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

Steven L. Beshear
Governor

Michael W. Hancock, P.E.
Secretary

November 17, 2010

CALL NO. 100
CONTRACT ID NO. 101338
ADDENDUM # 2

Subject: Pike County, APD 80-6 (27)
Letting November 19, 2010

(1) Revised - Plan Sheets - R2a, R2c, R2e, R2f, R5, R8, R13, R14, R18a, R27, R27a, R27d, R27e, R27f, R27g, R27h, R49, & R49g
(2) Revised - Table of Contents - Page 2 of 160
(3) Added - Special Note for Fuel Adjustment - Page 25(a) of 160
(4) Deleted - Special Provision - Page 26 of 160
(5) Revised - CAP - Page 69 of 160
(6) Revised - Bid Items - Pages 155-160 of 160

Proposal revisions are available at http://transportation.ky.gov/contract/.
Plan revisions are available at http://www.lynnimaging.com/kytransportation/.

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

Sincerely,

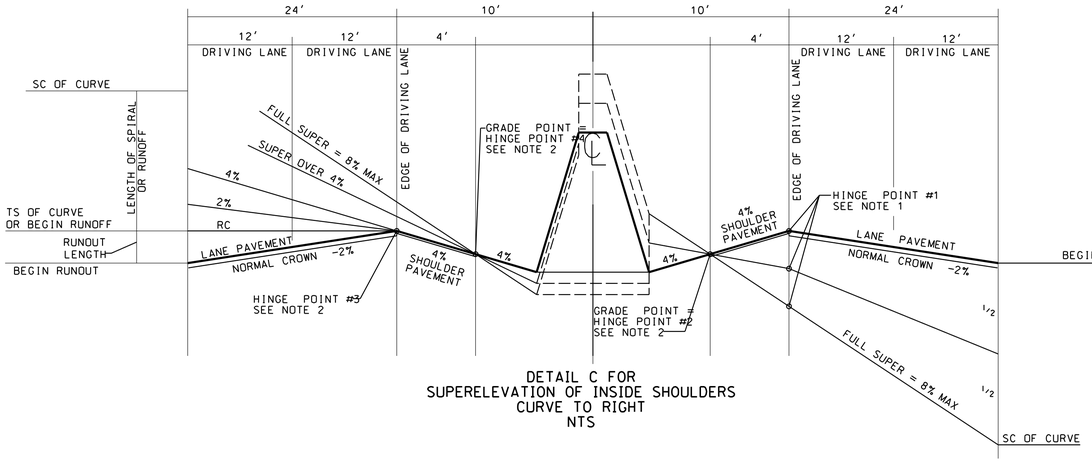
Ryan Griffith

Ryan Griffith
Director
Division of Construction Procurement

RG:ks

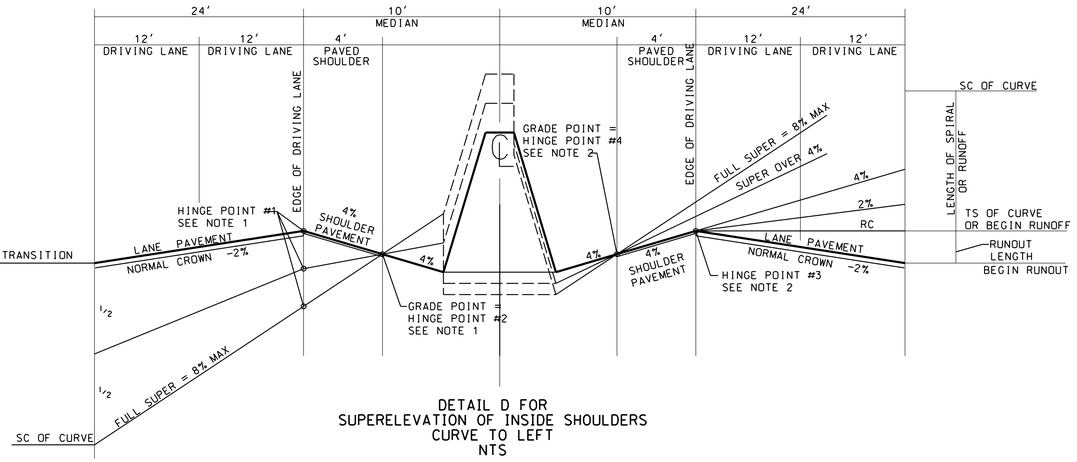
Enclosures

COUNTY OF	ITEM NO.	SHEET NO.
PIKE	12-263.72	RO2A



DETAIL C FOR
SUPERELEVATION OF INSIDE SHOULDERS
CURVE TO RIGHT
NTS

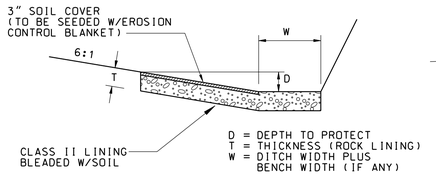
BEGIN SUPERELEVATION TRANSITION
Se = -2%



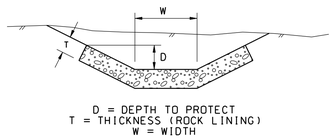
DETAIL D FOR
SUPERELEVATION OF INSIDE SHOULDERS
CURVE TO LEFT
NTS

NOTE #1: THE SHOULDER TRANSITIONS FROM POSITIVE 4% TO FULL SUPER ROTATING AROUND HINGE POINT #2 IN THE SAME DISTANCE THAT THE PAVEMENT TRANSITIONS FROM NEGATIVE 2% TO FULL SUPER ROTATING AROUND HINGE POINT #1.

NOTE #2: FOR SUPERELEVATION FROM NORMAL CROWN THROUGH POSITIVE 4% THE DRIVING LANES ROTATE AROUND HINGE POINT #3 AND THE SHOULDER REMAINS AT NEGATIVE 4%. FOR SUPERELEVATION FROM POSITIVE 4% THROUGH POSITIVE 8% THE DRIVING LANES AND THE SHOULDER ROTATE AROUND HINGE POINT #4 WITH NO BREAK IN SLOPE AT THE EDGE OF PAVEMENT.



TYPICAL ROADWAY DITCH
IN ROCK CUT



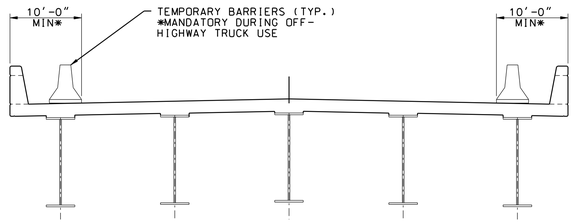
TYPICAL SURFACE
DITCH SECTION

JOHN MOORE BRANCH BRIDGE OVER RUSSEL FORK LOAD LIMIT:

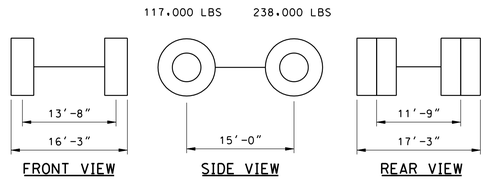
The John Moore Branch Bridge over Russell Fork is designed for HS25 live load. AND to accomodate off road hauling during US 460 construction. The off-road design vehicle is a Caterpillar 777D with a gross weight of 355.000 pounds. The contractor shall ensure that no LIVE LOAD with a gross weight greater than the Caterpillar 777D cross the bridge.

During off-road hauling, temporary concrete barriers shall be placed inside the permanent barriers on both sides of the bridge. Roadway width inside the temporary barriers shall be 29 feet or less.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE STRUCTURAL INTEGRETY OF THE SUB AND SUPER STRUCTURE OF THE JOHN MOORE BRANCH BRIDGE FOR THE DURATION OF THE PROJECT. KYTC WILL INSPECT THE CONDITION OF THE BRIDGE BEFORE AND AFTER COMPLETION OF THE PROJECT AND THE CONTRACTOR SHALL RE-ESTABLISH PRE-PROJECT CONDITION OF THE SUB AND SUPER STRUCTURE OF THE BRIDGE.



CONSTRUCTION USE DECK SECTION
(LOOKING AHEAD N.T.S.)



MAXIMUM OFF-HIGHWAY TRUCK LOADING
(CATERPILLAR 777D)

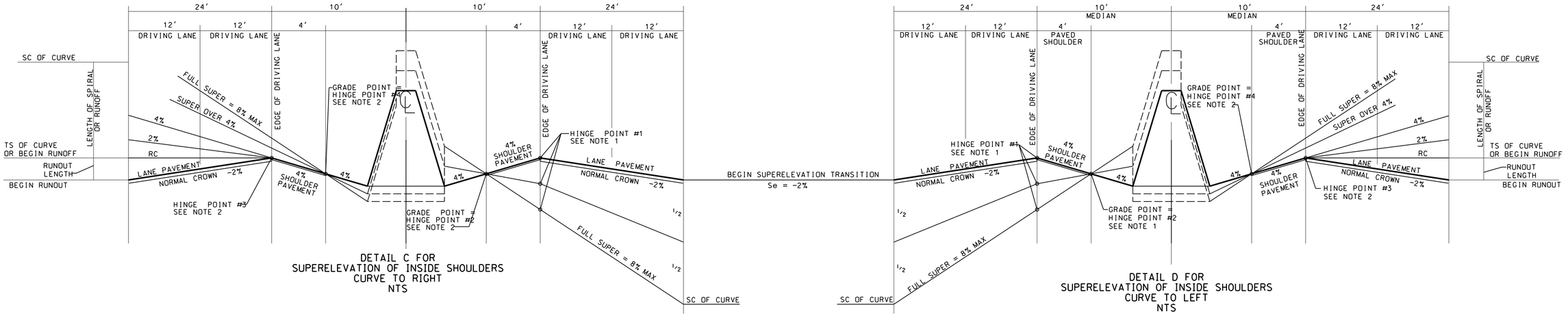
PREPARED BY DATE
CHECKED BY DATE
APPROVED BY DATE

Cell Library: kytc.cel
Cell Name: sp
11/4/2010
...\r0020ats

TYPICAL DETAIL
NOT TO SCALE

COUNTY OF	ITEM NO.	SHEET NO.
PIKE	12-263.72	RO2A

⚠ REVISED 11-15-10



DETAIL C FOR
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CURVE TO RIGHT
NTS

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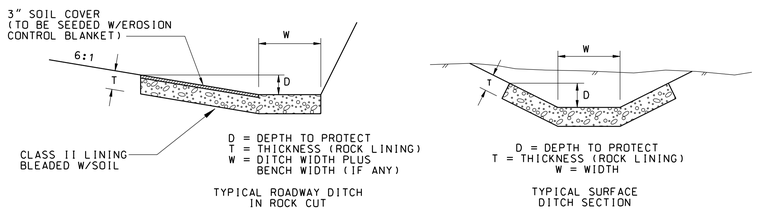
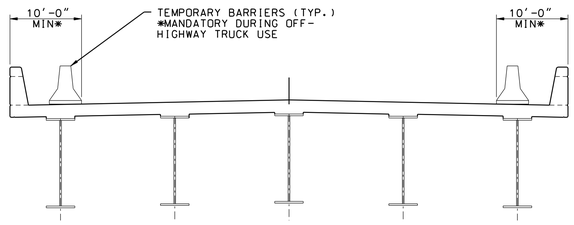


TYPICAL ROADWAY DITCH
IN ROCK CUT

TYPICAL SURFACE
DITCH SECTION



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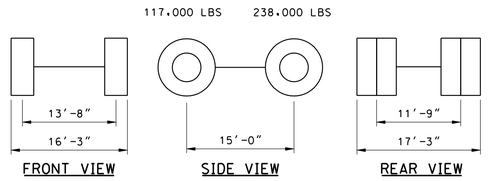

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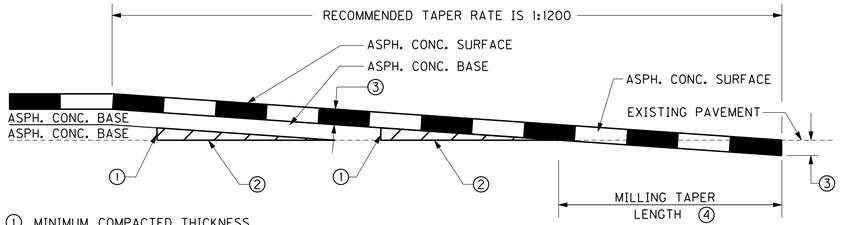
TYPICAL DETAIL
NOT TO SCALE

COUNTY OF	ITEM NO.	SHEET NO.
PIKE	12-263.72	RO2C

① SEE CROSS SECTIONS FOR SLOPES OUTSIDE THE LIMITS OF THE SHOULDERS

② SHOULDERS SHALL BE WIDENED 2' WHERE GUARDRAIL IS REQUIRED. PAVED SHOULDER SHOULD EXTEND TO FACE OF GUARDRAIL.

③ SUPERELEVATED SHOULDERS: CONSTRUCT TO STANDARD SUPERELEVATION EXCEPT NOT FLATTER THAN 4.0%



① MINIMUM COMPACTED THICKNESS
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③ ASPHALT SURFACE THICKNESS (FULL DEPTH)
④ MILL EXISTING PAVEMENT TO RECEIVE ASPHALT SURFACE FULL DEPTH (EDGE KEY).
TAPER LENGTH (ft) = $\frac{\text{t (in)} \times \text{TAPER RATE}}{12}$

FOR A TAPER RATE OF 1:1200
TAPER LENGTH = 150 FEET WHEN T = 1.50 inches

TAPERING OF OVERLAYS ON HIGH SPEED FACILITIES (≥45 MPH)

KY 80 Pavement Design

KY 80 Pavement Design	
1.5" Surface	1.5" Depth Class 4 Asphalt Surface 0.50B PG64-22
16" Base	4" Depth Class 4 Asphalt Base 1.00D PG64-22
	4" Depth Class 4 Asphalt Base 1.50D PG64-22
	4" Depth Class 4 Asphalt Base 1.50D PG64-22
	4" Depth Compacted Crushed Stone Base
KY 80 Shoulder Design	
1.5" Surface	1.5" Depth Class 3 Asphalt Surface 0.50D PG64-22
16" Base	4" Depth Class 3 Asphalt Base 1.00D PG64-22
	12" Depth Compacted Crushed Stone Base
Asphalt Seal Coat ..	2.4 LBS/SY Emulsified Asphalt RS-2
	20 LBS/SY Asphalt Seal Aggregate

CONSTRUCTION CROSSING OF KY 80 Pavement Design

KY 80 Pavement Design	
1.5" Surface	1.5" Depth Class 3 Asphalt Surface 0.50D PG64-22
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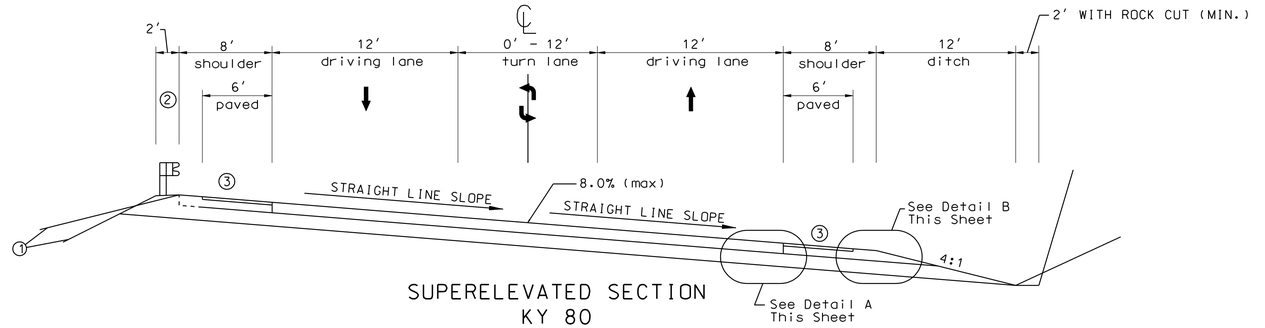
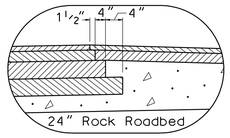
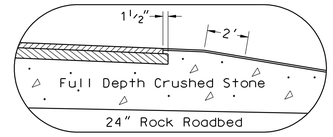


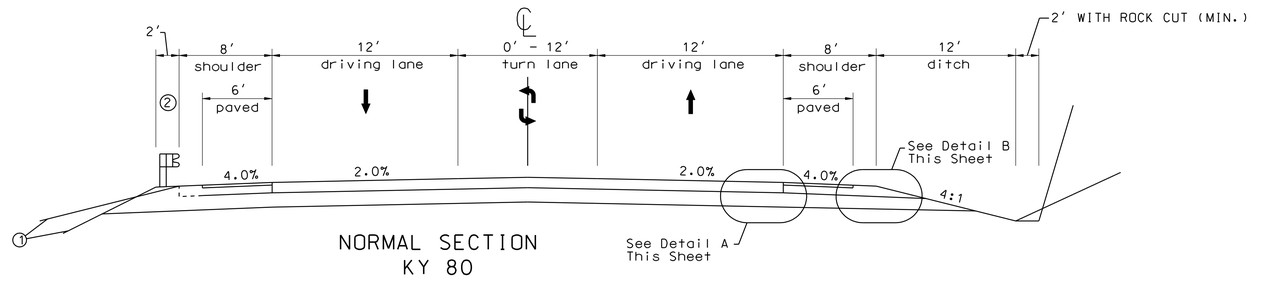
SUPERELEVATED SECTION
KY 80



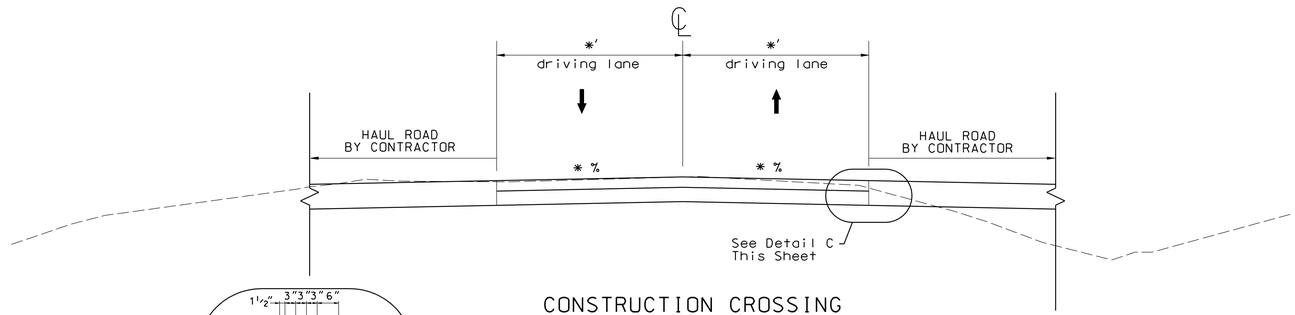
DETAIL A
NTS

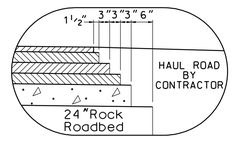


DETAIL B
NTS



NORMAL SECTION
KY 80





DETAIL C
NTS

CONSTRUCTION CROSSING
OF KY 80
* = match existing

KY 80 & APPROACH TYPICALS
NOT TO SCALE

PREPARED BY ____ DATE ____
CHECKED BY ____ DATE ____
APPROVED BY ____ DATE ____

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11/14/2010
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COUNTY OF	ITEM NO.	SHEET NO.
PIKE	12-263.72	RO2C

⚠ REVISED 11-15-10

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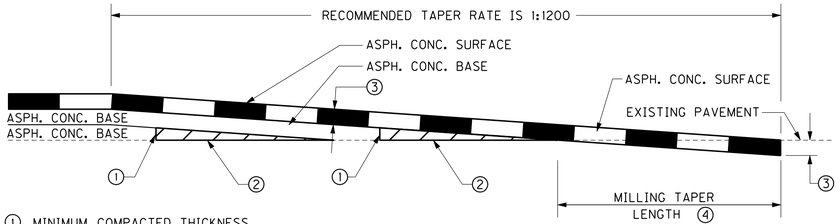

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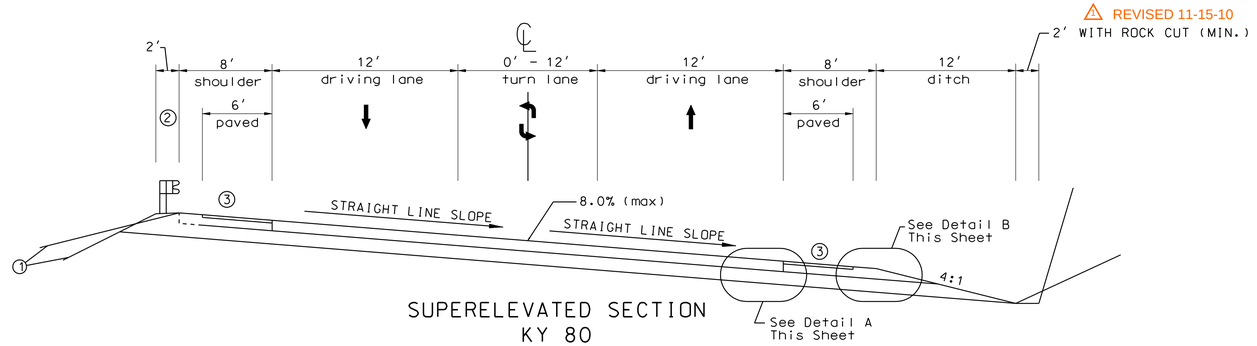

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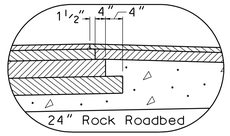

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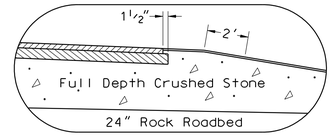
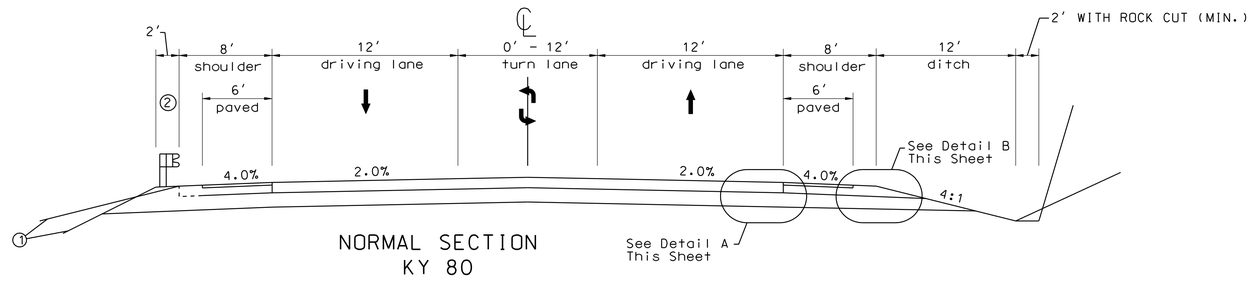


DETAIL B
NTS



NORMAL SECTION
KY 80

CONSTRUCTION CROSSING OF KY 80 Pavement Design

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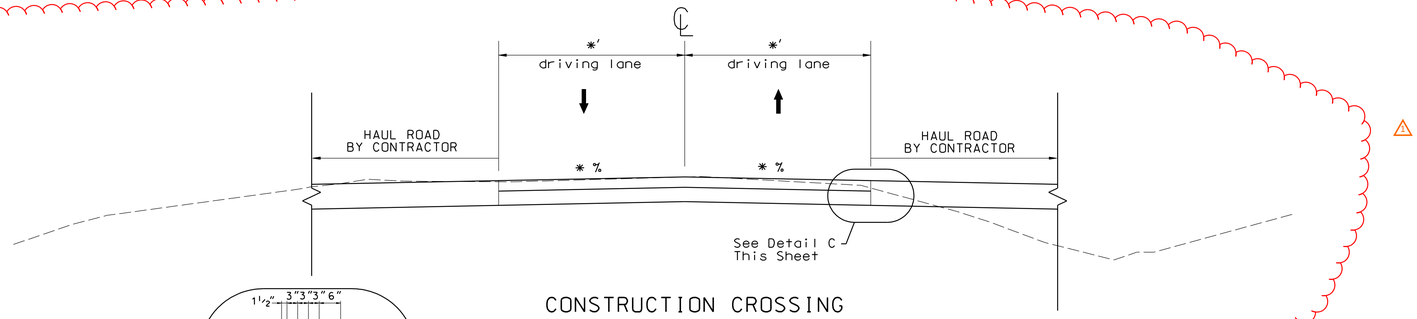

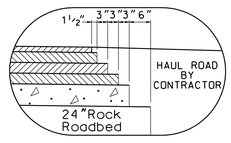

DETAIL C
NTS

CONSTRUCTION CROSSING
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KY 80 & APPROACH TYPICALS
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Cell Library: kytc.cel
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11/4/2010
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COUNTY OF	ITEM NO.	SHEET NO.
PIKE	12-263.72	R02E

GENERAL SUMMARY

	ITEM CODE	ITEM	UNIT	MAINLINE US 460	RAMP 1	KY 80	JOHN MOORE BRANCH			TOTAL PROJECT	
	78	CRUSHED AGGREGATE SIZE NO 2	TON	0	0	2	0			2	
	1982	DELINEATOR FOR GUARDRAIL-WHITE	EACH	0	0	11	0			11	
	2014	BARRICADE-TYPE III	EACH	0	0	14	0			14	
	2159	TEMP DITCH	LIN FT	-	-	-	-			18163	
(5)(6)(9)	2200	ROADWAY EXCAVATION	CU YD	2812911	2859362	449683	1898			6123854	(A)
(1)	2242	WATER	M GAL	0	0	200	0			200	
	2262	FENCE-WOVEN WIRE TYPE 1	LIN FT	8124	1410	2318	0			11852	
	2351	GUARDRAIL-STEEL W BEAM-S FACE	LIN FT	0	0	3775	0			3775	
	2360	GUARDRAIL TERMINAL SECTION NO 1	EACH	0	0	4	0			4	
	2367	GUARDRAIL END TREATMENT TYPE 1	EACH	0	0	4	0			4	
	2429	RIGHT-OF-WAY MONUMENT TYPE 1	EACH	23	4	15	0			42	
	2431	WITNESS R/W MONUMENT TYPE 2	EACH	2	0	1	0			3	
	2432	WITNESS POST	EACH	23	4	15	0			42	
	2488	CHANNEL LINING CLASS IV	CU YD	112	123	898	13400			14533	
(2)	2545	CLEARING AND GRUBBING	LP SUM	-	-	-	-			1	
(3)	2562	SIGNS	SQ FT	0	0	474	0			474	
	2568	MOBILIZATION	LP SUM	-	-	-	-			1	
	2569	DEMOBILIZATION	LP SUM	-	-	-	-			1	
	2585	EDGE KEY	LIN FT	0	0	44	0			44	
(4)	2600	FABRIC GEOTEXTILE TY IV FOR PIPE	SQ YD	4666	518	781	814			6779	
	2650	MAINTAIN AND CONTROL TRAFFIC	LP SUM	-	-	-	-			1	
	2651	DIVERSIONS (BY-PASS DETOURS)	LP SUM	-	-	-	-			1	
	2653	LANE CLOSURE	EACH	0	0	2	0			2	
	2671	PORTABLE CHANGEABLE MESSAGE SIGN	EACH	0	0	3	0			3	
	2701	TEMP SILT FENCE	LIN FT	-	-	-	-			18163	
	2703	SILT TRAP TYPE A	EACH	-	-	-	-			291	
	2704	SILT TRAP TYPE B	EACH	-	-	-	-			291	
	2705	SILT TRAP TYPE C	EACH	-	-	-	-			291	
	2706	CLEAN SILT TRAP TYPE A	EACH	-	-	-	-			1746	
	2707	CLEAN SILT TRAP TYPE B	EACH	-	-	-	-			1746	
	2708	CLEAN SILT TRAP TYPE C	EACH	-	-	-	-			1746	
	2709	CLEAN TEMP SILT FENCE	LIN FT	-	-	-	-			18163	
	2726	STAKING	LP SUM	-	-	-	-			1	
	2775	ARROW PANEL	EACH	0	0	2	0			2	
	3171	CONCRETE BARRIER WALL TYPE 9T	LIN FT	60	0	1000	1560			2620	
	4772	HPS LUMINAIRE OFFSET	EACH	0	0	3	0			3	
	4933	TEMP SIGNAL 2 PHASE	EACH	0	0	3	0			3	
	5950	EROSION CONTROL BLANKET	SQ YD	-	-	-	-			262660	
	5952	TEMP MULCH	SQ YD	-	-	-	-			1409408	
	5953	TEMP SEEDING AND PROTECTION	SQ YD	-	-	-	-			1409408	
	5966	TOPDRESSING FERTILIZER	TON	-	-	-	-			72.94	
	5985	SEEDING AND PROTECTION	SQ YD	-	-	-	-			1318207	
	5989	SPECIAL SEEDING CROWN VETCH	SQ YD	-	-	-	-			343440	
	6510	PAVE STRIPING-TEMP PAINT-4 IN	LIN FT	0	0	32102	0			32102	
	6514	PAVE STRIPING-PERM PAINT-4 IN	LIN FT	0	0	14008	0			14008	
	6568	PAVE MARKING-THERMO STOP BAR-24IN	LIN FT	0	0	48	0			48	
(8)	8100	CONCRETE-CLASS A	CU YD	-	-	-	-			12.55	
(8)	8150	STEEL REINFORCEMENT	LB	-	-	-	-			700	
	10020NS	FUEL ADJUSTMENT	DOLL	-	-	-	-			896341	
	10030NS	ASPHALT ADJUSTMENT	DOLL	-	-	-	-			28700	
(7)	20667ED	PNEUMATIC BACKSTOWING	TON	400	300	0	0			700	
	2570	PROJECT CPM SCHEDULE	LS							1	
	23131ER701	PIPELINE VIDEO INSPECTION	LIN FT	-	-	-	-			917	
(10)	2542	CEMENT	TON	5	4	-	-			9	
	2690	SAFELOADING	CU YD	-	43	-	-			43	

EARTHWORK TOTALS

EMBANKMENT ..... 5309409 CU YD
ROADWAY EXCAVATION ..... 6123854 CU YD (A)

(A) ROADWAY EXCAVATION INCLUDES:
COMMON EXCAVATION ..... 894802 CU YD (B)
ROCK EXCAVATION (S.R.) ..... 5227030 CU YD
EMBANKMENT BENCH ..... 2022 CU YD
TRANSVERSE BENCH ..... 0 CU YD

(B) COMMON EXCAVATION INCLUDES:
EXCAVATION ..... 893830 CU YD
DITCH LEFT ..... 886 CU YD
DITCH RIGHT ..... 86 CU YD

(1) FOR CONTROLLING DUST CAUSED BY MAINTAINING TRAFFIC ONLY.

(2) APPROXIMATELY 291 ACRES

(3) TEMPORARY SIGNS FOR MAINTENANCE OF TRAFFIC

(4) FOR WRAPPING PIPE TRENCH BACKFILL

(5) CONTRACTOR IS HEREBY NOTIFIED OF THE HOMES AND ASSOCIATED STRUCTURES IN THE CLOSE PROXIMITY OF CONSTRUCTION AS DEPICTED ON PLAN SHEETS. THE CONTRACTOR SHALL USE ALL NECESSARY PRECAUTIONARY METHODS TO INSURE THE SAFETY OF THE RESIDENTS AND THEIR PROPERTY IN THIS VICINITY DURING THE PROSECUTION OF ANY AND ALL WORK IN AND AROUND THIS AREA.

(6) ALL EXCESS MATERIAL RESULTING FROM ROADWAY EXCAVATION SHALL BE PLACED IN THE JOHN MOORE BRANCH WASTE AREA. FOR ADDITIONAL INFORMATION REFER TO GEOTECHNICAL NOTES SHEET R49 IN THE CONTRACT PLANS

(7) PIPE IS INCIDENTAL TO 20667ED.

(8) QUANTITY CARRIED OVER FROM PIPE DRAINAGE SUMMARY.

(9) INCLUDES EARTHWORK RECALCULATED BY CENTROID METHOD AT INTERSECTION OF US460 (STA 759+00 TO STA 763+50) AND RAMP 1 (STA 214+00 TO STA 218+12.55).

(10) FOR PNEMATIC BACKSTOWING SEE GEOTECHNICAL NOTES 20 & 21 (SHEET R49).

PREPARED BY DATE
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APPROVED BY DATE

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GENERAL SUMMARY

COUNTY OF	ITEM NO.	SHEET NO.
PIKE	12-263.72	R02E

⚠ REVISED 11-15-10

GENERAL SUMMARY

	ITEM CODE	ITEM	UNIT	MAINLINE US 460	RAMP 1	KY 80	JOHN MOORE BRANCH			TOTAL PROJECT	
	78	CRUSHED AGGREGATE SIZE NO 2	TON	0	0	2	0			2	
	1982	DELINEATOR FOR GUARDRAIL-WHITE	EACH	0	0	11	0			11	
	2014	BARRICADE-TYPE III	EACH	0	0	14	0			14	
	2159	TEMP DITCH	LIN FT	-	-	-	-			18163	
⑤⑥⑨	2200	ROADWAY EXCAVATION	CU YD	2812911	2859362	449683	1898			6123854	(A)
⚠ ①	2242	WATER	M GAL	0	0	200	0			200	
	2262	FENCE-WOVEN WIRE TYPE 1	LIN FT	8124	1410	2318	0			11852	
	2351	GUARDRAIL-STEEL W BEAM-S FACE	LIN FT	0	0	3775	0			3775	
	2360	GUARDRAIL TERMINAL SECTION NO 1	EACH	0	0	4	0			4	
	2367	GUARDRAIL END TREATMENT TYPE 1	EACH	0	0	4	0			4	
	2429	RIGHT-OF-WAY MONUMENT TYPE 1	EACH	23	4	15	0			42	
	2431	WITNESS R/W MONUMENT TYPE 2	EACH	2	0	1	0			3	
	2432	WITNESS POST	EACH	23	4	15	0			42	
	2488	CHANNEL LINING CLASS IV	CU YD	112	123	898	13400			14533	
②	2545	CLEARING AND GRUBBING	LP SUM	-	-	-	-			1	
③	2562	SIGNS	SQ FT	0	0	474	0			474	
	2568	MOBILIZATION	LP SUM	-	-	-	-			1	
	2569	DEMOBILIZATION	LP SUM	-	-	-	-			1	
	2585	EDGE KEY	LIN FT	0	0	44	0			44	
④	2600	FABRIC GEOTEXTILE TY IV FOR PIPE	SQ YD	4666	518	781	814			6779	
	2650	MAINTAIN AND CONTROL TRAFFIC	LP SUM	-	-	-	-			1	
	2651	DIVERSIONS (BY-PASS DETOURS)	LP SUM	-	-	-	-			1	
	2653	LANE CLOSURE	EACH	0	0	2	0			2	
	2671	PORTABLE CHANGEABLE MESSAGE SIGN	EACH	0	0	3	0			3	
	2701	TEMP SILT FENCE	LIN FT	-	-	-	-			18163	
	2703	SILT TRAP TYPE A	EACH	-	-	-	-			291	
	2704	SILT TRAP TYPE B	EACH	-	-	-	-			291	
	2705	SILT TRAP TYPE C	EACH	-	-	-	-			291	
	2706	CLEAN SILT TRAP TYPE A	EACH	-	-	-	-			1746	
	2707	CLEAN SILT TRAP TYPE B	EACH	-	-	-	-			1746	
	2708	CLEAN SILT TRAP TYPE C	EACH	-	-	-	-			1746	
	2709	CLEAN TEMP SILT FENCE	LIN FT	-	-	-	-			18163	
	2726	STAKING	LP SUM	-	-	-	-			1	
	2775	ARROW PANEL	EACH	0	0	2	0			2	
	3171	CONCRETE BARRIER WALL TYPE 9T	LIN FT	60	0	1000	1560			2620	
	4772	HPS LUMINAIRE OFFSET	EACH	0	0	3	0			3	
	4933	TEMP SIGNAL 2 PHASE	EACH	0	0	3	0			3	
	5950	EROSION CONTROL BLANKET	SQ YD	-	-	-	-			262660	
	5952	TEMP MULCH	SQ YD	-	-	-	-			1409408	
	5953	TEMP SEEDING AND PROTECTION	SQ YD	-	-	-	-			1409408	
	5966	TOPDRESSING FERTILIZER	TON	-	-	-	-			72.94	
	5985	SEEDING AND PROTECTION	SQ YD	-	-	-	-			1318207	
	5989	SPECIAL SEEDING CROWN VETCH	SQ YD	-	-	-	-			343440	
	6510	PAVE STRIPING-TEMP PAINT-4 IN	LIN FT	0	0	32102	0			32102	
	6514	PAVE STRIPING-PERM PAINT-4 IN	LIN FT	0	0	14008	0			14008	
	6568	PAVE MARKING-THERMO STOP BAR-24IN	LIN FT	0	0	48	0			48	
⑧	8100	CONCRETE-CLASS A	CU YD	-	-	-	-			12.55	
⑧	8150	STEEL REINFORCEMENT	LB	-	-	-	-			700	
	10020NS	FUEL ADJUSTMENT	DOLL	-	-	-	-			896341	
⚠	10030NS	ASPHALT ADJUSTMENT	DOLL	-	-	-	-			28700	
⑦	20667ED	PNEUMATIC BACKSTOWING	TON	400	300	0	0			700	
	2570	PROJECT CPM SCHEDULE	LS							1	
	23131ER701	PIPELINE VIDEO INSPECTION	LIN FT	-	-	-	-			917	
⑩	2542	CEMENT	TON	5	4	-	-			9	
⚠	2690	SAFELOADING	CU YD	-	43	-	-			43	

EARTHWORK TOTALS

EMBANKMENT ..... 5309409 CU YD

ROADWAY EXCAVATION ..... 6123854 CU YD (A)

(A) ROADWAY EXCAVATION INCLUDES:

COMMON EXCAVATION ..... 894802 CU YD (B)

ROCK EXCAVATION (S.R.) ..... 5227030 CU YD

EMBANKMENT BENCH ..... 2022 CU YD

TRANSVERSE BENCH ..... 0 CU YD

(B) COMMON EXCAVATION INCLUDES:

EXCAVATION ..... 893830 CU YD

DITCH LEFT ..... 886 CU YD

DITCH RIGHT ..... 86 CU YD

① FOR CONTROLLING DUST CAUSED BY MAINTAINING TRAFFIC ONLY.

② APPROXIMATELY 291 ACRES

③ TEMPORARY SIGNS FOR MAINTENANCE OF TRAFFIC

④ FOR WRAPPING PIPE TRENCH BACKFILL

⑤ CONTRACTOR IS HEREBY NOTIFIED OF THE HOMES AND ASSOCIATED STRUCTURES. IN THE CLOSE PROXIMITY OF CONSTRUCTION AS DEPICTED ON PLAN SHEETS. THE CONTRACTOR SHALL USE ALL NECESSARY PRECAUTIONARY METHODS TO INSURE THE SAFETY OF THE RESIDENTS AND THEIR PROPERTY IN THIS VICINITY DURING THE PROSECUTION OF ANY AND ALL WORK IN AND AROUND THIS AREA.

⑥ ALL EXCESS MATERIAL RESULTING FROM ROADWAY EXCAVATION SHALL BE PLACED IN THE JOHN MOORE BRANCH WASTE AREA. FOR ADDITIONAL INFORMATION REFER TO GEOTECHNICAL NOTES SHEET R49 IN THE CONTRACT PLANS

⑦ PIPE IS INCIDENTAL TO 20667ED.

⑧ QUANTITY CARRIED OVER FROM PIPE DRAINAGE SUMMARY.

⑨ INCLUDES EARTHWORK RECALCULATED BY CENTROID METHOD AT INTERSECTION OF US460 (STA 759+00 TO STA 763+50) AND RAMP 1 (STA 214+00 TO STA 218+12.55).

⑩ FOR PNEMATIC BACKSTOWING SEE GEOTECHNICAL NOTES 20 & 21 (SHEET R49).

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PAVING AREAS

ITEM	KY 80	KY 80 SHOULDERS	TIE-IN FROM EX. KY 80 TO PROP. KY 80	DETOUR "1"	ENTRANCES ⑥	CONSTRUCTION CROSSING OF KY 80					TOTAL PROJECT
	S	Q	U	A	R	E	Y	A	R	D	S
1½" DEPTH CL4 ASPH SURF 0.50B PG64-22	10730	0	511	2340	0	0					13581
1½" DEPTH CL3 ASPH SURF 0.50D PG64-22	0	4168	0	0	0	267 ⑦					4968
1¼" DEPTH CL2 ASPH SURF 0.38D PG64-22	0	0	0	0	967	0					967
4" DEPTH CL2 ASPH BASE 0.75D PG64-22	0	0	0	0	993	0					993
4" DEPTH CL4 ASPH BASE 1.00D PG64-22	10812	0	517	1873	0	0					13202
5" DEPTH CL4 ASPH BASE 1.00D PG64-22 ⑤	0	0	0	489	0	0					489
4" DEPTH CL3 ASPH BASE 1.00D PG64-22	0	4168	0	0	0	0					4168
3" DEPTH CL4 ASPH BASE 1.50D PG64-22	0	0	0	0	0	825 ⑦					825
4" DEPTH CL4 ASPH BASE 1.50D PG64-22	22291	0	1084	3923	0	0					27298
4" DEPTH CRUSHED STONE BASE	11257	0	566	2050	1041	0					14914
6" DEPTH CRUSHED STONE BASE	0	0	0	0	0	286 ⑦					286
12" DEPTH CRUSHED STONE BASE	0	4168	0	0	0	0					4168
FULL DEPTH CRUSHED STONE BASE ④	0	4867	0	0	0	0					4867
ASPHALT SEAL AGGREGATE	0	2552	0	0	0	0					2552
EMULSIFIED ASPHALT RS-2	0	2552	0	0	0	0					2552

PAVING SUMMARY

ITEM CODE	ITEM	UNIT	KY 80	KY 80 SHOULDERS	TIE-IN FROM EX. KY 80 TO PROP. KY 80	DETOUR	ENTRANCES	CONSTRUCTION CROSSING OF KY 80					TOTAL PROJECT
3	CRUSHED STONE BASE ①	TON	2589	6234	130	472	239	197 ⑨					9862
100	ASPHALT SEAL AGGREGATE ②	TON	0	51	0	0	0	0					51
208	CL4 ASPH BASE 1.50D PG64-22	TON	4904	0	238	863	0	136					6142
214	CL3 ASPH BASE 1.00D PG64-22	TON	0	917	0	0	0	0					917
217	CL4 ASPH BASE 1.00D PG64-22	TON	2379	0	114	546	0	0					3039
221	CL2 ASPH BASE 0.75D PG64-22	TON	0	0	0	0	219	0					219
291	EMULSIFIED ASPHALT RS-2 ③	TON	0	6.1	0	0	0	0					6.1
301	CL2 ASPH SURF 0.38D PG64-22	TON	0	0	0	0	66	0					66
312	CL3 ASPH SURF 0.50D PG64-22	TON	0	344	0	0	0	66 ⑧					410
327	CL4 ASPH SURF 0.50B PG64-22	TON	885	0	42	193	0	0					1120

NOTES

ALL ASHALT MIXTURES SHALL BE ESTIMATED AT 110 LBS. PER SQ. YD. PER INCH OF DEPTH, UNLESS NOTED OTHERWISE.

① ESTIMATED AT 115 LBS. PER SQ. YD. PER INCH OF DEPTH.

② ESTIMATED AT 19.9 LBS. PER SQ. YD. (TWO APPLICATIONS)

③ ESTIMATED AT 2.4 LBS. PER SQ. YD. (TWO APPLICATIONS)

④ THE FULL DEPTH CRUSHED STONE BASE AREA HAS BEEN CALCULATED USING AN AVERAGE DEPTH OF 12 INCHES.

⑤ THIS COARSE IS USED FOR THE LEVELING & WEDGING REQUIRED TO TIE THE DETOUR TO EXISTING KY 80 AND IS ESTIMATED AT AN AVERAGE DEPTH OF 5 INCHES FOR 200 LINEAR FEET OF DETOUR.

⑥ KY 80 STA 68+50 (RT)
KY 80 STA 71+81.50 (RT)
KY 80 STA 73+00 (RT)
KY 80 STA 74+22 (RT)
KY 80 STA 81+50 (RT)
JOHN MOORE BRANCH STA 50+00 (260' LT)

⑦ THE AREAS FOR THE CONSTRUCTION CROSSING OF KY 80 ARE ESTIMATED ON A LENGTH OF 100 LINEAR FEET OF CROSSING.

⑧ THE QUANTITY OF ASPHALT SURFACE HAS BEEN CALCULATED BASED ON THREE COARSES BEING REQUIRED DURING THE DURATION OF THE PROJECT.

⑨ THE QUANTITY FOR CRUSHED STONE BASE HAS BEEN DOUBLED FOR APPLICATION TO ROCK ROAD BED.

PAVING SUMMARY

COUNTY OF	ITEM NO.	SHEET NO.
PIKE	12-263.72	R02F

COUNTY OF	ITEM NO.	SHEET NO.
PIKE	12-263.72	RO2F

⚠ REVISED 11-15-10

PAVING

ITEM	S	KY 80	KY 80 SHOULDERS	ENTRANCES ⑥	DETOUR "1"	TIE-IN FROM EX. KY 80 TO PROP. KY 80	CONSTRUCTION CROSSING OF KY 80	TOTAL PROJECT
1½" DEPTH CL4 ASPH SURF 0.50B PG64-22	0	10730	0	0	2340	511	0	13581
1½" DEPTH CL3 ASPH SURF 0.50D PG64-22		0	4168	0	0	0	267 ⑦	4968
1¼" DEPTH CL2 ASPH SURF 0.38D PG64-22		0	0	967	0	0	0	967
4" DEPTH CL2 ASPH BASE 0.75D PG64-22		0	0	993	0	0	0	993
4" DEPTH CL4 ASPH BASE 1.00D PG64-22		10812	0	0	1873	517	0	13202
5" DEPTH CL4 ASPH BASE 1.00D PG64-22 ⑤		0	0	0	489	0	0	489
4" DEPTH CRUSHED STONE BASE		1257	0	0	0	0	0	1257
6" DEPTH CRUSHED STONE BASE		0	0	0	0	0	825 ⑦	825
12" DEPTH CRUSHED STONE BASE		0	4168	0	0	0	0	4168
FULL DEPTH CRUSHED STONE BASE ④		2229	0	0	3923	1084	0	27298
		0	4867	0	0	0	0	4867
ASPHALT SEAL AGGREGATE		0	2552	0	0	0	0	2552
EMULSIFIED ASPHALT RS-2		0	2552	0	0	0	0	2552
4" DEPTH CRUSHED STONE BASE		1041	0	0	2050	566	0	14914
6" DEPTH CRUSHED STONE BASE		0	0	0	0	0	286 ⑦	286
12" DEPTH CRUSHED STONE BASE		0	4168	0	0	0	0	4168
FULL DEPTH CRUSHED STONE BASE ④		0	4867	0	0	0	0	4867
ASPHALT SEAL AGGREGATE		0	2552	0	0	0	0	2552
EMULSIFIED ASPHALT RS-2		0	2552	0	0	0	0	2552

PAVING SUMMARY

ITEM CODE	ITEM	UNIT	KY 80	KY 80 SHOULDERS	ENTRANCES	DETOUR	TIE-IN FROM EX. KY 80 TO PROP. KY 80	CONSTRUCTION CROSSING OF KY 80	TOTAL PROJECT
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100	ASPHALT SEAL AGGREGATE ②	TON	0	51	0	0	0	0	51
208	CL4 ASPH BASE 1.50D PG64-22	TON	4904	0	0	863	238	136	6142
214	CL3 ASPH BASE 1.00D PG64-22	TON	0	917	0	0	0	0	917
217	CL4 ASPH BASE 1.00D PG64-22	TON	2379	0	0	546	114	0	3039
221	CL2 ASPH BASE 0.75D PG64-22	TON	0	0	219	0	0	0	219
291	EMULSIFIED ASPHALT RS-2 ③	TON	0	6.1	0	0	0	0	6.1
301	CL2 ASPH SURF 0.38D PG64-22	TON	0	0	66	0	0	0	66
312	CL3 ASPH SURF 0.50D PG64-22	TON	0	344	0	0	42	66 ⑧	410
327	CL4 ASPH SURF 0.50B PG64-22	TON	885	0	0	193	42	0	1120

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NOTES

ALL ASHALT MIXTURES SHALL BE ESTIMATED AT 110 LBS. PER SQ. YD. PER INCH OF DEPTH, UNLESS NOTED OTHERWISE.

① ESTIMATED AT 115 LBS. PER SQ. YD. PER INCH OF DEPTH.

② ESTIMATED AT 19.9 LBS. PER SQ. YD. (TWO APPLICATIONS)

③ ESTIMATED AT 2.4 LBS. PER SQ. YD. (TWO APPLICATIONS)

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⑥ KY 80 STA 68+50 (RT)
KY 80 STA 71+81.50 (RT)
KY 80 STA 73+00 (RT)
KY 80 STA 74+22 (RT)
KY 80 STA 81+50 (RT)
JOHN MOORE BRANCH STA 50+00 (260' LT)

⑦ THE AREAS FOR THE CONSTRUCTION CROSSING OF KY 80 ARE ESTIMATED ON A LENGTH OF 100 LINEAR FEET OF CROSSING.

⑧ THE QUANTITY OF ASPHALT SURFACE HAS BEEN CALCULATED BASED ON THREE COARSES BEING REQUIRED DURING THE DURATION OF THE PROJECT.

⑨ THE QUANTITY FOR CRUSHED STONE BASE HAS BEEN DOUBLED FOR APPLICATION TO ROCK ROAD BED.

⚠

PAVING SUMMARY

COUNTY OF	ITEM NO.	SHEET NO.
PIKE	12-263.72	R05

ENTRANCE CONSTRUCTION			
LOCATION	BIT. (S.Y.)	GRAVEL (S.Y.)	PIPE
RT 81+50	197		

STEEL "W" BEAM GUARDRAIL CONSTRUCTION			
LT. OR RT.	STATION TO STATION	SINGLE FACE (ft)	END TREATMENT TY 1 (Ea)
LT.	KY 80 74+50 TO 80+62.50	562.5	1
RT.	KY 80 74+50 TO 78+93.75	393.75	1

DITCH CONSTRUCTION CHART								
LT	RT	MD	LIMITS STA. TO STA.	TYPE	QUANTITY	DEPTH	THICKNESS	DITCH
X			74+50 -77+50	IN ROCK				2.0' F.B.
	X		74+50 - 77+50	CLASS IV	99.4 CU YD	1.0'	2.0'	SPECIAL "V" BOT
X			77+50 - INLET	CLASS IV	42.9 CU YD	2.0'	2.0'	20.0' F.B.
	X		77+50 - OUTLET	CLASS IV	300.2 CU YD	2.0'	2.0'	20.0' F.B.
X			77+50 - 86+50	CLASS IV	298.1 CU YD	1.0'	2.0'	2.0' F.B.

PREPARED BY DATE
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11/14/2010
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US 460 STA. 745+50 TO STA. 758+50
SCALE : 1"=50'

COUNTY OF	ITEM NO.	SHEET NO.
PIKE	12-263.72	R05

⚠ REVISED 11-15-10

ENTRANCE CONSTRUCTION			
LOCATION	BIT. (S.Y.)	GRAVEL (S.Y.)	PIPE
RT 81+50	197		

STEEL "W" BEAM GUARDRAIL CONSTRUCTION			
LT. OR RT.	STATION TO STATION	SINGLE FACE (ft)	END TREATMENT TY 1 (Ea)
LT.	KY 80 74+50 TO 80+62.50	562.5	1
RT.	KY 80 74+50 TO 78+93.75	393.75	1

DITCH CONSTRUCTION CHART								
LT	RT	MD	LIMITS STA. TO STA.	TYPE	QUANTITY	DEPTH	THICKNESS	DITCH
X			74+50 -77+50	IN ROCK				2.0' F.B.
	X		74+50 - 77+50	CLASS IV	99.4 CU YD	1.0'	2.0'	SPECIAL "V" BOT
X			77+50 - INLET	CLASS IV	42.9 CU YD	2.0'	2.0'	20.0' F.B.
	X		77+50 - OUTLET	CLASS IV	300.2 CU YD	2.0'	2.0'	20.0' F.B.
X			77+50 - 86+50	CLASS IV	298.1 CU YD	1.0'	2.0'	2.0' F.B.

PREPARED BY DATE
CHECKED BY DATE
APPROVED BY DATE

Cell Library: kytc.cel
Cell Name: sp
11/14/2010
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US 460 STA. 745+50 TO STA. 758+50
SCALE : 1"=50'

COUNTY OF	ITEM NO.	SHEET NO.
PIKE	12-263.72	R08

SHEET TOTALS						
EXC.	S.R.	DITCH LT.	DITCH RT.	EMB. BENCH	EMB.	ROCK RDBED
69805*	160969*	0	0	2022	164883	16334

* INCLUDES EARTHWORK RECALCULATED BY CENTROID METHOD AT INTERSECTION OF US460 (STA 759+00 TO STA 763+50) AND RAMP 1 (STA 214+00 TO STA 218+12.55).

STA. 761+36.96
EL. 1097.00
5 ELEC.
END BRIDGE RT (BY OTHERS)
STA 759+70
BRIDGE RT
(BY OTHERS)
-4.000%
P.V.C. 765+50.00
Elev. 868.51
STA 768+93.50 @ 0° SKEW
CONST 1-DBI TYPE 2
STA 769+00 @ 0° SKEW
CONST 36" STORM SEWER,
1-DBI TYPE 2, 1-DBI TYPE 13 MODIFIED
1-36" PIPE CULVERT HEADWALL
So=8.00%
TG 852.68
TG 852.44
IE 848.35
IE 848.11
PROP 36"
STORM SEWER
IE 847.32
FLOOD EVALUATION DATA
Q10 = 21.93 cfs
HW10 = 853.70 (grate)
Q25 = 26.25 cfs
HW25 = 853.81 (grate)
FLOOD EVALUATION DATA
Q10 = 21.93 cfs
HW10 = 853.46 (grate)
Q25 = 26.25 cfs
HW25 = 853.57 (grate)
758+50 759+00 760+00 761+00 762+00 763+00 764+00 765+00 766+00 767+00 768+00 769+00 770+00 771+00 771+50

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MAINLINE PROFILE
STA. 758+50 TO STA. 771+50
SCALE 1"=50' HORIZ., 1"=20' VERT.

COUNTY OF	ITEM NO.	SHEET NO.
PIKE	12-263.72	R08

⚠1 REVISED 11-15-10

SHEET TOTALS

EXC.	S.R.	DITCH LT.	DITCH RT.	EMB. BENCH	EMB.	ROCK RDBED
69805*	160969*	0	0	2022	164883	16334

* INCLUDES EARTHWORK RECALCULATED BY CENTROID METHOD AT INTERSECTION OF US460 (STA 759+00 TO STA 763+50) AND RAMP 1 (STA 214+00 TO STA 218+12.55). ⚠1

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CHECKED BY ______ DATE ______
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...\r00800pr

MAINLINE PROFILE
STA. 758+50 TO STA. 771+50
SCALE 1"=50' HORIZ., 1"=20' VERT.

COUNTY OF	ITEM NO.	SHEET NO.
PIKE	12-263.72	R13

STEEL "W" BEAM GUARDRAIL CONSTRUCTION

LT. OR RT.	STATION TO STATION	SINGLE FACE (ft)	END TREATMENT TY 1 (Ea)	DELINEATORS WHITE (Ea)
LT.	55+37.50 TO 61+50	562.5	1	3•
RT.	50+00 TO 61+50	1150		8•

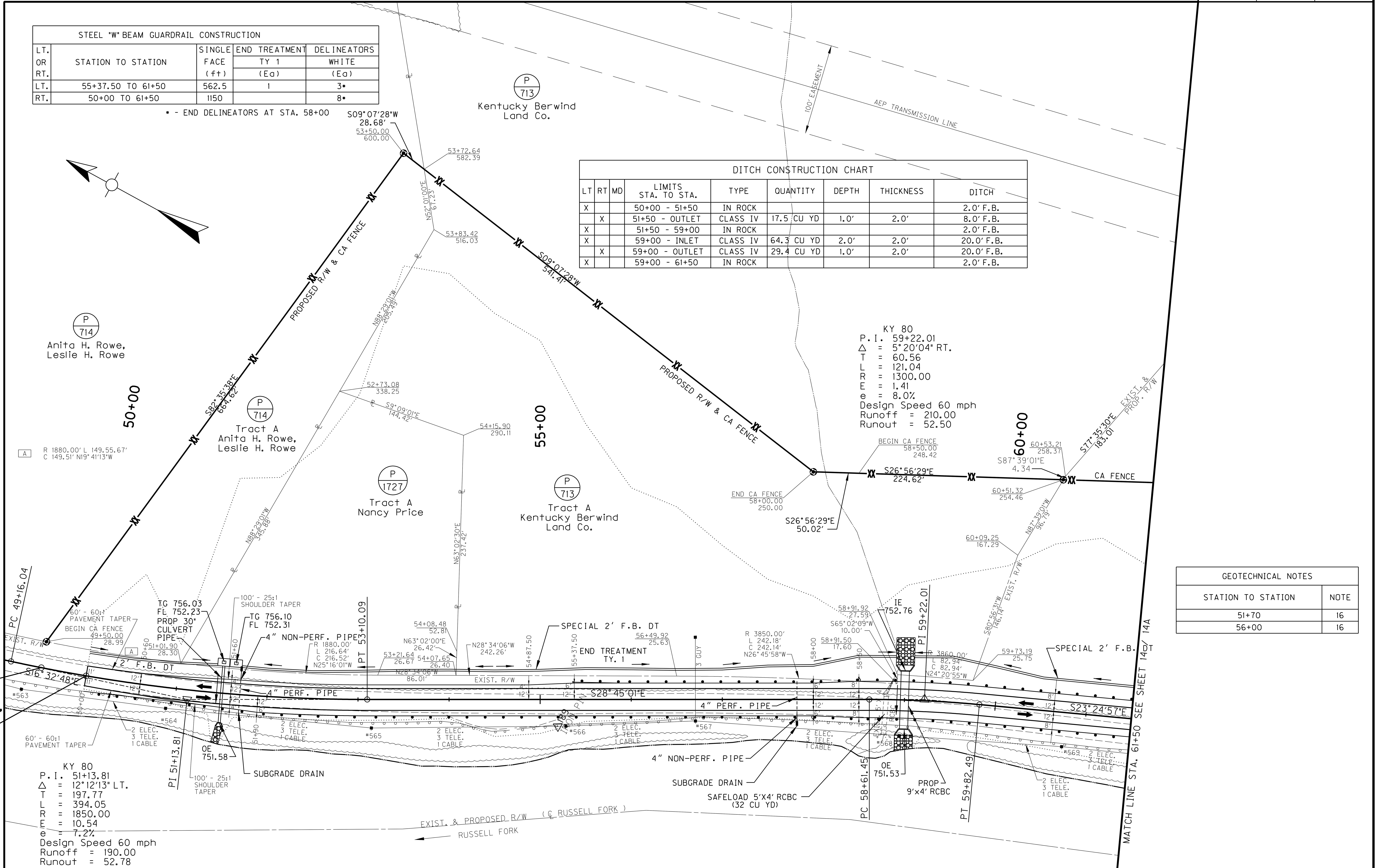
• - END DELINEATORS AT STA. 58+00

DITCH CONSTRUCTION CHART

LT	RT	MD	LIMITS STA. TO STA.	TYPE	QUANTITY	DEPTH	THICKNESS	DITCH
X			50+00 - 51+50	IN ROCK				2.0' F.B.
	X		51+50 - OUTLET	CLASS IV	17.5 CU YD	1.0'	2.0'	8.0' F.B.
X			51+50 - 59+00	IN ROCK				2.0' F.B.
X			59+00 - INLET	CLASS IV	64.3 CU YD	2.0'	2.0'	20.0' F.B.
	X		59+00 - OUTLET	CLASS IV	29.4 CU YD	1.0'	2.0'	20.0' F.B.
X			59+00 - 61+50	IN ROCK				2.0' F.B.

GEOTECHNICAL NOTES

STATION TO STATION	NOTE
51+70	16
56+00	16



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11/14/2010
...\r01300pl

KY 80 STA. 50+00 TO STA. 61+50
SCALE : 1"=50'

COUNTY OF	ITEM NO.	SHEET NO.
PIKE	12-263.72	R13

⚠ REVISED 11-15-10

STEEL "W" BEAM GUARDRAIL CONSTRUCTION				
LT. OR RT.	STATION TO STATION	SINGLE FACE (ft)	END TREATMENT TY 1 (Ea)	DELINEATORS WHITE (Ea)
LT.	55+37.50 TO 61+50	562.5	1	3•
RT.	50+00 TO 61+50	1150		8•

• - END DELINEATORS AT STA. 58+00

DITCH CONSTRUCTION CHART								
LT	RT	MD	LIMITS STA. TO STA.	TYPE	QUANTITY	DEPTH	THICKNESS	DITCH
X			50+00 - 51+50	IN ROCK				2.0' F.B.
	X		51+50 - OUTLET	CLASS IV	17.5 CU YD	1.0'	2.0'	8.0' F.B.
X			51+50 - 59+00	IN ROCK				2.0' F.B.
X			59+00 - INLET	CLASS IV	64.3 CU YD	2.0'	2.0'	20.0' F.B.
	X		59+00 - OUTLET	CLASS IV	29.4 CU YD	1.0'	2.0'	20.0' F.B.
X			59+00 - 61+50	IN ROCK				2.0' F.B.

GEOTECHNICAL NOTES	
STATION TO STATION	NOTE
51+70	16
56+00	16

P 713 Kentucky Berwind Land Co.

100' EASEMENT

AEP TRANSMISSION LINE

S09°07'28"W 28.68'

53+50.00 600.00

53+72.64 582.39

N52°01'00"E 67.23'

53+83.42 516.03

S09°07'28"W 541.41'

PROPOSED R/W & CA FENCE

P 714 Anita H. Rowe, Leslie H. Rowe

S82°35'38"E 64.62'

N88°29'01"W 258.45'

52+73.08 338.25

S9°09'01"E 144.42'

54+15.90 290.11

P 714 Tract A Anita H. Rowe, Leslie H. Rowe

P 1727 Tract A Nancy Price

P 713 Tract A Kentucky Berwind Land Co.

N88°29'01"W 345.88'

N63°02'30"E 237.42'

50+00

55+00

60+00

A R 1880.00' L 149.55.67' C 149.51' N19°41'13"W

KY 80
P.I. 59+22.01
Δ = 5°20'04" RT.
T = 60.56
L = 121.04
R = 1300.00
E = 1.41
e = 8.0%
Design Speed 60 mph
Runoff = 210.00
Runout = 52.50

BEGIN CA FENCE 58+50.00 248.42

END CA FENCE 58+00.00 250.00

S26°56'29"E 224.62'

S26°56'29"E 50.02'

60+53.21 258.37

S87°39'01"E 4.34

60+51.32 254.46

CA FENCE

S77°35'30"E 183.01

EXIST. & PROP. R/W

60+09.25 167.29

N87°39'01"W 96.79'

S80°56'37"W 146.14' EXIST. R/W

PC 49+16.04

EXIST. R/W

60'-60:1 PAVEMENT TAPER

BEGIN CA FENCE 49+50.00 28.99

A 50+51.90 28.30

TG 756.03 FL 752.23 PROP 30" CULVERT PIPE

100'-25:1 SHOULDER TAPER

TG 756.10 FL 752.31

4" NON-PERF. PIPE

R 1880.00' L 216.64' C 216.52' N25°16'01"W

PT 53+10.09

54+08.48 52.81

N63°02'00"E 26.42'

53+21.64 26.67

54+07.65 26.40

N28°34'06"W 86.01'

N28°34'06"W 242.26'

54+87.50

55+37.50

SPECIAL 2' F.B. DT

END TREATMENT TY. 1

56+49.92 25.63

3 GUY

R 3850.00' L 242.18' C 242.14' N26°45'58"W

58+00

58+91.92 27.59

S65°02'09"W 10.00'

58+91.50 17.60

IE 752.76

PI 59+22.01

R 3860.00' L 82.94' C 82.94' N24°20'55"W

59+73.19 25.75

SPECIAL 2' F.B. DT

S16°32'48"E

2' F.B. DT

EXIST. R/W

4" PERF. PIPE

S28°45'01"E

4" PERF. PIPE

S23°24'57"E

4" NON-PERF. PIPE

SUBGRADE DRAIN

SAFELOAD 5'X4' RCBC (32 CU YD)

PROP 9'x4' RCBC

OE 751.58

OE 751.53

PI 51+13.81

PC 58+61.45

PT 59+82.49

60'-60:1 PAVEMENT TAPER

100'-25:1 SHOULDER TAPER

2 ELEC. 3 TELE. 1 CABLE

#563 #564 #565 #566 #567 #568 #569

KY 80
P.I. 51+13.81
Δ = 12°12'13" LT.
T = 197.77
L = 394.05
R = 1850.00
E = 10.54
e = 7.2%
Design Speed 60 mph
Runoff = 190.00
Runout = 52.78

EXIST. & PROPOSED R/W (℄ RUSSELL FORK)

RUSSELL FORK

BEGIN R/W KY 80 STA. 49+50

BEGIN GRADE, DRAIN, & SURFACING KY 80 STA. 50+00

MATCH LINE STA. 61+50 SEE SHEET 14C/ 14A

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KY 80 STA. 50+00 TO STA. 61+50
SCALE : 1"=50'

COUNTY OF	ITEM NO.	SHEET NO.
PIKE	12-263.72	R14

DITCH CONSTRUCTION CHART

LT	RT	MD	LIMITS STA. TO STA.	TYPE	QUANTITY	DEPTH	THICKNESS	DITCH
X			61+50 - 66+00	IN ROCK				2.0' F.B.
	X		66+00 - OUTLET	CLASS IV	22.6 CU YD	1.0'	2.0'	8.0' F.B.
X			66+00 - 71+50	IN ROCK				2.0' F.B.
X			72+50 - 74+50	IN ROCK				2.0' F.B.
	X		73+50 - 74+50	CLASS IV	23.8 CU YD	1.0'	2.0'	SPECIAL "V" BOT
RAMP 1								
X			200+50 - 204+50	IN ROCK				2.0' F.B.
	X		200+50 - 204+50	IN ROCK				2.0' F.B.

STEEL "W" BEAM GUARDRAIL CONSTRUCTION

LT. OR RT.	STATION TO STATION	SINGLE FACE (ft)	TERM SEC. No. 1 (Ea)	END TREATMENT TY 1 (Ea)
LT.	KY 80 61+50 TO 62+12.50	12.5		1
LT.	KY 80 73+87.50 TO 74+50	12.5		1
RT.	KY 80 61+50 TO 68+42	712.5	1	
RT.	KY 80 68+58 TO 71+73.50	337.5	2	
RT.	KY 80 74+30 TO 74+50	31.25	1	

GEOTECHNICAL NOTES

STATION TO STATION	NOTE
64+50 - 67+00	17
201+33	16
200+00 - 203+00	14

ENTRANCE CONSTRUCTION

LOCATION	BIT. (S.Y.)	GRAVEL (S.Y.)	PIPE
RT 68+50	117		
RT 71+81.50	112		
RT 73+00	182		
RT 74+22	91		28' - 15" PIPE

KY 80
P.I. 66+24.03
△ = 23°09'23" LT.
T = 358.53
L = 707.27
R = 1750.00
E = 36.35
e = 7.4%
Design Speed 60 mph
Runoff (In) = 195.00
Runout (In) = 52.70
Runoff (Out) = 244.00
Runout (Out) = 65.95

RAMP 1
P.I. 202+72.00
△ = 90°00'00" RT.
T = 200.00
L = 314.16
R = 200.00
E = 82.84
e = 7.8%
Design Speed 25 mph
Runoff = 164.00
Runout = 42.05
• SUBGRADE DRAIN

PREPARED BY DATE
CHECKED BY DATE
APPROVED BY DATE

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Cell Name: sp
11/14/2010
...\r01400pl

MATCH LINE STA. 61+50 SEE SHEET 13

MATCH LINE STA. 74+50 SEE SHEET 5B

MATCH LINE STA. 74+50 SEE SHEET 5/5A

AEP TRANSMISSION LINE

EXIST. & PROP. R/W

PROPOSED R/W & CA FENCE

CA FENCE

100' EASEMENT

END TREATMENT TY. 1

SPECIAL 2' F.B. DT

2' F.B. DT

PC 62+65.50

PI 66+24.03
△ = 33°28'21" LT.

PI 0+50.47

PI 202+72.00

PI 0+50.00
△ = 90°00'21" RT.

TG 761.62
FL 757.29

TG 761.69
FL 757.36

TG 772.63
FL 769.93

PC 200+72.00

PT 69+72.77

PROP 36" STORM SEWER
OE 756.87

PROP 18" CULVERT PIPE

PROP 15" ENT. PIPE
OE 778.79

IE 788.98

SAFELOAD 18" RCP (3 CU YD)

SAFELOAD 18" RCP (2 CU YD)

TERMINAL SECTION NO. 1

150' - 25:1 PAVEMENT TAPER

STA. 68+71.36
EL. 799.12
4 WIRES
2 ELEC.
1 TELE.
1 CABLE

STA. 70+47.56
EL. 789.34
1 CABLE
1 TELE.

STA. 69+82.70
EL. 803.33
1 ELEC.
1 CABLE
2 ELEC.
3 TELE.
1 CABLE

STA. 71+71.50
EL. 787.47
1 ELEC.
1 TELE.
1 CABLE

STA. 73+23.60
EL. 812.49
1 ELEC.
1 TELE.
1 CABLE

LIMITS OF PAVING RAMP 1 STA. 200+68

STA. 72+00 KY 80 =
STA. 200+00 RAMP 1
OE 769.37

SPECIAL 2' F.B. DT
WW

TYPE III BARRICADE

METAL CARPORT

SPECIAL "V" BOTTOM DT

END TREATMENT TYPE 1

Ida Wright

RUSSELL FORK

P 715 Malissie Elswick Estate (L.L.)

P 715 Tract A Malissie Elswick Estate

P 711 Wright Heirs (L.L.)

P 709 Tract A Carol Johnson

P 707 Tract A Gary Feldpusch Goldie Feldpusch

P 706 Tract A Lisa L. Mullins

P 712 Arnet Hogston Heirs (L.L.)

P 711 Tract A Wright Heirs

P 712 Tract A Arnet Hogston Heirs

P 710 Tract A James Stapleton Emile Stapleton

P 708 St. Francis Church

P 708 Tract A

P 708 Tract B

P 705 Tract A William S. Elswick Karen Elswick

P 1721 Tract A Billy Ratliff Debbie Ratliff

P 1721 Billy Ratliff Debbie Ratliff SEE SHEET 24A FOR R.O.W. DETAILS

• BY OTHERS

KY 80 STA. 61+50 TO STA. 74+50
SCALE : 1"=50'

COUNTY OF	ITEM NO.	SHEET NO.
PIKE	12-263.72	R14

REVISED 11-15-10

DITCH CONSTRUCTION CHART

LT	RT	MD	LIMITS STA. TO STA.	TYPE	QUANTITY	DEPTH	THICKNESS	DITCH
X			61+50 - 66+00	IN ROCK				2.0' F.B.
	X		66+00 - OUTLET	CLASS IV	22.6 CU YD	1.0'	2.0'	8.0' F.B.
X			66+00 - 71+50	IN ROCK				2.0' F.B.
X			72+50 - 74+50	IN ROCK				2.0' F.B.
	X		73+50 - 74+50	CLASS IV	23.8 CU YD	1.0'	2.0'	SPECIAL "V" BOT
RAMP 1								
X			200+50 - 204+50	IN ROCK				2.0' F.B.
	X		200+50 - 204+50	IN ROCK				2.0' F.B.

STEEL "W" BEAM GUARDRAIL CONSTRUCTION

LT. OR RT.	STATION TO STATION	SINGLE FACE (ft)	TERM SEC. No. 1 (Ea)	END TREATMENT TY 1 (Ea)
LT.	KY 80 61+50 TO 62+12.50	12.5		1
LT.	KY 80 73+87.50 TO 74+50	12.5		1
RT.	KY 80 61+50 TO 68+42	712.5	1	
RT.	KY 80 68+58 TO 71+73.50	337.5	2	
RT.	KY 80 74+30 TO 74+50	31.25	1	

GEOTECHNICAL NOTES

STATION TO STATION	NOTE
64+50 - 67+00	17
201+33	16
200+00 - 203+00	14

ENTRANCE CONSTRUCTION

LOCATION	BIT. (S.Y.)	GRAVEL (S.Y.)	PIPE
RT 68+50	117		
RT 71+81.50	112		
RT 73+00	182		
RT 74+22	91		28' - 15" PIPE

PREPARED BY DATE
CHECKED BY DATE
APPROVED BY DATE

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Cell Name: sp
11/14/2010
...\r01400pl

KY 80
P.I. 66+24.03
△ = 23°09'23" LT.
T = 358.53
L = 707.27
R = 1750.00
E = 36.35
e = 7.4%
Design Speed 60 mph
Runoff (In) = 195.00
Runout (In) = 52.70
Runoff (Out) = 244.00
Runout (Out) = 65.95

RAMP 1
P.I. 202+72.00
△ = 90°00'00" RT.
T = 200.00
L = 314.16
R = 200.00
E = 82.84
e = 7.8%
Design Speed 25 mph
Runoff = 164.00
Runout = 42.05
• SUBGRADE DRAIN

MATCH LINE STA. 61+50 SEE SHEET 13

MATCH LINE STA. 74+50 SEE SHEET 5/5A

MATCH LINE STA. 204+50 SEE SHEET 5B

END TREATMENT TY. 1

SPECIAL 2' F.B. DT

PC 62+65.50

2' F.B. DT

TG 761.62
FL 757.29

TG 761.69
FL 757.36

PROP 36" STORM SEWER
OE 756.87

SAFELOAD 18" RCP (3 CU YD)

150' - 25:1 PAVEMENT TAPER

PI 0+50.47
△ = 33°28'21" LT.

PI 66+24.03

TERMINAL SECTION NO. 1

SAFELOAD 18" RCP (2 CU YD)

TERMINAL SECTION NO. 1

PI 0+50.00
△ = 5°00'21" RT.

SPECIAL "V" BOTTOM DT

PROP 18" CULVERT PIPE

PROP 15" ENT. PIPE
OE 778.79

IE 788.98

• END TREATMENT TYPE 1

LIMITS OF PAVING
RAMP 1 STA. 200+68

STA. 72+00 KY 80=
STA. 200+00 RAMP 1
OE 769.37

PT 69+72.77

SPECIAL 2' F.B. DT

PC 200+72.00

2' F.B. DT
TG 772.63
FL 769.93

TYPE III BARRICADE

• BY OTHERS

AEP TRANSMISSION LINE

100' EASEMENT

EXIST. & PROP. R/W

PROPOSED R/W & CA FENCE

CA FENCE

RUSSELL FORK

Ida Wright

P 715 Malissie Elswick Estate (L.L.)

P 715 Tract A Malissie Elswick Estate

P 711 Wright Heirs (L.L.)

P 709 Tract A Carol Johnson

P 707 Tract A Gary Feldpusch Goldie Feldpusch

P 706 Tract A Lisa L. Mullins

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P 712 Tract A Arnet Hogston Heirs

P 710 Tract A James Stapleton Emile Stapleton

P 708 Tract A

P 708 Tract B

P 708 St. Francis Church

P 705 Tract A William S. Elswick Karen Elswick

P 1721 Tract A Billy Ratliff Debbie Ratliff

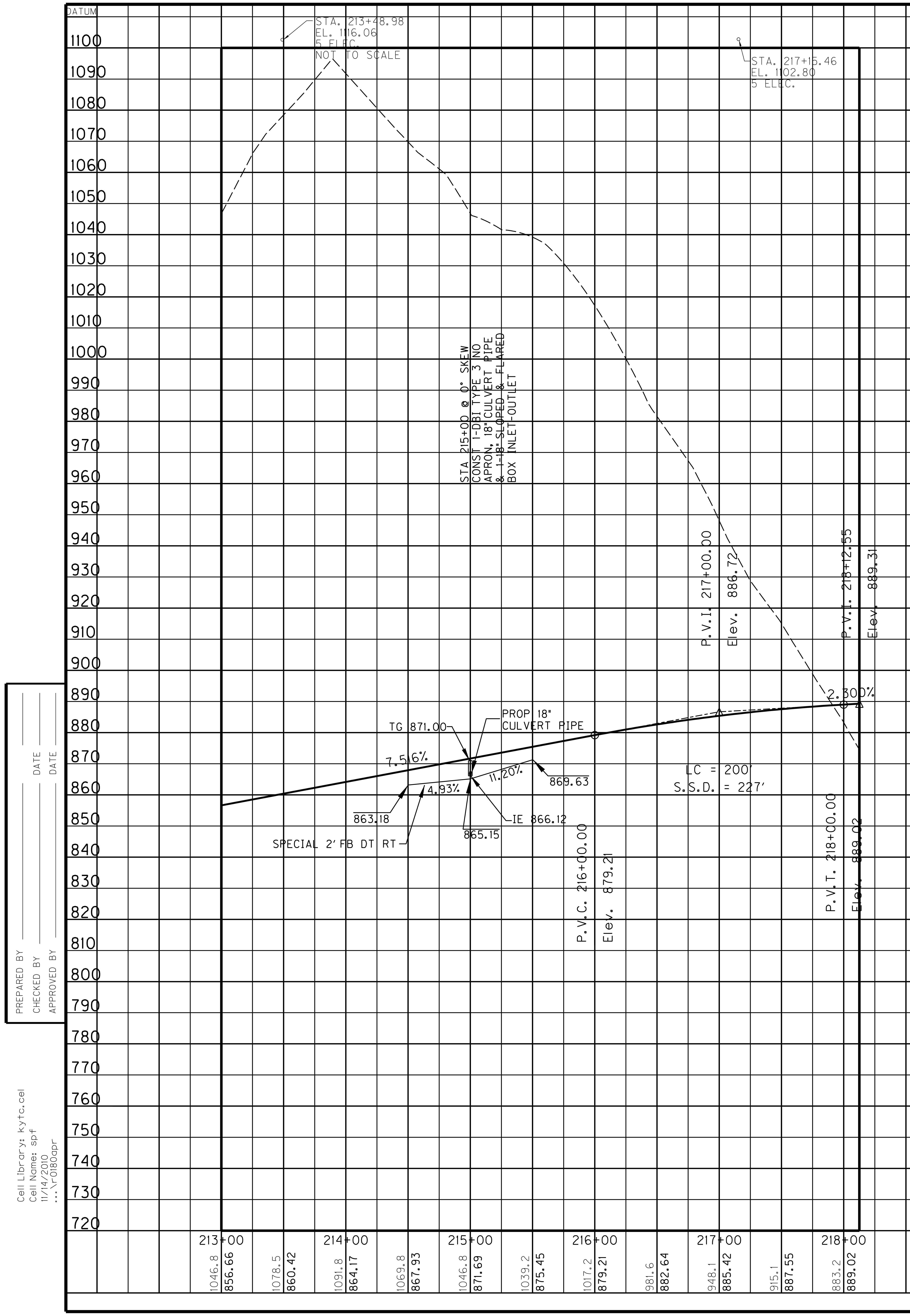
P 1721 Billy Ratliff Debbie Ratliff SEE SHEET 24A FOR R.O.W. DETAILS

METAL CARPORT STA. 73+23.60 EL. 812.49

KY 80 STA. 61+50 TO STA. 74+50

SCALE : 1"=50'

COUNTY OF	ITEM NO.	SHEET NO.
PIKE	12-263.72	R18A



SHEET TOTALS						
EXC.	S.R.	DITCH LT.	DITCH RT.	EMB. BENCH	EMB.	ROCK RDBED
156929*	1442420*	0	0	0	0	3772

* INCLUDES EARTHWORK RECALCULATED BY CENTROID METHOD AT INTERSECTION OF US460 (STA 759+00 TO STA 763+50) AND RAMP 1 (STA 214+00 TO STA 218+12.55).

RAMP 1 PROFILE
STA. 213 + 00 TO STA. 218 + 12.55

SCALE 1"=50' HORIZ., 1"=20' VERT.

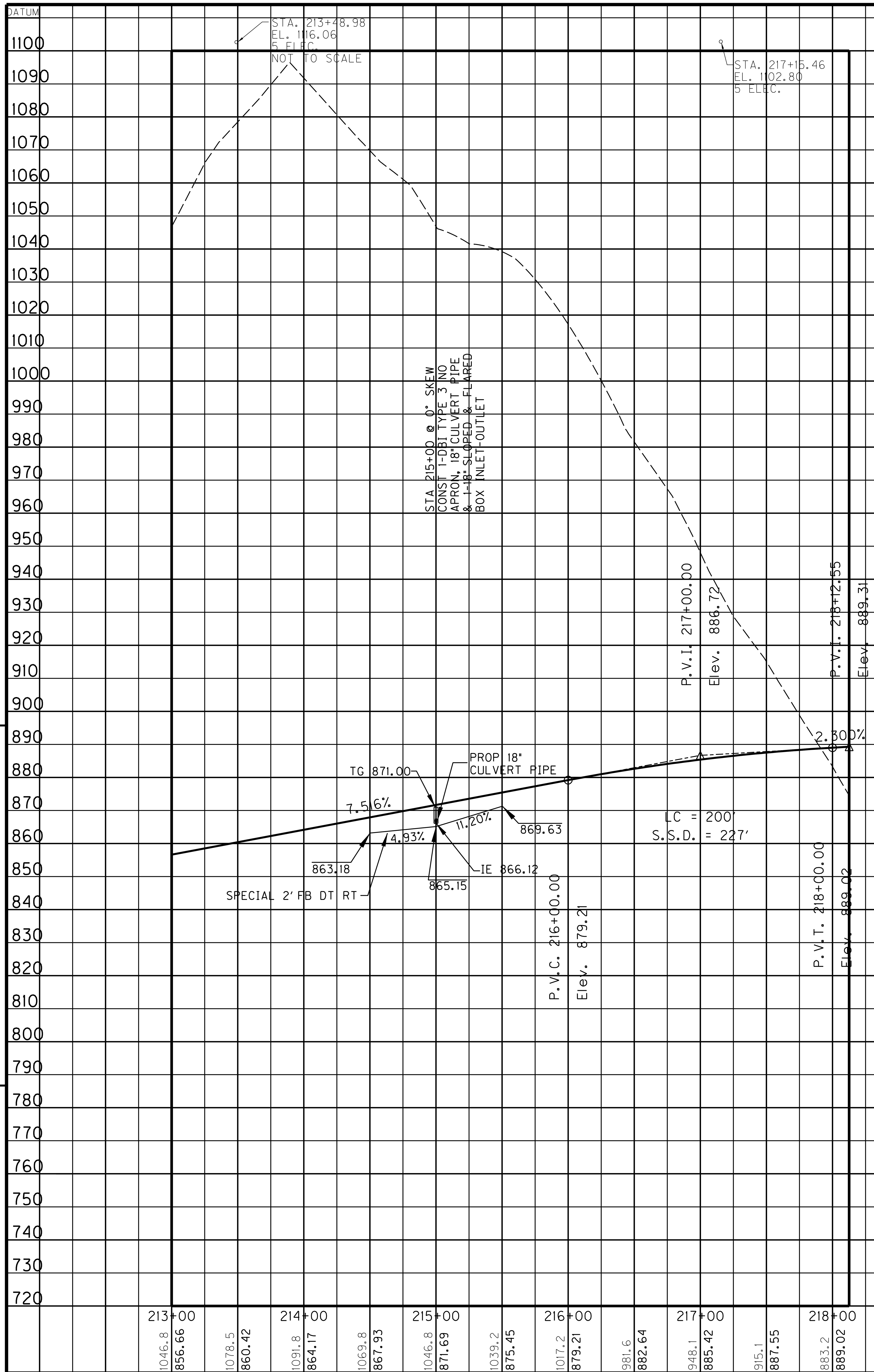
COUNTY OF	ITEM NO.	SHEET NO.
PIKE	12-263.72	R18A

REVISED 11-15-10

SHEET TOTALS

EXC.	S.R.	DITCH LT.	DITCH RT.	EMB. BENCH	EMB.	ROCK RDBED
156929*	1442420*	0	0	0	0	3772

* INCLUDES EARTHWORK RECALCULATED BY CENTROID METHOD AT INTERSECTION OF US460 (STA 759+00 TO STA 763+50) AND RAMP 1 (STA 214+00 TO STA 218+12.55).



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APPROVED BY ______

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11/14/2010
...\Vr0180apr

RAMP 1 PROFILE
STA. 213+00 TO STA. 218+12.55
SCALE 1"=50' HORIZ., 1"=20' VERT.

MAINTENANCE OF TRAFFIC NOTES

COUNTY OF	ITEM NO.	SHEET NO.
PIKE	12-263.72	R27

PAVEMENT EDGE DROP-OFFS

DIFFERENCE IN ELEVATION FOR TRAVEL LANES

A PAVEMENT EDGE THAT TRAFFIC IS EXPECTED TO CROSS IN A LANE CHANGE SITUATION SHOULD NOT HAVE AN ELEVATION DIFFERENCE GREATER THAN ONE AND ONE-HALF INCHES. THIS MAY BE INCREASED TO TWO INCHES FOR LOW SPEED SITUATIONS. WARNING SIGNS MUST BE PLACED IN ADVANCE AND THROUGHOUT THE DROP-OFF AREA.

PAVEMENT DROP-OFF

PAVEMENT EDGES THAT TRAFFIC IS NOT EXPECTED TO CROSS, EXCEPT ACCIDENTALLY, SHOULD BE TREATED AS FOLLOWS:

LESS THAN 2 INCHES -
NO PROTECTION REQUIRED. WARNING SIGNS SHOULD BE PLACED IN ADVANCE AND THROUGHOUT THE DROP-OFF AREA.

2 INCHES TO 4 INCHES -
PLACE PLASTIC DRUMS OR VERTICAL PANELS EVERY 100 FEET ON TANGENT SECTIONS FOR SPEEDS OF 50 MILES PER HOUR OR GREATER. CONES MAY BE USED IN PLACE OF PLASTIC DRUMS OR PANELS DURING DAYLIGHT HOURS. FOR TANGENT SECTIONS WITH SPEEDS LESS THAN 50 MILES PER HOUR AND FOR CURVES, DEVICES SHOULD BE PLACED EVERY 50 FEET. SPACING FOR TAPERS SHOULD BE IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

GREATER THAN 4 INCHES -

FOR TEMPORARY CONDITION, THREE DAYS OR LESS, DROP-OFFS GREATER THAN 4 INCHES MAY BE PROTECTED WITH PLASTIC DRUMS OR VERTICAL PANELS FOR SHORT DISTANCES DURING DAYLIGHT HOURS WHILE WORK IS BEING DONE IN THE DROP-OFF AREA. A WEDGE WITH 1:3 OR FLATTER SLOPE IS REQUIRED OVERNIGHT, OR WHEN WORK IS IDLE IN DROP-OFF AREA.

FOR MORE THAN THREE DAYS, POSITIVE SEPERATION (BARRIER WALL) IS REQUIRED.

LESSER TREATMENTS THAN THOSE DESCRIBED ABOVE MAY BE CONSIDERED FOR LOW-VOLUME LOCAL STREETS.

PAYMENT WILL BE ALLOWED FOR THE DGA MATERIAL USED FOR WEDGING.

ENVIRONMENTAL NOTES

EROSION CONTROL AND WATER POLLUTION CONTROL

THE PROVISIONS OF SECTION 212 (EROSION CONTROL) AND 213 (WATER POLLUTION CONTROL) OF THE KENTUCKY STANDARD SPECIFICATIONS SHALL BE FULLY ENFORCED TO MINIMIZE ADVERSE IMPACTS TO THE WATER QUALITY OF RUSSELL FORK, BEAVER CREEK, GROUNDWATER AND OTHER AQUATIC FEATURES. SILT TRAPS (PER KENTUCKY STANDARD SPECIFICATIONS SECTION 213.04.03) ARE NOT TO BE CONSTRUCTED IN A NATURAL STREAM CHANNEL AND SILT IS TO BE PREVENTED FROM ENTERING RUSSELL FORK AND BEAVER CREEK BY USE OF SEDIMENTATION BASINS, SILT CHECKS, SILT TRAPS, SILT FENCES, TEMPORARY SEEDING AND, IF NECESSARY, TEMPORARY SILT DITCHES, PROPOERLY LOCATED ALONG THE LENGTH OF THE EMBANKMENT AND IN EPHEMERAL DITCHES TRIBUTARY TO THESE FEATURES. ALL RUNOFF FROM CONSTRUCTION IS TO BE ROUTED THROUGH THESE EROSION CONTROL STRUCTURES.

THE CONTRACTOR IS RESPONSIBLE FOR PERMIT AND EROSION CONTROL REQUIRED FOR CONSTRUCTION TRAFFIC CROSSING OF BEAVER CREEK.

BLASTING OPERATIONS

DURING BLASTING OPERATIONS, TRAFFIC MAY BE HALTED ON KY 80 A MAXIMUM OF 30 MINUTES PER HOUR TO ALLOW THE EXECUTION OF THE "BLAST" AND TO ALLOW FOR REMOVAL OF ROCK FRAGMENTS AND DEBRIS. BLASTING WILL NOT BE PERMITTED BETWEEN THE HOURS OF 7:00 - 9:00 A.M. AND 3:00 - 5:00 P.M.

THE CONTRACTOR, WHEN USING EXPLOSIVE CHARGES OF ANY KIND FOR THE PURPOSE OF EXCAVATING, REMOVAL, ETC., ON THIS PROJECT SHALL HALT ALL TRAFFIC A SAFE DISTANCE ON EITHER SIDE OF THE IMPEDING BLAST.

AFTER ANY BLAST, THE CONTRACTOR SHALL IMMEDIATELY INSPECT THE PAVEMENT AND REPAIR DAMAGE AND REMOVE DEBRIS THAT MAY BE A HAZARD TO TRAFFIC BEFORE ALLOWING TRAFFIC TO PROCEED ON THE AFFECTED SECTION.

THE CONTRACTOR SHALL HAVE SUITABLE EQUIPMENT AT THE SITE AND IN RUNNING MODE FOR THE PURPOSE OF REPAIRING THE EXISTING PAVEMENT AND CLEARING THE EXISTING PAVEMENT OF ALL DEBRIS.

THE CONTRACTOR SHALL HALT TRAFFIC, BLAST, REPAIR AND CLEAN THE EXISTING PAVEMENT AND RETURN TRAFFIC TO NORMAL OPERATION IN THE LEAST AMOUNT OF TIME POSSIBLE.

PROJECT PHASING

ALL MAINLINE AND RAMP CONSTRUCTION MAY RUN CONCURRENT WITH THE FOLLOWING PHASES AS LONG AS IT DOES NOT AFFECT THE TRAFFIC IN THESE PHASES. PROPER SIGNING AND FLAGGING WILL BE REQUIRED. ACCESS TO KY 1373 AND ALL ENTRANCES ALONG KY 80 MUST BE MAINTAINED THROUGH EACH PHASE.

CONSTRUCT TEMPORARY SIGNAL FOR CONSTRUCTION CROSSING OF KY 80 BETWEEN THE EXISTING BRIDGE OVER BEAVER CREEK AND THE APPROACH TO JOHN MOORE BRANCH BRIDGE OVER THE RUSSELL FORK FOR HAULING EXCESS MATERIAL INTO JOHN MOORE BRANCH. THE SIGNAL SHALL BE IN OPERATION DURING ALL HAULING ACTIVITY ACROSS KY 80 UNLESS A FLAGGER IS PRESENT.

THE CONTRACTOR IS RESPOSIBLE FOR MAINTAINING THE STRUCTURAL INTEGRITY OF THE KY 80 PAVEMENT, AS DETERMINED BY THE KYTC ENGINEER, IN THE VICINITY OF THE CROSSING AND THE JOHN MOORE BRANCH BRIDGE (SEE NOTE SHEET 2A) UNTIL PROJECT COMPLETION.

PHASE 1

CONSTRUCT AS MUCH OF DETOUR "1" AS POSSIBLE WITHOUT AFFECTING TRAFFIC ON EXISTING KY 80.

CONSTRUCT DETOUR "1" TIE INS TO KY80 UNDER TRAFFIC WITH FLAGGER.

PHASE 2

REROUTE TRAFFIC TO DETOUR "1".

CONSTRUCT PIPES ACROSS KY 80 USING CUT AND COVER LANE CLOSURE CASE I.

CONSTRUCT LEFT SIDE DRAINAGE AND PAVE LEFT SHOULDER FROM PROPOSED STATION 51+00 TO 67+00.

PHASE 2 CONTINUED

CONSTRUCT LEFT SIDE DRAINAGE AND PAVE LEFT SHOULDER AND AS MUCH OF TRAVEL LANES (THRU BINDER COURSE) AS POSSIBLE LEFT OF EXISTING KY 80 FROM PROPOSED STATION 67+00 TO 77+00 WITHOUT AFFECTING TRAFFIC ALONG EXISTING KY 80.

CONSTRUCT RCBC FROM LEFT SIDE TO 22.5 FEET RIGHT OF CENTERLINE STATION 78+50.

CONSTRUCT LEFT SIDE DRAINAGE AND ROCK ROADBED TO 18' RIGHT OF CENTERLINE FROM PROPOSED STATION 77+00 TO 80+00.

CONSTRUCT LEFT SIDE DRAINAGE AND ROCK ROADBED TO 12' RIGHT OF CENTERLINE FROM PROPOSED STATION 80+00 TO 85+00.

CONSTRUCT LEFT SIDE DRAINAGE FROM PROPOSED STATION 85+00 TO BEAVER CREEK.

CONSTRUCT AS MUCH OF KY 80 TIE IN AS POSSIBLE WITHOUT AFFECTING TRAFFIC ALONG EXISTING KY 80.

PHASE 3

REDUCE TRAFFIC TO ONE LANE ON THE S.B. LANE OF EXISTING KY 80 WITH SIGNALIZED LANE CLOSURE FOR WORK ZONE 50+00 TO 67+00.

CONSTRUCT AS MUCH OF TRAVEL LANE (THRU BINDER COURSE) LEFT OF KY 80 CENTERLINE STATION 51+00 TO 67+00.

CONSTRUCT KY 80 TIE IN TO KY 80 UNDER TRAFFIC WITH FLAGGER.

PHASE 4

SHIFT TRAFFIC TO NEWLY CONSTRUCTED N.B. LANE OF KY 80 AND REDUCE TRAFFIC TO ONE LANE WITH SIGNALIZED LANE CLOSEURE FOR WORK ZONE 50+00 TO 67+00.

REROUTE TRAFFIC (TWO WAY) TO NEWLY CONSTRUCTED KY 80 AND KY 80 TIE-IN WORK ZONE 67+00 TO 85+00.

CONSTRUCT REMAINING SHOULDER AND TRAVEL LANE (THRU BINDER COURSE) RIGHT OF KY 80 CENTERLINE STATION 50+00 TO 67+00.

CONSTRUCT REMAINING RCBC STATION 78+50.

REMOVE DETOUR "1".

CONSTRUCT ENTRANCES 50+00 TO 84+18.

PHASE 5

COMPLETE FINAL PAVING AND STRIPING UNDER TRAFFIC WITH FLAGGER.

PREPARED BY DATE
CHECKED BY DATE
APPROVED BY DATE

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MAINTENANCE OF TRAFFIC
SCALE : 1"=100'

MAINTENANCE OF TRAFFIC NOTES

COUNTY OF	ITEM NO.	SHEET NO.
PIKE	12-263.72	R27

⚠ REVISED 11-15-10

PAVEMENT EDGE DROP-OFFS

DIFFERENCE IN ELEVATION FOR TRAVEL LANES

A PAVEMENT EDGE THAT TRAFFIC IS EXPECTED TO CROSS IN A LANE CHANGE SITUATION SHOULD NOT HAVE AN ELEVATION DIFFERENCE GREATER THAN ONE AND ONE-HALF INCHES. THIS MAY BE INCREASED TO TWO INCHES FOR LOW SPEED SITUATIONS. WARNING SIGNS MUST BE PLACED IN ADVANCE AND THROUGHOUT THE DROP-OFF AREA.

PAVEMENT DROP-OFF

PAVEMENT EDGES THAT TRAFFIC IS NOT EXPECTED TO CROSS, EXCEPT ACCIDENTALLY, SHOULD BE TREATED AS FOLLOWS:

LESS THAN 2 INCHES -
NO PROTECTION REQUIRED. WARNING SIGNS SHOULD BE PLACED IN ADVANCE AND THROUGHOUT THE DROP-OFF AREA.

2 INCHES TO 4 INCHES -
PLACE PLASTIC DRUMS OR VERTICAL PANELS EVERY 100 FEET ON TANGENT SECTIONS FOR SPEEDS OF 50 MILES PER HOUR OR GREATER. CONES MAY BE USED IN PLACE OF PLASTIC DRUMS OR PANELS DURING DAYLIGHT HOURS. FOR TANGENT SECTIONS WITH SPEEDS LESS THAN 50 MILES PER HOUR AND FOR CURVES, DEVICES SHOULD BE PLACED EVERY 50 FEET. SPACING FOR TAPERS SHOULD BE IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

GREATER THAN 4 INCHES -

FOR TEMPORARY CONDITION, THREE DAYS OR LESS, DROP-OFFS GREATER THAN 4 INCHES MAY BE PROTECTED WITH PLASTIC DRUMS OR VERTICAL PANELS FOR SHORT DISTANCES DURING DAYLIGHT HOURS WHILE WORK IS BEING DONE IN THE DROP-OFF AREA. A WEDGE WITH 1:3 OR FLATTER SLOPE IS REQUIRED OVERNIGHT, OR WHEN WORK IS IDLE IN DROP-OFF AREA.

FOR MORE THAN THREE DAYS, POSITIVE SEPERATION (BARRIER WALL) IS REQUIRED.

LESSER TREATMENTS THAN THOSE DESCRIBED ABOVE MAY BE CONSIDERED FOR LOW-VOLUME LOCAL STREETS.

PAYMENT WILL BE ALLOWED FOR THE DGA MATERIAL USED FOR WEDGING.

ENVIRONMENTAL NOTES

EROSION CONTROL AND WATER POLLUTION CONTROL

THE PROVISIONS OF SECTION 212 (EROSION CONTROL) AND 213 (WATER POLLUTION CONTROL) OF THE KENTUCKY STANDARD SPECIFICATIONS SHALL BE FULLY ENFORCED TO MINIMIZE ADVERSE IMPACTS TO THE WATER QUALITY OF RUSSELL FORK, BEAVER CREEK, GROUNDWATER AND OTHER AQUATIC FEATURES. SILT TRAPS (PER KENTUCKY STANDARD SPECIFICATIONS SECTION 213.04.03) ARE NOT TO BE CONSTRUCTED IN A NATURAL STREAM CHANNEL AND SILT IS TO BE PREVENTED FROM ENTERING RUSSELL FORK AND BEAVER CREEK BY USE OF SEDIMENTATION BASINS, SILT CHECKS, SILT TRAPS, SILT FENCES, TEMPORARY SEEDING AND, IF NECESSARY, TEMPORARY SILT DITCHES, PROPOERLY LOCATED ALONG THE LENGTH OF THE EMBANKMENT AND IN EPHEMERAL DITCHES TRIBUTARY TO THESE FEATURES. ALL RUNOFF FROM CONSTRUCTION IS TO BE ROUTED THROUGH THESE EROSION CONTROL STRUCTURES.

THE CONTRACTOR IS RESPONSIBLE FOR PERMIT AND EROSION CONTROL REQUIRED FOR CONSTRUCTION TRAFFIC CROSSING OF BEAVER CREEK.

BLASTING OPERATIONS

DURING BLASTING OPERATIONS, TRAFFIC MAY BE HALTED ON KY 80 A MAXIMUM OF 30 MINUTES PER HOUR TO ALLOW THE EXECUTION OF THE "BLAST" AND TO ALLOW FOR REMOVAL OF ROCK FRAGMENTS AND DEBRIS. BLASTING WILL NOT BE PERMITTED BETWEEN THE HOURS OF 7:00 - 9:00 A.M. AND 3:00 - 5:00 P.M.

THE CONTRACTOR, WHEN USING EXPLOSIVE CHARGES OF ANY KIND FOR THE PURPOSE OF EXCAVATING, REMOVAL, ETC., ON THIS PROJECT SHALL HALT ALL TRAFFIC A SAFE DISTANCE ON EITHER SIDE OF THE IMPEDING BLAST.

AFTER ANY BLAST, THE CONTRACTOR SHALL IMMEDIATELY INSPECT THE PAVEMENT AND REPAIR DAMAGE AND REMOVE DEBRIS THAT MAY BE A HAZARD TO TRAFFIC BEFORE ALLOWING TRAFFIC TO PROCEED ON THE AFFECTED SECTION.

THE CONTRACTOR SHALL HAVE SUITABLE EQUIPMENT AT THE SITE AND IN RUNNING MODE FOR THE PURPOSE OF REPAIRING THE EXISTING PAVEMENT AND CLEARING THE EXISTING PAVEMENT OF ALL DEBRIS.

THE CONTRACTOR SHALL HALT TRAFFIC, BLAST, REPAIR AND CLEAN THE EXISTING PAVEMENT AND RETURN TRAFFIC TO NORMAL OPERATION IN THE LEAST AMOUNT OF TIME POSSIBLE.

PROJECT PHASING

ALL MAINLINE AND RAMP CONSTRUCTION MAY RUN CONCURRENT WITH THE FOLLOWING PHASES AS LONG AS IT DOES NOT AFFECT THE TRAFFIC IN THESE PHASES. PROPER SIGNING AND FLAGGING WILL BE REQUIRED. ACCESS TO KY 1373 AND ALL ENTRANCES ALONG KY 80 MUST BE MAINTAINED THROUGH EACH PHASE.

CONSTRUCT TEMPORARY SIGNAL FOR CONSTRUCTION CROSSING OF KY 80 BETWEEN THE EXISTING BRIDGE OVER BEAVER CREEK AND THE APPROACH TO JOHN MOORE BRANCH BRIDGE OVER THE RUSSELL FORK FOR HAULING EXCESS MATERIAL INTO JOHN MOORE BRANCH. THE SIGNAL SHALL BE IN OPERATION DURING ALL HAULING ACTIVITY ACROSS KY 80 UNLESS A FLAGGER IS PRESENT.

THE CONTRACTOR IS RESPOSIBLE FOR MAINTAINING THE STRUCTURAL INTEGRITY OF THE KY 80 PAVEMENT, AS DETERMINED BY THE KYTC ENGINEER, IN THE VICINITY OF THE CROSSING AND THE JOHN MOORE BRANCH BRIDGE (SEE NOTE SHEET 2A) UNTIL PROJECT COMPLETION.

PHASE 1

CONSTRUCT AS MUCH OF DETOUR "1" AS POSSIBLE WITHOUT AFFECTING TRAFFIC ON EXISTING KY 80.

CONSTRUCT DETOUR "1" TIE INS TO KY80 UNDER TRAFFIC WITH FLAGGER.

PHASE 2

REROUTE TRAFFIC TO DETOUR "1".

CONSTRUCT PIPES ACROSS KY 80 USING CUT AND COVER LANE CLOSURE CASE I. ⚠

CONSTRUCT LEFT SIDE DRAINAGE AND PAVE LEFT SHOULDER FROM PROPOSED STATION 51+00 TO 67+00.

PHASE 2 CONTINUED

CONSTRUCT LEFT SIDE DRAINAGE AND PAVE LEFT SHOULDER AND AS MUCH OF TRAVEL LANES (THRU BINDER COURSE) AS POSSIBLE LEFT OF EXISTING KY 80 FROM PROPOSED STATION 67+00 TO 77+00 WITHOUT AFFECTING TRAFFIC ALONG EXISTING KY 80.

CONSTRUCT RCBC FROM LEFT SIDE TO 22.5 FEET RIGHT OF CENTERLINE STATION 78+50.

CONSTRUCT LEFT SIDE DRAINAGE AND ROCK ROADBED TO 18' RIGHT OF CENTERLINE FROM PROPOSED STATION 77+00 TO 80+00.

CONSTRUCT LEFT SIDE DRAINAGE AND ROCK ROADBED TO 12' RIGHT OF CENTERLINE FROM PROPOSED STATION 80+00 TO 85+00.

CONSTRUCT LEFT SIDE DRAINAGE FROM PROPOSED STATION 85+00 TO BEAVER CREEK.

CONSTRUCT AS MUCH OF KY 80 TIE IN AS POSSIBLE WITHOUT AFFECTING TRAFFIC ALONG EXISTING KY 80.

PHASE 3

REDUCE TRAFFIC TO ONE LANE ON THE S.B. LANE OF EXISTING KY 80 WITH SIGNALIZED LANE CLOSURE FOR WORK ZONE 50+00 TO 67+00. ⚠

CONSTRUCT AS MUCH OF TRAVEL LANE (THRU BINDER COURSE) LEFT OF KY 80 CENTERLINE STATION 51+00 TO 67+00.

CONSTRUCT KY 80 TIE IN TO KY 80 UNDER TRAFFIC WITH FLAGGER.

PHASE 4

SHIFT TRAFFIC TO NEWLY CONSTRUCTED N.B. LANE OF KY 80 AND REDUCE TRAFFIC TO ONE LANE WITH SIGNALIZED LANE CLOSEURE FOR WORK ZONE 50+00 TO 67+00. ⚠

REROUTE TRAFFIC (TWO WAY) TO NEWLY CONSTRUCTED KY 80 AND KY 80 TIE-IN WORK ZONE 67+00 TO 85+00.

CONSTRUCT REMAINING SHOULDER AND TRAVEL LANE (THRU BINDER COURSE) RIGHT OF KY 80 CENTERLINE STATION 50+00 TO 67+00.

CONSTRUCT REMAINING RCBC STATION 78+50.

REMOVE DETOUR "1".

CONSTRUCT ENTRANCES 50+00 TO 84+18.

PHASE 5

COMPLETE FINAL PAVING AND STRIPING UNDER TRAFFIC WITH FLAGGER.

DATE
DATE
DATE
PREPARED BY
CHECKED BY
APPROVED BY

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Cell Name: sp
11/14/2010
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MAINTENANCE OF TRAFFIC
SCALE : 1"=100'

COUNTY OF	ITEM NO.	SHEET NO.
PIKE	12-263.72	R27A

50+00

55+00

60+00

65+00

70+00

75+00

30+00

BEGIN DETOUR "I"
STA. 30+00.00 =
KY 80 33.96' RT.
STA. 73+21.56

KY 80 - DETOUR I
P.I. 32+00.46
Δ = 7°55'31" RT.
T = 93.52
L = 186.74
R = 1350.00
E = 3.24
e = 3.6%
Design Speed 30 mph
Runoff = 95.00
Runout = 52.78

CONSTRUCT TEMPORARY
TRIPLE 48" CULVERT PIPE

CONSTRUCT DETOUR "I"

PI 32+00.46

PC 33+41.13

PT 36+42.12

35+00

S46°41'00"E

S38°45'29"E

S51°31'56"E

PC 31+06.94

PI 32+93.68

PI 34+92.25

S83°13'25"E

MATCH LINE STA. 80+00 SEE SHEET 27B

KY 80 - DETOUR I
P.I. 34+92.25
Δ = 12°46'27" LT.
T = 151.12
L = 300.99
R = 1350.00
E = 8.43
e = 3.6%
Design Speed 30 mph
Runoff = 95.00
Runout = 52.78

PHASE 1

PREPARED BY _____ DATE _____
CHECKED BY _____ DATE _____
APPROVED BY _____ DATE _____

Cell Library: kytc.cel
Cell Name: SP
11/14/2010
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EXISTING ROADWAY

ROADWAY CONSTRUCTION DURING PHASE

PREVIOUSLY CONSTRUCTED ROADWAY

TEMPORARY PAVEMENT MARKING

TWO LANE TRAFFIC FLOW

ONE LANE TRAFFIC FLOW

MAINTENANCE OF TRAFFIC

SCALE : 1"=100'

COUNTY OF	ITEM NO.	SHEET NO.
PIKE	12-263.72	R27A

REVISED 11-15-10

50+00

55+00

60+00

65+00

70+00

75+00

30+00

BEGIN DETOUR "I"
STA. 30+00.00 =
KY 80 33.96' RT.
STA. 73+21.56

KY 80 - DETOUR I
P.I. 32+00.46
Δ = 7°55'31" RT.
T = 93.52
L = 186.74
R = 1350.00
E = 3.24
e = 3.6%
Design Speed 30 mph
Runoff = 95.00
Runout = 52.78

CONSTRUCT TEMPORARY
TRIPLE 48" CULVERT PIPE

CONSTRUCT DETOUR "I"

PI 32+00.46

PC 33+41.13

PT 36+42.12

35+00

S51°31'56"E

S46°41'00"E

S38°45'29"E

PC 31+06.94

R=1350.00

PI 34+92.25

S83°39'E

SEE SHEET 27B

MATCH LINE STA. 80+00

KY 80 - DETOUR I
P.I. 34+92.25
Δ = 12°46'27" LT.
T = 151.12
L = 300.99
R = 1350.00
E = 8.43
e = 3.6%
Design Speed 30 mph
Runoff = 95.00
Runout = 52.78

PHASE 1

PREPARED BY _____ DATE _____
CHECKED BY _____ DATE _____
APPROVED BY _____ DATE _____

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11/14/2010
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EXISTING ROADWAY

PREVIOUSLY CONSTRUCTED ROADWAY

TWO LANE TRAFFIC FLOW

ROADWAY CONSTRUCTION DURING PHASE

TEMPORARY PAVEMENT MARKING

ONE LANE TRAFFIC FLOW

MAINTENANCE OF TRAFFIC

SCALE : 1"=100'

COUNTY OF	ITEM NO.	SHEET NO.
PIKE	12-263.72	R27D

50+00
55+00
60+00
65+00
70+00
75+00
80+00

END ROAD WORK

LANE CLOSURE CASE I
SIGNS NOT PLACED TO SCALE -
PLACE SIGNS AS
NECESSARY FOR EACH CASE

ROAD WORK XXXX

ONE LANE ROAD XXXX

XXX FEET

LANE CLOSURE CASE I
SIGNS NOT PLACED TO SCALE -
PLACE SIGNS AS
NECCESSARY FOR EACH CASE

NO PASSING ZONE

ROAD CLOSED

XX M.P.H.

XX M.P.H.

XX M.P.H.

CONSTRUCTION ZONE DIVERSION
TWO-LANE HIGHWAY

TEMPORARY TRIPLE
48" CULVERT PIPE

SEE SHEET 27E

MATCH LINE STA. 80+00 SEE SHEET 27E

PHASE 2

PREPARED BY _____ DATE _____
CHECKED BY _____ DATE _____
APPROVED BY _____ DATE _____

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11/14/2010
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EXISTING ROADWAY
ROADWAY CONSTRUCTION DURING PHASE
PREVIOUSLY CONSTRUCTED ROADWAY
TEMPORARY PAVEMENT MARKING
TWO LANE TRAFFIC FLOW
ONE LANE TRAFFIC FLOW

MAINTENANCE OF TRAFFIC

SCALE : 1"=100'

COUNTY OF	ITEM NO.	SHEET NO.
PIKE	12-263.72	R27D

⚠ REVISED 11-15-10

50+00
55+00
60+00
65+00
70+00
75+00

END ROAD WORK

LANE CLOSURE CASE I
SIGNS NOT PLACED TO SCALE -
PLACE SIGNS AS
NECESSARY FOR EACH CASE

ROAD WORK XXXX

ONE LANE ROAD XXXX

XXX FEET

NO PASSING ZONE

LANE CLOSURE CASE I
SIGNS NOT PLACED TO SCALE -
PLACE SIGNS AS
NECCESSARY FOR EACH CASE

ROAD CLOSED

XX M.P.H.

CONSTRUCTION ZONE DIVERSION
TWO-LANE HIGHWAY

TEMPORARY TRIPLE
48" CULVERT PIPE

XX M.P.H.

XX M.P.H.

MATCH LINE STA. 80+00 SEE SHEET 27E

PHASE 2

PREPARED BY ____ DATE ____
CHECKED BY ____ DATE ____
APPROVED BY ____ DATE ____

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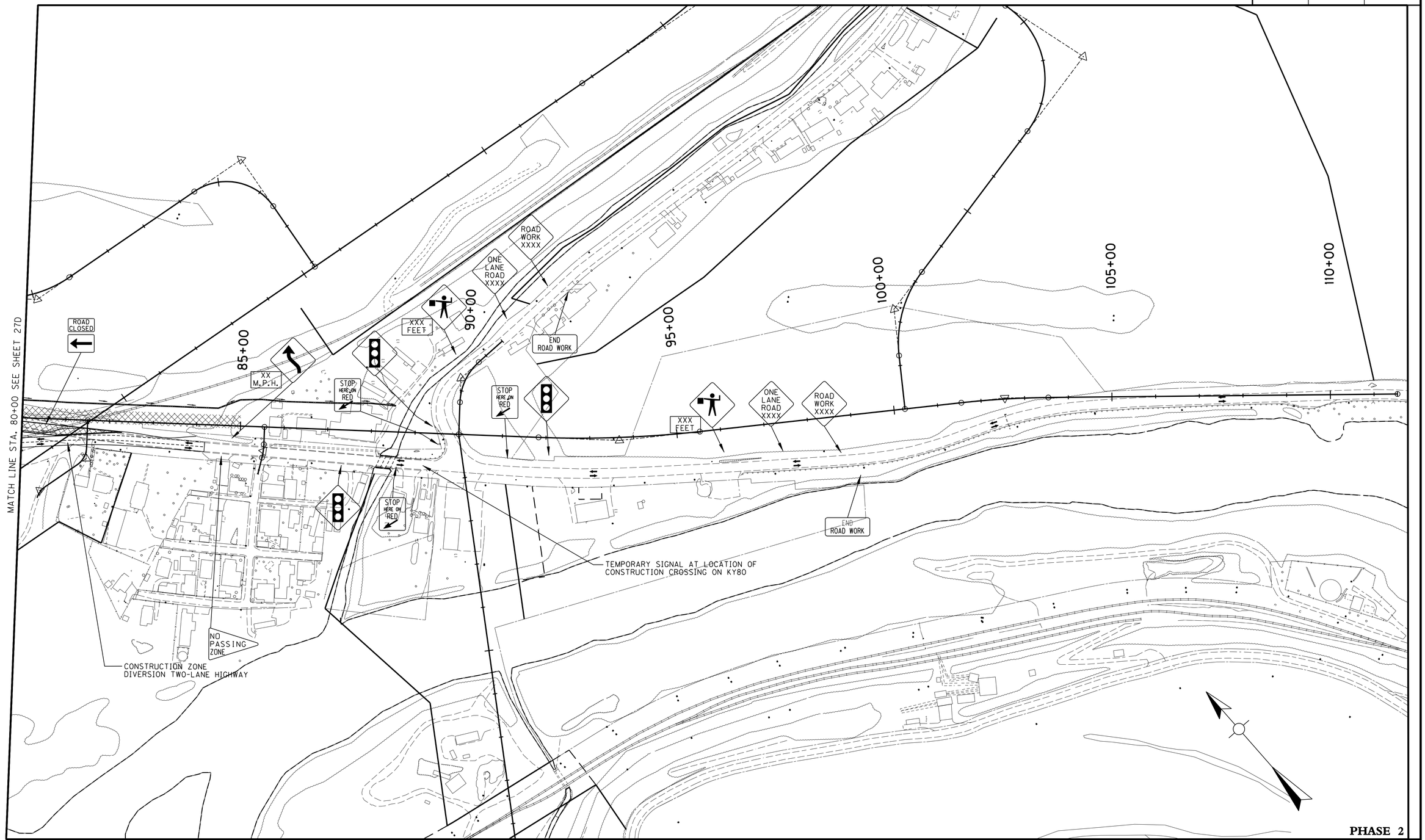
EXISTING ROADWAY
ROADWAY CONSTRUCTION DURING PHASE
PREVIOUSLY CONSTRUCTED ROADWAY
TEMPORARY PAVEMENT MARKING
TWO LANE TRAFFIC FLOW
ONE LANE TRAFFIC FLOW

MAINTENANCE OF TRAFFIC

SCALE : 1"=100'

COUNTY OF	ITEM NO.	SHEET NO.
PIKE	12-263.72	R27E



EXISTING ROADWAY
ROADWAY CONSTRUCTION DURING PHASE
PREVIOUSLY CONSTRUCTED ROADWAY
TEMPORARY PAVEMENT MARKING
TWO LANE TRAFFIC FLOW
ONE LANE TRAFFIC FLOW

MAINTENANCE OF TRAFFIC
SCALE : 1"=100'

PREPARED BY ____ DATE ____
CHECKED BY ____ DATE ____
APPROVED BY ____ DATE ____

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COUNTY OF	ITEM NO.	SHEET NO.
PIKE	12-263.72	R27E

⚠ REVISED 11-15-10

MATCH LINE STA. 80+00 SEE SHEET 27D

85+00 90+00 95+00 100+00 105+00 110+00

ROAD CLOSED

XX M.P.H.

STOP HERE ON RED

XXX FEET

ONE LANE ROAD XXXX

ROAD WORK XXXX

END ROAD WORK

STOP HERE ON RED

XXX FEET

ONE LANE ROAD XXXX

ROAD WORK XXXX

STOP HERE ON RED

END ROAD WORK

TEMPORARY SIGNAL AT LOCATION OF CONSTRUCTION CROSSING ON KY80

NO PASSING ZONE

CONSTRUCTION ZONE DIVERSION TWO-LANE HIGHWAY ⚠

PHASE 2

EXISTING ROADWAY

ROADWAY CONSTRUCTION DURING PHASE

PREVIOUSLY CONSTRUCTED ROADWAY

TEMPORARY PAVEMENT MARKING

TWO LANE TRAFFIC FLOW

ONE LANE TRAFFIC FLOW

MAINTENANCE OF TRAFFIC
SCALE : 1"=100'

PREPARED BY DATE
CHECKED BY DATE
APPROVED BY DATE

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Cell Name: sp
11/14/2010
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COUNTY OF	ITEM NO.	SHEET NO.
PIKE	12-263.72	R27F

50+00
55+00
60+00
65+00
70+00
75+00
80+00 SEE SHEET 27G
MATCH LINE STA. 80+00 SEE SHEET 27G

END ROAD WORK
XX M.P.H.
ROAD WORK XXXX
ONE LANE ROAD XXXX
ONE LANE ROAD XXXX FT
STOP HERE ON RED
NO PASSING ZONE
TYPE III BARRICADES
ROAD CLOSED
ONE LANE ROAD XXXX FT
ONE LANE ROAD XXXX
STOP HERE ON RED
XX M.P.H.
XX M.P.H.
XX M.P.H.

SIGNALIZED LANE CLOSURE
SIGNS NOT PLACED TO SCALE

CONSTRUCTION ZONE DIVERSION
TWO-LANE HIGHWAY

TEMPORARY TRIPLE
48" CULVERT PIPE

PHASE 3

PREPARED BY _____ DATE _____
CHECKED BY _____ DATE _____
APPROVED BY _____ DATE _____

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Cell Name: sp
11/14/2010
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EXISTING ROADWAY
ROADWAY CONSTRUCTION DURING PHASE
PREVIOUSLY CONSTRUCTED ROADWAY
TEMPORARY PAVEMENT MARKING
TWO LANE TRAFFIC FLOW
ONE LANE TRAFFIC FLOW

MAINTENANCE OF TRAFFIC

SCALE : 1"=100'

COUNTY OF	ITEM NO.	SHEET NO.
PIKE	12-263.72	R27F

⚠ REVISED 11-15-10

50+00
55+00
60+00
65+00
70+00
75+00
MATCH LINE STA. 80+00 SEE SHEET 27G

END ROAD WORK
XX M.P.H.
ROAD WORK XXXX
ONE LANE ROAD XXXX
ONE LANE ROAD XXXX FT
STOP HERE ON RED
NO PASSING ZONE
TYPE III BARRICADES
ROAD CLOSED
ONE LANE ROAD XXXX FT
ONE LANE ROAD XXXX
STOP HERE ON RED
XX M.P.H.
XX M.P.H.
XX M.P.H.

SIGNALIZED LANE CLOSURE
SIGNS NOT PLACED TO SCALE ⚠

CONSTRUCTION ZONE DIVERSION
TWO-LANE HIGHWAY

TEMPORARY TRIPLE
48" CULVERT PIPE ⚠

PHASE 3

PREPARED BY ____ DATE ____
CHECKED BY ____ DATE ____
APPROVED BY ____ DATE ____

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Cell Name: sp
11/14/2010
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EXISTING ROADWAY
ROADWAY CONSTRUCTION DURING PHASE
PREVIOUSLY CONSTRUCTED ROADWAY
TEMPORARY PAVEMENT MARKING
TWO LANE TRAFFIC FLOW
ONE LANE TRAFFIC FLOW

MAINTENANCE OF TRAFFIC
SCALE : 1"=100'

COUNTY OF	ITEM NO.	SHEET NO.
PIKE	12-263.72	R27G

MATCH LINE STA. 80+00 SEE SHEET 27F

ROAD CLOSED

XX M.P.H.

STOP HERE ON RED

XXX FEET

ROAD WORK XXXX

ONE LANE ROAD XXXX

END ROAD WORK

STOP HERE ON RED

STOP HERE ON RED

XXX FEET

ONE LANE ROAD XXXX

ROAD WORK XXXX

END ROAD WORK

85+00

90+00

95+00

100+00

105+00

110+00

20+00

TEMPORARY SIGNAL AT LOCATION OF CONSTRUCTION CROSSING ON KY80

NO PASSING ZONE

CONSTRUCTION ZONE DIVERSION TWO-LANE HIGHWAY

PREPARED BY ____ DATE ____

CHECKED BY ____ DATE ____

APPROVED BY ____ DATE ____

Cell Library: kytc.cel
Cell Name: sp
11/14/2010
..\r0270gtc

EXISTING ROADWAY

ROADWAY CONSTRUCTION DURING PHASE

PREVIOUSLY CONSTRUCTED ROADWAY

TEMPORARY PAVEMENT MARKING

TWO LANE TRAFFIC FLOW

ONE LANE TRAFFIC FLOW

PHASE 3

MAINTENANCE OF TRAFFIC
SCALE : 1"=100'

COUNTY OF	ITEM NO.	SHEET NO.
PIKE	12-263.72	R27G

⚠ REVISED 11-15-10

MATCH LINE STA. 80+00 SEE SHEET 27F

ROAD CLOSED

XX M.P.H.

STOP HERE ON RED

XXX FEET

ROAD WORK XXXX

ONE LANE ROAD XXXX

END ROAD WORK

STOP HERE ON RED

STOP HERE ON RED

85+00

90+00

95+00

100+00

105+00

110+00

20+00

XXX FEET

ONE LANE ROAD XXXX

ROAD WORK XXXX

END ROAD WORK

TEMPORARY SIGNAL AT LOCATION OF CONSTRUCTION CROSSING ON KY80

NO PASSING ZONE

CONSTRUCTION ZONE DIVERSION TWO-LANE HIGHWAY ⚠

PHASE 3

EXISTING ROADWAY

ROADWAY CONSTRUCTION DURING PHASE

PREVIOUSLY CONSTRUCTED ROADWAY

TEMPORARY PAVEMENT MARKING

TWO LANE TRAFFIC FLOW

ONE LANE TRAFFIC FLOW

MAINTENANCE OF TRAFFIC
SCALE : 1"=100'

PREPARED BY ____ DATE ____
CHECKED BY ____ DATE ____
APPROVED BY ____ DATE ____

Cell Library: kytc.cel
Cell Name: sp
11/14/2010
..\r0270gtc

COUNTY OF	ITEM NO.	SHEET NO.
PIKE	12-263.72	R27H

50+00

55+00

60+00

65+00

70+00

75+00

END ROAD WORK

ROAD WORK XXXX

ONE LANE ROAD XXXX

ONE LANE ROAD XXXX FT

STOP HERE ON RED

SIGNALIZED LANE CLOSURE
SIGNS NOT PLACED TO SCALE

TYPE III BARRICADES

REMOVE DETOUR "1"

REMOVE TEMPORARY TRIPLE 48" CULVERT PIPE

MATCH LINE STA. 80+00 SEE SHEET 27J

PHASE 4

PREPARED BY _____ DATE _____
CHECKED BY _____ DATE _____
APPROVED BY _____ DATE _____

Cell Library: kytc.cel
Cell Name: sp
11/14/2010
::\r027ohtc

EXISTING ROADWAY

ROADWAY CONSTRUCTION DURING PHASE

PREVIOUSLY CONSTRUCTED ROADWAY

TEMPORARY PAVEMENT MARKING

TWO LANE TRAFFIC FLOW

ONE LANE TRAFFIC FLOW

MAINTENANCE OF TRAFFIC
SCALE : 1"=100'

COUNTY OF	ITEM NO.	SHEET NO.
PIKE	12-263.72	R27H

⚠ REVISED 11-15-10

50+00
55+00
60+00
65+00
70+00
75+00

END ROAD WORK

ROAD WORK XXXX

ONE LANE ROAD XXXX

ONE LANE ROAD XXXX FT

STOP HERE ON RED

SIGNALIZED LANE CLOSURE
SIGNS NOT PLACED TO SCALE

TYPE III BARRICADES

REMOVE DETOUR "1"

REMOVE TEMPORARY TRIPLE 48" CULVERT PIPE

MATCH LINE STA. 80+00 SEE SHEET 27J

PHASE 4

PREPARED BY _____ DATE _____
CHECKED BY _____ DATE _____
APPROVED BY _____ DATE _____

Cell Library: kytc.cel
Cell Name: sp
11/14/2010
::\r027ohtc

EXISTING ROADWAY
ROADWAY CONSTRUCTION DURING PHASE
PREVIOUSLY CONSTRUCTED ROADWAY
TEMPORARY PAVEMENT MARKING
TWO LANE TRAFFIC FLOW
ONE LANE TRAFFIC FLOW

MAINTENANCE OF TRAFFIC
SCALE : 1"=100'

COUNTY OF	ITEM NO.	SHEET NO.
PIKE	12-263.72	R49

GEOTECHNICAL NOTES

Section 7: Station 758+80 to 845+00

1. Clearing and grubbing of embankment areas shall be completed in accordance with Section 202 of the current Kentucky Department of Highways Standard Specifications for Road and Bridge Construction.

2. Removal of existing structures and other obstructions shall be completed in accordance with Section 203 of the current Kentucky Department of Highways Standard Specifications for Road and Bridge Construction.

3. All water wells within the limits of construction, whether shown on the plans or not, shall be plugged in accordance with requirements of Section 708 of the current Kentucky Department of Highways Standard Specifications for Road and Bridge Construction.

4. All catch basins and manholes shall be filled and capped, and all septic tanks shall be cleaned and filled in accordance with Section 708 of the current Kentucky Department of Highways Standard Specifications for Road and Bridge Construction.

5. Procedures shall be performed as required to control erosion and water pollution in accordance with Sections 212 and 213 of the Kentucky Department of Highways Standard Specifications for Road and Bridge Construction.

6. All channel changes and special ditches shall be constructed prior to placement of any embankment materials adjacent to them in accordance with Section 206 of the current Kentucky Department of Highways Standard Specifications for Road and Bridge Construction. At the direction of the Engineer, materials excavated from these areas may be utilized in construction of the embankments, but may require aeration to the proper moisture contents prior to compaction operations. No extra payment shall be permitted for rehandling, hauling, stockpiling and/or manipulating these materials. Only sandstones and durable shales shall be utilized for Class IV channel lining. All non-durable shales shall be excluded from use as channel lining.

7. In accordance with Section 206 of the current Kentucky Department of Highways Standard Specifications for Road and Bridge Construction, the moisture content of embankment material shall not vary from the optimum moisture content, as determined by KM 64-511, by more than plus or minus two percent. This moisture content requirement shall have equal weight with the density requirement when determining the acceptability of embankment or subgrade construction. Refer to the Family of Curves for moisture-density relationships.

8. All soils, whether from roadway excavation or borrow, may require manipulation to obtain proper moisture content prior to compaction. Direct payment shall not be permitted for rehandling, hauling, stockpiling and/or manipulating soils.

9. The Contractor is responsible for conducting any operations necessary (such as construction of temporary drainage ditches, etc.) in order to excavate the cut areas to the required typical sections. These operations shall be incidental to the roadway excavation price.

10. Any saturated, soft, unstable areas encountered within embankment foundation limits and/or any other areas as specified by the Engineer shall be drained. Saturated, soft, unstable areas were noted at the following locations.

<u>Approximate Station Limits</u>
Mainline

791+00 - 793+00

11. The Contractor shall conduct grading operations in such a manner that durable sandstone and durable shale obtained from roadway excavation shall be stockpiled separately or otherwise manipulated so that ample quantities are available for those areas requiring said materials. No direct payment will be allowed for such necessary manipulation as stockpiling and/or double handling the material. Durable sandstone and durable shale shall not be wasted unless prior approval is obtained from the Engineer.

12. All roadway embankments shall be constructed using durable shale and/or durable sandstone, obtained from roadway excavation, from groundline up to roadway grade. Non-durable shales, coal and underclays shall be wasted and not utilized in the roadway embankments.

13. Embankment foundation benches shall be constructed <u>into bedrock</u> and perforated pipe underdrains shall be placed at the following approximate locations in accordance with current Kentucky Department of Highways Standard Drawings RGX-010 and RDP-006, project cross-sections, and as directed by the Engineer. The benches shall be constructed one at a time beginning with the lowest bench. Each bench shall be backfilled prior to excavation of the next bench. This procedure shall be followed to help maintain stability of the new embankments and existing slopes in these areas.

<u>Approximate Station Limits</u>
Mainline

765+75 - 766+75
834+75 - 835+25

14. Any coal encountered at planned grade or within a zone four (4) feet below planned grade shall be removed to a depth of four (4) feet below planned grade. The Contractor shall not perform additional undercutting to recover coal unless prior approval of the Engineer has been obtained. Any such undercutting at or near grade for recovery of coal shall be backfilled with durable sandstone in two (2) foot lifts, and positive drainage shall be maintained through the cut using eight (8) inch perforated pipe underdrains, as applicable. Potential coal at or within four (4) feet of planned grade exists at these approximate station intervals.

Roadway Portion	Approximate Station Limits
Mainline	773+50 - 777+50
	820+00 - 822+00
Ramp 1	200+00 - 203+00

15. Transverse benches shall be constructed and perforated pipe underdrains shall be installed at the following approximate locations in accordance with Kentucky Department of Highways Standard Drawings RDP-005 and RDP-006, project cross-sections, and as directed by the Engineer. Contrary to Standard Drawing RDP-006, transverse benches and perforated pipe underdrains shall be installed in both uphill and downhill transition areas between cuts and fills.

<u>Approximate Station</u>
Mainline

820+80
822+60

16. Perforated pipes for subgrade drainage shall be installed at vertical sags and at the upgrade ends of structures, in accordance with Standard Drawing RDP-005 and/or as directed by the Engineer. Contrary to Standard Drawing RDP-005, such drains shall be installed even when a rock roadbed is being constructed. These drainage features shall be installed at the following approximate locations.

Roadway Portion	Approximate Station
Mainline	775+00
Ramp 1	201+20
Ramp 2	314+40
KY 80	54+00
KY 80	56+00
KY 80	88+40

17. Colluvial soils are present at the following approximate locations:

Roadway Portion	Approximate Station Limits
Mainline	787+50 - 789+00
	802+00 - 803+00
KY 80	64+50 - 67+00

Cut slopes constructed in these materials have been found to be relatively unstable for long term performance. Construction in these areas shall be performed as shown on the project cross-sections and as directed by the Engineer.

18. Intermediate benches between elevations 1010.0 and 1070.0 shall be constructed between approximate Stations 202+00 and 204+00 as shown on the project cross-sections, and as directed by the Engineer. The purpose of the intermediate benches is to control water runoff and erosion within the non-durable shale.

19. Any vertical mine or air shaft under a proposed embankment, whether shown on the plans or not, shall be filled with broken stone (durable sandstone or durable shale) from roadway excavation and capped with an eight (8) inch reinforced concrete slab. The slab shall be in accordance with Section 708 of the current Kentucky Department of Highways Standard Specifications for Road and Bridge Construction.

20. Any mine tunnels or horizontal auger openings in mined-out areas below grade <u>which show signs of subsidence</u>, whether shown on the plans or not, shall be thoroughly investigated at the direction of the Engineer by rock coring, probing or other means. The openings shall be collapsed or undercut and backfilled with broken stone (durable sandstone or durable shale - SDI 95 or greater) from roadway excavation. The material shall be backfilled in accordance with Section 206. At the direction of the Engineer, pneumatic backstowing of crushed stone (maximum size 40 mm with no more than 5% passing the No. 100 sieve) may be utilized to backfill openings which are inaccessible or difficult to backfill by other means. If feasible, positive drainage of the tunnels or openings shall be provided through use of pipe underdrains or other suitable drainage features. Pipes and other materials used for drainage shall be paid for at the unit bid price for those items. Pneumatic backstowing or other special equipment shall be paid for at the unit bid price per ton of backstowed material. Potential mine tunnels or horizontal auger openings in mined out areas below grade have been identified within the following station interval.

<u>Approximate Station Limits</u>
Mainline

759+00 - 763+00

21. Any mine tunnels or horizontal auger openings which are exposed in cut slopes, whether shown on the plans or not, shall be backfilled a minimum distance of 20-feet from the face of the cut. Pneumatic backstowing with broken stone (durable sandstone or durable shale - SDI 95 or greater, maximum size 40 mm with no more than 5% passing the No. 100 sieve) shall be required in an effort to completely fill any voids. The last five (5) feet, horizontally, of backstowed material shall contain five percent cement, by weight, and shall be backstowed as a slurry mix. If feasible, positive drainage of the tunnels or openings shall be provided through the use of pipe underdrains, surface ditches or other suitable drainage facilities. Pipes and other material used for drainage shall be paid for at the unit bid price for those items. Pneumatic backstowing and other materials, or special equipment, shall be paid for at the unit bid price per ton of backstowed material. Potential mine tunnels or horizontal auger openings which may be exposed in cut slopes have been identified within the following station interval.

<u>Approximate Station Limits</u>
Ramp 1

214+00 - 217+00

Controlled Embankment at John Moore Branch

22. All notes and recommendations regarding preparation of areas to receive fill, as presented in FMSM's January 2001 "Geotechnical Engineering Report, US 460 Relocation, Sections 7, 8 and 8A, Beaver Creek to Grassy Creek", remain applicable.

23. Clearing and grubbing of embankment area shall be completed in accordance with Section 202 of the current Kentucky Department of Highways Standard Specifications for Road and Bridge Construction. Vegetative and organic materials shall be removed from the disposal area prior to placement of the excess spoil.

24. A durable sandstone drainage blanket should be constructed along the natural flow path of the hollow and extend from the toe to the head of the natural surface area beneath the fill. In addition latteral drains from swales and sweeps should be constructed to direct water to the underdrain.

The drainage blanket should be sized to carry the maximum anticipated seepage of water, due to precipitation, away from the fill. However, the minimum size of the drainage blanket should be 16 feet in width by 8 feet in height. In constructing the drainage blanket, no more than 10 percent of the rock should be less than 12 inches in size and no single rock should be larger than 25 percent of the width of the drainage blanket. The durable sandstone should be obtained from roadway excavation.

25. The excess material placed in the Controlled Embankment at John Moore Branch will be placed in accordance with Section 206 of the <u>Standard Specifications for Road and Bridge Construction</u>, current edition, except that NO MEASUREMENT OR DIRECT PAYMENT WILL BE MADE FOR THE SITE PREPARATION, EXCAVATION, ROCK DRAINAGE BLANKET, OR PLACEMENT OF THE EXCESS MATERIAL IN THE CONTROLLED EMBANKMENT.

26. Upon completion of the controlled embankment and prior to future development of the site at John Moore Branch, it is recommended that site specific geotechnical explorations be performed that are designed specifically for that type of proposed development. Depending on the type of structure to be built, additional foundation improvement techniques such as preloading, dynamic compaction, excavation/replacement of materials, or deep foundation elements may be required. Because the specifics of future development at the site cannot be defined at this time, this report does not contain any conclusions or recommendations regarding how this controlled embankment may need to be constructed or improved to accommodate such development.

KENTUCKY
DEPARTMENT OF HIGHWAYS
COUNTY OF
PIKE

PROJECT NUMBERS
US 460 SECTION 7
FD 52 098 0460
APD 80-6 (27)

19 ___ BY ___________ DESIGN ENGINEER

FORM NO. 8
...\r04900sp

COUNTY OF	ITEM NO.	SHEET NO.
PIKE	12-263.72	R49

REVISED 11-15-10

GEOTECHNICAL NOTES

Section 7: Station 758+80 to 845+00

1. Clearing and grubbing of embankment areas shall be completed in accordance with Section 202 of the current Kentucky Department of Highways Standard Specifications for Road and Bridge Construction.

2. Removal of existing structures and other obstructions shall be completed in accordance with Section 203 of the current Kentucky Department of Highways Standard Specifications for Road and Bridge Construction.

3. All water wells within the limits of construction, whether shown on the plans or not, shall be plugged in accordance with requirements of Section 708 of the current Kentucky Department of Highways Standard Specifications for Road and Bridge Construction.

4. All catch basins and manholes shall be filled and capped, and all septic tanks shall be cleaned and filled in accordance with Section 708 of the current Kentucky Department of Highways Standard Specifications for Road and Bridge Construction.

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Approximate Station Limits
Mainline
791+00 - 793+00

11. The Contractor shall conduct grading operations in such a manner that durable sandstone and durable shale obtained from roadway excavation shall be stockpiled separately or otherwise manipulated so that ample quantities are available for those areas requiring said materials. No direct payment will be allowed for such necessary manipulation as stockpiling and/or double handling the material. Durable sandstone and durable shale shall not be wasted unless prior approval is obtained from the Engineer.

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Approximate Station Limits
Mainline
765+75 - 766+75
834+75 - 835+25

14. Any coal encountered at planned grade or within a zone four (4) feet below planned grade shall be removed to a depth of four (4) feet below planned grade. The Contractor shall not perform additional undercutting to recover coal unless prior approval of the Engineer has been obtained. Any such undercutting at or near grade for recovery of coal shall be backfilled with durable sandstone in two (2) foot lifts, and positive drainage shall be maintained through the cut using eight (8) inch perforated pipe underdrains, as applicable. Potential coal at or within four (4) feet of planned grade exists at these approximate station intervals.

Roadway Portion	Approximate Station Limits
Mainline	773+50 - 777+50
	820+00 - 822+00
Ramp 1	200+00 - 203+00

15. Transverse benches shall be constructed and perforated pipe underdrains shall be installed at the following approximate locations in accordance with Kentucky Department of Highways Standard Drawings RDP-005 and RDP-006, project cross-sections, and as directed by the Engineer. Contrary to Standard Drawing RDP-006, transverse benches and perforated pipe underdrains shall be installed in both uphill and downhill transition areas between cuts and fills.

Approximate Station
Mainline
820+80
822+60

16. Perforated pipes for subgrade drainage shall be installed at vertical sags and at the upgrade ends of structures, in accordance with Standard Drawing RDP-005 and/or as directed by the Engineer. Contrary to Standard Drawing RDP-005, such drains shall be installed even when a rock roadbed is being constructed. These drainage features shall be installed at the following approximate locations.

Roadway Portion	Approximate Station
Mainline	775+00
Ramp 1	201+20
Ramp 2	314+40
KY 80	54+00
KY 80	56+00
KY 80	88+40

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Roadway Portion	Approximate Station Limits
Mainline	787+50 - 789+00
	802+00 - 803+00
KY 80	64+50 - 67+00

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Approximate Station Limits
Mainline
759+00 - 763+00

21. Any mine tunnels or horizontal auger openings which are exposed in cut slopes, whether shown on the plans or not, shall be backfilled a minimum distance of 20-feet from the face of the cut. Pneumatic backstowing with broken stone (durable sandstone or durable shale - SDI 95 or greater, maximum size 40 mm with no more than 5% passing the No. 100 sieve) shall be required in an effort to completely fill any voids. The last five (5) feet, horizontally, of backstowed material shall contain five percent cement, by weight, and shall be backstowed as a slurry mix. If feasible, positive drainage of the tunnels or openings shall be provided through the use of pipe underdrains, surface ditches or other suitable drainage facilities. Pipes and other material used for drainage shall be paid for at the unit bid price for those items. Pneumatic backstowing and other materials, or special equipment, shall be paid for at the unit bid price per ton of backstowed material. Potential mine tunnels or horizontal auger openings which may be exposed in cut slopes have been identified within the following station interval.

Approximate Station Limits
Ramp 1
214+00 - 217+00

Controlled Embankment at John Moore Branch

22. All notes and recommendations regarding preparation of areas to receive fill, as presented in FMSM's January 2001 'Geotechnical Engineering Report, US 460 Relocation, Sections 7, 8 and 8A, Beaver Creek to Grassy Creek', remain applicable.

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24. A durable sandstone drainage blanket should be constructed along the natural flow path of the hollow and extend from the toe to the head of the natural surface area beneath the fill. In addition latteral drains from swales and sweeps should be constructed to direct water to the underdrain.

    The drainage blanket should be sized to carry the maximum anticipated seepage of water, due to precipitation, away from the fill. However, the minimum size of the drainage blanket should be 16 feet in width by 8 feet in height. In constructing the drainage blanket, no more than 10 percent of the rock should be less than 12 inches in size and no single rock should be larger than 25 percent of the width of the drainage blanket. The durable sandstone should be obtained from roadway excavation.

25. The excess material placed in the controlled embankment at John Moore Branch will be placed in accordance with Section 206 of the Standard Specifications for Road and Bridge Construction, current edition, except that NO MEASUREMENT OR DIRECT PAYMENT WILL BE MADE FOR THE SITE PREPARATION, EXCAVATION, ROCK DRAINAGE BLANKET, OR PLACEMENT OF THE EXCESS MATERIAL IN THE CONTROLLED EMBANKMENT.

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KENTUCKY DEPARTMENT OF HIGHWAYS
COUNTY OF
PIKE

PROJECT NUMBERS: US 460 SECTION 7; FD 52 098 0460; APD 80-6 (27)

19 ___ BY _____ DESIGN ENGINEER

FORM NO. 8
...\r049005sp

COUNTY OF	ITEM NO.	SHEET NO.
PIKE	12-263.72	R49G

Core Log Sta. 203+00, 460.0' Lt.

Elev.		
	1168.0 - 1162.7	Overburden
	1162.7 - 1157.6	Sandstone, brown to gray, medium grained, medium bedded (durable)
	1157.6 - 1153.7	Shale, brown, silty, highly weathered, zones fractured
	1153.7 - 1151.5	Coal, black
	1151.5 - 1147.7	Shale, gray, silty
	1147.7 - 1090.0	Sandstone, brown to gray, medium grained, thin to medium bedded, with coal stringers, streaks and partings (durable)
	1090.0 - 1068.8	Shale, gray, sandy to silty
	1068.8 - 1068.4	Coal, black
	1068.4 - 1029.4	Shale, gray, sandy, with sandy stringers, streaks and partings, zones very sandy

Cut Limits From •Station 200+00 to •Station 218+00

Core Log Sta. 203+00, 250.0' Lt.

Elev.		
	1045.0 - 1040.0	Overburden
	1040.0 - 993.9	Shale, brown, silty, highly weathered, zones fractured, zones clay-like/earthy
	993.9 - 988.7	Coal, black
	988.7 - 987.8	Shale, gray, silty
	987.8 - 987.1	Coal, black
	987.1 - 970.6	Shale, gray, silty
	970.6 - 961.0	Sandstone, gray, fine to medium grained, thin to medium bedded, occasional water stains (durable)
	961.0 - 948.6	Shale, gray, silty
	948.6 - 915.7	Sandstone, gray, fine to medium grained, thin to medium bedded, with occasional zones shaly, with coal stringers, streaks and partings (durable)
	915.7 - 913.7	Shale, gray, silty
	913.7 - 913.1	Coal, black, boney
	913.1 - 912.5	Shale, gray, sandy
	912.5 - 895.8	Sandstone, gray, fine grained, thin to medium bedded, with coal stringers, streaks, and partings (durable)
	895.8 - 893.4	Shale, gray, silty
	893.4 - 891.8	Coal, black
	891.8 - 885.3	Shale, gray, silty to sandy
	885.3 - 826.7	Sandstone, gray, medium grained, thin to medium bedded, with occasional coal and shale stringers, streaks, and partings, with occasional zones shaly
	826.7 - 778.4	Shale, gray, sandy
	778.4 - 774.7	Coal, black, vitreous
	774.7 - 770.0	Shale, gray, sandy

NOTES:

1. This sheet presents geotechnical data and recommendations. Refer to project plans, profiles, and cross sections for final alignment and grade.
2. Refer to Geotechnical Note 14 for removal of coal at or within four feet of planned grade between approximate Stations 200+00 and 230+00.

SCALE CHANGE
SCALE: 1"=40'

RAMP I CUT STABILITY SECTION STATION 203+00

SOILS AND SUBSURFACE INVESTIGATION BY FULLER, MOSSBARGER, SCOTT AND MAY ENGINEERS, INC., LEXINGTON, KENTUCKY DATE DEC. 2000

DRAFTED BY SFS DATE

FORM NO. 9

...r0490gsp

COUNTY OF	ITEM NO.	SHEET NO.
PIKE	12-263.72	R49G

⚠ REVISED 11-15-10

Core Log Sta. 203+00, 460.0' Lt.

Elev.		
	1168.0 - 1162.7	Overburden
	1162.7 - 1157.6	Sandstone, brown to gray, medium grained, medium bedded (durable)
	1157.6 - 1153.7	Shale, brown, silty, highly weathered, zones fractured
	1153.7 - 1151.5	Coal, black
	1151.5 - 1147.7	Shale, gray, silty
	1147.7 - 1090.0	Sandstone, brown to gray, medium grained, thin to medium bedded, with coal stringers, streaks and partings (durable)
	1090.0 - 1068.8	Shale, gray, sandy to silty
	1068.8 - 1068.4	Coal, black
	1068.4 - 1029.4	Shale, gray, sandy, with sandy stringers, streaks and partings, zones very sandy

Cut Limits From •Station 200+00 to •Station 218+00

Core Log Sta. 203+00, 250.0' Lt.

Elev.		
	1045.0 - 1040.0	Overburden
	1040.0 - 993.9	Shale, brown, silty, highly weathered, zones fractured, zones clay-like/earthy
	993.9 - 988.7	Coal, black
	988.7 - 987.8	Shale, gray, silty
	987.8 - 987.1	Coal, black
	987.1 - 970.6	Shale, gray, silty
	970.6 - 961.0	Sandstone, gray, fine to medium grained, thin to medium bedded, occasional water stains (durable)
	961.0 - 948.6	Shale, gray, silty
	948.6 - 915.7	Sandstone, gray, fine to medium grained, thin to medium bedded, with occasional zones shaly, with coal stringers, streaks and partings (durable)
	915.7 - 913.7	Shale, gray, silty
	913.7 - 913.1	Coal, black, boney
	913.1 - 912.5	Shale, gray, sandy
	912.5 - 895.8	Sandstone, gray, fine grained, thin to medium bedded, with coal stringers, streaks, and partings (durable)
	895.8 - 893.4	Shale, gray, silty
	893.4 - 891.8	Coal, black
	891.8 - 885.3	Shale, gray, silty to sandy
	885.3 - 826.7	Sandstone, gray, medium grained, thin to medium bedded, with occasional coal and shale stringers, streaks, and partings, with occasional zones shaly
	826.7 - 778.4	Shale, gray, sandy
	778.4 - 774.7	Coal, black, vitreous
	774.7 - 770.0	Shale, gray, sandy

Lost water at 1149.4
64° fracture from 1149.5 to 1149.2
66° fracture from 1139.1 to 1138.7
Near vertical fractures from 1136.2 to 1135.5, 1081.2 to 1077.9 and 1065.7 to 1064.7
62° fracture from 1121.0 to 1120.6
76° fracture from 1111.2 to 1110.3
Weathered zone, with multiple fractures, near vertical to 61° from 1100.3 to 1097.0

RDZ = 52.0'

Clay seams from 1005.0 to 1000.0
69° fractures from 979.6 to 979.2 and 902.1 to 901.8
Weathered zone 976.8 to 975.1
Near vertical fractures from 958.2 to 957.1 and 938.3 to 937.3
79° fracture from 941.0 to 940.7

203+00

NOTES:

1. This sheet presents geotechnical data and recommendations. Refer to project plans, profiles, and cross sections for final alignment and grade.
2. Refer to Geotechnical Note 14 for removal of coal at or within four feet of planned grade between approximate Stations 200+00 and 230+00.

SCALE CHANGE
SCALE: 1"=40'

RAMP I CUT STABILITY SECTION STATION 203+00

SOILS AND SUBSURFACE INVESTIGATION BY FULLER, MOSSBARGER, SCOTT AND MAY ENGINEERS, INC. LEXINGTON, KENTUCKY DATE

DRAFTED BY SFS DATE DEC. 2000

FORM NO. 9

...r0490gsp

SPECIAL NOTE FOR FUEL ADJUSTMENT

Contrary to Standard Specification 109.07.02, the fuel/work ratio for Roadway Excavation on this project will be 0.38.

Item No. 12 - 263.72 **Project Mgr.** JOHN MICHAEL JOHNSON

County PIKE **Route** US-460

CAP #	Date of Promise	Promise made to:	Location of Promise
1	06-DEC-07	Brad Eldridge	Highway Design

CAP Description

VERIFY LOCATION OF 20' FB CHANNEL ON SHEET R05 WITH THE RESIDENT ENGINEER PRIOR TO CONSTRUCTION. THE LOCATION MAY SHIFT SLIGHTLY DUE TO THE PROPOSED LOCATION OF BRIDGE PIERS.

2	12-AUG-08	Brad Eldridge	Highway Design

CAP Description

DISREGARD CAP#1. INSTEAD, VERIFY LOCATION OF 2' FLAT BOTTOM CHANNEL ON SHEET R05 WITH THE RESIDENT ENGINEER PRIOR TO CONSTRUCTION. THE LOCATION MAY SHIFT SLIGHTLY DUE TO THE PROPOSED LOCATION OF BRIDGE PIERS.

3	19-JUN-09	J. M. Johnson / Dave Skeens	D-12

CAP Description

IF CONTRACTOR DECIDES TO PLACE FILL IN THE AREA OF THE KY POWER POLE AT APPROX. KY 80 STATION 82+70, 250' +/- RIGHT (CORNER OF THURMAN ELSWICK PROPERTY, SHEET R05), CONTRACTOR WILL BE RESPONSIBLE FOR HAVING ALL LINES RAISED TO SUIT COMPANY SPECIFICATIONS. THIS INCLUDES POWER, CABLE AND TELEPHONE. ANY CHANGES TO THE UNDERGROUND CONDUIT AND WIRES WILL BE THE RESPONSIBILITY OF THE CONTRACTOR AND MUST BE APPROVED BY THE RESPECTIVE COMPANIES.

4	19-JUN-09	J. M. Johnson / Dave Skeens	D-12

CAP Description

TWO GAS LINES BELONGING TO EQUITABLE RESOURCES ARE LOCATED WITHIN THE JOHN MOORE BRANCH WASTE AREA. CONTRACTOR MAY PLACE FILL MATERIAL OVER THE GAS LINES BUT MUST CONTACT EQUITABLE PRIOR TO COMMENCEMENT OF CLEARING. EQUITABLE WILL LOCATE THE LINES AND MARK THE DEPTH TO ENSURE NO EQUIPMENT WILL HIT THE LINE DURING OPERATIONS. THE LINES ARE LOCATED AT APPROXIMATE STATION 15+00 OF THE OSCAR WRIGHT HOLLOW BASELINE (SHEET R15H) AND RIGHT OFAPPROXIMATE STATION 130+00 - 140+00 OF THE JOHN MOORE BRANCH WASTE AREA (SHEET R15F)

5	16-NOV-10	J. M. Johnson	D-12

CAP Description

CAP NOTE #3 NO LONGER APPLIES SINCE ALL MATERIAL FROM THE PROJECT IS TO BE PLACED IN JOHN MOORE BRANCH.

CONTRACT ID: 101338 PAGE: 1
COUNTY: PIKE LETTING: 11/19/10
PROPOSAL: APD 80-6(27) CALL NO: 100

LINE NO	ITEM	DESCRIPTION	APPROXIMATE QUANTITY	UNIT	UNIT PRICE	AMOUNT
	SECTION 0001	PAVING				
0010	00003	CRUSHED STONE BASE (REVISED: 11-16-10)	9,862.000	TON		
0020	00100	ASPHALT SEAL AGGREGATE	51.000	TON		
0030	00208	CL4 ASPH BASE 1.50D PG64-22 (REVISED: 11-16-10)	6,142.000	TON		
0040	00214	CL3 ASPH BASE 1.00D PG64-22	917.000	TON		
0050	00217	CL4 ASPH BASE 1.00D PG64-22	3,039.000	TON		
0060	00221	CL2 ASPH BASE 0.75D PG64-22	219.000	TON		
0070	00291	EMULSIFIED ASPHALT RS-2	6.100	TON		
0080	00301	CL2 ASPH SURF 0.38D PG64-22	66.000	TON		
0090	00312	CL3 ASPH SURF 0.50D PG64-22 (REVISED: 11-16-10)	410.000	TON		
0100	00327	CL4 ASPH SURF 0.50B PG64-22	1,120.000	TON		
	SECTION 0002	ROADWAY				
0110	00078	CRUSHED AGGREGATE SIZE NO 2	2.000	TON		
0130	01982	DELINEATOR FOR GUARDRAIL-WHITE	11.000	EACH		
0140	02014	BARRICADE-TYPE III	14.000	EACH		
0150	02159	TEMP DITCH	18,163.000	LF		
0160	02200	ROADWAY EXCAVATION (REVISED: 11-16-10)	6,123,854.000	CUYD		
0170	02242	WATER	200.000	MGAL		
0180	02262	FENCE-WOVEN WIRE TYPE 1	11,852.000	LF		
0190	02351	GUARDRAIL-STEEL W BEAM-S FACE	3,775.000	LF		
0200	02360	GUARDRAIL TERMINAL SECTION NO 1	4.000	EACH		

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LINE NO	ITEM	DESCRIPTION	APPROXIMATE QUANTITY	UNIT	UNIT PRICE	AMOUNT
0210	02367	GUARDRAIL END TREATMENT TYPE 1	4.000	EACH		
0220	02429	RIGHT-OF-WAY MONUMENT TYPE 1	42.000	EACH		
0230	02431	WITNESS R/W MONUMENT TYPE 2	3.000	EACH		
0240	02432	WITNESS POST	42.000	EACH		
0250	02488	CHANNEL LINING CLASS IV	14,533.000	CUYD		
0251	02542	CEMENT (ADDED: 11-16-10)	9.000	TON		
0260	02545	CLEARING AND GRUBBING (291 ACRES)	(1.00)	LS		
0270	02562	SIGNS	474.000	SQFT		
0280	02570	PROJECT CPM SCHEDULE	(1.00)	LS		
0290	02585	EDGE KEY	44.000	LF		
0300	02600	FABRIC GEOTEXTILE TY IV FOR PIPE	6,779.000	SQYD	2.00	13,558.00
0310	02650	MAINTAIN & CONTROL TRAFFIC	(1.00)	LS		
0320	02651	DIVERSIONS (BY-PASS DETOURS)	(1.00)	LS		
0330	02653	LANE CLOSURE	2.000	EACH		
0340	02671	PORTABLE CHANGEABLE MESSAGE SIGN	3.000	EACH		
0341	02690	SAFELOADING (ADDED: 11-16-10)	43.000	CUYD		
0350	02701	TEMP SILT FENCE	18,163.000	LF		
0360	02703	SILT TRAP TYPE A	291.000	EACH		
0370	02704	SILT TRAP TYPE B	291.000	EACH		
0380	02705	SILT TRAP TYPE C	291.000	EACH		
0390	02706	CLEAN SILT TRAP TYPE A	1,746.000	EACH		

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LINE NO	ITEM	DESCRIPTION	APPROXIMATE UNIT QUANTITY	UNIT	UNIT PRICE	AMOUNT
0400	02707	CLEAN SILT TRAP TYPE B	1,746.000	EACH		
0410	02708	CLEAN SILT TRAP TYPE C	1,746.000	EACH		
0420	02709	CLEAN TEMP SILT FENCE	18,163.000	LF		
0430	02726	STAKING	(1.00)	LS		
0440	02775	ARROW PANEL	2.000	EACH		
0450	03171	CONCRETE BARRIER WALL TYPE 9T	2,620.000	LF		
0460	04772	HPS LUMINAIRE OFFSET	3.000	EACH		
0470	04933	TEMP SIGNAL 2 PHASE	3.000	EACH		
0480	05950	EROSION CONTROL BLANKET	262,660.000	SQYD		
0490	05952	TEMP MULCH	1,409,408.000	SQYD		
0500	05953	TEMP SEEDING AND PROTECTION	1,409,408.000	SQYD		
0510	05966	TOPDRESSING FERTILIZER	72.940	TON		
0520	05985	SEEDING AND PROTECTION	1,318,207.000	SQYD		
0530	05989	SPECIAL SEEDING CROWN VETCH	343,440.000	SQYD		
0540	06510	PAVE STRIPING-TEMP PAINT-4 IN	32,102.000	LF		
0550	06514	PAVE STRIPING-PERM PAINT-4 IN	14,008.000	LF		
0560	06568	PAVE MARKING-THERMO STOP BAR-24IN	48.000	LF		
0570	08100	CONCRETE-CLASS A	12.550	CUYD		
0580	08150	STEEL REINFORCEMENT	700.000	LB		
0590	10020NS	FUEL ADJUSTMENT (REVISED: 11-16-10)	896,341.000	DOLL	1.00	896,341.00
0600	10030NS	ASPHALT ADJUSTMENT (REVISED: 11-16-10)	28,700.000	DOLL	1.00	28,700.00

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LINE NO	ITEM	DESCRIPTION	APPROXIMATE UNIT QUANTITY	UNIT PRICE	AMOUNT
0610	20667ED	PNEUMATIC BACKSTOWING	700.000 TON		
0620	23131ER701	PIPELINE VIDEO INSPECTION	917.000 LF		
	SECTION 0003	DRAINAGE			
0630	00440	ENTRANCE PIPE-15 IN	28.000 LF		
0640	00462	CULVERT PIPE-18 IN	176.000 LF		
0650	00464	CULVERT PIPE-24 IN	46.000 LF		
0660	00522	STORM SEWER PIPE-18 IN	845.000 LF		
0670	00524	STORM SEWER PIPE-24 IN	50.000 LF		
0680	00526	STORM SEWER PIPE-30 IN	171.000 LF		
0690	00528	STORM SEWER PIPE-36 IN	545.000 LF		
0700	01000	PERFORATED PIPE-4 IN	70.000 LF		
0710	01010	NON-PERFORATED PIPE-4 IN	20.000 LF		
0720	01020	PERF PIPE HEADWALL TY 1-4 IN	1.000 EACH		
0730	01028	PERF PIPE HEADWALL TY 3-4 IN	1.000 EACH		
0740	01450	S & F BOX INLET-OUTLET-18 IN	2.000 EACH		
0750	01451	S & F BOX INLET-OUTLET-24 IN	1.000 EACH		
0760	01452	S & F BOX INLET-OUTLET-30 IN	4.000 EACH		
0770	01453	S & F BOX INLET-OUTLET-36 IN	3.000 EACH		
0780	01493	DROP BOX INLET TYPE 2	4.000 EACH		
0790	01496	DROP BOX INLET TYPE 3	2.000 EACH		
0800	01499	DROP BOX INLET TYPE 4	5.000 EACH		

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LINE NO	ITEM	DESCRIPTION	APPROXIMATE UNIT QUANTITY	UNIT PRICE	AMOUNT
0810	01756	MANHOLE TYPE A	2.000 EACH		
0820	01767	MANHOLE TYPE C	1.000 EACH		
0830	20569ES710	DROP BOX INLET TY 13G(MOD) (MODIFIED)	4.000 EACH		
0840	20570ES710	DROP BOX INLET TY 13S(MOD) (MODIFIED)	1.000 EACH		
	SECTION 0004	BRIDGE			
0850	08002	STRUCTURE EXCAV-SOLID ROCK	413.400 CUYD		
0860	08003	FOUNDATION PREPARATION (25258)	(1.00) LS		
0870	08003	FOUNDATION PREPARATION (25259)	(1.00) LS		
0880	08003	FOUNDATION PREPARATION (25260)	(1.00) LS		
0890	08003	FOUNDATION PREPARATION (26555)	(1.00) LS		
0900	08100	CONCRETE-CLASS A	352.200 CUYD		
0910	08150	STEEL REINFORCEMENT	42,159.000 LB		
	SECTION 0005	UTILITY			
0920	01065	STEEL ENCASEMENT PIPE-8 IN	100.000 LF		
0930	01073	STEEL ENCASEMENT PIPE-16 IN	100.000 LF		
0940	01095	DUCTILE IRON PIPE-8 IN	590.000 LF		
0950	03460	TIE-IN TO WATER LINE	6.000 EACH		
0960	03494	VALVE-4 IN	2.000 EACH		
0970	03528	GATE VALVE-8 IN	2.000 EACH		
0980	21353ND	TIE-IN TO FORCE MAIN	6.000 EACH		
0990	23013EN	SANITARY SEWER FORCE MAIN	280.000 LF		
	SECTION 0006	DEMOBILIZATION / MOBILIZATION			

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LINE NO	ITEM	DESCRIPTION	APPROXIMATE UNIT QUANTITY	UNIT PRICE	AMOUNT
1000	02568	MOBILIZATION (NO MORE THAN 5%)	LUMP		
1010	02569	DEMOBILIZATION (AT LEAST 1.5%)	LUMP		
		TOTAL BID			