Steven L. Beshear
Governor

TRANSPORTATION CABINET
Frankfort, Kentucky 40622
www.transportation.ky.gov/

Michael W. Hancock, P.E.
Secretary

July 12, 2011

CALL NO. 328
CONTRACT ID NO. 112969
ADDENDUM # 1

Subject: Harlan County, FE02 048 0038 B00012
Letting July 15, 2011

(1)Revised - Special Note for Replacing Expansion Dams - Pages 11-13 of 68
(2)Revised - Special Note for Eliminating Transverse Joints - Pages 14-15 of 68

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

Ryan Griffith
Director
Division of Construction Procurement

RG:ks
Enclosures

SPECIAL NOTE FOR REPLACING EXPANSION DAMS AND/OR INSTALLING ARMORED EDGES FOR CONCRETE ON BRIDGES

1. 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 device(s) and/or bridge ends; (3) Install armored edges and new concrete as specified and in accordance with the attached detail drawings; (4) Maintain and control traffic; and (5) Any other work specified as part of this contract.

2. 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 Standard Drawing BJE-001, current edition.

C. Stud Anchors. The armored edge stud anchors are ¾" x 6" embedded stud shear connectors conforming to ASTM A108, Grade 1015 (Nelson Studs or equal).

D. Steel Reinforcement. Use Grade 60. See Section 602.

E. Epoxy Bond Coat. See Section 511.

3. 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 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.

4. CONSTRUCTION.

A. Remove Existing Materials. Remove existing Expansion Dam, Bridge End, Armored Edges and specified areas of concrete as shown on the attached sketches. Remove debris and/or expansion joint filler as directed by the Engineer. . 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. Dispose of all removed material entirely away from the job site. This work is incidental to the contract unit price for "Expansion Joint Replacement" or "Armored Edge for Concrete".

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 or to match the original grade (See attached detail drawings). Place the new Class "M" concrete to the scarified grade and finish to receive the new overlay or

place the new Class “M” concrete to the original grade and finish with broom strokes drawn transversely from curb to curb.

All new structural steel shall be cleaned and painted in accordance with requirements of Section 607.03.23, except that surfaces to come in contact with concrete are not to be painted.

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 replacement, as directed by the Engineer, 1300 linear feet of #4 steel reinforcing bars in 20’ lengths. Place these bars in areas deemed by the Engineer to require additional reinforcement. 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. Ensure that all exposed steel reinforcement is tied in accordance with Section 602.03.04 prior to pouring the new Class “M” concrete. Deliver unused bars to the Local County Maintenance Barn. Payment will be made in accordance with Section 602.

D. Stage Construction. Installation of concrete and armored edges in two (or more if specified) stages is necessary. Join the armored edges at or near the centerline of the roadway or lane line, field weld and grind smooth.

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.

IV MEASUREMENT.

A. Armored Edge for Concrete. The Department will measure the quantity in linear feet from gutterline to gutterline along the face of the bridge end.

B. Steel Reinforcement. See Section 602.

V. PAYMENT.

A. Armored Edge for Concrete. 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 and all incidental items necessary to complete the work (except the overlay material) within the specified pay limits as specified by this note and as shown on the attached detail drawings.

B. Steel Reinforcement. See Section 602.

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SPECIAL NOTE FOR ELIMINATING TRANSVERSE JOINTS ON BRIDGES

This Special Note will apply where indicated on the plans or in the proposal. Section references herein are to the Department's 2008 Standard Specifications for Road and Bridge Construction.

1.0. DESCRIPTION. Remove existing concrete and existing joint material to eliminate the transverse joint. Install additional reinforcing steel and place concrete.

2.0 MATERIALS.

A. Class "M" Concrete. Use either "M1" or "M2". See Section 601.

B. Steel Reinforcement. Use Grade 60. See Section 602.

C. Epoxy Bond Coat. See Section 511.

3.0 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.

4.0 CONSTRUCTION.

A. Remove Existing Materials. Remove the existing transverse joints, joint filler, and specified areas of concrete as shown on the plans or as directed by the Engineer. 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.
Dispose of all removed material entirely away from the job site. This work is incidental to the contract unit price for "Eliminate Transverse Joint".

B. Additional Steel Reinforcement. Furnish for this work steel reinforcing bars as shown on the plans. Splice these bars to the existing longitudinal reinforcement in the deck and curb/sidewalk in the areas of removed concrete to tie the slabs together as shown on the plans. Ensure that all exposed steel reinforcement is tied in accordance with Section 602.03.04 prior to pouring the new Class "M" concrete.

C. Place New Concrete. 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.
Place new Class "M" Concrete to the specified grade and finish to receive the new overlay or as shown on the plans. On the sidewalk and curb, place the new concrete to original grade and finish to match the existing curb/sidewalk.

5.0 MEASUREMENT.

A. Eliminate Transverse Joint. The Department will measure the quantity in linear feet from plinth to plinth perpendicular to the centerline of the bridge.

B. Steel Reinforcement. See Section 602.

6.0 PAYMENT.

A. Eliminate Transverse Joint. Payment at the contract unit price per linear foot is full compensation for furnishing equipment, labor, tools and materials needed to complete removal and disposal of the specified existing materials, cleaning and straighting of existing steel reinforcement, furnishing and installing the concrete, and all incidental items necessary to complete the work (except the overlay material if specified elsewhere in the contract) within the specified pay limits as indicated on the drawings.

B. Steel Reinforcement. See Section 602.