



TRANSPORTATION CABINET

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

Steven L. Beshear
Governor

Michael W. Hancock, P.E.
Secretary

September 22, 2015

CALL NO. 311
CONTRACT ID NO. 152915
ADDENDUM # 2

Subject: Nelson County, FE02 090 9002 B00015L,R
Letting September 25, 2015

- (1) Revised - Bid Items - Page 74 of 74
- (2) Added - Notes - Pages 1-3 of 3

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 cursive script that reads "Rachel Mills".

Rachel Mills, P.E.
Director
Division of Construction Procurement

RM:ks
Enclosures



An Equal Opportunity Employer M/F/D

PROPOSAL BID ITEMS

Report Date 9/22/15

Page 1 of 1

Section: 0001 - BRIDGE

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0010	02003		RELOCATE TEMP CONC BARRIER	1,600.00	LF		\$	
0020	02562		TEMPORARY SIGNS	298.00	SQFT		\$	
0030	02650		MAINTAIN & CONTROL TRAFFIC APPLIES TO 090B00015L	1.00	LS		\$	
0040	02650		MAINTAIN & CONTROL TRAFFIC APPLIES TO 090B00015R	1.00	LS		\$	
0050	02653		LANE CLOSURE	4.00	EACH		\$	
0060	02671		PORTABLE CHANGEABLE MESSAGE SIGN	2.00	EACH		\$	
0070	02775		ARROW PANEL	2.00	EACH		\$	
0080	02898		RELOCATE CRASH CUSHION	2.00	EACH		\$	
0090	02900		INSTALL TEMP CRASH CUSHION	2.00	EACH		\$	
0100	03171		CONCRETE BARRIER WALL TYPE 9T	1,600.00	LF		\$	
0110	03298		EXPAN JOINT REPLACE 4 IN	180.00	LF		\$	
0120	03299		ARMORED EDGE FOR CONCRETE	120.00	LF		\$	
0130	03300		ELIMINATE TRANSVERSE JOINT	198.00	LF		\$	
0140	03304		BRIDGE OVERLAY APPROACH PAVEMENT	666.00	SQYD		\$	
0150	06514		PAVE STRIPING-PERM PAINT-4 IN	2,632.00	LF		\$	
0160	06549		PAVE STRIPING-TEMP REM TAPE-B	4,000.00	LF		\$	
0170	06550		PAVE STRIPING-TEMP REM TAPE-W	4,000.00	LF		\$	
0180	06551		PAVE STRIPING-TEMP REM TAPE-Y	4,000.00	LF		\$	
0190	08150		STEEL REINFORCEMENT	2,605.20	LB		\$	
0200	08504		EPOXY SAND SLURRY	688.80	SQYD		\$	
0210	08510		REM EPOXY BIT FOREIGN OVERLAY	3,100.00	SQYD		\$	
0220	08526		CONC CLASS M FULL DEPTH PATCH	30.00	CUYD		\$	
0230	08534		CONCRETE OVERLAY-LATEX	129.20	CUYD		\$	
0240	08549		BLAST CLEANING	3,788.00	SQYD		\$	
0241	22146EN		CONCRETE PATCHING REPAIR (ADDED: 9-22-15)	500.00	SQFT		\$	
0250	24094EC		PARTIAL DEPTH PATCHING	86.20	CUYD		\$	

Section: 0002 - DEMOBILIZATION

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0260	02569		DEMOBILIZATION	1.00	LS		\$	

NOTES FOR BRIDGE PIER AND SOFFIT CONCRETE PATCHING

These Notes or designated portions thereof, apply where so indicated on the plans, proposals or bidding instruction.

- I. DESCRIPTION.** Perform all work in accordance with the Department's 2012 Standard Specifications, and applicable Supplemental Specifications, the attached sketches, and these Notes. Section references are to the Standard Specifications.

This work consists of: (1) Furnish all labor, materials, tools, and equipment; (2) Remove existing spalled/delaminated concrete; (3) Prepare the existing surface for concrete patching; (4) Place hook fasteners and welded wire fabric over surfaces to be repaired (where applicable); (5) Apply concrete patching as specified by this note and as shown on the attached detail drawings; (6) Finish and cure the new Concrete Patches; (7) Maintain & control traffic; and, (8) Any other work specified as part of this contract.

II. MATERIALS.

- A. Concrete.** Approved Concrete Product for Vertical and Overhead Repair Patch.
B. Steel Reinforcement. Use Grade 60. See Section 602
C. Welded Steel Wire Fabric (WWF). Conform to Section 811
D. Hook Fasteners. Use commercial grade galvanized hook fasteners. Minimum 3/16" diameter.

III. CONSTRUCTION.

- A. Concrete Removal and Preparation.** The Contractor, as directed by the Engineer shall locate and remove all loose, spalled, deteriorated and delaminated concrete. Sounding shall be used to locate delaminated areas. Care shall be exercised not to damage areas of sound concrete or reinforcing steel during concrete removal operations. Unless specifically *directed by the Engineer*, depth of removal shall not exceed 6 inches. Concrete removal shall be in accordance with a sequence approved by the Engineer.

Concrete removal shall be accomplished by chipping with hand picks, chisels or light duty pneumatic or electric chipping hammers (not to exceed 15 lbs.). If sound concrete is encountered before existing reinforcing steel is exposed, the surface shall be prepared and repaired without further removal of the concrete. When corroded reinforcing steel is exposed, concrete removal shall continue until there is a minimum 3/4 inch clearance around the exposed, corroded reinforcing bar. Care shall be taken to not damage bond to adjacent non-exposed reinforcing steel during concrete removal processes.

The perimeter of all areas where concrete is removed shall be tapered at an approximately 45° angle, except that the outer edges of all chipped areas shall be saw cut to minimum depth of 3/4 inch to prevent featheredging unless otherwise approved by the Engineer.

After all deteriorated concrete has been removed; the repair surface to receive concrete patching shall be prepared by abrasive blast cleaning. Abrasive blast

cleaning shall remove all fractured surface concrete and all traces of any unsound material or contaminants such as oil, grease, dirt, slurry, or any materials which could interfere with the bond of freshly placed concrete.

The Contractor shall dispose all removed material off State Right Of Way in an approved site.

- B. Steel Reinforcement.** All corroded reinforcing steel exposed during concrete removal shall have corrosion products removed by abrasive grit blasting or wire brush whichever is more appropriate. Furnish for replacement, as directed by the Engineer, additional linear feet of steel reinforcing bars ½” diameter by 20-foot lengths. Place these bars in areas deemed by the Engineer to require additional reinforcement. Field cutting and bending is permitted. Deliver unused bars to the nearest County Maintenance Barn. Payment will be made in accordance with Section 602.

Reinforcing steel displaying deep pitting or loss of more than 20 percent of cross-sectional area shall be removed and replaced. Such bars shall be placed in accordance with the recommendations of ACI 506R, Sections 5.4 and 5.5. In particular, bars shall not be bundled in lapped splices, but shall be placed such that the minimum spacing around each bar is three times the maximum aggregate size to allow for proper encapsulation with concrete patching.

Intersecting reinforcing bars shall be tightly secured to each other using tie wire and adequately supported to minimize movement during concrete placement.

Welded wire fabric (WWF) shall be provided as shown on the attached sketches and at each repair area larger than 1 square foot if the depth of the repair exceeds 3 inches from the original dimension of the repaired member. Sheets of adjoining WWF shall be lapped by at least one and one-half spaces at all intersections, in both directions, and be securely fastened. WWF fabric shall be supported no closer than ½ inch to the prepared concrete surface and shall have a minimum concrete cover of 1.5 inches.

WWF shall be fastened to preset anchors on a grid not more than 12 inches square. Large knots of tie wire which could result in sand pockets and voids during patching shall be avoided.

- C. Hook Fasteners.** Hook fasteners shall be positioned at the spacing as stated above or as directed by the Engineer. Any given area shall have a minimum of four anchors. The WWF shall not move or deform excessively during concrete patching. Maximum hook fastener spacing shall not exceed 2 feet on a grid pattern over the entire repair area.

Hook fasteners shall be of commercial grade galvanized steel with a minimum diameter of 3/16”. They may be mechanically set or grouted, as approved by the Engineer.

The Department will randomly select hook fasteners to be tested to verify pullout force is sufficient. If any anchors fail to meet the minimum acceptable pullout value, corrective measures shall be taken by the Contractor and further testing will be conducted.

- D. Concrete Patching.** Place and finish the new concrete for the patching area in accordance with the manufacturer's recommendations, as shown on the attached detail drawings, or as directed by the Engineer. The Engineer shall approve the Contractor's method of placing and consolidating the concrete prior to the beginning of this operation.
- E. Curing.** On completion of finishing operation, patching concrete shall immediately be prevented from drying out and cracking by fogging, wetting, and/or any appropriate method approved by the Engineer. Curing shall continue for duration recommended by the product manufacturer.

Each Contractor submitting a bid for this work shall make a thorough inspection of the site prior to submitting his bid and shall thoroughly familiarize himself with existing conditions so that the work can be expeditiously performed after a contract is awarded. Submission of a bid will be considered evidence of this inspection having been made. Any claims resulting from site conditions will not be honored by the Department. Quantities given are approximate. The quantity for "Concrete Patching Repair" shall be bid with the contingency that quantities may be increased, decreased, or eliminated by the Engineer. Dispose of all removed material entirely away from the job site as approved by the Engineer. This work is incidental to the contract unit price for "Concrete Patching Repair".

IV. MEASUREMENT

- A. Concrete Patching.** The Department will measure the quantity per square feet of each area restored.
- B. Steel Reinforcement.** See Section 602.
- C. Welded Wire Fabric & Hook Fasteners.** Welded Wire Fabric and Hook Fasteners will not be measured for payment, but shall be considered incidental to "Concrete Patching Repair".

V. PAYMENT

- A. Concrete Patching Repair.** Payment at the contract unit price per square feet is full compensation for the following: (1) Furnish all labor, materials, tools, equipment; (2) preparation of specified bents including removing and disposing of specified existing materials; (3) place, finish and cure new concrete patches; and (4) all incidentals necessary to complete the work as specified by this note and as shown on the attached detail drawings.
- B. Steel Reinforcement.** See Section 602.

The Department will consider payment as full compensation for all work required by these notes and detail drawings.