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Michael W. Hancock, P.E. Secretary

September 15, 2011

CALL NO. 201

CONTRACT ID NO. 111039

ADDENDUM # 1

Subject: Clark-Montgomery Counties, 121GR11D039-IM

Letting September 23, 2011

(1) Revised - Traffic Control Plan - Page 53 of 205

(2) Revised - Replacing Expansion Dams - Pages 115-117 of 205

(3) Revised - Eliminating Transverse Joints - Pages 118-119(a) of 205

Proposal revisions are available at http://transportation.ky.gov/contract/.

If you have any questions, please contact us at 502-564-3500.

Sincerely,

Ryan Griffith

Director

Division of Construction Procurement

RG:ks

Enclosures



Traffic Control Plan Clark & Montgomery Counties I-64 Page 4 of 8

PHASE I

Shift traffic to the inside lanes and shoulders and close the outside lanes to traffic. Install temporary barrier wall along the bridge over Prewitt-Grassy Lick Road (see traffic control typical sections). Perform all bridge repairs and barrier retrofit for inside shoulders and driving lane. Perform all bridge and barrier retrofit for outside shoulders and driving lane. Mill 1.5 inches and place 1.25 inches of surface pavement on outside shoulders and outside driving lanes. Perform all roadside work during Phase II. All ramp work will be completed during this phase.

PHASE II

Shift traffic to the outside lanes and shoulders and close the inside lanes to traffic. Shift temporary barrier wall at the approached to the bridge over Prewitt-Grassy Lick Road (see traffic control typical sections). Perform all bridge repairs and barrier retrofit for inside shoulders and driving lane. Mill 1.5 inches of surface pavement and place 1.25 inches of surface pavement for inside shoulders and driving lane. Perform all median work during this phase.

PHASE IA & IIA – TRAFFIC COUNTING INDUCTANCE LOOPS

After asphalt pavement milling operations are completed install traffic counting inductance loops. Close one lane, in the direction of work only, using drums and flashing arrows in accordance with the Standard Drawings and these notes. Lane closures will be permitted only during hours of actual operations. Lane closures will be shortened, reduced to a shoulder closure, or removed as appropriate, when the Contractor does not have active operations requiring a lane closure.

PHASE III - PERMANENT STRIPING

After all other work is completed, place permanent striping. Mobile operations may be utilized. In addition to newly paved areas, place permanent striping on bridge decks within the project limits.

LANE CLOSURES

Limit the lengths of lane closures to only that needed for actual operations in accordance with the phasing specified herein, or as directed by the Engineer up to a maximum of four miles long with a minimum of one mile between successive lane closures. Contrary to section 112, lane closures will **NOT** be measured for payment, but are considered incidental to the lump sum bid item for "Maintain and Control Traffic."

SPECIAL NOTE FOR REPLACING EXPANSION DAMS WITH ARMORED EDGES FOR CONCRETE BRIDGES

I. DESCRIPTION

Perform all work in accordance with the Kentucky Transportation Cabinet, Department of Highway's 2008 Standard Specifications for Road and Bridge Construction and applicable Supplemental Specifications, the Standard Drawings, this Note, and the attached detail drawings. Section references are to the Standard Specifications.

This work consists of the following:

- (1) Furnish all labor, materials, tools, and equipment
- (2) Remove existing concrete and expansion devices
- (3) Install armored edges and new concrete as specified and in accordance with the attached detail drawings
- (4) Install new joint seals
- (5) Maintain and control traffic
- (6) Any other work specified as part of this contract.

II. MATERIALS

- **A. Class "M" Concrete**. Use either "M1" or "M2". See Section 601.
- **B. Structural Steel**. Use new, commercial grade steel suitable for welding. The Engineer will base acceptance on visual inspection. See manufacturer's specifications for Armored Edges on Strip Seal Expansion Dams.
- **C. Stud Anchors**. The armored edge stud anchors are ³/₄" x 6" embedded stud shear connectors conforming to ASTM A108, Grade 1015 (Nelson Studs or equal).
- **D. Steel Reinforcement Epoxy Coated**. Use Grade 60. See Section 602.
- **E.** Epoxy Bond Coat. See Section 511.
- **F. Preformed Expansion Joint Strip Seals**. Provide 4" Seals, See Section 807.03.03.

III. EQUIPMENT

- **A.** Hammer. Provide Power driven Hammers lighter than nominal 45 lb. class.
- **B. Sawing Equipment.** Sawing equipment shall be a concrete saw capable of sawing concrete to the specified depth.
- **C. Hydraulic Impact Equipment.** Hydraulic Impact/Skid Steer Type Equipment with a maximum rated striking Energy of 360 ft-lbs are permitted only in areas of concrete removal more than 6 inches away from boundaries of surface areas to remain in service. The Contractor is to provide data information to the engineer on the equipment they wish to utilize to ensure compliance with this note.

IV. CONSTRUCTION

- A. Remove Existing Materials. Remove the existing expansion dam and specified areas of concrete as shown on the attached sketches. Remove debris and/or expansion joint filler as directed by the Engineer. When deteriorated concrete adjacent to the limits of removal is encountered, extend the removal area as directed by the Engineer. Dispose of all removed material entirely away from the job site. This work is incidental to the contract unit price for "Expansion Joint Replacement". Clean and leave all existing steel reinforcement encountered in place. Damaged steel reinforcement will be repaired/replaced as directed by the Engineer at no additional cost to the department.
- **B. Place New Concrete and Armored Edges**. After all specified existing materials have been removed; place new armored edges to match the grade of the proposed overlay (See attached detail drawings). Place the new Class "M" concrete to the proposed grade and finish with broom strokes drawn transversely from curb to curb (See attached detail drawings).

Blast clean all areas of existing concrete and structural steel to come in contact with new concrete until free of all laitance and deleterious substances immediately prior to the placement of the Class "M" Concrete. The surface areas of existing concrete to come in contact with the new Class "M" Concrete are to be coated with an epoxy bond coat immediately prior to placing new concrete in accordance with Section 511. The interfaces of the new and old concrete shall be as nearly vertical and horizontal as possible.

C. Additional Steel Reinforcement. Furnish for this work, as directed by the Engineer, steel reinforcement as shown in the attached detail drawings. All steel reinforcement shall be epoxy coated in accordance with Section 811.10. Splice these bars to the existing reinforcement in the deck in the areas of removed concrete as shown in the attached detail drawings or as directed by the Engineer. Ensure that all exposed steel reinforcement is tied in accordance with Section 602.03.04 prior to pouring the new Class "M" concrete. Field cutting and bending is permitted. Do not place any additional steel reinforcement above the height of the top row of Nelson studs on the armored edges.

In addition to the reinforcing bars shown in the detail drawings, provide an extra 40 linear feet of epoxy coated steel reinforcing bars ½" by 20-ft lengths minimum. These bars are to be placed as directed by the Engineer in areas with highly corroded existing reinforcement (section loss greater than 20%). Field cutting and bending is permitted. Deliver unused bars to the local maintenance facility.

Reinforcement and bar splices are incidental to the contract unit price for "Expansion Joint Replacement-4 IN" or "Replace Armored Edge".

- **D. Preformed Expansion Joint Strip Seals.** Place the strip seal in one continuous, unbroken length. Place joints as recommended by the manufacturer and in accordance with Section 609.03.04 (E).
- **E. Shop Plans.** Shop Plans will <u>not</u> be required. The contractor is responsible for obtaining field measurements and supplying properly sized materials to complete the work.

V. MEASUREMENT

A. Expansion Joint Replacement – 4 IN. The Department will measure the quantity in linear feet as the horizontal distance between the inside face of the barriers along the centerline of the joint (as shown on the detail drawings).

VI. PAYMENT

A. Expansion Joint Replacement – 4 IN. Payment at the contract unit price per linear foot is full compensation for removing specified existing materials, furnishing and installing the new armored edges, concrete, reinforcement, preformed expansion joint strip seal, and all incidental items necessary to complete the work within the specified pay limits as specified by this note and as shown on the attached detail drawings.

The Department will consider payment as full compensation for all work required by this note and the attached detail drawings.

SPECIAL NOTE FOR ELIMINATING TRANSVERSE JOINTS ON BRIDGES

I. DESCRIPTION

Perform all work in accordance with the Kentucky Transportation Cabinet, Department of Highway's 2008 Standard Specifications for Road and Bridge Construction and applicable Supplemental Specifications, the Standard Drawings, this Note, and the attached detail drawings. Section references are to the Standard Specifications.

This work consists of the following:

- (1) Furnish all labor, materials, tools, and equipment
- (2) Remove existing concrete to eliminate the transverse joint
- (3) Install additional steel reinforcement, new armored edge and new concrete as specified and in accordance with the attached detail drawings
- (4) Maintain and control traffic
- (5) Any other work specified as part of this contract.

II. MATERIALS

- **A. Class "M" Concrete.** Use either "M1" or "M2". See Section 601.
- B. Steel Reinforcement Epoxy Coated. Use Grade 60. See Section 602.
- **C. Epoxy Bond Coat.** See Section 511.

III. EQUIPMENT

- **A. Hammer.** Provide Power driven Hammers lighter than nominal 45 lb. class.
- **B. Sawing Equipment.** Sawing equipment shall be a concrete saw capable of sawing concrete to the specified depth.
- **C. Hydraulic Impact Equipment.** Hydraulic Impact/Skid Steer Type Equipment with a maximum rated striking Energy of 360 ft-lbs are permitted only in areas of concrete removal more than 6 inches away from boundaries of surface areas to remain in service. The Contractor is to provide data information to the engineer on the equipment they wish to utilize to ensure compliance with this note.

IV. CONSTRUCTION

A. Remove Existing Materials. Remove the existing transverse joints, joint filler, and specified areas of concrete as shown on the attached detail drawings or as directed by the Engineer. When deteriorated concrete adjacent to the limits of removal is encountered, extend the removal area as directed by the Engineer. Dispose of all removed material entirely away from the job site. This work is incidental to the contract unit price for "Eliminate Transverse Joint".

Clean and leave all existing steel reinforcement encountered in place. Damaged steel reinforcement will be repaired/replaced as directed by the Engineer at no additional cost to the Department.

B. Place New Concrete and Armored Edges. After all specified existing materials have been removed; place new armored edges to match the proposed grade (See attached detail drawings). At bridge ends, place the new Class "M" concrete to the proposed grade and finish with broom strokes drawn transversely from gutterline to gutterline. For eliminating joints over piers, place the new Class "M" Concrete to the scarified grade and finish it to receive the new overlay. On the curb and/or brush block, place the new concrete to the original grade shown on the detail drawings and finish to match the existing surface.

Blast clean all areas of existing concrete and structural steel to come in contact with new concrete until free of all laitance and deleterious substances immediately prior to the placement of the new concrete. The surface areas of existing concrete to come in contact with the new concrete are to be coated with an epoxy bond coat immediately prior to placing new concrete in accordance with Section 511. The interfaces of the new and old concrete shall be as nearly vertical and horizontal as possible.

C. Steel Reinforcement. Furnish for this work steel reinforcement as shown in the attached detail drawings. All steel reinforcement shall be epoxy coated in accordance with Section 811.10. Splice these bars to the existing reinforcement in the deck and backwall in the areas of removed concrete as shown on the attached detail drawings or directed by the Engineer. Ensure that all exposed steel reinforcement is tied in accordance with Section 602.03.04 prior to pouring the new concrete. In addition to the reinforcing bars shown in the detail drawings, provide an extra 60 linear feet of epoxy coated steel reinforcing bars ½" by 20-ft lengths minimum. These bars are to be placed as directed by the Engineer in areas with highly corroded existing reinforcement (section loss greater than 20%). Field cutting and bending is permitted. Deliver unused bars to the local maintenance facility.

Reinforcement, bar splices, and mechanical connectors are incidental to the contract unit price for "Eliminate Transverse Joint".

D. Shop Plans. Shop Plans will <u>not</u> be required. The contractor is responsible for obtaining field measurements and supplying properly sized materials to complete the work.

V. MEASUREMENT

A. Eliminate Transverse Joint. The Department will measure the quantity in linear feet as the horizontal distance between the inside face of the barriers along the centerline of the joint (as shown on the detail drawings).

VI. PAYMENT

A. Eliminate Transverse Joint. Payment at the contract unit price per linear foot is full compensation for removing and disposing of the specified existing materials; furnishing and installing the concrete, steel reinforcement and armored edge; and all incidental items necessary to complete the work within the specified pay limits as specified by this note and as shown on the attached detail drawings.

The Department will consider payment as full compensation for all work required by this note and the attached detail drawings.