reflective sheeting shall meet or exceed the standards of Type IV, Type V, Type VII, Type VIII, Type IX, or Type XI as defined by AASHTO M 268 (ASTM D4956). For barricades, vertical panels, and direction indicator barricades; the reflective sheeting shall meet or exceed the standards of Type III as defined by AASHTO M 268 (ASTM D4956). Round surfaced temporary traffic control devices including, but not limited to; drums, cones, and tubular markers shall be reflectorized with reflectorized sheeting meeting or exceeding the standards of Type IV as defined by AASHTO M 268 (ASTM D4956). All orange colored material shall be fluorescent.

TEMPORARY PAVEMENT MARKING

Temporary Pavement Marking shall be used on the tapers for the lane closures.

CONTINUOUSLY REINFORCED PCC PAVEMENT REPAIR

Two alternatives of Continuously Reinforced PCC Pavement Repair are available to the Contractor. One method is the fulldepth saw cut method, Alternate A. The other method, Alternate B, is a combination of full depth removal and partial removal utilizing jackhammers, leaving a portion of existing reinforcing steel intact.

Full Depth Saw Cut Method – Alternate A

The Contractor shall saw the in place concrete transversely full depth at the limits of the repair area. The area within the full depth saw cuts shall be removed by the lift out method or break out method. Damage to the face of in place concrete will not be permitted. The Contractor shall remove and dispose of the in place concrete and shape and compact the underlying base material prior to placement of concrete.

After removal of the in place concrete and repair of the gravel cushion subgrade, new reinforcing steel shall be installed according to the 24' Continuously Reinforced PCC Pavement Repair Area, Alternate A plan details.

No. 5 longitudinal bars shall be drilled in between every in place longitudinal steel bar. The No. 5 longitudinal bars shall overlap into the existing concrete 9" on both sides of the repair area. Drilled holes will be required and the additional longitudinal bars shall be inserted in accordance with the notes for Steel Bar Insertion. The additional longitudinal bars shall then be lap spliced with new No. 5 longitudinal bars across the length of the repair area.

Cost for the steel bars, epoxy resin adhesive, drilling of holes, applying the adhesive, inserting the steel bars into the drilled holes and all other items incidental to the insertion of the steel bars for the No. 5 longitudinal bars shall be incidental to the contract unit price per square yard for Continuously Reinforced PCC Pavement Repair.

No. 5 transverse bars shall be drilled in starting 6" from both ends of the repair area. The spacing shall then be 30" center to center throughout the length of the repair area. The transverse bars shall overlap 9" into the existing concrete. New No. 5 deformed steel bars shall be placed across the width of the repair area and lapped 16" minimum with the drilled in bars. The drilled holes and rebar shall be installed per the steel bar installation note.

Cost for the steel bars, epoxy resin adhesive, drilling of holes, applying the adhesive, inserting the steel bars into the drilled holes and all other items incidental to the insertion of the No. 5 steel transverse bars shall be incidental to the contract unit price per each for Insert Steel Bar in PCC Pavement.

Full Depth / Partial Removal Method – Alternate B

The transverse boundaries are sawn to a depth of one and one-half to two inches (1-1/2 to 2"). Location of the full-depth transverse cuts will be eighteen inches (18") inside the partial depth transverse cuts and at the longitudinal boundaries. The eighteen-inch (18") area between the saw cuts will be the lap area for reinforcing steel.

The area inside the full-depth saw cuts will be removed by the lift-out or breakout method. Beginning at the center of the repair area, a type of pavement breaking device, such as a hydro hammer or other heavy equipment, may be used to shatter the concrete. The use of a ballbreaker will not be permitted as the large shockwaves may damage the adjacent concrete or reinforcing steel. No heavy break-up will be allowed within two feet of the full-depth saw cuts. The broken concrete may be removed by backhoe or other approved methods.

Jackhammers used to remove concrete in the lap area shall not exceed 30 pounds, with 15-pound jackhammers to be used along vertical walls and around existing reinforcing steel. Bending or damaging the existing reinforcing steel will not be permitted. Reinforcing steel damaged during removal of the lap area will require lap area extension at the Contractor's expense.

New No. 5 longitudinal reinforcing steel shall be installed according to the 24' Continuously Reinforced PCC Pavement Repair Area, Alternate B plan details. The No. 5 longitudinal bars shall overlap the existing reinforcing steel 16" on both sides of the repair area.

No. 5 transverse bars shall be drilled in starting 6" from both ends of the repair area. The spacing shall then be 30" center to center throughout the length of the repair area. The transverse bars shall overlap 9" into the existing concrete. New No. 5 deformed steel bars shall be placed across the width of the repair area and lapped 16" minimum with the drilled in bars. The drilled holes and rebar shall be installed per the steel bar installation note.

Cost for the steel bars, epoxy resin adhesive, drilling of holes, applying the adhesive, inserting the steel bars into the drilled holes and all other items incidental to the insertion of the No. 5 steel transverse bars shall be incidental to the contract unit price per each for Insert Steel Bar in PCC Pavement.

STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	090E-391 & 090W-391	6	19

Revised 03-04-2016 JDH