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

Steven L. Beshear
Governor

Michael W. Hancock, P.E.
Secretary

October 24, 2013

CALL NO. 101
CONTRACT ID NO. 131216
ADDENDUM # 3

Subject: Bullitt County, NHPP IM 0655 (109)
Letting October 25, 2013

(1) Revised - General Summary - Pages 76-77 of 321
(2) Revised - Special Notes - Pages 116 & 119 of 321
(3) Revised - Notes Applicable to Project - Page 121 of 321
(4) Added - Special Note - Pages 256(a)-256(g) of 321
(5) Revised - Bid Items - Pages 319-321 of 321

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

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

Sincerely,

Ryan Griffith

Ryan Griffith
Acting Director
Division of Construction Procurement

RG:ks
Enclosures

I-65 PAVEMENT REHABILITATION
BULLITT COUNTY
ITEM NUMBER: 5-2071.00
GENERAL SUMMARY

ITEM NUMBER	ITEM		QUANTITY	UNIT
1	DGA BASE	(1)	6821	TON
78	CRUSHED AGGREGATE SIZE NO. 2	(2)	500	TON
190	LEVEL & WEDGING PG64-22	(3)	200	TON
214	CL3 ASPH BASE 1.00D PG64-22	(4)	4118	TON
219	CL4 ASPH BASE 1.00D PG76-22		310	TON
342	CL4 ASPH SURF 0.38A PG76-22		706	TON
1000	PERFORATED PIPE-4 IN	(2)	500	LIN FT
1010	NON-PERFORATED PIPE-4 IN	(2)	50	LIN FT
1020	PERF PIPE HEADWALL TYPE 1- 4 IN	(2)	5	EACH
1985	DELINEATOR FOR BARRIER - YELLOW		3660	EACH
2003	RELOCATE TEMP CONC BARRIER	(5)	140000	LIN FT
2071	JPC PAVEMENT - 11 IN	(6)	258414	SQ YD
2058	REMOVE PCC PAVEMENT	(6)	258414	SQ YD
2110	PARTIAL DEPTH PATCHING	(7)	300	CU FT
2200	ROADWAY EXCAVATION	(16)	50	CU YD
2363	GUARDRAIL CONNECTOR TO BRIDGE END TY A		8	EACH
2367	GUARDRAIL END TREATMENT TYPE 1		13	EACH
2369	GUARDRAIL END TREATMENT TYPE 2A		2	EACH
2373	GUARDRAIL END TREATMENT TYPE 3		1	EACH
2381	REMOVE GUARDRAIL		1350	LIN FT
2391	GUARDRAIL END TREATMENT TYPE 4A		25	EACH
2562	SIGNS	(8)	10000	SQ FT
2568	MOBILIZATION		1	LUMP SUM
2569	DEMOBILIZATION		1	LUMP SUM
2570	PROJECT CPM SCHEDULE		1	LUMP SUM
2599	FABRIC - GEOTEXTILE TYPE IV	(1)	500	SQ YD
2650	MAINTAIN AND CONTROL TRAFFIC		1	LUMP SUM
2671	PORTABLE CHANGEABLE MESSAGE SIGN	(8)	16	EACH
2676	MOBILIZATION FOR MILL & TEXT		1	LS
2677	ASPHALT PAVE MILLING & TEXTURING		1016	TON
2775	ARROW PANEL	(8)	12	EACH
8903	CRASH CUSHION TYPE VI CLASS BT TL3	(9)	3	EACH
2898	RELOCATE CRASH CUSHION	(10)	13	EACH
3171	CONCRETE BARRIER WALL TYPE 9T	(11)	43000	LIN FT
3240	BASE FAILURE REPAIR	(12)	750	SQ YD
6401	FLEXIBLE DELINEATOR POST-M/W		2195	EACH
6404	FLEXIBLE DELINEATOR POST-M/Y		1400	EACH
6511	PAVEMENT STRIPING-TEMP PAINT - 6 INCH		1080000	LIN FT
6592	PAVEMENT MARKER TYPE V-B W/R		1900	EACH
6593	PAVEMENT MARKER TYPE V-B Y/R		806	EACH
10020NS	FUEL ADJUSTMENT		16109	DOLLAR
10030NS	ASPHALT ADJUSTMENT		9601	DOLLAR
20259ED	TEMPORARY MEDIAN CROSSOVER	(13)	8	EACH
20432ES112	REMOVE CRASH CUSHION		1	EACH
21802EN	STEEL W BEAM GUARDRAIL S FACE (7 FT POSTS)		2537.5	LIN FT
23143ED	KPDES PERMIT AND TEMPORARY EROSION CONTROL		1	LUMP SUM
23147EN	HIGH TENSION CABLE-ROPE	(14)	8000	LIN FT
23148EN	END ANCHOR	(15)	8	EACH

I-65 PAVEMENT REHABILITATION
BULLITT COUNTY
ITEM NUMBER: 5-2071.00
GENERAL SUMMARY

ITEM NUMBER	ITEM	QUANTITY	UNIT
23979EC	CRASH CUSHION TYPE VI CLASS C TL3	1	EACH
24189ER	DURABLE WATERBORNE MARKING-6 IN W	354800	LIN FT
24190ER	DURABLE WATERBORNE MARKING-6 IN Y	243460	LIN FT
24191ER	DURABLE WATERBORNE MARKING-12 IN W	21170	LIN FT

(1) Item includes 500 tons for use in full depth JPC replacement sections, 2100 tons for guardrail end treatment replacement and 4221 tons for temporary median crossovers as directed by the engineer. Depth of DGA at median crossovers shall be 8 inches.

(2) For use in full depth JPC replacement sections requiring subgrade drainage and transverse drains as directed by the engineer.

(3) To be used for pavement patching during MOT as directed by the engineer.

(4) To be used at temporary median crossovers. Pavement is to be placed at a depth of 8 inches (two 4 inch lifts)

(5) Includes 9,000 linear feet for relocation to median crossovers when cable barrier is not functional and crossovers are not being utilized. Also includes 131,000 linear feet for barrier wall relocation for MOT.

(6) Includes an additional 10% for continuing pavement deterioration.

(7) Fibercrete, or other material approved by the engineer, shall be used for partial depth patching.

(8) The quantity for these items includes initial placement. Any relocation required will not be paid for directly, but will be considered incidental to maintain and control traffic.

(9) Quantity includes 1 crash cushion for MOT and 2 crash cushions for temporary wall to be used at cable barrier openings.

(10) Quantity includes 7 relocations for MOT and 6 relocations for crash cushions to be used at cable barrier openings.

(11) Quantity includes 40000 linear feet for MOT and 3000 linear feet to be used at cable barrier openings when median crossovers are in place but are not being utilized, as directed by the engineer.

(12) Quantity shall be used at select asphalt bridge approaches at the discretion of the engineer.

(13) All items needed to construct temporary crossovers, including but not limited to, temporary drainage, excavation, and or embankment are incidental to pay item "Temporary median crossover" with the exception of DGA, Asphalt, and temporary striping (which will be paid for separately). See MOT plans for locations. All locations shall be field verified and approved by the engineer prior to construction. All medians must be restored to existing condition when crossover is no longer in use.

(14) Quantity to be used for replacement of cable barrier system in areas through the temporary crossover sections at the direction of the engineer. The high tension cable system includes all hardware, post, concrete pad (construct any concrete pads per the section 505 of the Standard Specs for concrete sidewalks), cables, labor, and incidentals within the end anchors. The proposed high tension cable system must match the manufacturer's system currently in the field at each removal location.

(15) The existing cable barrier system must be removed through the limits of median crossover locations. Cutting, tying, re-tensioning, and any hardware needed to reattach cable at both ends of temporary crossovers is incidental to construction of new end anchors. Removal locations and anchor installation shall be as directed by the engineer. ***NOTE**- If cable barrier is removed and crossover is not being utilized the contractor shall construct temporary barrier wall (with crash cushion) through the limits of the removed cable barrier system as directed by the engineer.

(16) To be used at the discretion of the engineer to undercut wet areas encountered during the removal of PCC pavement.

NOTE: Quantities from all roadway summaries have been carried over and included in this General Summary

III. CONSTRUCTION METHODS

A. **Maintain and Control Traffic.** See Traffic Control Plan.

B. **Site Preparation.** Be responsible for all site preparation. Do not disturb existing signs. This item will include, but is not limited to, incidental excavation and backfilling; removal of all obstructions or any other items; disposal of materials; sweeping and removal of debris; shoulder preparation and restoration; temporary and permanent erosion and pollution control; and all incidentals. Site preparation will be only as approved or directed by the Engineer. Other than the bid items listed, no direct payment will be made for site preparation, but will be incidental to the other items of work.

C. **Concrete Pavement Removal and Replacement.** Except as specified in these notes, perform full depth concrete pavement removal and replacement in accordance with the Special Note for Full Depth Concrete Pavement Repair. Approximate removal locations are listed in the proposal. The Engineer will determine actual locations at the time of construction, and may add to the listed repairs if deemed necessary. Remove pavement for full depth repairs by a saw cut and lift method without disturbing the underlying base or damaging the adjacent pavement remaining in place. Do not "pre-saw" in advance until ready for slab removal within more than 24 to 48 hours of removal. (The Engineer will not allow the slab to be sawed and then to remain under traffic for more than 48 hours after sawing.) Pre-saw only in locations directed by the Engineer. Do not hammer or break pavement by other means to facilitate removal. Do not oversaw into existing JPC Pavement not intended to be removed. The original nominal depth of the mainline JPC pavement is 11 inches. However, the finished grade will be transitioned to match the adjacent pavement to remain in place. Rideability requirements will be based on the 10’ straightedge method. See section 501.03.13 in the specifications for concrete finishing. Gang drills, capable of drilling a minimum of four holes at a time, are required for dowel, hook bolt, and tie bar placement, unless otherwise approved by the Engineer.

It is intended to not disturb the underlying soil; however, a quantity of DGA, Excavation, Crushed Aggregate #2, Geotextile Fabric Type IV, 4" Perforated pipe and 4" Non- perforated pipe (to drain the aggregate) and Perforated Pipe Headwalls is included for undercutting very poor, soft, wet soils - to be used sparingly and only as directed by the Engineer. Undercutting will be measured as Roadway Excavation.

Use of a maturity meter is permitted to verify that JPC is ready for traffic, but is considered incidental to 11” JPC Pavement.

D. **Partial Depth Patching.** Except as specified in these notes, perform Partial Depth Patching in accordance with Special Note for Partial Depth Concrete Pavement Repair. The Engineer will determine the removal locations. It is intended that the Polymer Patching material be used to fill these corner breaks without grinding and preparing the hole. The Engineer will determine actual locations at the time of construction. This material may be Diamond Ground.

L. **Fabric Geotextile Type IV.** Fabric Geotextile Type IV will be measured per square yard and is to be used to wrap crushed aggregate No. 2 for stabilization after slab removal.

M. **Undercutting.** Undercutting existing PCC pavement will be measured by cubic yards of excavation.

V. BASIS OF PAYMENT

No direct payment will be made other than for the bid items listed. All other items required to complete the construction will be incidental to the bid items listed. Existing signs damaged by the Contractor will be replaced by the Contractor at his expense.

A. **Maintain and Control Traffic.** See Traffic Control Plan.

B. **Site Preparation.** Other than the bid items listed, no direct payment will be allowed for site preparation, but will be incidental to the other items of work.

C. **Dense Grade Aggregate.** See Section 302 of the Standard Specifications.

D. **Remove JPC Pavement.** See Special Note for Full Depth Concrete Pavement Repair.

E. **JPC Pavement -11"** See Special Note for Full Depth Concrete Pavement Repair. No additional payment will be made for any additional concrete required due to a depth beyond 11".

F. **Raised Pavement Markers and Permanent Striping.** See Traffic Control Plan.

MUTCD manual.

7. Removed guardrail shall be delivered to the Guardrail and Sign Recycling Center in Frankfort and shall be coordinated with the Resident Engineer. A “Guardrail Delivery and Verification Sheet” has been included in this proposal and must be completed for verification of the components delivered.

8. Existing pavement markers in the mainline concrete shall be covered during times when traffic is shifted and the existing markers are not on the appropriate edge line for the actual traffic configuration. Covering of the existing pavement markers will be considered incidental to the lump sum bid item for “Maintain and Control Traffic”.

9. The existing edge drain system is to be preserved. Care should be taken when the deteriorated concrete is removed and replaced. Additionally, there is a quantity of perforated pipe, non-perforated pipe and pipe headwalls set-up to be used at the engineer's discretion. Payment will be based on the actual quantities measured in the field by the Engineer.

10. DGA, flowable fill, crushed aggregate No. 2 and geotextile fabric used to backfill and any excavation required for placement of the proposed perforated and non-perforated pipe trench will be incidental to the price of the 4" perforated and 4" non-perforated pipe and no additional pay will be permitted.

11. Non-perforated pipe will be backfilled with flowable fill. Backfill of the non-perforated pipe with flowable fill will be incidental to the bid item "Non-perforated Pipe — 4 Inch".

12. All pipe connections in the edge drain system will be rigid.

13. Edge drains damaged during placement of additional outlets will be replaced at the contractor's expense.

14. Existing median u-turn locations within the project limits are not to be disturbed with this project.

15. All asphalt joints shall be resealed with joint/crack sealer as directed by the engineer. This item shall be incidental to asphalt surface pavement quantities.

16. A quantity of perforated pipe, headwalls, and crushed aggregate #2 has been included for transverse drains at cut and fill transitions as needed throughout the project. These locations shall be located and verified by the field engineer.

SPECIAL NOTE FOR INSTALLATION AND MAINTENANCE TRAINING

1. Provide installation training by the manufacturer of the system during construction.

   A. During the installation of the proposed cable barrier system, provide on-site field instruction on installation procedures covering all aspects of the system installation, including grading, line post installation, wire rope or cable installation and tensioning, and terminal or anchor installation. The scheduling and location of this training shall be approved by the Engineer.

   B. Provide the training for a maximum of 10 participants, to include the following as may apply:
      - Contractor (prime)
      - Installation Contractor (sub)
      - KYTC personnel (Construction, Maintenance, Traffic Safety and Highway Design)

2. The installation contractor must have personnel on site at all times during the installation of the system that have been trained by the manufacturer.

3. Provide maintenance training by the manufacturer of the system prior to the closing out of the project.

   A. Provide a minimum of two (2) hours of classroom instruction on the maintenance and repair of the system. This training shall be provided in a location central to the project and the local KYTC district office. The scheduling and location of this training shall be approved by the Engineer.

   B. Provide a minimum of two (2) hours of on-site field instruction on the maintenance and repair of the system.

   C. Provide the training as required for a maximum of 30 participants, to include the following:

      - KYTC personnel (Construction, Maintenance, Traffic Safety and Highway Design)
      - FHWA representative when system installed on federal aid projects
      - Those invited by the KYTC, which may include law enforcement agencies and emergency response representatives

4. The required training will be **incidental to the contract**.

SPECIAL NOTES FOR
HTC MEDIAN BARRIER INSTALLATION AND LAYOUT

PAGE 1 OF 2

The HTC Median Barrier will meet or exceed the specifications documented in the ***SPECIAL NOTE FOR HIGH TENSION CABLE-ROPE MEDIAN BARRIER***. The Contractor may choose any manufacturer of high tension cable-rope so long as their system meets or exceeds specifications documented in the ***SPECIAL NOTE FOR HIGH TENSION CABLE-ROPE MEDIAN BARRIER***. The Contractor shall select and install only one manufacturer's high tension cable barrier system for the entire project. Terminal sections and high tension cable barrier shall be produced by the same manufacturer. A listing of high tension cable-rope manufacturers and their products may be found on the Federal Highway Administration's Safety website for Roadside Hardware Guidance:

(http://safety.fhwa.dot.gov/roadway_dept/policy_guide/road_hardware/).

The Contractor shall provide the following documentation to the Engineer a minimum of 14 days prior to installation of the system:

a) A copy of the appropriate FHWA Acceptance Letters (from NCHRP Report 350 testing) for the HTC system, including one for TL-4 on 6H:1V slopes, TL-3 on 4H:1V, and TL-3 for the terminals/end anchorages.

b) Two copies of the manufacturer's product brochure, specifications, and installation and maintenance manuals.

c) Certification signed and stamped by a Professional Engineer licensed in the Commonwealth of Kentucky stating that the final design of the system meets the requirements of the contract documents.

d) Five copies of the proposed system layout plans clearly depicting installation details, including existing planimetric features (guardrail, safety terminals, edges of pavement/shoulder, ditch line, structures, etc.) and proposed HTC system features (safety terminals, intermediate line posts, and cable-rope location).

e) One copy of the design drawings and calculations for the safety terminal and intermediate line post foundations for the soil conditions on the project. Design drawings and calculations shall be stamped by a Professional Engineer licensed in the Commonwealth of Kentucky.

Review and acceptance of the proposed design (as shown in the documentation listed above) must occur before the Contractor proceeds with installation. The review will be completed in 14 days.

SPECIAL NOTES FOR
HTC MEDIAN BARRIER INSTALLATION AND LAYOUT

PAGE 2 OF 2

When developing the proposed system layout, the Contractor and Manufacturer will adhere to the following guidance:

a) Maintain a minimum of 9' between the HTC system and the edge of traveled way. Allowances will be made to the offset when the barrier passes by a permanent structure such as a bridge pier or sign truss pedestal. The Engineer will approve any variances to the 9' offset.

b) The HTC system must remain a minimum of 9' up from the median ditch line.

c) Legal median u-turn crossovers should remain open.

d) Where possible, shield anchors behind existing roadside safety hardware (i.e. guardrail end treatments, bridge-ends, etc.)

Contrary to Section 111 of the *KYTC Standard Specifications for Road and Bridge Construction (current edition)* no Value Engineering or proposal to modify the specifications of the high tension cable median barrier will be accepted on this project.

The concrete pad mow strip will be constructed per the Section 505 of the *KYTC Standard Specifications for Road and Bridge Construction (current edition)* for concrete sidewalks.

SPECIAL NOTE FOR
HIGH TENSION CABLE-ROPE MEDIAN BARRIER

Sheet 1 of 4

DESCRIPTION This work shall consist of furnishing and installing a high tension cable-rope HTC median barrier with terminals/end anchorages as recommended by the Manufacturer, as directed by the Engineer, and in accordance with the requirements of this special note.

GENERAL REQUIREMENTS The HTC median barrier system shall be a four cable-rope system that meets the National Cooperative Highway Research Program (NCHRP) Report 350, Test Level 4 testing for 6H:1V slopes and be accepted by FHWA as such. HTC installed on front slope grades steeper than 6H:1V but 4H:1V or flatter shall be Test Level 3 tested and accepted as such. Each of the four cable-ropes shall be independently anchored to a concrete end-anchor. The terminals/end anchorages shall be tested and accepted under NCHRP Report 350 Test Level 3. Geotechnical information of the project area shall be used by the Manufacturer to design the sizes and depths of the anchors and footings. Intermediate line posts shall be socketed with sleeves set in concrete. The maximum post spacing for the HTC System shall be 10.5 feet, center to center.

MATERIALS Samples for testing shall be provided as directed by the Physical Section of the Division of Materials. Contractors shall contact the Physical Section of the Division of Materials at 502-564-3160 for department specific sampling and testing procedures prior to bid. Section references are from the *Kentucky Standard Specifications for Road and Bridge Construction (current edition)*.

Concrete, Class A	Section 601
Steel Reinforcement (Minimum Grade 40 steel)	Section 811
Anchor Bolts and Nuts	Section 813
Galvanizing (Bolts, Nuts & Washers)	AASHTO M 232
Fittings (Steel) Hardware	AASHTO M 30
Reflective Sheeting	Section 830

Cable-rope The cable-rope shall be a galvanized ¾ inch diameter, 3x7 wire rope construction meeting AASHTO M30 Type I Class A coating. The wire rope shall be pre-stretched during manufacturing to exhibit a minimum modulus of elasticity of 11,805,090 pounds/inch^2 after pre-stretching. If cable rope or fittings of higher strength were used at the time of NCHRP 350 evaluation, use the higher strength materials.

Posts Posts shall be the socketed versions with caps, placed in metal or plastic sleeves installed in a concrete foundation. All posts shall be fabricated from materials meeting ASTM A-36 or greater steel and galvanized after fabrication to A-123. The required welding shall be performed by a certified welder in accordance with AWS D1.1. Posts shall be domestic hot-rolled mild steel, or cold-formed from hot-rolled mild steel. A fitting gasket, profiled to fit tightly around each post, shall be provided to prevent debris from entering the socket.

SPECIAL NOTE FOR
HIGH TENSION CABLE-ROPE MEDIAN BARRIER

Sheet 2 of 4

Fittings Only swaged fittings shall be provided. Field-installed, galvanized-steel fittings (i.e., turnbuckles and splices) shall be one-inch diameter. Smaller fittings may be allowed with written permission from the Division of Design, Division of Construction, and the Division of Materials. Factory applied or stainless steel fittings shall meet AASHTO M30 Type I Class A. Threaded terminals shall be right hand or left hand threaded M24 X 3 pitch to ANSI B 1.13M. The body of the threaded terminal shall provide a minimum of 6 inches wire rope engagement depth. Threaded terminals shall be either stainless steel or galvanized, after processing, to ASTM A-153.

Turnbuckles Turnbuckles (i.e. Rigging Screws) shall be threaded to accept the fitting described above. Turnbuckles may be either the open or closed body type (with two inspection holes to determine threaded rope terminal penetration). The turnbuckles shall allow for a minimum of 6 inches of penetration from each end. Turnbuckles shall meet AASHTO M30 Type I Class A and shall be either stainless steel or galvanized, after processing, to ASTM A-153.

Mechanical Anchor Fittings Fittings shall be provided at the anchor termination of each cable-rope and shall be of the same type as used in the connection to the turnbuckles. The fittings shall meet AASHTO M30 Type I Class A yielding, shall be capable of release and reuse, and shall be either stainless steel or galvanized, after processing, to ASTM A-153.

End Terminals End Terminals placed within the clear zone, as defined by AASHTO Roadside Design Guide, shall be NCHRP Report 350 compliant, meeting Test Level 3 (TL-3) requirements, and having an FHWA letter of acceptance. Other terminals may be used in locations where impacts are unlikely or if properly shielded by impact attenuator, if approved by the Engineer. Each of the four cable-ropes of the system shall have separate anchor connections to the terminal end section. End anchors shall be fabricated from materials meeting ASTM A-36 and galvanized after fabrication to A-123. All welding shall be performed by a certified welder in accordance with AWS D1.1.

CONSTRUCTION The Contractor shall install high tension cable-rope barrier system according to the manufacturer's design and recommendation. Prior to construction, the proposed layout and location of the HTC System will be approved by the Department. The posts shall be installed plumb and in accordance with the proposed layout, spacing, and location shown in the HTC System layout plans as approved by the Department.

Turnbuckles shall be included to allow for tensioning of the cable-ropes. For installations greater than 1,000 feet in length, at least one Turnbuckle per 1,000 feet shall be included per length of cable-rope. For installations less than 1,000 feet in length, one Turnbuckle per length of cable-rope shall be included near the center of the installation.

SPECIAL NOTE FOR
HIGH TENSION CABLE-ROPE MEDIAN BARRIER

Sheet 3 of 4

Extreme care shall be taken in ensuring proper cable-rope height. The area shall be relatively smooth, without edge drop-offs, holes, other depressions or abrupt slope changes between the edge of the traveled way and the cable-rope barrier system.

The HTC System shall be placed and tensioned immediately after initial installation per the manufacturer's recommendations. Tension shall be rechecked approximately two (2) to three (3) weeks after initial tensioning and adjusted, if necessary. A tension log form shall be completed showing the time, date, location, ambient temperature, and final tension reading, signed by the person performing the tension reading. This log shall be furnished to the Engineer upon completion of work. This form shall also include the manufacturer's recommended tension chart.

Line post shall be socketed with sleeves set in concrete. The minimum diameter for the line post foundations shall be 12 inches. Minimum installation depth for the concrete line posts footings shall be 36-inches for non-rock installation. Greater depths may be required for non-rock installation due to manufacturer's recommendations based on soil information as shown in this proposal. Depths and requirements for installations in rock shall be based on manufacturer's recommendations.

The HTC System shall be delineated with retro-reflective sheeting. The delineation shall be applied to the last five posts at each end of an installation and throughout the remainder of the installation at a maximum spacing of 50 feet. The delineation shall provide a minimum of seven square inches of area when viewed on a line parallel to the roadway centerline. For median installations, the sheeting shall be applied to both sides of the post. The delineation shall be attached near the top of the posts as recommended by the manufacturer. The sheeting shall be yellow or white and shall be the same color as the adjacent edge line.

Contractor shall not allow traffic to be exposed to trenching and/or excavated post anchor holes for longer than one working shift, as directed by the Engineer.

SPECIAL NOTE FOR
HIGH TENSION CABLE-ROPE MEDIAN BARRIER

Sheet 4 of 4

MEASUREMENT

High Tension Cable-Rope Barrier will be measured by the linear foot. Any costs associated with the cable-rope, intermediate line posts, line post foundations, cable-rope tensioning, reflective sheeting, and all necessary incidentals shall be included in the price bid for this item.

End Anchors will be measured by each unit. The Contractor's proposed layout and location plans will specify the type and number of end terminals required. Any costs associated with the excavation, reinforcing steel, concrete, and other incidentals shall be included in the price bid for this item.

PAYMENT

Code	Pay Item	Pay Unit
23147EN	HIGH TENSION CABLE-ROPE BARRIER	LINEAR FOOT
23148EN	END ANCHORS	EACH

Such payment shall be full compensation for furnishing all materials, equipment, labor, and incidentals to complete the work as specified.

131216

PROPOSAL BID ITEMS

Report Date 0/23/13

Section: 0001 - PAVING

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	FP	AMOUNT
0010	00001		DGA BASE REVISED: 10-8-13	6,821.00	TON		$	
0020	00078		CRUSHED AGGREGATE SIZE NO 2	500.00	TON		$	
0030	00190		LEVELING & WEDGING PG64-22	200.00	TON		$	
0040	00214		CL3 ASPH BASE 1.00D PG64-22	4,118.00	TON		$	
0050	00219		CL4 ASPH BASE 1.00D PG76-22	310.00	TON		$	
0060	00342		CL4 ASPH SURF 0.38A PG76-22	706.00	TON		$	
0070	02058		REMOVE PCC PAVEMENT	258,414.00	SQYD		$	
0080	02071		JPC PAVEMENT-11 IN REVISED: 10-16-13	258,414.00	SQYD		$	
0090	02110		PARTIAL DEPTH PATCHING	300.00	CUFT		$	
0100	02677		ASPHALT PAVE MILLING & TEXTURING	1,016.00	TON		$	
0110	03240		BASE FAILURE REPAIR	750.00	SQYD		$	

Section: 0002 - ROADWAY

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	FP	AMOUNT
0120	01985		DELINEATOR FOR BARRIER - YELLOW	3,660.00	EACH		$	
0130	02003		RELOCATE TEMP CONC BARRIER	140,000.00	LF		$	
0140	02200		ROADWAY EXCAVATION ADDED: 10-23-13	50.00	CUYD		$	
0150	02363		GUARDRAIL CONNECTOR TO BRIDGE END TY A	8.00	EACH		$	
0160	02367		GUARDRAIL END TREATMENT TYPE 1	13.00	EACH		$	
0170	02369		GUARDRAIL END TREATMENT TYPE 2A	2.00	EACH		$	
0180	02373		GUARDRAIL END TREATMENT TYPE 3	1.00	EACH		$	
0190	02381		REMOVE GUARDRAIL	1,350.00	LF		$	
0200	02391		GUARDRAIL END TREATMENT TYPE 4A	25.00	EACH		$	
0210	02562		TEMPORARY SIGNS	10,000.00	SQFT		$	
0220	02570		PROJECT CPM SCHEDULE SEE DESIGN FOR SPECIAL NOTE	1.00	LS		$	
0230	02599		FABRIC-GEOTEXTILE TYPE IV	500.00	SQYD		$	
0240	02650		MAINTAIN & CONTROL TRAFFIC	1.00	LS		$	
0250	02671		PORTABLE CHANGEABLE MESSAGE SIGN	16.00	EACH		$	
0260	02676		MOBILIZATION FOR MILL & TEXT	1.00	LS		$	
0270	02775		ARROW PANEL	12.00	EACH		$	
0280	02898		RELOCATE CRASH CUSHION	13.00	EACH		$	
0290	03171		CONCRETE BARRIER WALL TYPE 9T	43,000.00	LF		$	
0300	06401		FLEXIBLE DELINEATOR POST-M/W	2,195.00	EACH		$	
0310	06404		FLEXIBLE DELINEATOR POST-M/Y	1,400.00	EACH		$	
0320	06511		PAVE STRIPING-TEMP PAINT-6 IN REVISED: 10-23-13	1,080,000.00	LF		$	
0330	06592		PAVEMENT MARKER TYPE V-B W/R	1,900.00	EACH		$	
0340	06593		PAVEMENT MARKER TYPE V-B Y/R	806.00	EACH		$	
0350	08903		CRASH CUSHION TY VI CLASS BT TL3	3.00	EACH		$	
0360	10020NS		FUEL ADJUSTMENT	16,109.00	DOLL	$1.00	$	$16,109.00
0370	10030NS		ASPHALT ADJUSTMENT	9,601.00	DOLL	$1.00	$	$9,601.00
0380	20259ED		TEMPORARY MEDIAN CROSSOVER	8.00	EACH		$	
0390	20432ES112		REMOVE CRASH CUSHION	1.00	EACH		$	
0400	21802EN		G/R STEEL W BEAM-S FACE (7 FT POST)	2,537.50	LF		$	

PROPOSAL BID ITEMS

Report Date 0/23/13

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	FP	AMOUNT
0410	23143ED		KPDES PERMIT AND TEMP EROSION CONTROL	1.00	LS		$	
0420	23147EN		HIGH TENSION CABLE-ROPE BARRIER	8,000.00	LF		$	
0430	23148EN		END ANCHORS	8.00	EACH		$	
0440	23979EC		CRASH CUSHION TY VI CLASS C TL3	1.00	EACH		$	
0450	24189ER		DURABLE WATERBORNE MARKING-6 IN W	354,800.00	LF		$	
0460	24190ER		DURABLE WATERBORNE MARKING-6 IN Y	243,460.00	LF		$	
0470	24191ER		DURABLE WATERBORNE MARKING-12 IN W	21,170.00	LF		$	

Section: 0003 - DRAINAGE

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	FP	AMOUNT
0480	01000		PERFORATED PIPE-4 IN	500.00	LF		$	
0490	01010		NON-PERFORATED PIPE-4 IN	50.00	LF		$	
0500	01020		PERF PIPE HEADWALL TY 1-4 IN	5.00	EACH		$	

Section: 0004 - ROLLING FORK RIVER BRIDGE

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	FP	AMOUNT
0510	23386EC		JOINT SEAL REPLACEMENT REVISED: 10-8-13	448.00	LF		$	

Section: 0005 - KY 61 AND CSX RAILROAD BRIDGE

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	FP	AMOUNT
0520	03295		EXPAN JOINT REPLACE 2 IN	70.00	LF		$	
0530	06542		PAVE STRIPING-THERMO-6 IN W	865.00	LF		$	
0540	06543		PAVE STRIPING-THERMO-6 IN Y	544.00	LF		$	
0550	06546		PAVE STRIPING-THERMO-12 IN W	352.00	LF		$	
0560	08549		BLAST CLEANING	3,994.00	SQYD		$	
0570	23331EC		EPOXY-URETHANE WATERPROOFING	35,945.00	SQFT		$	

Section: 0006 - LEBANON JUNCTION ROAD BRIDGE

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	FP	AMOUNT
0580	06542		PAVE STRIPING-THERMO-6 IN W	501.00	LF		$	
0590	06543		PAVE STRIPING-THERMO-6 IN Y	301.00	LF		$	
0600	08549		BLAST CLEANING	1,874.00	SQYD		$	
0610	23331EC		EPOXY-URETHANE WATERPROOFING	16,867.00	SQFT		$	

Section: 0007 - LONG LICK CREEK BRIDGE

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	FP	AMOUNT
0620	03294		EXPAN JOINT REPLACE 1 1/2 IN	244.00	LF		$	

131216

PROPOSAL BID ITEMS

Report Date 0/23/13

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	FP	AMOUNT
0630	03299		ARMORED EDGE FOR CONCRETE	244.00	LF		$	
0640	06542		PAVE STRIPING-THERMO-6 IN W	550.00	LF		$	
0650	06543		PAVE STRIPING-THERMO-6 IN Y	350.00	LF		$	
0660	08549		BLAST CLEANING	2,179.00	SQYD		$	
0670	23331EC		EPOXY-URETHANE WATERPROOFING	19,611.00	SQFT		$	

Section: 0008 - RJ CORMAN RAILROAD BRIDGE

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	FP	AMOUNT
0680	03299		ARMORED EDGE FOR CONCRETE	112.00	LF		$	
0690	06542		PAVE STRIPING-THERMO-6 IN W	195.00	LF		$	
0700	06543		PAVE STRIPING-THERMO-6 IN Y	115.00	LF		$	
0710	08549		BLAST CLEANING	716.00	SQYD		$	
0720	23331EC		EPOXY-URETHANE WATERPROOFING	6,440.00	SQFT		$	

Section: 0009 - KY 480 BRIDGE

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	FP	AMOUNT
0730	22146EN		CONCRETE PATCHING REPAIR	10.00	SQFT		$	

Section: 0010 - SALT RIVER BRIDGE

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	FP	AMOUNT
0740	08526		CONC CLASS M FULL DEPTH PATCH	1.00	CUYD		$	

Section: 0011 - TRAFFIC LOOPS

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	FP	AMOUNT
0750	04793		CONDUIT-1 1/4 IN	200.00	LF		$	
0760	04795		CONDUIT-2 IN	215.00	LF		$	
0770	04820		TRENCHING AND BACKFILLING	395.00	LF		$	
0780	04829		PIEZOELECTRIC SENSOR	36.00	EACH		$	
0790	04830		LOOP WIRE	16,350.00	LF		$	
0800	04895		LOOP SAW SLOT AND FILL	2,840.00	LF		$	
0810	20359NN		GALVANIZED STEEL CABINET	4.00	EACH		$	
0820	20360ES818		WOOD POST	8.00	EACH		$	
0830	20391NS835		ELECTRICAL JUNCTION BOX TYPE A	10.00	EACH		$	

Section: 0012 - MOBILIZATION AND DEMOBILIZATION

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	FP	AMOUNT
0840	02568		MOBILIZATION	1.00	LS		$	
0850	02569		DEMOBILIZATION	1.00	LS		$	