Matthew G. Bevin
Governor

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

Greg Thomas
Secretary

November 14, 2016

CALL NO. 203
CONTRACT ID NO. 162286
ADDENDUM # 2

Subject: Bell County, 007GR16P110-NHPP & FD05
Letting November 18, 2016

(1) Delete – Special Note – Pages 17-22 of 142
(2) Revised – Material Summary – Page 50 of 142
(3) Revised – Bid Items – Pages 141-142 of 142
(4) Added – Special Note – 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,

Rachel Mills

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

RM:ks
Enclosures

MATERIAL SUMMARY

CONTRACT ID: 162286 **007GR16P110-NHPP & FD05** **MP007025E1601**

PINEVILLE-MIDDLESBORO ROAD (US 25E) FROM NORTH END OF YELLOW CREEK BRIDGE EXTENDING NORTH TO SOUTH END OF CLEAR CREEK LAKE BRIDGE PAVEMENT (WITH ALTERNATES), A DISTANCE OF 5.79 MILES.

Project Line No	Bid Code	DESCRIPTION	Quantity	Unit
0005	02562	TEMPORARY SIGNS	376.00	SQFT
0010	02650	MAINTAIN & CONTROL TRAFFIC - (US 25E)	1.00	LS
0015	02671	PORTABLE CHANGEABLE MESSAGE SIGN	2.00	EACH
0020	02775	ARROW PANEL	2.00	EACH
0025	06510	PAVE STRIPING-TEMP PAINT-4 IN	20,000.00	LF
0030	06514	PAVE STRIPING-PERM PAINT-4 IN	78,190.00	LF
0035	06574	PAVE MARKING-THERMO CURV ARROW	72.00	EACH
0040	06578	PAVE MARKING-THERMO MERGE ARROW	2.00	EACH
0045	23875NC	REMOVE THERMOPLASTIC ARROWS	74.00	EACH
0050	24489EC	INLAID PAVEMENT MARKER	16.00	EACH
0055	24880EC	REMOVE PAVEMENT MARKER	740.00	EACH
0060	20814EC	MICRO SURFACING-SURFACE COURSE	132,763.00	SQYD
0065	21652EN	MICRO SURFACING-LEVELING COURSE	11,452.00	SQYD
0070	00190	LEVELING & WEDGING PG64-22	465.00	TON
0075	02676	MOBILIZATION FOR MILL & TEXT - (US 25E)	1.00	LS
0080	02677	ASPHALT PAVE MILLING & TEXTURING	20.00	TON
0085	23307EC	CL3 ASPH SURF NO.4B PG64-22	4,625.00	TON
0090	02569	DEMOBILIZATION	1.00	LS

CONTRACT ID: 162286 **007GR16P110-NHPP & FD05** **MP00730851601**

FOUR MILE-POSSUM HOLLOW ROAD (KY 3085) FROM KY 2014 EXTENDING NORTH TO KNOX COUNTY LINE PAVEMENT (WITH ALTERNATES), A DISTANCE OF 2.03 MILES.

Project Line No	Bid Code	DESCRIPTION	Quantity	Unit
0005	00103	ASPHALT SEAL COAT - (CSS-1H OR SS-1H)	2.00	TON
0010	02562	TEMPORARY SIGNS	160.00	SQFT
0015	02650	MAINTAIN & CONTROL TRAFFIC - (KY 3085)	1.00	LS
0020	06510	PAVE STRIPING-TEMP PAINT-4 IN	85,536.00	LF
0025	06514	PAVE STRIPING-PERM PAINT-4 IN	42,768.00	LF
0040	02569	DEMOBILIZATION	1.00	LS
0045	00083	CRUSHED AGGREGATE SIZE NO 8 - (ADDED: 11-14-16)	564.00	TON
0050	00103	ASPHALT SEAL COAT - (CRS-2P OR CRS-2L) (ADDED: 11-14-16)	96.00	TON

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PROPOSAL BID ITEMS

Report Date 11/14/16

Section: 0001 - PAVING

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0005	00083		CRUSHED AGGREGATE SIZE NO 8 (ADDED: 11-14-16)	564.00	TON		$	
0010	00103		ASPHALT SEAL COAT (CSS-1H OR SS-1H)	2.00	TON		$	
0015	00103		ASPHALT SEAL COAT (CRS-2P OR CRS-2L) (ADDED: 11-14-16)	96.00	TON		$	
0020	02562		TEMPORARY SIGNS	160.00	SQFT		$	
0030	02650		MAINTAIN & CONTROL TRAFFIC (KY 3085)	1.00	LS		$	
0040	06510		PAVE STRIPING-TEMP PAINT-4 IN	85,536.00	LF		$	
0050	06514		PAVE STRIPING-PERM PAINT-4 IN	42,768.00	LF		$	

Section: 0002 - MICROSURFACE

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0080	20814EC		MICRO SURFACING-SURFACE COURSE	132,763.00	SQYD		$	
0090	21652EN		MICRO SURFACING-LEVELING COURSE	11,452.00	SQYD		$	

Section: 0003 - ULTRATHIN

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0100	00190		LEVELING & WEDGING PG64-22	465.00	TON		$	
0110	02676		MOBILIZATION FOR MILL & TEXT (US 25E)	1.00	LS		$	
0120	02677		ASPHALT PAVE MILLING & TEXTURING	20.00	TON		$	
0130	23307EC		CL3 ASPH SURF NO.4B PG64-22	4,625.00	TON		$	

Section: 0004 - ROADWAY

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0140	02562		TEMPORARY SIGNS	376.00	SQFT		$	
0150	02650		MAINTAIN & CONTROL TRAFFIC (US 25E)	1.00	LS		$	
0160	02671		PORTABLE CHANGEABLE MESSAGE SIGN	2.00	EACH		$	
0170	02775		ARROW PANEL	2.00	EACH		$	
0180	06510		PAVE STRIPING-TEMP PAINT-4 IN	20,000.00	LF		$	
0190	06514		PAVE STRIPING-PERM PAINT-4 IN	78,190.00	LF		$	
0200	06574		PAVE MARKING-THERMO CURV ARROW	72.00	EACH		$	
0210	06578		PAVE MARKING-THERMO MERGE ARROW	2.00	EACH		$	
0220	23875NC		REMOVE THERMOPLASTIC ARROWS	74.00	EACH		$	
0230	24489EC		INLAID PAVEMENT MARKER	16.00	EACH		$	
0240	24880EC		REMOVE PAVEMENT MARKER	740.00	EACH		$	

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PROPOSAL BID ITEMS

Report Date 11/14/16

Section: 0005 - DEMOBILIZATION

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0250	02569		DEMOBILIZATION	1.00	LS		$	

SPECIAL NOTE FOR ASPHALT CHIP SEAL

1. DESCRIPTION. Construct an asphalt chip seal consisting of one or more applications each of asphalt material and cover aggregate.

2. MATERIAL AND EQUIPMENT.

Asphalt Material. Furnish undiluted CRS-2P or CRS-2L polymer modified emulsion that conforms to **AASHTO M 316** and the requirements **Section 806.05.**

Aggregate. A cleaned washed aggregate cover material type D number 8 or 9m shall meet material requirements that conform to **Section 805,** as applicable.

Equipment. Provide, and keep on the project at all times, an accurate thermometer, hand brooms, and other small tools and equipment essential for completion of the work.

The asphalt distributor for the application of the emulsion shall have full circulation spray bar that is adjustable to at least 16 feet wide in 2 feet increments and capable of heating and circulating the emulsion simultaneously, conforming to subsection 406.02.05. It must have computerized rate control for adjusting and controlling the application from the cab within 0.01 gallons per square yard increments. The distributor shall also be equipped with a volume measuring device and a thermometer for measuring the emulsion temperature in the tank.

The aggregate spreader shall be a continuous mechanical feed, self-propelled aggregate spreader with front discharge. Ensure the spreader can evenly distribute the aggregate from the transporting vehicle directly onto the fresh asphalt material in smooth, uniform layers, independent of the forward speed. Ensure that the spreader is capable of being filled and moved without discharging aggregate.

The roller shall be a Pneumatic tire roller weighing at least 5 tons.

The power broom shall be a mechanically powered kick-broom or vacuum type broom.

3. CONSTRUCTION.

Weather Limitations. Application of chip seal shall only be constructed when ambient temperature is 50 degrees F and rising. CRS-2P should not be applied when the air temperature is below 60°F and falling. Do not construct when the ambient temperature within the preceding 24 hours has been 35 degrees F or lower, except with the Engineer's written permission. Do not proceed with construction if rain is expected in a minimum period of 24 hours, nor when rain is impending within 2 hours after completion of the chip seal. If an unexpected shower arises during operations, the asphalt distributor should be shut off immediately and placement of aggregate continued until all asphalt has been covered.

Preparation of Mixture. Submit a complete mix design a minimum of 14 days prior to construction. Mix design shall be prepared by an approved laboratory, to verify the compatibility of the aggregate, asphalt emulsion and other additives. Perform the mix design with the same materials that will be used on the project.

Surface Preparation. Prior to operation, the contractor shall remove all existing thermoplastic striping, thermoplastic legends, and raised markers within application limits. All surfaces intended for application shall be thoroughly cleaned of all vegetation, loose material, dirt, or other objectionable material immediately before application of emulsion using a mechanical sweeper and wire hand brooms, when necessary. Clean the edges of the

surface providing a full and uniformly clean width of roadway. Where mud or earth exists, remove it in advance and allow surface to thoroughly dry before applying emulsion. Mowing or removal of shoulder vegetation and or brush may be necessary for proper application.

If cracks cannot be adequately filled by emulsion, fill with proper asphalt material or hot pour joint sealer conforming to subsection 807.03.01. If applicable, apply cover aggregate before applying chip seal application.

Application Rates of Materials.

Properties	Minimum	Maximum
Application rate of emulsion, gallons/sq yard*	0.22	0.35
Emulsion temperature, F	110	185
Application rate of aggregate, lb/sy*	16	22

*****Engineer may adjust application rates due to existing conditions

4. APPLICATION.

Application of Emulsion. Heat and maintain emulsion between 110 and 185 degrees F during application. Polymer modified emulsion shall be applied when air temperature is at least 50 degrees F and rising and a minimum surface temperature of 70 degrees F.

Emulsion shall be applied using a pressure distributor in a uniform, continuous quantity at specified rates.

Keep the nozzles of the spray bar clean at all times. Immediately make any streaked areas uniform by use of a hand hose equipped with a nozzle.

Do not apply the asphalt material farther in advance of the spreading of the aggregate than can be covered directly by the aggregate immediately available at the site of work.

When the chip seal treatment is constructed in half-widths, provide complete coverage by overlapping the 2 applications approximately 4 inches along centerline.

Prevent spotting or discoloring curbs, headwalls, and other structures. When such discolorations occur, remove them at no expense to KYTC.

Make joints utilizing an approved method.

Aggregate. Aggregate cover material shall be cleaned and washed to remove dirt and dust, ensuring appropriate adhesion with emulsion. Due to this process, aggregate may be damp during application. Prior to breaking of the emulsion, aggregate shall be continuously and evenly spread with the proper equipment at the specified rates. Spreading equipment shall not contact the asphalt material before it is covered with aggregate. Precautions should be taken not to exceed the designated rate by more than 5 percent. Use hand brooms to correct any irregularities.

Rolling. A self-propelled pneumatic tire roller shall be used for the required rolling of the aggregate. This shall be done immediately following the spreading of aggregate. Operate the rollers parallel to the centerline in a manner preventing the dislodgment of newly applied aggregate. Rolling should proceed from the outer edge to the center, with each pass overlapping the previous by one-half. Cover the entire surface with at least 3 passes or more when the engineer directs.

Sweeping. Power sweep/vacuum the completed application to remove all excess aggregate after the asphalt material has cured sufficiently. Sweeping/vacuuming must be completed prior to any striping and/or before the end of the application day. Little to no aggregate shall be remaining on entrance/exit aprons of intersecting crossroads

and driveways. A second sweeping may be required following the initial application day. Prior to a applying a fog seal or other of surface treatment over the chip seal, it may be opened to traffic for an amount of time specified in the contract. This may be necessary to ensure maximum aggregate retention.

5. MEASUREMENT.

When an authorized adjustment is made, KYTC will measure quantities up to 5 percent in excess of the designated application rate for payment. KYTC will not measure quantities exceeding the designated application rate by more than 5 percent for payment.

Asphalt Material. KYTC will measure the quantity in tons according to **Section 109.**

Aggregate. KYTC will measure the quantity in tons according to **Section 109.**

6. PAYMENT.

KYTC will make payment for the completed and accepted quantities under the following:

Pay Item	Pay Unit
Asphalt Seal Coat (CRS-2P or CRS-2L)	Ton
Crushed Aggregate	Ton

KYTC will consider payment as full compensation for all work required under this section.

SPECIAL NOTE FOR FOG SEAL

The fog seal shall consist of either CSS-1h or SS-1h at an application rate of 0.10-0.15 gallons/SY. The recommended emulsions are to be used in accordance with Section 806 of the Standard Specifications for Road and Bridge Construction, current editions. The application shall be a minimum of 7 to 10 calendar days after the chip/scrub seal application, or as directed by the Engineer.