



Andy Beshear  
GOVERNOR

## TRANSPORTATION CABINET

200 Mero Street  
Frankfort, Kentucky 40601

Jim Gray  
SECRETARY

February 14, 2025

CALL NO. 200  
CONTRACT ID NO. 255371  
ADDENDUM # 1

Subject: Franklin County, 121GR25D071-STP BRZ  
Letting February 20, 2025

- (1) Added - Special Notes - Pages 40A-40H of 208
- (2) Revised - Material Summary - Pages 149-151 of 208
- (3) Revised - Proposal Bid Items - Pages 206-208 of 208

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 black ink that reads "Rachel Mills".

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

RM:mr  
Enclosures

# **SPECIAL NOTE FOR NON-DESTRUCTIVE TESTING OF DRILLED SHAFTS (CROSSHOLE SONIC LOGGING)**

## **Franklin County**

### **Item No. 5-10046**

#### **1.0 DESCRIPTION**

Crosshole Sonic Logging (CSL) is a nondestructive method to test the integrity of drilled shafts. The Contractor will be responsible for supplying all equipment and materials necessary to perform this testing, and obtaining the services of a CSL Testing Firm using personnel experienced with CSL testing and approved by the Engineer to perform the testing.

- 1.1** The CSL tests must either be performed by or under the supervision of a responsible licensed professional engineer with:
- a minimum of three (3) years experience performing CSL tests, and
  - experience performing CSL tests on a minimum of three (3) past projects with ascope and complexity similar to this project including a minimum of 60 drilled shafts in the past three (3) years.

If the responsible professional engineer does not perform the testing, then the responsible field technician who does perform the testing must meet the same experience requirements.

- 1.2** Preliminary Submittal - At least 21 calendar days before beginning drilled shaft construction, submit a technical proposal prepared by the CSL Testing Firm that documents the personnel's experience and addresses the testing procedures. Experience documentation should include resumes, references, certifications, project lists, experiencedescriptions and details, etc. Within 10 working days, the Engineer will review the proposal and report to the Contractor whether the CSL Testing Firm and personnel are approved and the proposal is acceptable.

- 1.3** The Contractor will be responsible for providing:
- a. access tubes which will be used for CSL testing of the drilled shafts;
  - b. watertight shoes, watertight caps, and non-shrink grout;
  - c. suitable working space and access to every shaft;
  - d. a reliable 600 watt (minimum) generator; and
  - e. any other equipment or materials necessary to accomplish the testing.

Table 1 - Minimum Number of Access Tubes and CSL Logs			
Rock Socket Diameter (inches)	Number of Tubes	Diagonal Logs	Perimeter Logs
30 to 54	4	2	4
60 to 78	6	3	6
84 to 96	8	4	8

**2.0 MATERIALS**

- 2.1** Supply the number of access tubes shown in the plans or in Table 1. Provide access tubes meeting the requirements below. The Engineer will accept access tubes based on visual inspection and certification that the steel pipe meets the requirements below:
- a. Schedule 40 steel pipe conforming to ASTM A 53, Grade A or B, Type E, F, or S;
  - b. contains round, regular internal diameters free of defects or obstructions, including any at pipe joints;
  - c. capable of permitting the free, unobstructed passage of source and receiver probes; and
  - d. watertight and free from corrosion with clean internal and external faces to ensure passage of the probes and a good bond between the concrete and the tubes.
- 2.2** Provide watertight shoes on the bottom and removable watertight caps on the top of the tubes.
- 2.3** Provide non-shrink grout to fill the access tubes and any cored holes at the completion of the CSL testing and Engineer approval for refill. Use grout conforming to Section 601.03.03 of the Standard Specifications.

**3.0 CONSTRUCTION**

- 3.1** Access Tube Installation
- a. Install access tubes equally spaced around the perimeter of each of the drilled shafts.
  - b. Securely attach the tubes to the longitudinal reinforcement. Wire-tie the tubes a minimum of every 3 feet so they will stay in position during placement of rebar and concrete. Place the tubes so they will be parallel with each other and as near to vertical as possible in the finished shaft. Even moderate bending of the tubes will result in large regional variations in the data.
  - c. Place the tubes from 6 inches above the shaft tip to at least 3 feet above the top of shaft and at least 2 feet above ground level or top of casing. Under no circumstances may the tubes be allowed to come to rest on the bottom of the excavation.
  - d. Ensure that any joints in the tubes are watertight.
  - e. During placement of the reinforcement cage, exercise care so that the tubes will not be damaged to the extent that would prevent a probe from passing through them.
  - f. After placing the reinforcing cage and before beginning concrete placement, fill the tubes with clean potable water and cap or seal the tube tops to keep debris out of the tubes. Replace the watertight caps immediately after filling the tubes with water.
  - g. Before placing concrete, investigate at least one tube per shaft to make sure that there are no bends, crimps, obstructions or other impediments to the free passage of the testing probes.

- h. During removal of the caps from the tubes, exercise care so as not to apply excess torque, hammering, or other stresses which could break the bond between the tubes and concrete.
- i. After concrete placement and before the beginning of CSL testing, inspect the access tubes and report any access tubes that the test probe cannot pass through to the Engineer. The Engineer will make an evaluation to determine if the CSL testing can be successfully performed without the tube(s); the Engineer may require the contractor to, at its own expense, replace one or more tubes with 2-inch diameter holes cored through the concrete for the entire length of the shaft, excluding the bottom 6 inches. Unless directed otherwise by the Engineer, locate core holes approximately 6 inches inside the reinforcement such that it does not damage the reinforcement. For each core hole drilled, record a log with descriptions of inclusions and voids in the cored holes and submit a copy of the log to the Engineer. Preserve the cores, identify as to location and make available for inspection by the Engineer.

- 3.2** Grouting - After completion of the CSL testing and evaluation of results, and only after being directed to do so by the Engineer, remove the water from the access tubes and any cored holes, completely fill the tubes and holes with approved grout. After grouting, cut the tubes flush with the tops of the drilled shafts.

#### **4.0 TESTING AND REPORTING**

The Engineer may elect to reduce the amount of testing and will pay only for the authorized quantities.

- 4.1** Testing
- a. Perform CSL testing according to ASTM D6760, "Integrity Testing of Concrete Deep Foundations by Ultrasonic Crosshole Testing".
  - b. Provide access to the top of the shaft for testing personnel and equipment.
  - c. Perform CSL testing in accordance with generally accepted CSL Testing methods.
  - d. Obtain the minimum number of CSL logs shown in Table 1 unless otherwise directed by the Engineer.
  - e. Perform CSL testing on all completed shafts designated for testing by the Engineer, after the shaft concrete has cured at least 48 hours. Additional curing time may be necessary, depending on the concrete admixtures that are used.
- 4.2** Test Reports - Submit a test report prepared by the CSL Testing Firm and signed by the responsible professional engineer which, as a minimum, contains:
- a. Date of test
  - b. Pier No., Plan Shaft No., Station, Offset, and Top of Shaft Elevation;
  - c. Schematic showing a plan view of the access tube locations;
  - d. CSL logs presented for each tube pair tested with any defect zones indicated on the logs and discussed in the report as appropriate.
  - e. Analyses of initial pulse arrival time versus depth or velocity versus depth if requested by the Engineer; and
  - f. Analyses of pulse energy/amplitude versus depth.

**4.3** The Department will generally use the criteria below for evaluation of the shafts but may vary the criteria based on other available information (e.g. TIP results, construction records, etc.)

Satisfactory	Good (G)	FAT increase 0 to 10% <b>and</b> Energy Reduction < 6 dB
Anomaly	Questionable (Q)	FAT increase 11 to 20% <b>and</b> Energy Reduction < 9 dB
Flaw	Poor/Flaw (P/F)	FAT increase 21 to 30% <b>or</b> Energy Reduction < 12 dB
Defect	Poor/Defect (P/D)	FAT increase >31% <b>or</b> Energy Reduction < 12 dB

The Department will consider energy reductions in conjunction with FAT increases and reserves the right to vary the anomaly, flaw and defect criteria based on energy reductions.

- Flaws affecting >50% of profiles or defects affecting >1 profile at the same depth must be addressed.
- "Addressing" may include tomography, core drilling, repair, replacement, or other methods.
- Full cross-section flaws or defects require repair.
- Anomalies need evaluation and potential addressing.

**4.4** Independent Comparison Tests - Consultants acting on behalf of the Department may perform independent comparison tests on the shafts tested by the Contractor's CSL Testing Firm.

## **5.0 EVALUATION OF TEST RESULTS**

- 5.1** Allow direct communication between the CSL Testing Firm and the Department.
- 5.2** The Engineer will evaluate the CSL test results in the test report to determine whether or not the drilled shaft integrity is acceptable. Within 5 working days after receiving a test report, the Engineer will report to the Contractor whether the construction is acceptable or additional analyses are needed.
- 5.3** The Engineer will not require the Contractor to wait for CSL testing and evaluation to continue drilled shaft construction. However, if the CSL tests indicate that the integrity of any drilled shaft is questionable, the Engineer may direct the Contractor to suspend drilled shaft operations until the problem is resolved.
- 5.4** Continue with construction of the structure above the drilled shafts only after receiving written approval to do so, based on evaluation of the CSL test results.
- 5.5** If the CSL records are complex or inconclusive, the Engineer may require additional testing (such as Angled CSL, Crosshole Tomography, Singlehole Sonic Logging, or Sonic Echo/Impulse Response, etc.) or concrete cores to sample the concrete in question to verify shaft conditions. If core samples are needed, obtain cores with a minimum diameter of 2 inches, unless directed otherwise by the Engineer. Unless directed otherwise by the Engineer, locate core holes approximately 6 inches inside the reinforcement such that they do not damage the reinforcement. For each core hole drilled, record a log with descriptions of inclusions and voids in the cored holes and submit a copy of the log to the Engineer. Place the cores in crates properly marked showing the shaft depth at each interval of core recovery. Transport the cores and logs

### **Special Note for Non-Destructive Testing of Drilled Shafts**

to the Geotechnical Branch in Frankfort for inspection and testing. Grout the core holes in accordance with Section 3.2 above.

- 5.6 If the additional testing or evaluation of cores indicate that concrete for any drilled shaft on which additional testing or coring was required is acceptable, the Department will pay for the additional testing and concrete coring and grouting on a cost plus basis. If the additional testing or evaluations of cores indicate that the concrete for any drilled shaft concrete is unacceptable, the additional testing and concrete coring and grouting will beat the expense of the Contractor.
- 5.7 If defects are found, the original structural designer will perform structural analyses, at the expense of the Contractor, based on the design criteria established for the structure to assess the effects of the defects on the structural performance of the drilled shaft. If the results of the analyses indicate that there is conclusive evidence that the defects will result in inadequate or unsafe performance under the design loads, as defined by the design criteria for the structure, the Engineer will reject the shaft.
- 5.8 If any shaft is rejected, provide a plan for remedial action to the Engineer for approval. Any modifications to the foundation shafts and/or other substructure elements caused by the remedial action will require calculations and working drawings by the original structural designer, at the expense of the Contractor. Begin remediation operations only after receiving approval from the Engineer for the proposed remediation. All remedial action will be at no cost to the Department and with no extension of contract time.

## 6.0 METHOD OF MEASUREMENT

The Department will pay for the authorized and accepted quantities of "CSL Testing" at the contract unit price per each shaft tested (production and technique drilled shafts). This will constitute full compensation for all costs associated with providing access for testing personnel and equipment, performing the CSL Testing in a single shaft, and reporting the results to the Engineer.

Installation of CSL Access Tubing is incidental to the applicable contract unit bid price for Drilled Shaft, Common, and Drilled Shaft, Solid Rock. This will constitute all costs and delays associated with installing the CSL Access Tubing in a single shaft, including but not limited to providing and installing access tubing, providing and installing all required bracing for access tubes, providing and placing grout in access tubes.

The Department will pay using a change order for the direct cost of additional testing and concrete coring, authorized by the Engineer, required to investigate shafts with inconclusive CSL records if evaluation of the additional testing or cores indicates that concrete for that drilled shaft is acceptable. This will constitute full compensation for all costs and delays associated with performing additional tests, obtaining and delivering concrete cores to the Geotechnical Branch, and grouting core holes.

**7.0 PAYMENT**

The Department will pay for the completed and accepted quantities under the following:

<b>Code</b>	<b>Pay Item</b>	<b>Unit</b>
21321NC	CSL Testing (4 tubes)	Each

The Department will consider payment as full compensation for all work required under this Special Note.

**Special Note for Non-Destructive  
Testing of Drilled Shafts**

### **SPECIAL NOTE FOR PILE STRIKE ALTERNATE**

As an alternate to striking the pile with a hammer once placed inside a pre-drilled hole, the contractor may include shear resisting devices on the pile as shown in Figure 1 below. Place pile in hole and use an excavator to apply full hydraulic load to the top of pile before filling hole with concrete. The cost of all labor and materials is incidental to Pre-drilling Piles.

Notes:

1. Alternate was designed for 125% of the pile design axial load. Required number of threaded rods is provided in Table 1. The piles on this project have a maximum pile design axial load of 61 tons.
2. Use ASTM F1554 Grade 36 threaded rods with a minimum tensile strength of 58 ksi.
3. The minimum depth of the rock socket is 2'-0". Engineer to determine the top of rock elevation.
4. The minimum depth of the concrete backfill shall be 9" above the top threaded rod. Concrete to be Class A or B.
5. Pile points are not required.
6. Provide an excavator with sufficient capacity and reach to lift and place piles without contacting the ground or sides of the boring and to pull casing as the hole is being backfilled.
7. Contractor is to ensure hole is cleaned during and after excavation. The portion of the predrilled bore hole above the rock socket shall be excavated using casing to prevent collapsing. The rock socket shall be visually inspected. The bottom of the hole shall be visible to the Inspector by normal means from the surface elevation. If not adequately cleared of debris or water the contractor may be required to clean out the holes using a vacuum excavator and/or a pump. After the pile and concrete are placed the casing shall be backfilled with sand or pea gravel. Remove the casing as the hole above the rock socket is backfilled.
8. Measure final excavation depths with a weighted tape or other approved methods after final cleaning. Ensure the base of the excavation has less than ½" of sediment at the time of pile and concrete placement. Do not allow the depth of the water to exceed 3" during concrete placement.



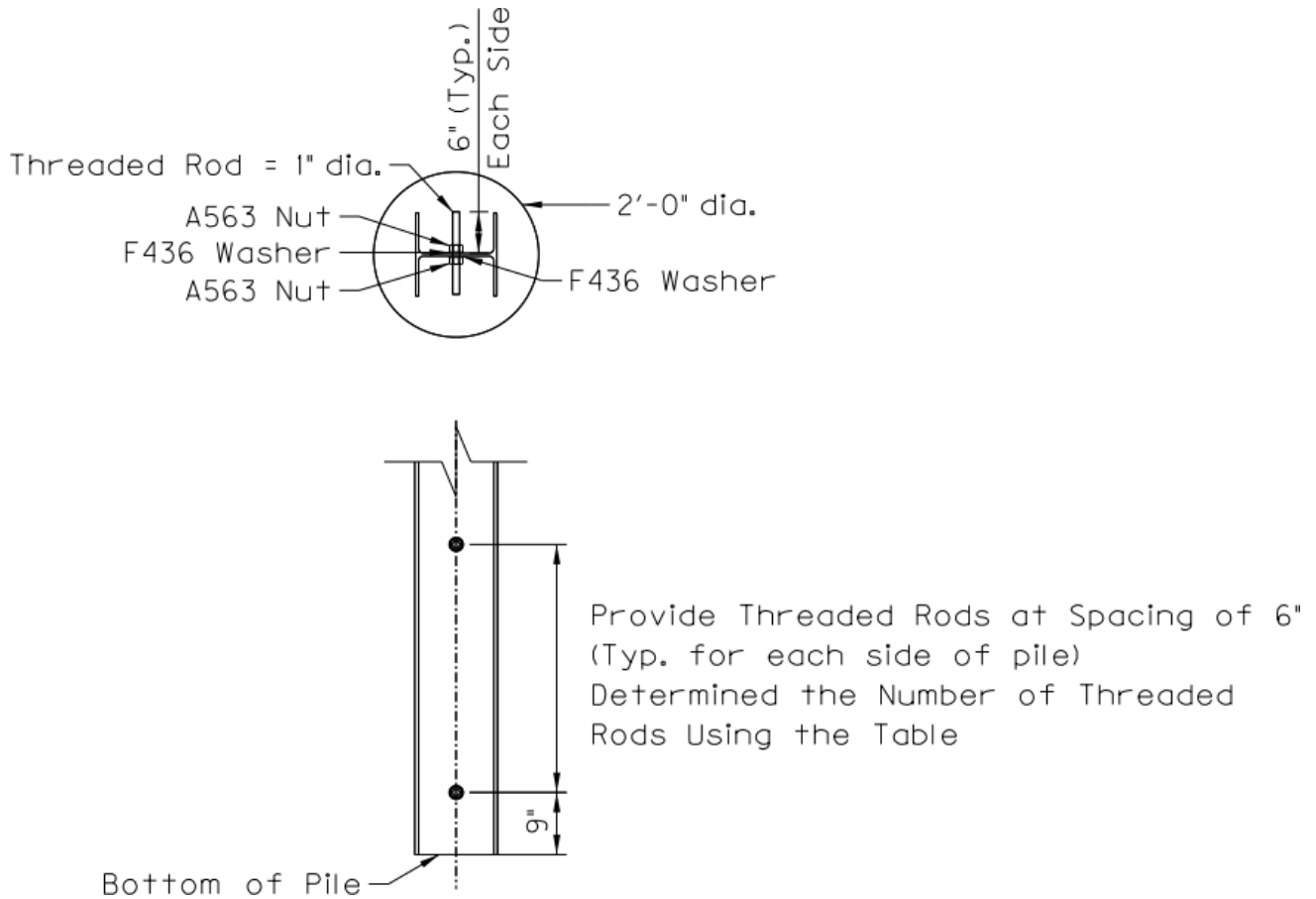


Figure 1: Threaded rod detail

Table 1: Number of threaded rods required based on pile design load

NUMBER OF THREADED RODS								
PILE DESIGN LOAD (TONS)	60	70	80	90	100	110	120	135
Grade 36 (fu = 58 ksi)	5	6	7	7	8	9	9	10
Grade 55 (fu = 75 ksi)	4	5	5	6	6	7	7	8
Grade 105 (fu = 125 ksi)	3	3	3	4	4	4	5	5

# MATERIAL SUMMARY

**CONTRACT ID: 255371**

**121GR25D071-STP BRZ**

**BR03700122500**

KY 12 ADDRESS DEFICIENCIES OF KY 12 OVER FLAT CREEK (037B00080N) BRIDGE REPLACEMENT, A DISTANCE OF .02 MILES.

Project Line No	Bid Code	DESCRIPTION	Quantity	Unit
0005	00001	DGA BASE	2,583.00	TON
0010	00100	ASPHALT SEAL AGGREGATE	22.00	TON
0015	00103	ASPHALT SEAL COAT	3.00	TON
0020	00212	CL2 ASPH BASE 1.00D PG64-22	1,054.00	TON
0025	00301	CL2 ASPH SURF 0.38D PG64-22	161.00	TON
0030	00356	ASPHALT MATERIAL FOR TACK	3.00	TON
0035	00440	ENTRANCE PIPE-15 IN	40.00	LF
0040	00470	CULVERT PIPE-48 IN	64.00	LF
0045	01216	PIPE CULVERT HEADWALL-48 IN	1.00	EACH
0050	01987	DELINEATOR FOR GUARDRAIL BI DIRECTIONAL WHITE	10.00	EACH
0055	02230	EMBANKMENT IN PLACE	12,293.00	CUYD
0060	02231	STRUCTURE GRANULAR BACKFILL	243.00	CUYD
0065	02233	SPECIAL EMBANKMENT	4,388.00	CUYD
0070	02351	GUARDRAIL-STEEL W BEAM-S FACE	1,212.50	LF
0075	02360	GUARDRAIL TERMINAL SECTION NO 1	3.00	EACH
0080	02367	GUARDRAIL END TREATMENT TYPE 1	3.00	EACH
0085	02483	CHANNEL LINING CLASS II	1,065.00	TON
0090	02545	CLEARING AND GRUBBING - AREA~2.81 ACRES	1.00	LS
0095	02585	EDGE KEY	34.00	LF
0100	02602	FABRIC-GEOTEXTILE CLASS 1	2,030.00	SQYD
0105	02603	FABRIC-GEOTEXTILE CLASS 2	4,363.00	SQYD
0110	02650	MAINTAIN & CONTROL TRAFFIC	1.00	LS
0115	02671	PORTABLE CHANGEABLE MESSAGE SIGN	2.00	EACH
0120	02692	SETTLEMENT PLATFORM	2.00	EACH
0125	02726	STAKING	1.00	LS
0130	02731	REMOVE STRUCTURE	1.00	LS
0135	03171	CONC BARRIER WALL TYPE 9T	100.00	LF
0140	03299	ARMORED EDGE FOR CONCRETE	50.00	LF
0145	03340	STEEL PIPE-2 1/2 IN	68.25	LF
0150	03343	STEEL PIPE-4 IN	57.75	LF
0155	06540	PAVE STRIPING-THERMO-4 IN W	1,790.00	LF
0160	06541	PAVE STRIPING-THERMO-4 IN Y	1,790.00	LF
0165	06554	PAVE STRIPING-DUR TY 1-4 IN W	460.00	LF
0170	06555	PAVE STRIPING-DUR TY 1-4 IN Y	460.00	LF
0175	08003	FOUNDATION PREPARATION	1.00	LS
0180	08019	CYCLOPEAN STONE RIP RAP	2,286.00	TON
0185	08033	TEST PILES	180.00	LF
0190	08046	PILES-STEEL HP12X53	1,152.00	LF
0195	08094	PILE POINTS-12 IN	16.00	EACH
0200	08100	CONCRETE-CLASS A	169.00	CUYD
0205	08104	CONCRETE-CLASS AA	208.00	CUYD
0210	08150	STEEL REINFORCEMENT	25,651.00	LB
0215	08151	STEEL REINFORCEMENT-EPOXY COATED	45,714.00	LB

## MATERIAL SUMMARY

Project Line No	Bid Code	DESCRIPTION	Quantity	Unit
0220	08672	PRECAST PC BOX BEAM SB42	1,367.00	LF
0225	08903	CRASH CUSHION TY VI CLASS BT TL3	2.00	EACH
0230	20745ED	ROCK SOUNDINGS	210.00	LF
0235	20746ED	ROCK CORINGS	94.00	LF
0240	21415ND	EROSION CONTROL	1.00	LS
0245	21420ED	DRILLED SHAFT-66 IN (COMMON)	210.00	LF
0250	21421ED	DRILLED SHAFT-60 IN (SOLID ROCK)	40.00	LF
0255	23378EC	CONCRETE SEALING	11,584.00	SQFT
0260	25017ED	RAIL SYSTEM SIDE MOUNTED MGS	462.00	LF
0265	26233EC	MOBILIZATION FOR CONCRETE SURF TREATMENT	1.00	LS
0270	02568	MOBILIZATION	1.00	LS
0275	02569	DEMOBILIZATION	1.00	LS

**CONTRACT ID: 255371**

**121GR25D071-STP BRZ**

**BR03716652500**

KY 1665 ADDRESS DEFICIENCIES OF KY 1665 OVER S. BENSON CREEK (037B00038N) BRIDGE REPLACEMENT, A DISTANCE OF .07 MILES.

Project Line No	Bid Code	DESCRIPTION	Quantity	Unit
0280	00001	DGA BASE	78.00	TON
0285	00100	ASPHALT SEAL AGGREGATE	3.54	TON
0290	00103	ASPHALT SEAL COAT	.42	TON
0295	00212	CL2 ASPH BASE 1.00D PG64-22	92.00	TON
0300	00301	CL2 ASPH SURF 0.38D PG64-22	13.00	TON
0305	00356	ASPHALT MATERIAL FOR TACK	.23	TON
0310	00463	CULVERT PIPE-21 IN	40.00	LF
0315	01206	PIPE CULVERT HEADWALL-21 IN	1.00	EACH
0320	01310	REMOVE PIPE	4.00	LF
0325	01651	JUNCTION BOX-MOD	1.00	EACH
0330	01987	DELINEATOR FOR GUARDRAIL BI DIRECTIONAL WHITE	10.00	EACH
0335	02014	BARRICADE-TYPE III	4.00	EACH
0340	02200	ROADWAY EXCAVATION	388.00	CUYD
0345	02223	GRANULAR EMBANKMENT	190.00	CUYD
0350	02231	STRUCTURE GRANULAR BACKFILL	376.00	CUYD
0355	02351	GUARDRAIL-STEEL W BEAM-S FACE	121.30	LF
0360	02360	GUARDRAIL TERMINAL SECTION NO 1	1.00	EACH
0365	02367	GUARDRAIL END TREATMENT TYPE 1	3.00	EACH
0370	02381	REMOVE GUARDRAIL	290.00	LF
0375	02399	EXTRA LENGTH GUARDRAIL POST	50.00	EACH
0380	02545	CLEARING AND GRUBBING - APPROX LESS THAN 1 ACRE	1.00	LS
0385	02562	TEMPORARY SIGNS	318.00	SQFT
0390	02585	EDGE KEY	44.00	LF
0395	02607	FABRIC-GEOTEXTILE CLASS 2 FOR PIPE	62.00	SQYD
0400	02610	RETAINING WALL-GABION	36.00	CUYD
0405	02650	MAINTAIN & CONTROL TRAFFIC	1.00	LS
0410	02671	PORTABLE CHANGEABLE MESSAGE SIGN	2.00	EACH

## MATERIAL SUMMARY

Project Line No	Bid Code	DESCRIPTION	Quantity	Unit
0415	02726	STAKING	1.00	LS
0420	02731	REMOVE STRUCTURE	1.00	LS
0425	03299	ARMORED EDGE FOR CONCRETE	48.00	LF
0430	06410	STEEL POST TYPE 1	29.00	LF
0435	06514	PAVE STRIPING-PERM PAINT-4 IN	310.00	LF
0440	06555	PAVE STRIPING-DUR TY 1-4 IN Y	526.00	LF
0445	08002	STRUCTURE EXCAV-SOLID ROCK	17.00	CUYD
0450	08003	FOUNDATION PREPARATION	1.00	LS
0455	08019	CYCLOPEAN STONE RIP RAP	255.00	TON
0460	08033	TEST PILES	49.00	LF
0465	08039	PRE-DRILLING FOR PILES	220.00	LF
0470	08051	PILES-STEEL HP14X89	390.00	LF
0475	08100	CONCRETE-CLASS A	170.90	CUYD
0480	08151	STEEL REINFORCEMENT-EPOXY COATED	17,317.00	LB
0485	08665	PRECAST PC BOX BEAM CB33-48	504.00	LF
0490	20191ED	OBJECT MARKER TY 3	3.00	EACH
0495	21134ND	REMOVE-STORE AND REINSTALL SIGN	1.00	EACH
0500	21415ND	EROSION CONTROL	1.00	LS
0505	23378EC	CONCRETE SEALING	5,600.00	SQFT
0510	25017ED	RAIL SYSTEM SIDE MOUNTED MGS	168.00	LF
0515	26167EC	CONCRETE-CLASS AA - IC	71.90	CUYD
0520	26233EC	MOBILIZATION FOR CONCRETE SURF TREATMENT	1.00	LS
0525	02569	DEMOBILIZATION	1.00	LS
0530	21321NC	CSL TESTING (4 TUBES) - (ADDED 2/14/2025)	4.00	EACH

**PROPOSAL BID ITEMS**

Report Date 2/14/25

**Section: 0001 - BRIDGE - 037B00080N**

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0010	00001		DGA BASE	2,583.00	TON		\$	
0020	00100		ASPHALT SEAL AGGREGATE	22.00	TON		\$	
0030	00103		ASPHALT SEAL COAT	3.00	TON		\$	
0040	00212		CL2 ASPH BASE 1.00D PG64-22	1,054.00	TON		\$	
0050	00301		CL2 ASPH SURF 0.38D PG64-22	161.00	TON		\$	
0060	00356		ASPHALT MATERIAL FOR TACK	3.00	TON		\$	
0070	00440		ENTRANCE PIPE-15 IN	40.00	LF		\$	
0080	00470		CULVERT PIPE-48 IN	64.00	LF		\$	
0090	01216		PIPE CULVERT HEADWALL-48 IN	1.00	EACH		\$	
0100	01987		DELINEATOR FOR GUARDRAIL BI DIRECTIONAL WHITE	10.00	EACH		\$	
0110	02230		EMBANKMENT IN PLACE	12,293.00	CUYD		\$	
0120	02231		STRUCTURE GRANULAR BACKFILL	243.00	CUYD		\$	
0130	02233		SPECIAL EMBANKMENT	4,388.00	CUYD		\$	
0140	02351		GUARDRAIL-STEEL W BEAM-S FACE	1,212.50	LF		\$	
0150	02360		GUARDRAIL TERMINAL SECTION NO 1	3.00	EACH		\$	
0160	02367		GUARDRAIL END TREATMENT TYPE 1	3.00	EACH		\$	
0170	02483		CHANNEL LINING CLASS II	1,065.00	TON		\$	
0180	02545		CLEARING AND GRUBBING AREA~2.81 ACRES	1.00	LS		\$	
0190	02585		EDGE KEY	34.00	LF		\$	
0200	02602		FABRIC-GEOTEXTILE CLASS 1	2,030.00	SQYD		\$	
0210	02603		FABRIC-GEOTEXTILE CLASS 2	4,363.00	SQYD		\$	
0220	02650		MAINTAIN & CONTROL TRAFFIC	1.00	LS		\$	
0230	02671		PORTABLE CHANGEABLE MESSAGE SIGN	2.00	EACH		\$	
0240	02692		SETTLEMENT PLATFORM	2.00	EACH		\$	
0250	02726		STAKING	1.00	LS		\$	
0260	02731		REMOVE STRUCTURE	1.00	LS		\$	
0270	03171		CONC BARRIER WALL TYPE 9T	100.00	LF		\$	
0280	03299		ARMORED EDGE FOR CONCRETE	50.00	LF		\$	
0290	03340		STEEL PIPE-2 1/2 IN	68.25	LF		\$	
0300	03343		STEEL PIPE-4 IN	57.75	LF		\$	
0310	06540		PAVE STRIPING-THERMO-4 IN W	1,790.00	LF		\$	
0320	06541		PAVE STRIPING-THERMO-4 IN Y	1,790.00	LF		\$	
0330	06554		PAVE STRIPING-DUR TY 1-4 IN W	460.00	LF		\$	
0340	06555		PAVE STRIPING-DUR TY 1-4 IN Y	460.00	LF		\$	
0350	08003		FOUNDATION PREPARATION	1.00	LS		\$	
0360	08019		CYCLOPEAN STONE RIP RAP	2,286.00	TON		\$	
0370	08033		TEST PILES	180.00	LF		\$	
0380	08046		PILES-STEEL HP12X53	1,152.00	LF		\$	
0390	08094		PILE POINTS-12 IN	16.00	EACH		\$	
0400	08100		CONCRETE-CLASS A	169.00	CUYD		\$	
0410	08104		CONCRETE-CLASS AA	208.00	CUYD		\$	
0420	08150		STEEL REINFORCEMENT	25,651.00	LB		\$	
0430	08151		STEEL REINFORCEMENT-EPOXY COATED	45,714.00	LB		\$	
0440	08672		PRECAST PC BOX BEAM SB42	1,367.00	LF		\$	
0450	08903		CRASH CUSHION TY VI CLASS BT TL3	2.00	EACH		\$	
0460	20745ED		ROCK SOUNDINGS	210.00	LF		\$	

**PROPOSAL BID ITEMS**

Report Date 2/14/25

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0470	20746ED		ROCK CORINGS	94.00	LF		\$	
0480	21415ND		EROSION CONTROL	1.00	LS		\$	
0490	21420ED		DRILLED SHAFT-66 IN (COMMON)	210.00	LF		\$	
0500	21421ED		DRILLED SHAFT-60 IN (SOLID ROCK)	40.00	LF		\$	
0510	23378EC		CONCRETE SEALING	11,584.00	SQFT		\$	
0520	25017ED		RAIL SYSTEM SIDE MOUNTED MGS	462.00	LF		\$	
0530	26233EC		MOBILIZATION FOR CONCRETE SURF TREATMENT	1.00	LS		\$	

**Section: 0002 - BRIDGE - 037B00038N**

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0540	00001		DGA BASE	78.00	TON		\$	
0550	00100		ASPHALT SEAL AGGREGATE	3.54	TON		\$	
0560	00103		ASPHALT SEAL COAT	.42	TON		\$	
0570	00212		CL2 ASPH BASE 1.00D PG64-22	92.00	TON		\$	
0580	00301		CL2 ASPH SURF 0.38D PG64-22	13.00	TON		\$	
0590	00356		ASPHALT MATERIAL FOR TACK	.23	TON		\$	
0600	00463		CULVERT PIPE-21 IN	40.00	LF		\$	
0610	01206		PIPE CULVERT HEADWALL-21 IN	1.00	EACH		\$	
0620	01310		REMOVE PIPE	4.00	LF		\$	
0630	01651		JUNCTION BOX-MOD	1.00	EACH		\$	
0640	01987		DELINEATOR FOR GUARDRAIL BI DIRECTIONAL WHITE	10.00	EACH		\$	
0650	02014		BARRICADE-TYPE III	4.00	EACH		\$	
0660	02200		ROADWAY EXCAVATION	388.00	CUYD		\$	
0670	02223		GRANULAR EMBANKMENT	190.00	CUYD		\$	
0680	02231		STRUCTURE GRANULAR BACKFILL	376.00	CUYD		\$	
0690	02351		GUARDRAIL-STEEL W BEAM-S FACE	121.30	LF		\$	
0700	02360		GUARDRAIL TERMINAL SECTION NO 1	1.00	EACH		\$	
0710	02367		GUARDRAIL END TREATMENT TYPE 1	3.00	EACH		\$	
0720	02381		REMOVE GUARDRAIL	290.00	LF		\$	
0730	02399		EXTRA LENGTH GUARDRAIL POST	50.00	EACH		\$	
0740	02545		CLEARING AND GRUBBING APPROX LESS THAN 1 ACRE	1.00	LS		\$	
0750	02562		TEMPORARY SIGNS	318.00	SQFT		\$	
0760	02585		EDGE KEY	44.00	LF		\$	
0770	02607		FABRIC-GEOTEXTILE CLASS 2 FOR PIPE	62.00	SQYD	\$2.00	\$	\$124.00
0780	02610		RETAINING WALL-GABION	36.00	CUYD		\$	
0790	02650		MAINTAIN & CONTROL TRAFFIC	1.00	LS		\$	
0800	02671		PORTABLE CHANGEABLE MESSAGE SIGN	2.00	EACH		\$	
0810	02726		STAKING	1.00	LS		\$	
0820	02731		REMOVE STRUCTURE	1.00	LS		\$	
0830	03299		ARMORED EDGE FOR CONCRETE	48.00	LF		\$	
0840	06410		STEEL POST TYPE 1	29.00	LF		\$	
0850	06514		PAVE STRIPING-PERM PAINT-4 IN	310.00	LF		\$	
0860	06555		PAVE STRIPING-DUR TY 1-4 IN Y	526.00	LF		\$	
0870	08002		STRUCTURE EXCAV-SOLID ROCK	17.00	CUYD		\$	
0880	08003		FOUNDATION PREPARATION	1.00	LS		\$	

**PROPOSAL BID ITEMS**

Report Date 2/14/25

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0890	08019		CYCLOPEAN STONE RIP RAP	255.00	TON		\$	
0900	08033		TEST PILES	49.00	LF		\$	
0910	08039		PRE-DRILLING FOR PILES	220.00	LF		\$	
0920	08051		PILES-STEEL HP14X89	390.00	LF		\$	
0930	08100		CONCRETE-CLASS A	170.90	CUYD		\$	
0940	08151		STEEL REINFORCEMENT-EPOXY COATED	17,317.00	LB		\$	
0950	08665		PRECAST PC BOX BEAM CB33-48	504.00	LF		\$	
0960	20191ED		OBJECT MARKER TY 3	3.00	EACH		\$	
0970	21134ND		REMOVE-STORE AND REINSTALL SIGN	1.00	EACH		\$	
0975	21321NC		CSL TESTING (4 TUBES) (ADDED 2/14/2025)	4.00	EACH		\$	
0980	21415ND		EROSION CONTROL	1.00	LS		\$	
0990	23378EC		CONCRETE SEALING	5,600.00	SQFT		\$	
1000	25017ED		RAIL SYSTEM SIDE MOUNTED MGS	168.00	LF		\$	
1010	26167EC		CONCRETE-CLASS AA - IC	71.90	CUYD		\$	
1020	26233EC		MOBILIZATION FOR CONCRETE SURF TREATMENT	1.00	LS		\$	

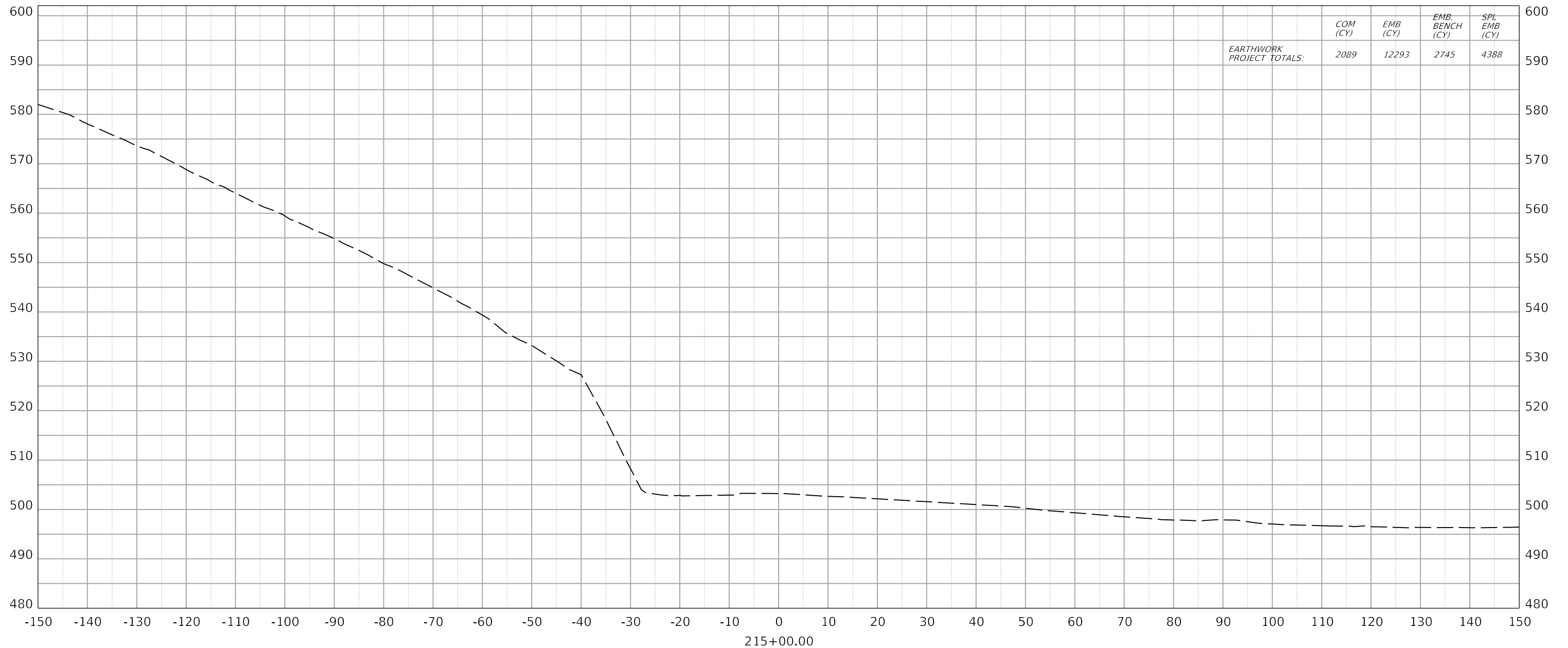
**Section: 0003 - DEMOBILIZATION &/OR MOBILIZATION**

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
1030	02568		MOBILIZATION	1.00	LS		\$	
1040	02569		DEMOBILIZATION	1.00	LS		\$	

NOTES:  
 NEW APPROACH EMBANKMENT CONSTRUCTION SHALL BE ONE OF THE EARLIEST ACTIVITIES FOR THIS SITE TO ALLOW FOR AS MUCH SETTLEMENT AS POSSIBLE TO OCCUR DURING CONSTRUCTION AND THUS REDUCING THE LONG-TERM IMPACTS OF THE SETTLEMENT. SURCHARGE MATERIAL SHALL NOT BE REMOVED UNTIL SETTLEMENT PLATFORM READINGS INDICATE A TOTAL SETTLEMENT OF 5" OR AS DETERMINED BY THE ENGINEER.

\*PLACEMENT AND REMOVAL OF SURCHARGE MATERIAL TO BE MEASURED AND PAID AS SPECIAL EMBANKMENT. SEE GEOTECH REPORT FOR STATION LIMITS AND MORE INFORMATION.

\*\*EMBANKMENT FOUNDATION BENCHES SHALL BE CONSTRUCTED AND PERFORATED PIPE UNDERDRAINS SHALL BE PLACED AT THE LOCATIONS AS DETAILED IN THE GEOTECH REPORT. PERFORATED PIPE UNDERDRAINS AND HEADWALLS SHALL BE INCIDENTAL TO EMBANKMENT IN PLACE.



	COM (CY)	EMB (CY)	EMB. BENCH (CY)	SPL EMB (CY)
EARTHWORK PROJECT TOTALS:	2089	12293	2745	4388



COMMONWEALTH OF KENTUCKY  
 DEPARTMENT OF HIGHWAYS



DRAWING TITLE: CROSS SECTIONS

HORIZONTAL SCALE  
 SCALE: 1" = 10'



STA 215+00

ITEM NO. 5-10046 COUNTY OF FRANKLIN

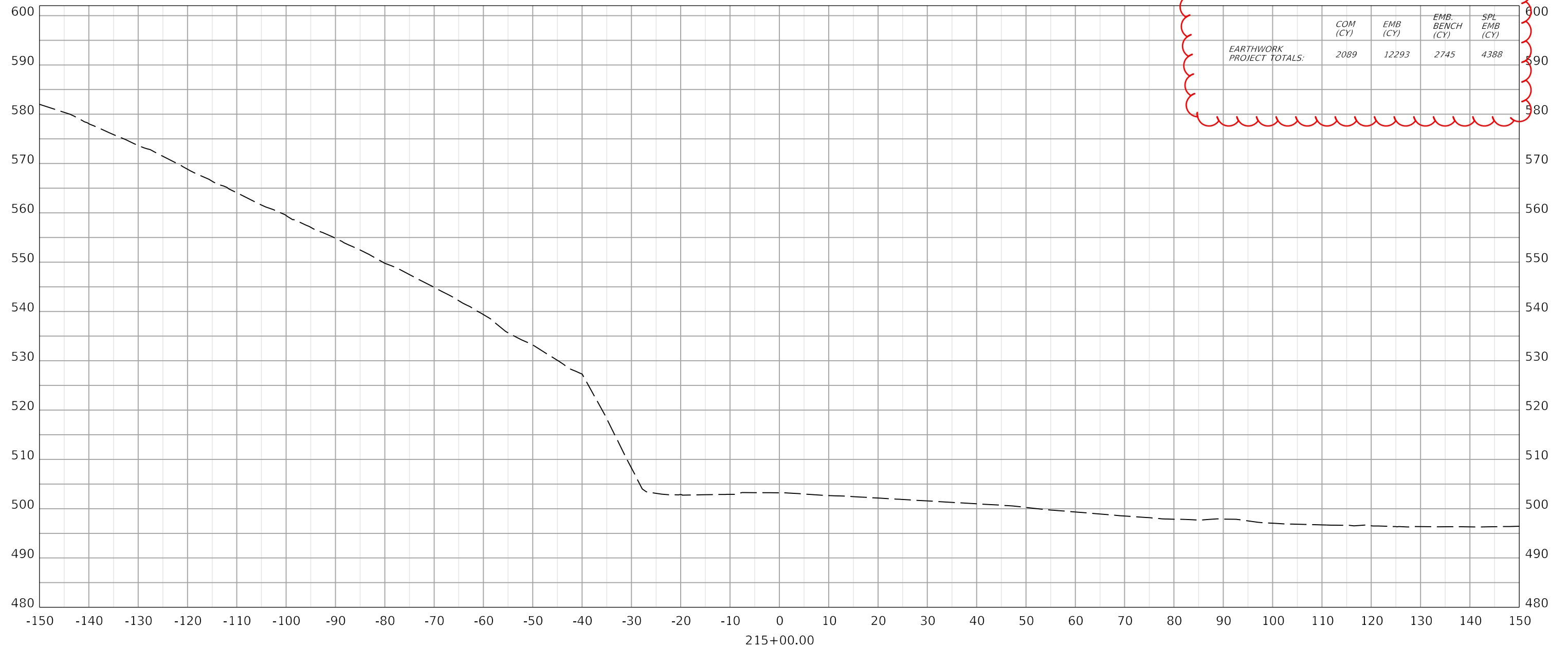
SHEET NO. X18



NOTES:  
 NEW APPROACH EMBANKMENT CONSTRUCTION SHALL BE ONE OF THE EARLIEST ACTIVITIES FOR THIS SITE TO ALLOW FOR AS MUCH SETTLEMENT AS POSSIBLE TO OCCUR DURING CONSTRUCTION AND THUS REDUCING THE LONG-TERM IMPACTS OF THE SETTLEMENT. SURCHARGE MATERIAL SHALL NOT BE REMOVED UNTIL SETTLEMENT PLATFORM READINGS INDICATE A TOTAL SETTLEMENT OF 5" OR AS DETERMINED BY THE ENGINEER.

\*PLACEMENT AND REMOVAL OF SURCHARGE MATERIAL TO BE MEASURED AND PAID AS SPECIAL EMBANKMENT. SEE GEOTECH REPORT FOR STATION LIMITS AND MORE INFORMATION.

\*\*EMBANKMENT FOUNDATION BENCHES SHALL BE CONSTRUCTED AND PERFORATED PIPE UNDERDRAINS SHALL BE PLACED AT THE LOCATIONS AS DETAILED IN THE GEOTECH REPORT. PERFORATED PIPE UNDERDRAINS AND HEADWALLS SHALL BE INCIDENTAL TO EMBANKMENT IN PLACE.



	COM (CY)	EMB (CY)	EMB. BENCH (CY)	SPL EMB (CY)
EARTHWORK PROJECT TOTALS:	2089	12293	2745	4388



COMMONWEALTH OF KENTUCKY  
 DEPARTMENT OF HIGHWAYS



DRAWING TITLE: CROSS SECTIONS

HORIZONTAL SCALE  
 SCALE: 1" = 10'



STA 215+00

ITEM NO. 5-10046 COUNTY OF FRANKLIN

SHEET NO. X18