



TRANSPORTATION CABINET

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

Steven L. Beshear
Governor

Michael W. Hancock, P.E.
Secretary

November 19, 2014

CALL NO. 201
CONTRACT ID NO. 141291
ADDENDUM # 5

Subject: Fayette County, 121GR14D091-NHPP & JL04
Letting November 21, 2014

(1)Added - Special Notes - Pages 1-10 of 10

Proposal revisions are available at <http://transportation.ky.gov/Construction-Procurement/>.

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

Sincerely,

A handwritten signature in blue ink that reads "Diana Castle Radcliffe".

Diana Castle Radcliffe
Director
Division of Construction Procurement

DR:ks
Enclosures



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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 Standard Specifications for Road and Bridge Construction and applicable Supplemental Specifications, the Standard Drawings (Current Editions), 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) Install new joint seals (where required); (5) Maintain and control traffic; and (6) 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 $\frac{3}{4}$ " 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.
 - F. Neoprene Strip Seals.** See attached detail drawings and Section 807.
- 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 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. 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, 800 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. Preformed Neoprene Joint Seal.** Place the preformed joint seal in one continuous, unbroken length. Place neoprene strip seals as recommended by the manufacturer and in accordance with Section 609.03.04 except that shop drawings will not be required.
- F. Approach Pavement Repair.** The Contractor shall repair any and all damage to the approach pavement due to this construction. A new asphalt surface wedge for all approaches to each structure in this project shall be placed and compacted to the satisfaction of the Engineer prior to allowing traffic back onto the structure after each section of the joint is replaced. The limits of approach pavement repair shall be out to out of bridge curbs. The length shall be up to three feet from the end of bridge or additional asphalt damaged by the Contractor as determined by the Engineer. No additional payment will be allowed for this work, as it will be considered incidental to the pay item "Armored Edge for Concrete".
- G. Lane Striping** Land striping shall be replaced where disturbed with like materials approved by the cabinet. (Two yellow lines in center) as directed by the engineer. All cost shall be incidental to the pay item for Expansion Joint Replace-4 In. Approximate quantity is 14 LF.

H. Shop Plans. Shop plans will not be required. The Contractor is responsible for obtaining field measurements and supplying properly sized materials to complete the work. New material that is unsuitable because of variation in the existing structure shall be replaced at the Contractor's expense.

IV MEASUREMENT.

- A. Expansion Joint Replace – 4 In.** The Department will measure the quantity in linear feet from gutter line to gutter line along the centerline of the joint.
- B. Armored Edge for Concrete.** The Department will measure the quantity in linear feet from gutter line to gutter line along the face of the bridge end.
- C. Steel Reinforcement.** See Section 602.

V. PAYMENT.

- A. Expansion Joint Replace – 4 In. (03298).** 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, neoprene strip seal, 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. Armored Edge for Concrete (03299).** 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.
- C. Steel Reinforcement (08150).** See Section 602.

VI. LOCATION.

See attached detailed drawing "Layout Sheet" for joint locations.

Residual lead paint may still be on bridge. The Contractor is advised to take all necessary protective measures including worker safety and environmental regulations. The Department will not consider any claims based on residual lead paint.

**SPECIAL NOTE FOR ELIMINATING TRANSVERSE JOINTS ON BRIDGES
(050B00019N)**

1. DESCRIPTION. Perform all work in accordance with the Kentucky Transportation Cabinet, Department of Highway's Standard Specifications for Road and Bridge Construction and applicable Supplemental Specifications, the Standard Drawings (Current Editions), 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; (3) Install new concrete and steel reinforcement; (4) Maintain and control traffic; and (5) Any other work specified as part of this contract.

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

II. 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.

III. EQUIPMENT.

A. Hammer. See Section 606.02.10 B.

B. Sawing Equipment. See Section 606.02.10 C.

C. Hydraulic Impact Equipment. See Section 606.02.10 D.

IV. 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.
- D. Lane Striping.** Lane striping shall be replaced where disturbed with like materials approved by the cabinet. (Two yellow lines in center) as directed by the engineer. All cost shall be incidental to the pay item for Eliminate Transverse Joint. Approximate quantity is 88 LF.

V. 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.

VI. PAYMENT.

- A. Eliminate Transverse Joint (03300).** 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 straightening 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 (08150).** See Section 602.

Residual lead paint may still be on bridge. The Contractor is advised to take all necessary protective measures including worker safety and environmental regulations. The Department will not consider any claims based on residual lead paint.

GENERAL NOTE FOR MAINTAIN AND CONTROL TRAFFIC

All lane closures on this project shall be in accordance with Kentucky Department of Highways Standard Drawings **No. TTC-100, TTC 110 and the FHWA Manual for Uniform Traffic Control Devices (Current Editions)** unless otherwise specified. Lane closures should be used only when absolutely necessary and kept to the shortest duration possible in order to minimize disruption to the traveling public. No work will be conducted over unprotected traffic at any location. At the discretion of the Engineer, lane closures may be restricted on holiday weekends.

The contractor shall be required to submit in writing, to the department, his complete work schedule 14 days prior to the Pre-Construction Conference. The contractor shall be required to coordinate his efforts with those of any other contractor in the construction area so as to eliminate any lane closures which conflict with this traffic note.

In the event it becomes necessary to make emergency repairs at this project by state forces or by other outside contractors, the (painting) contractor shall agree to alter his work pattern as directed by the engineer so as not to interfere with the emergency work.

The contractor shall be required to furnish all traffic control devices whenever his operations endanger or interfere with vehicular traffic as determined by the engineer. The contractor shall furnish any additional traffic control devices necessary to protect traffic and his workmen. Any costs associated with the added traffic control devices (including arrow boards) shall be incidental to the contract lump sum amount for "maintain and control traffic."

Placement of all devices for lane closures shall start and proceed in the direction of flow of traffic. Removal of devices shall start at the end of the construction area and proceed toward oncoming traffic. The contractor shall provide for the installation of all necessary traffic control devices before beginning work and their immediate removal as soon as work is suspended or completed. During the fully operational periods, when no lane closures are permitted, all equipment shall be totally removed from the job site. Traffic control signs shall be removed or covered (if left in a curb lane).

The contractor's vehicles shall always move with and not across or against the flow of traffic. Vehicles shall enter or leave work areas in a manner that will not be hazardous to or interfere with normal roadway traffic. Vehicles shall not park or stop except within designated work areas.

Personal vehicles shall not be permitted to park within the state right-of-way. The contractor's vehicles shall be prohibited from crossing the roadway and all pedestrian movement of the contractor's personnel on the roadway shall be limited to within the closed work area.

Any lane or shoulder closure shall include the use of a TMA placed between oncoming traffic and equipment or vehicles.

The Engineer may elect to use Variable Message Boards when necessary.

Payment

Payment of the contract lump sum amount for "maintain and control traffic" shall be full compensation for all items necessary to maintain and control traffic on this project. All traffic control items shall remain the property of the contractor when the work is complete.

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Maintain one usable 12 foot lane. Flagging or traffic signals shall be used. If traffic signals are used the Contractor shall use flagging to minimize impact on school bus traffic when school is in session. The Contractor shall be responsible for establishing the dates and times when school bus traffic will impact the job site. In the event of an emergency the contractor shall be prepared to remove the lane closure to maintain both 12 foot lanes of traffic.

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Maintain one usable 11 foot lane. Flagging or traffic signals shall be used. If traffic signals are used the Contractor shall use flagging to minimize impact on school bus traffic when school is in session. The Contractor shall be responsible for establishing the dates and times when school bus traffic will impact the job site.

**SPECIAL NOTE REGARDING POSSIBLE
ASBESTOS CONTAINING MATERIALS**

Any available information regarding possible asbestos containing materials (ACM) on or within bridge structures to be affected by the work has been included in the bid documents. If not included in the bid documents, the Department will provide, as soon as possible, additional information to the successful bidder for inclusion with the Kentucky Division for Air Quality Notification of Asbestos Abatement/Demolition/Renovation form (DEP 7036). If there are no documents stating otherwise, the bidders should assume there are no asbestos containing materials that will in any way affect the work.

SPECIAL NOTE FOR BEARING REPLACEMENT

- I. DESCRIPTION.** Perform all work in accordance with the Kentucky Transportation Cabinet, Department of Highway's 2012 Standard Specifications for Road and Bridge Construction and applicable Supplemental Specifications, the Standard Drawings, this Note, and the attached detailed drawings for Bearing Replacement. Section references are to the Standard Specifications. This work consists of the following: (1) Furnish all labor, materials as specified, tools, and equipment; (2) Bearing Replacement (3) Any other work specified as part of this contract.
- II. MATERIALS.**
- A. Structural Steel**
ASTM Material, A709 Grade 50 Structural Steel Plates and Shapes. Minimum structural steel strength ~ 50,000 psi.
- B. Elastomeric Bearing Pads**
Elastomeric bearing shall be fabricated to the design and dimension shown on the attached detailed drawings and to AASHTO LRFD Bridge Construction Specification, Section 18. Ensure bearings are low temperature Grade 3 with durometer hardness of 50 and subjected to the load testing requirements corresponding to Design Method A.
- C. Paint**
See Special Note see section 607.
- III. CONSTRUCTION.**
- A. Bearing Replacement.** Complete bearing replacement as specified in this special note and shown in the attached detailed drawings. Each bearing shall be replace one at a time with the no traffic on the lane above.
- B. Remove Existing Bearing.** Remove existing bearings as shown on the attached detailed drawings. Dispose of all removed material entirely away from the job site. This work is incidental to the contract unit price for "Bearing Replacement".
- C. Jack and Support.** Jack and Support the beams under full dead and live loads while replacing the bearings. Jacking Loads = 115 Tons (DL + LL) per beam line. A Jack capacity of 195 Tons or greater per beam line shall be required. The use of a locking mechanism on each jack is required. The jacking operation is to be performed in such a manner that the vertical position of the girders is to remain in approximately the same relative position throughout the jacking process. A maximum of 1/4" relative difference in position is allowed between any of the girders. The contractor shall repair any damage caused by the jacking operations to the satisfaction of the Engineer and at no cost to the Department The Contractor shall submit his jack and support plan to the Engineer for approval. This plan must be prepared, signed and stamped by a by a licensed Kentucky professional engineer.

- D. Cleaning and Painting.** All existing faying surfaces where new steel is to be installed shall be cleaned and receive the prime coat as specified in Special Note for Surface Preparation and Paint Application. Level of cleaning shall be to an **SSPC-SP 15** (Commercial Grade Power Tool Cleaning). All Power tools shall be equipped with vacuum shrouds and fitted with HEPA filters at their air exhausts. Maintain and operate all vacuum shrouded power tools to collect generated debris. All new structural steel shall receive shop surface preparation and shop applied prime coating as specified in Special Note for Surface Preparation and Paint Application. Necessary touch up/repair of the shop applied prime coat on the new steel may be performed in the field. Intermediate and Finish coatings specified shall be field applied. All items necessary to complete painting as specified in this note shall be considered to the unit price bid "Each" for Bearing Replacement.
- E. Verifying Field Conditions.** The Contractor shall field verify all plate and shape dimensions, bolt patterns and locations before ordering any material. New material that is unsuitable due to variation in existing structure shall be replaced at the Contractors expense.
- F. Damage to the structure.** The Contractor shall bear all responsibility and expense for any and all damage to the structure during the repair work, even to the removal and replacement of a fallen span, should the fallen span result from the Contractors actions.
- G. Location.** See bridge plans.

IV. MEASUREMENT.

Bearing Replacement. The Department will measure the quantity for "Each" repair.

V. PAYMENT.

Bearing Replacement (21969NN). Payment at the contract unit price for "Each" is full compensation for furnishing and installing all material as specified.

Residual lead paint may still be on bridge. The Contractor is advised to take all necessary protective measures including worker safety and environmental regulations when performing surface preparation and other work. The Department will not consider any claims based on residual lead paint.