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

Steven L. Beshear
Governor

Michael W. Hancock, P.E.
Secretary

August 11, 2014

CALL NO. 324
CONTRACT ID NO. 141042
ADDENDUM # 1

Subject: Pulaski County, FD04 SPP 100 9008 072-085
Letting August 22, 2014

(1)Revised - Special Notes - Pages 12-77 of 115

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

Plan revisions are available at http://www.lynnimaging.com/kytransportation/.

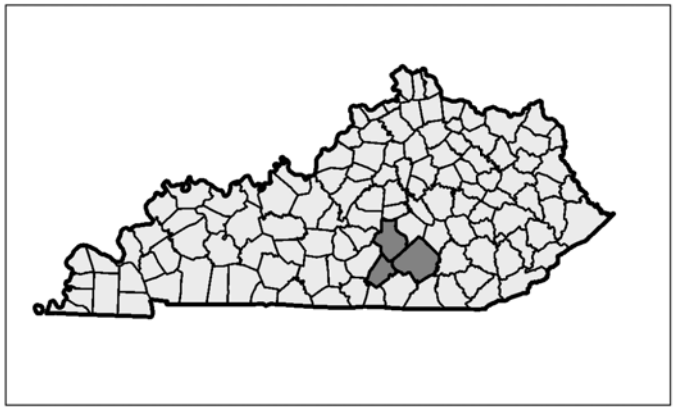
If you have any questions, please contact us at 502-564-3500.

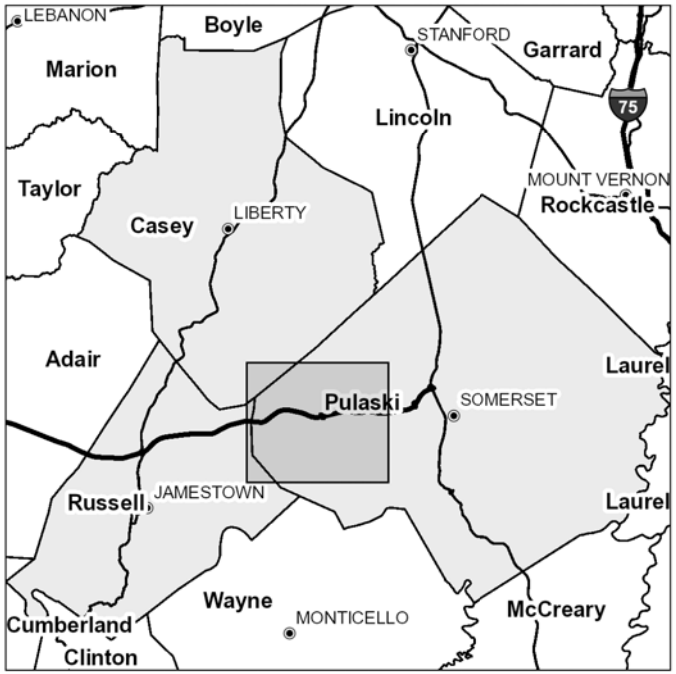
Sincerely,

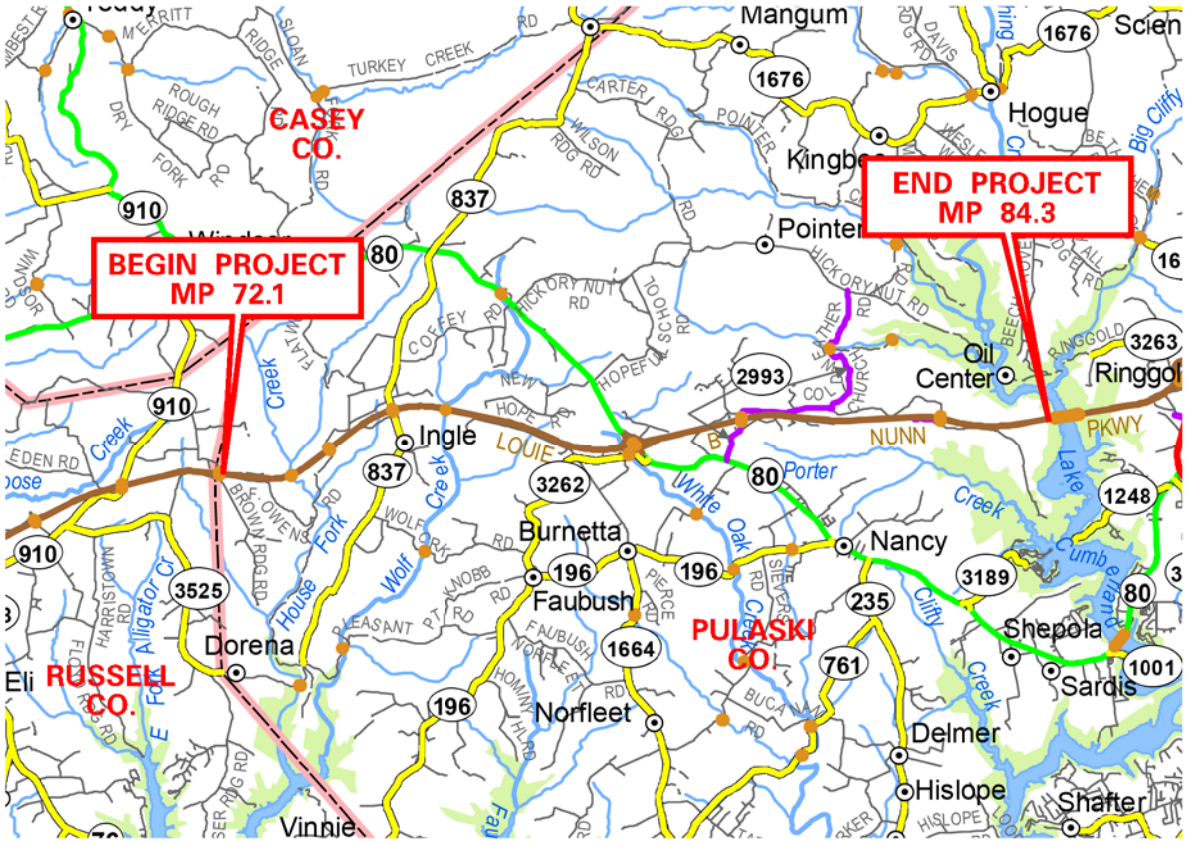
Diana Castle Radcliffe

Diana Castle Radcliffe
Director
Division of Construction Procurement

DR:ks
Enclosures







CONSTRUCTION NUMBER: FD04 SPP 100 9008 072–085

ITEM NUMBER: 8–2019.00 **LETTING DATE:** _____

RECOMMENDED BY: _____ **DATE:** _____
Project Manager

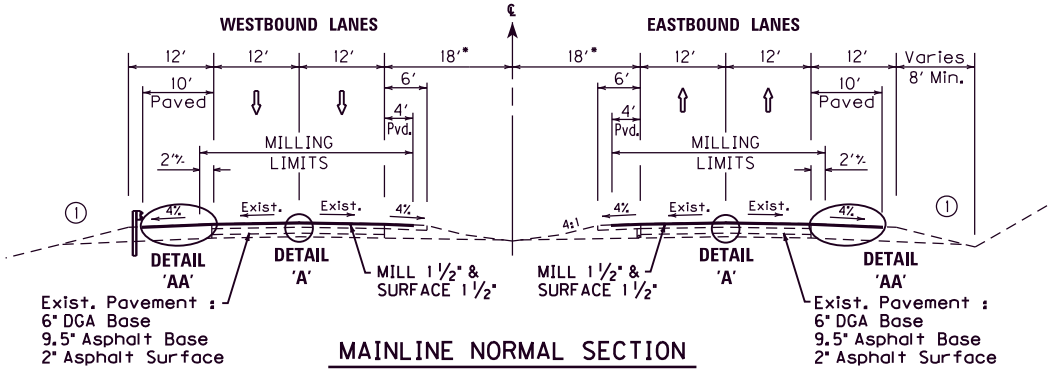
PLAN APPROVED BY: _____ **DATE:** _____
State Highway Engineer

FHWA APPROVED BY: _____ **DATE:** _____

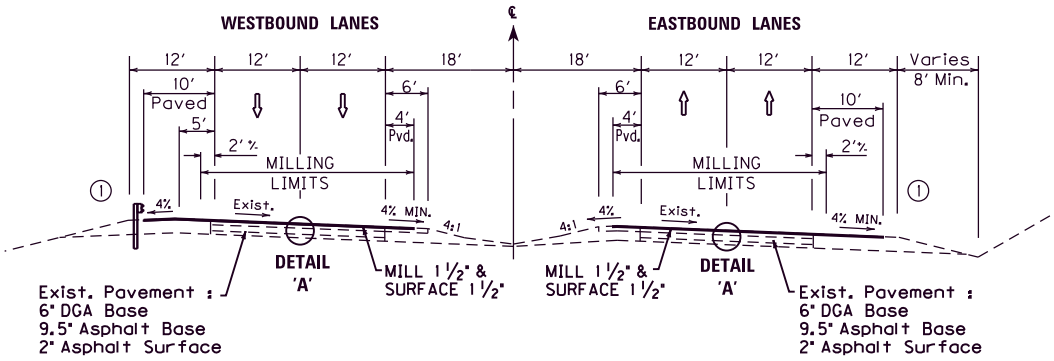
HMB PROFESSIONAL ENGINEERS, INC
3 HMB Circle, U.S. 460
Frankfort, KY 40601
502-692-9800

PROPOSED TYPICAL SECTIONS
CUMBERLAND PKWY.
MP 72.1 – RUSSELL / PULASKI Co. Line to
MP 84.3 – West End of Fishing Cr. Bridge

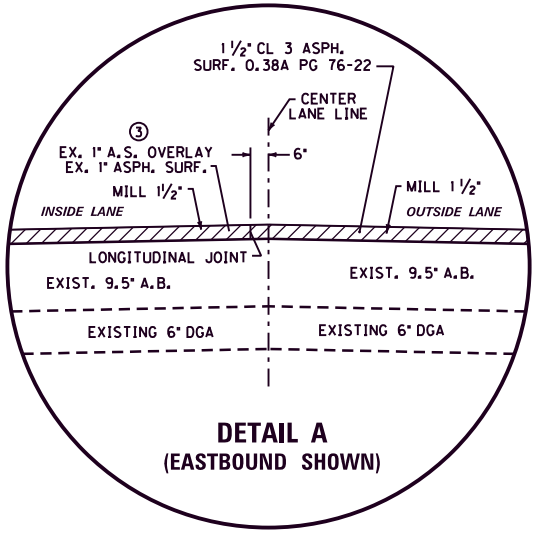
COUNTY OF	ITEM NO.	SHEET NO.
PULASKI	8-2019.00	



MAINLINE NORMAL SECTION



MAINLINE SUPERELEVATED SECTION

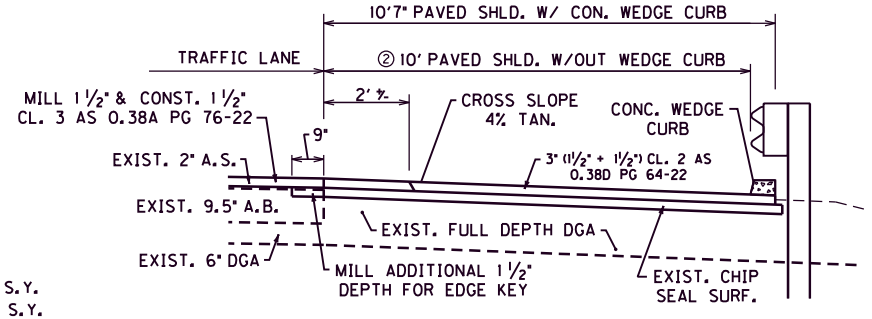


DETAIL A
(EASTBOUND SHOWN)

NOTE: THE LONGITUDINAL JOINT IN THE FINAL SURFACE COURSE SHALL BE OFFSET 6 INCHES FROM CENTERLINE TO ALLOW PLACEMENT OF PAVEMENT MARKINGS ON CL WITH APPROX. 2" CLEAR DISTANCE FROM THE CONSTRUCTION JOINT.

③ W.B. MP 72.1 to MP 76.55 EXIST. OVERLAY MILLED 1.25" AND CONSTRUCTED 1.25" A.S.

* VARIABLE MEDIAN - 26' to 10' - MP 84.180 to 84.30
* VARIABLE MEDIAN - 36' to 26' - MP 84.114 to MP 84.180



DETAIL AA

SURFACING SCHEDULE

MAINLINE TRAFFIC LANES & INSIDE SHOULDERS

ASPH. PAVE MILLING & TEXTURING ..... 1 ½" DEPTH
LEVELING & WEDGING PG 64-22 ③
CLASS 3 ASPH. SURF. 0.38A PG76-22 ..... 1 ½" DEPTH (1 COURSE)

OUTSIDE SHOULDERS

SHOULDER PREPARATION ..... DITCHING & SHOULDERING
CLASS 2 ASPH. BASE 0.50D PG64-22 ..... 2" DEPTH
CLASS 2 ASPH. SURF. 0.38D PG64-22 ..... 3" DEPTH (1½" + 1½")

① ASPHALT SEAL REQUIRED FROM OUTSIDE EDGE OF PAVED SHOULDER TO A POINT 2 FOOT DOWN THE DITCH OR FILL SLOPE (Where Applicable). TWO APPLICATIONS OF THE FOLLOWING :
ASPHALT SEAL COAT ..... 2.4 lbs. / S.Y.
ASPHALT SEAL AGGREGATE ..... 20 lbs. / S.Y.

② REDUCE WIDTH OF SHLD. PVMT. TO 9'6" WHERE GUARDRAIL W/ NO WEDGE CURB IS PRESENT.

③ TO BE USED AS DIRECTED BY THE ENGINEER FOR PAVEMENT IRREGULARITIES.

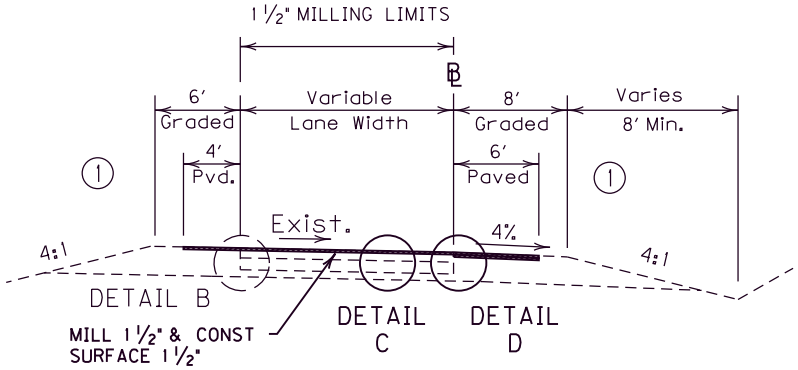
NOT TO SCALE

CUMBERLAND PKWY. TYPICAL SECTIONS

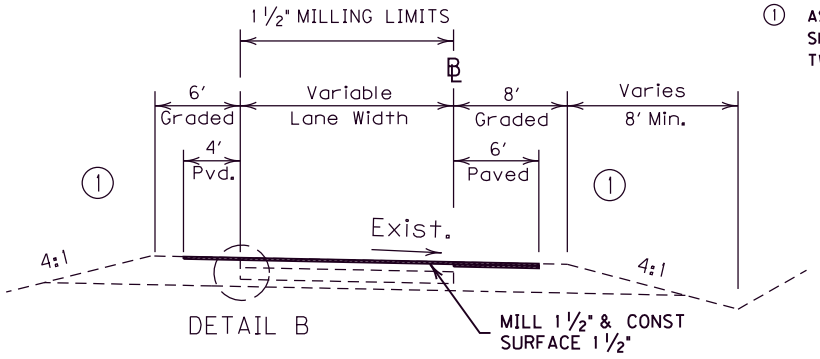
COUNTY OF	ITEM NO.	SHEET NO.
PULASKI	8-2019.00	

TYPICAL SECTIONS
KY 80 INTERCHANGE RAMPS

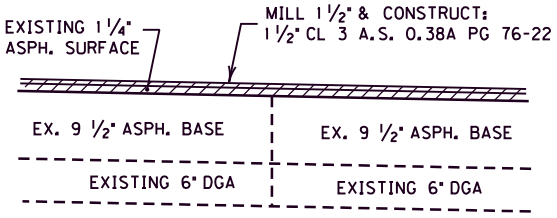
KY 80 OVER CUMBERLAND PKWY. (MP 78.349)
RAMP A (EB EXIT.)
RAMP B (EB ENTR.)
RAMP C (WB EXIT.)
RAMP D (WB ENTR.)



NORMAL SECTION



SUPERELEVATED SECTION



DETAIL B

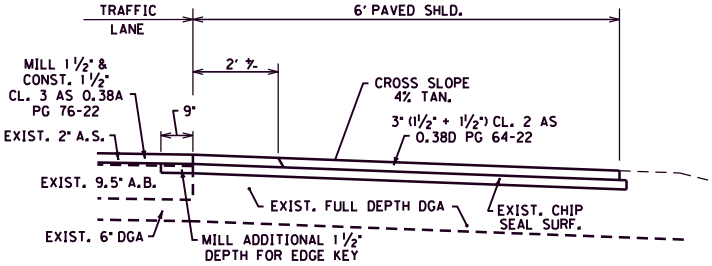
SURFACING SCHEDULE

RAMP LANES & INSIDE SHOULDER

ASPH. PAVE MILLING & TEXTURING .... 1 ½" DEPTH (TRAFFIC LANES & SHLD'S)
SHOULDER PREPARATION ..... DITCHING & SHOULDERING
CLASS 3 ASPH. SURF. 0.38A PG76-22 ..... 1 ½" DEPTH

① ASPHALT SEAL REQUIRED FROM OUTSIDE EDGE OF PAVED SHOULDER TO A POINT 2 FOOT DOWN THE DITCH OR FILL SLOPE. TWO APPLICATIONS OF THE FOLLOWING :
ASPHALT SEAL COAT..... 2.4 lbs. / S.Y.
ASPHALT SEAL AGGREGATE ..... 20 lbs. / S.Y.

NOTE :
ALL RAMPS SHALL BE MILLED AND SURFACED TO THE EXISTING EDGE OF PAVEMENT OF KY 80

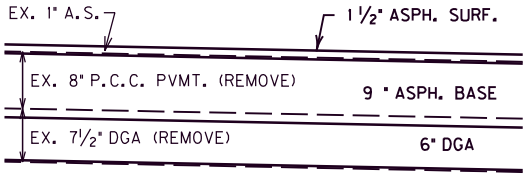


DETAIL D

SURFACING SCHEDULE

RAMP OUTSIDE SHOULDER

SHOULDER PREPARATION ..... DITCHING & SHOULDERING
CLASS 2 ASPH. SURF. 0.38D PG64-22 ..... 3" DEPTH (1 ½" + 1 ½")



DETAIL C
OLD TOLL BOOTH AREA

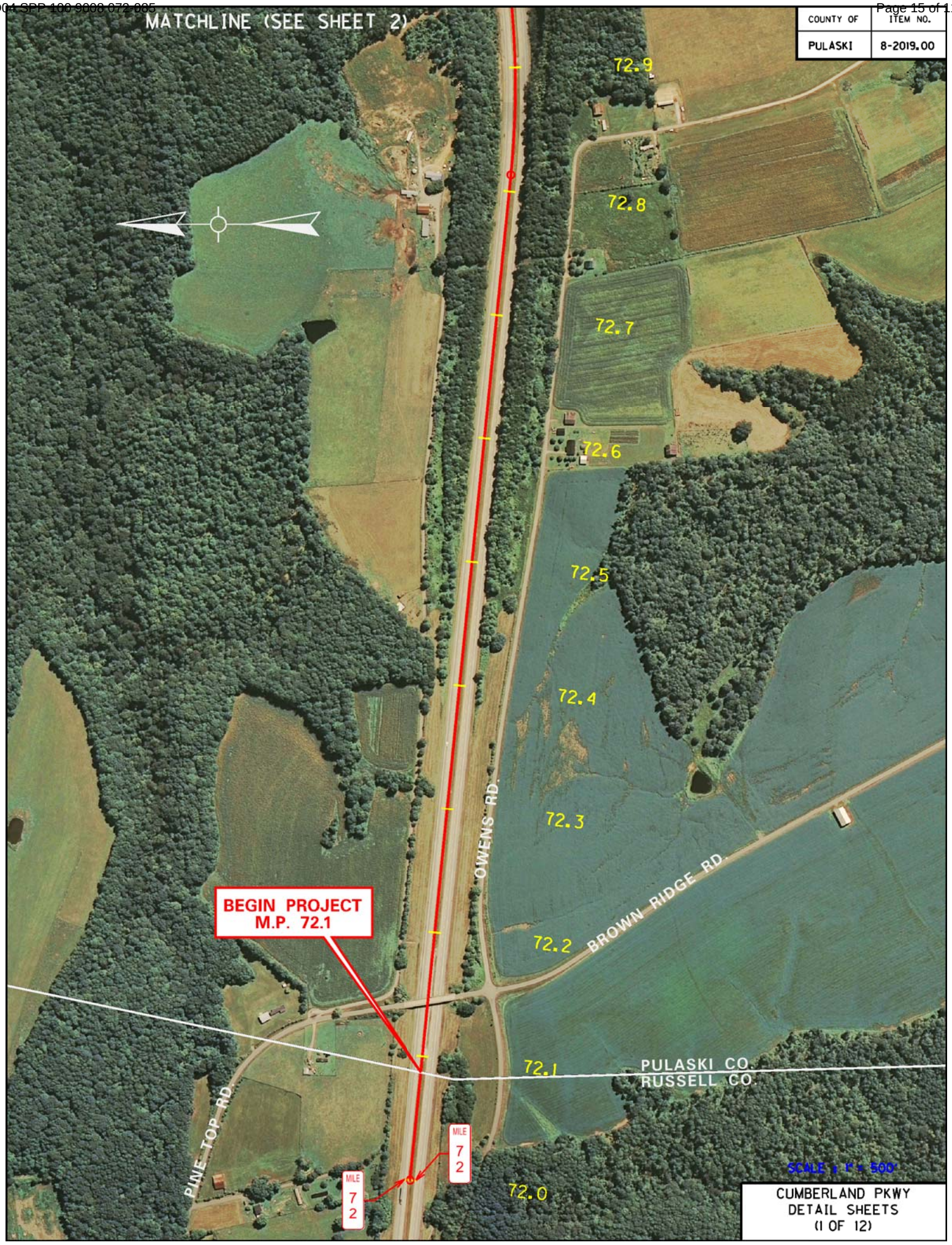
SURFACING SCHEDULE

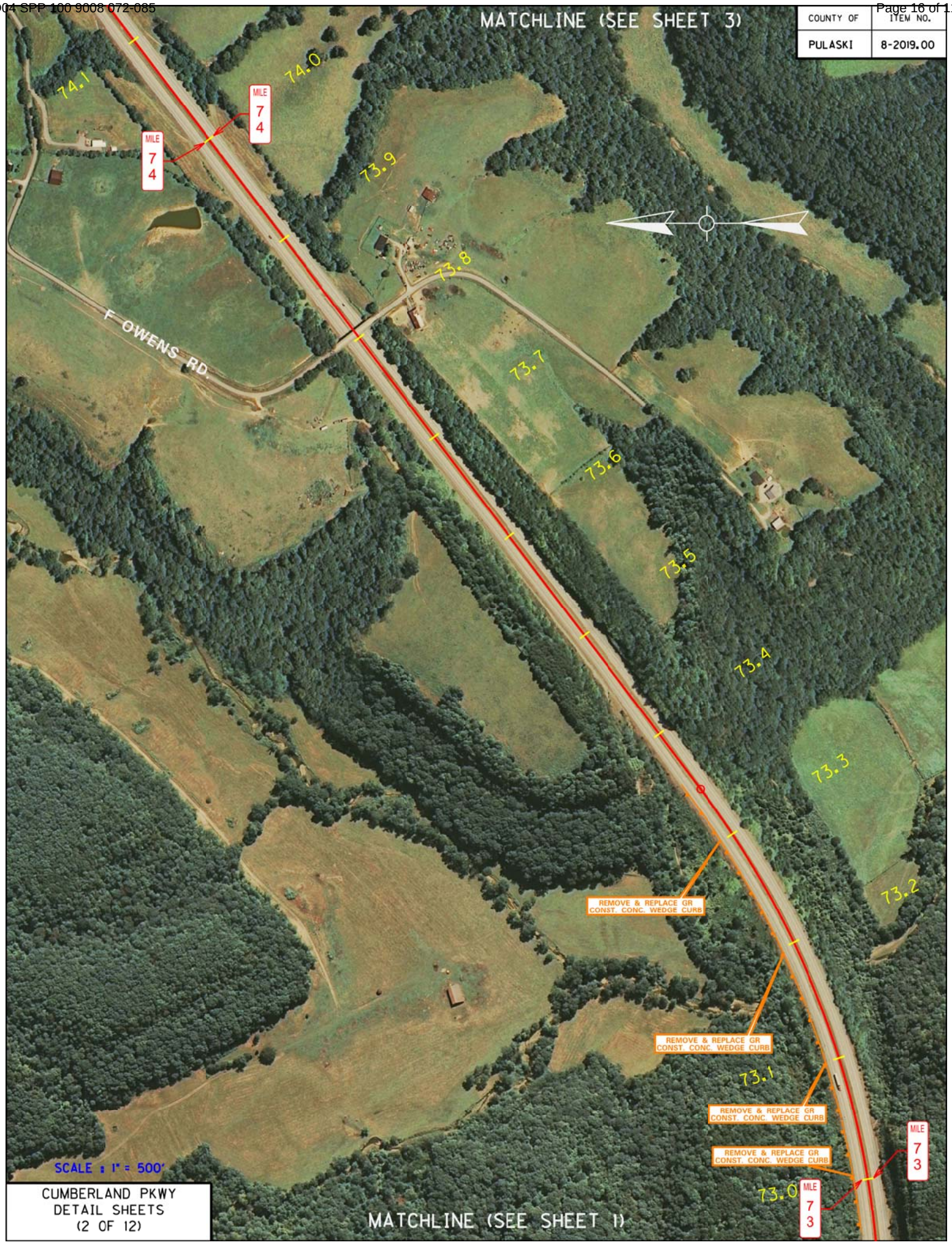
FULL DEPTH PVMT. REPLACEMENT
RAMP A & C - KY 80 INTERCHANGE

REMOVE EXIST. CONC. PAVEMENT ..... S.Y.
DGA BASE ..... 6" DEPTH
CLASS 3 ASPH. BASE 1.0D PG64-22 ..... 9" DEPTH (3"+3"+3")
CLASS 3 ASPH. SURF. 0.38A PG76-22 ..... 1 ½" DEPTH

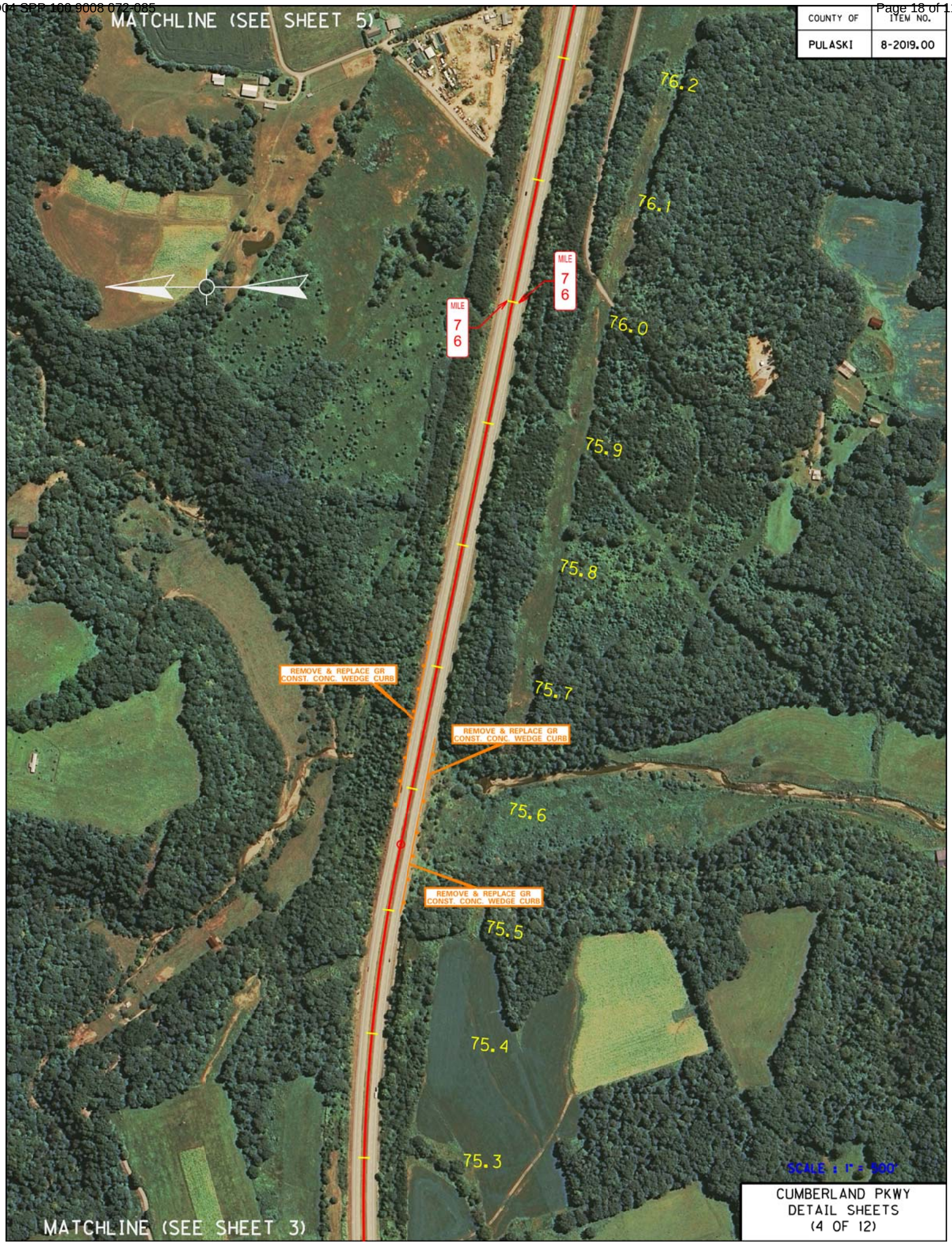
NOT TO SCALE

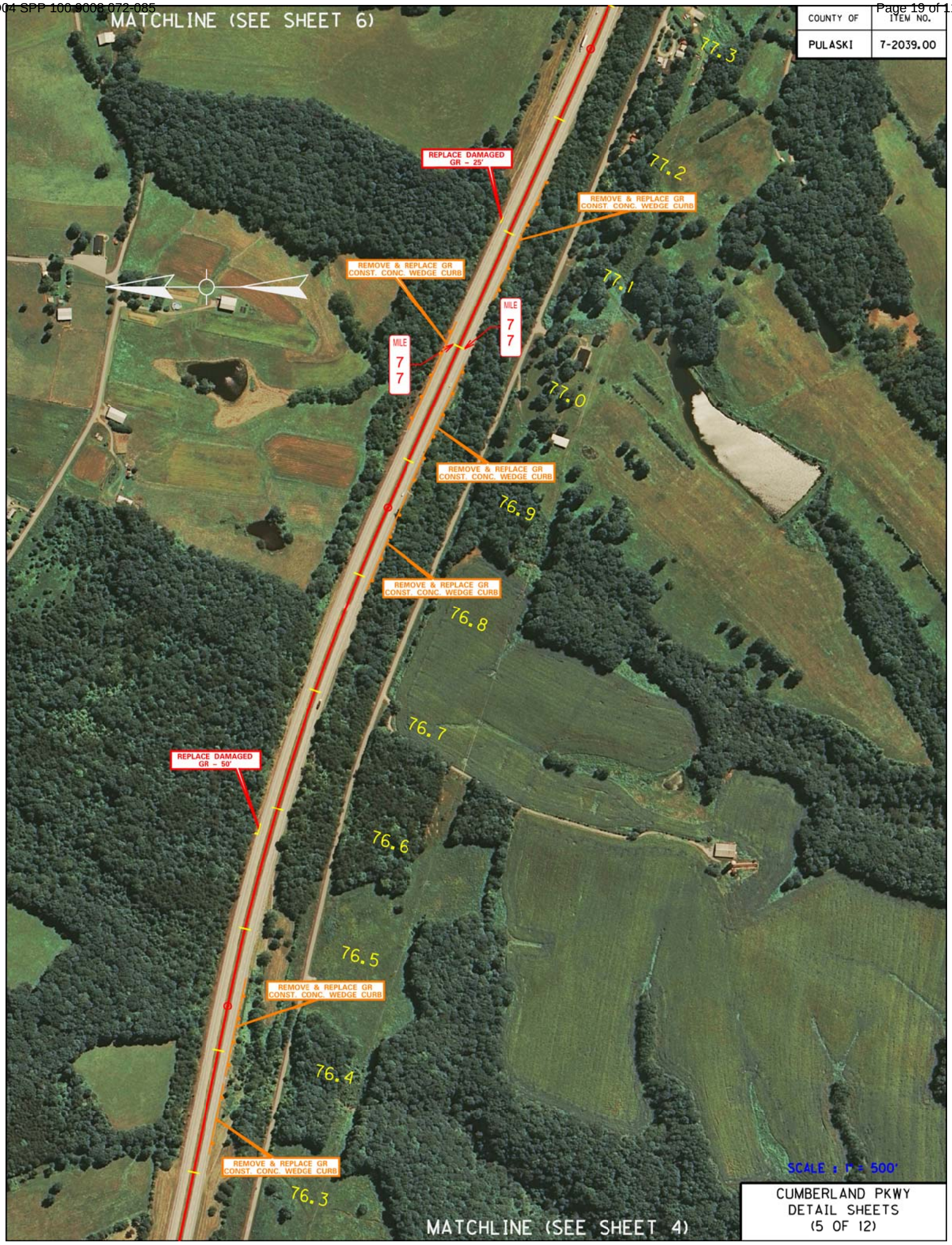
RAMP TYPICAL SECTIONS


MATCHLINE (SEE SHEET 2)
COUNTY OF
PULASKI
ITEM NO.
8-2019.00
72.9
72.8
72.7
72.6
72.5
72.4
72.3
72.2
72.1
72.0
OWENS RD.
BROWN RIDGE RD.
PINE TOP RD.
BEGIN PROJECT
M.P. 72.1
PULASKI CO.
RUSSELL CO.
MILE
72
MILE
72
SCALE : 1" = 500'
CUMBERLAND PKWY
DETAIL SHEETS
(1 OF 12)


MATCHLINE (SEE SHEET 3)
COUNTY OF
PULASKI
ITEM NO.
8-2019.00
74.1
74.0
MILE 74
MILE 74
73.9
73.8
F OWENS RD
73.7
73.6
73.5
73.4
73.3
73.2
REMOVE & REPLACE GR CONST. CONC. WEDGE CURB
REMOVE & REPLACE GR CONST. CONC. WEDGE CURB
73.1
REMOVE & REPLACE GR CONST. CONC. WEDGE CURB
REMOVE & REPLACE GR CONST. CONC. WEDGE CURB
MILE 73
73.0
MILE 73
SCALE : 1" = 500'
CUMBERLAND PKWY
DETAIL SHEETS
(2 OF 12)
MATCHLINE (SEE SHEET 1)


MATCHLINE (SEE SHEET 4)
COUNTY OF
PULASKI
ITEM NO.
8-2019.00
75.2
75.1
75.0
MILE 75
MILE 75
74.9
REPLACE DAMAGED GR - 50'
CR-1579O4
74.8
74.7
74.6
74.5
74.4
74.3
74.2
SCALE : 1" = 500'
MATCHLINE (SEE SHEET 2)
CUMBERLAND PKWY
DETAIL SHEETS
(3 OF 12)


MATCHLINE (SEE SHEET 5)
COUNTY OF
PULASKI
ITEM NO.
8-2019.00
76.2
76.1
MILE 76
MILE 76
76.0
75.9
75.8
REMOVE & REPLACE GR CONST. CONC. WEDGE CURB
75.7
REMOVE & REPLACE GR CONST. CONC. WEDGE CURB
75.6
REMOVE & REPLACE GR CONST. CONC. WEDGE CURB
75.5
75.4
75.3
SCALE : 1" = 500'
MATCHLINE (SEE SHEET 3)
CUMBERLAND PKWY
DETAIL SHEETS
(4 OF 12)


MATCHLINE (SEE SHEET 6)
COUNTY OF
PULASKI
ITEM NO.
7-2039.00
77.3
77.2
77.1
77.0
76.9
76.8
76.7
76.6
76.5
76.4
76.3
REPLACE DAMAGED GR - 25'
REMOVE & REPLACE GR CONST. CONC. WEDGE CURB
REMOVE & REPLACE GR CONST. CONC. WEDGE CURB
MILE 77
MILE 77
REMOVE & REPLACE GR CONST. CONC. WEDGE CURB
REMOVE & REPLACE GR CONST. CONC. WEDGE CURB
REPLACE DAMAGED GR - 50'
REMOVE & REPLACE GR CONST. CONC. WEDGE CURB
REMOVE & REPLACE GR CONST. CONC. WEDGE CURB
SCALE : 1" = 500'
MATCHLINE (SEE SHEET 4)
CUMBERLAND PKWY
DETAIL SHEETS
(5 OF 12)

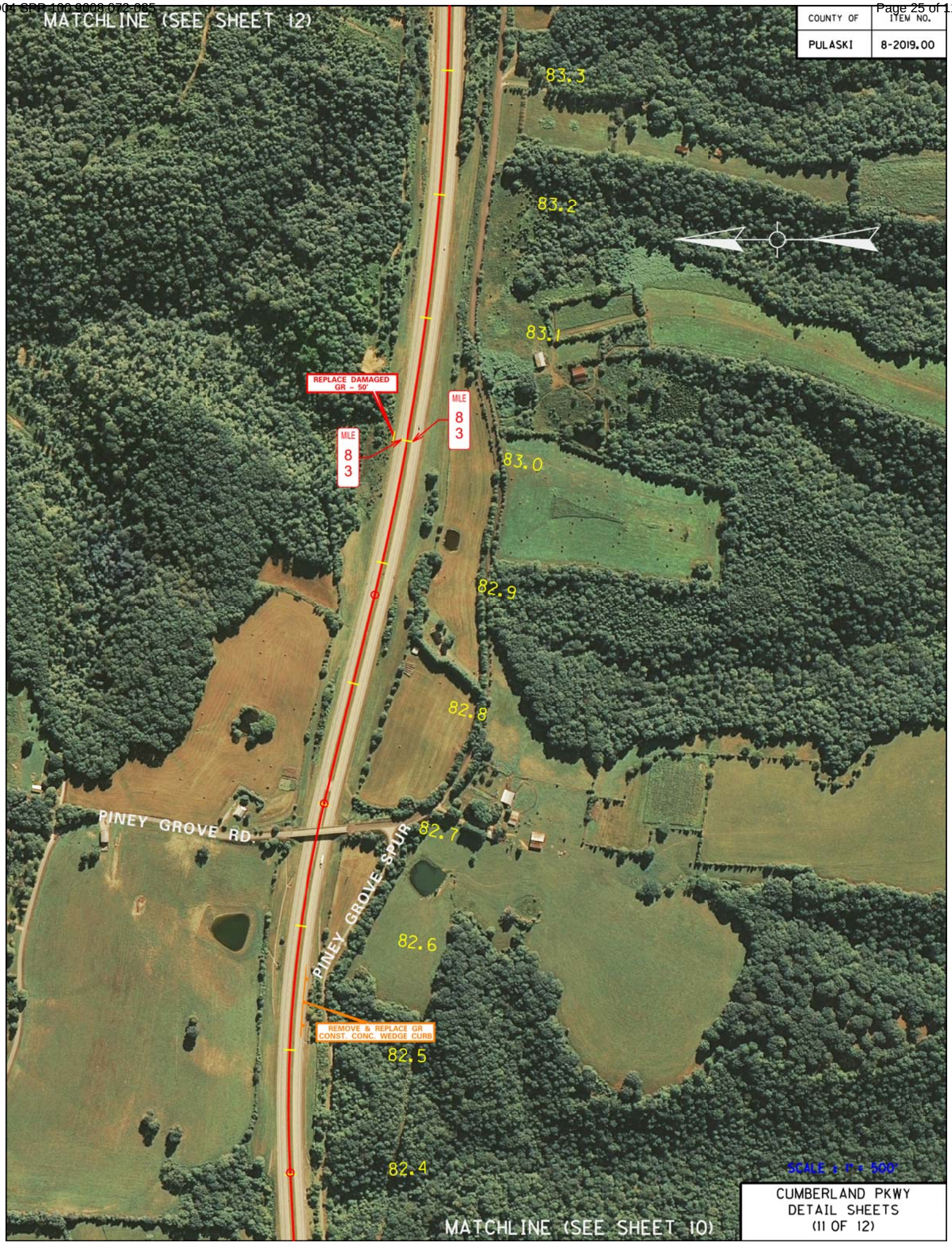

MATCHLINE (SEE SHEET 7)
78.3
KY 80
RAMP B
78.2
RAMP A
78.1
MILE 78
78.0
77.9
77.8
77.7
77.6
77.5
77.4
77.3
MATCHLINE (SEE SHEET 5)
COUNTY OF
PULASKI
ITEM NO.
8-2019.00
SCALE : 1" = 500'
CUMBERLAND PKWY
DETAIL SHEETS
(6 OF 12)

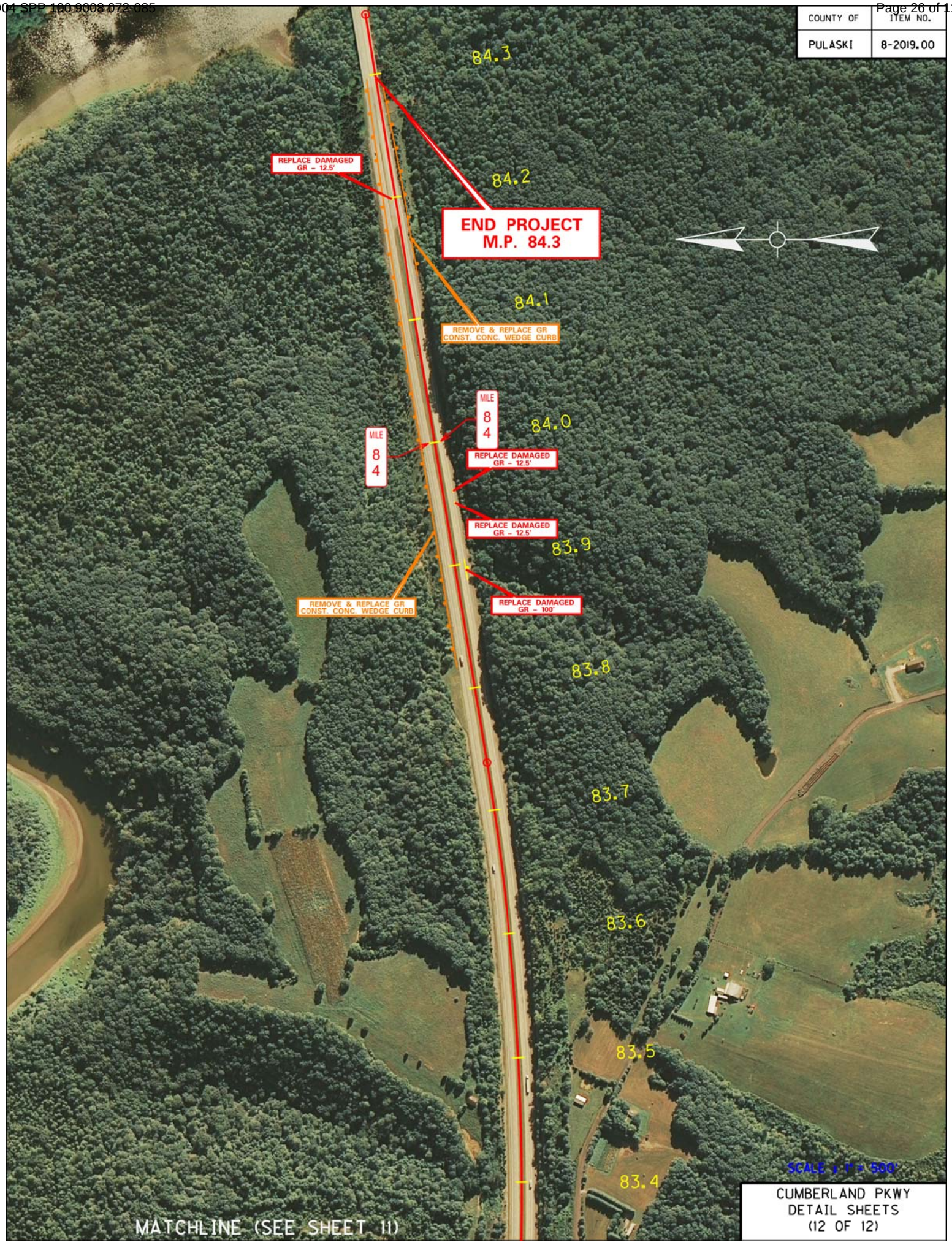

MATCHLINE (SEE SHEET 8)
COUNTY OF
PULASKI
ITEM NO.
8-2019.00
SINK HOLE
79.3
79.2
79.1
79.0
78.9
78.8
78.7
78.6
78.5
78.4
MILE 79
MILE 79
REMOVE & REPLACE GR CONST. CONC. WEDGE CURB
REMOVE & REPLACE GR CONST. CONC. WEDGE CURB
REMOVE CONC. PAVEMENT
REMOVE CONC. PAVEMENT
RAMP C
RAMP D
RAMP B
KY 80
SCALE : 1" = 500'
MATCHLINE (SEE SHEET 6)
CUMBERLAND PKWY
DETAIL SHEETS
(7 OF 12)

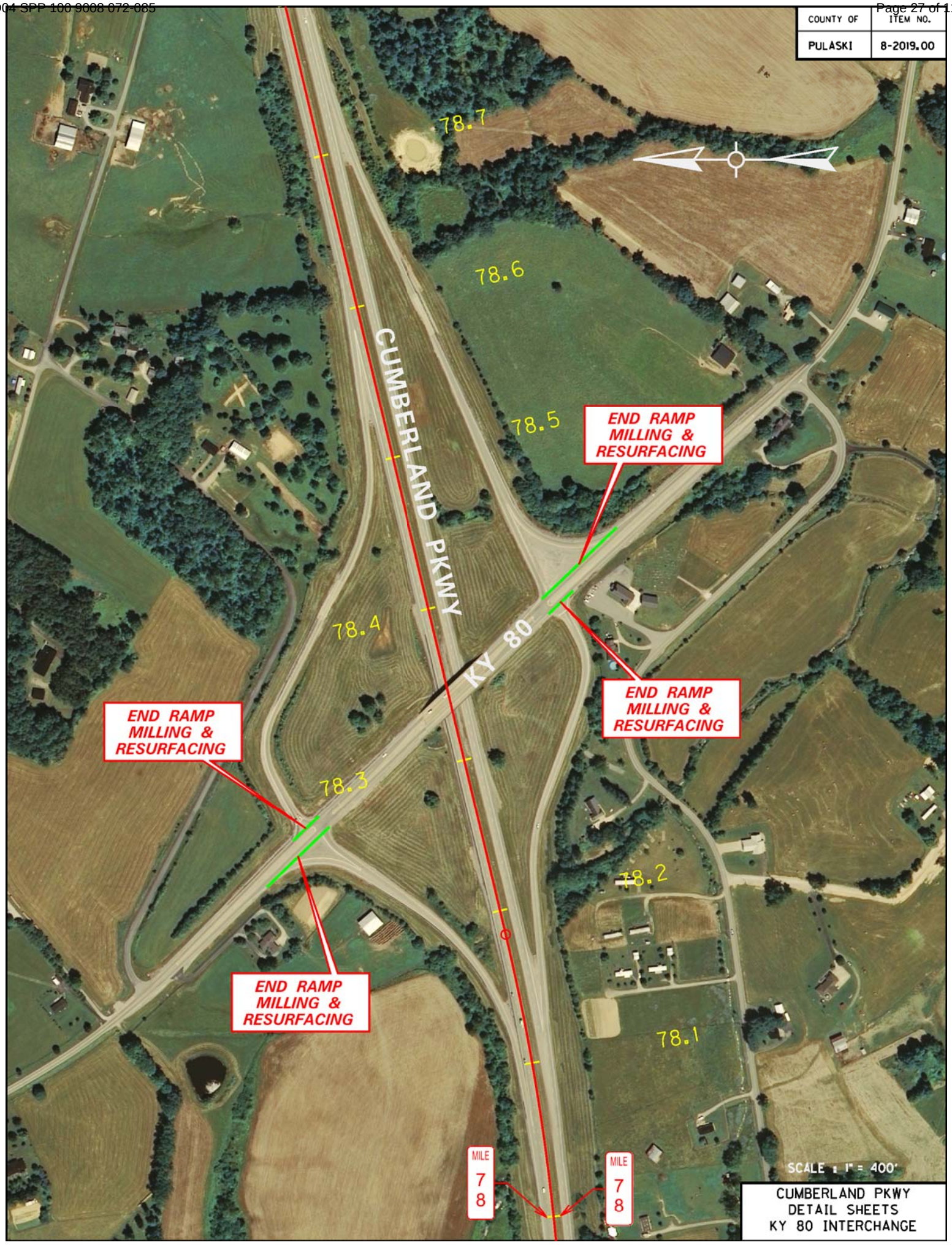

MATCHLINE (SEE SHEET 9)
COUNTY OF
PULASKI
ITEM NO.
8-2019.00
80.3
80.2
80.1
80.0
79.9
79.8
79.7
79.6
79.5
79.4
MILE 80
MILE 80
PINEY GROVE SPUR
PINEY GROVE RD.
HAPPY RIDGE RD.
SINK HOLE
SCALE 1" = 500'
CUMBERLAND PKWY
DETAIL SHEETS
(8 OF 12)
MATCHLINE (SEE SHEET 7)


MATCHLINE (SEE SHEET 10)
COUNTY OF
PULASKI
ITEM NO.
8-2019.00
81.3
81.2
81.1
81.0
80.9
80.8
80.7
80.6
80.5
80.4
MILE 81
MILE 81
REMOVE & REPLACE GR CONST. CONC. WEDGE CURB
REMOVE & REPLACE GR CONST. CONC. WEDGE CURB
SCALE : 1" = 500'
MATCHLINE (SEE SHEET 8)
CUMBERLAND PKWY
DETAIL SHEETS
(9 OF 12)


MATCHLINE (SEE SHEET 11)
COUNTY OF
PULASKI
ITEM NO.
8-2019.00
82.3
82.2
82.1
MILE 8 2
MILE 8 2
82.0
81.9
REMOVE & REPLACE GR CONST. CONC. WEDGE CURB
81.8
REMOVE & REPLACE GR CONST. CONC. WEDGE CURB
81.7
81.6
81.5
81.4
SCALE : 1" = 500'
MATCHLINE (SEE SHEET 9)
CUMBERLAND PKWY
DETAIL SHEETS
(10 OF 12)


MATCHLINE (SEE SHEET 12)
COUNTY OF
PULASKI
ITEM NO.
8-2019.00
83.3
83.2
83.1
83.0
82.9
82.8
82.7
82.6
82.5
82.4
REPLACE DAMAGED GR - 50'
MILE 83
MILE 83
PINEY GROVE RD.
PINEY GROVE SPUR
REMOVE & REPLACE GR CONST. CONC. WEDGE CURB
SCALE : 1" = 500'
MATCHLINE (SEE SHEET 10)
CUMBERLAND PKWY
DETAIL SHEETS
(11 OF 12)


COUNTY OF
PULASKI
ITEM NO.
8-2019.00
84.3
84.2
REPLACE DAMAGED GR - 12.5'
END PROJECT M.P. 84.3
84.1
REMOVE & REPLACE GR CONST. CONC. WEDGE CURB
MILE 84
84.0
REPLACE DAMAGED GR - 12.5'
REPLACE DAMAGED GR - 12.5'
83.9
REMOVE & REPLACE GR CONST. CONC. WEDGE CURB
REPLACE DAMAGED GR - 100'
83.8
83.7
83.6
83.5
83.4
SCALE : 1" = 500'
MATCHLINE (SEE SHEET 11)
CUMBERLAND PKWY
DETAIL SHEETS
(12 OF 12)


COUNTY OF
PULASKI
ITEM NO.
8-2019.00
78.7
78.6
78.5
78.4
78.3
78.2
78.1
CUMBERLAND PKWY
KY 80
END RAMP MILLING & RESURFACING
END RAMP MILLING & RESURFACING
END RAMP MILLING & RESURFACING
END RAMP MILLING & RESURFACING
MILE 78
MILE 78
SCALE : 1" = 400'
CUMBERLAND PKWY
DETAIL SHEETS
KY 80 INTERCHANGE

CUMBERLAND PKWY
PULASKI COUNTY
PAVEMENT REHABILITATION, MILEPOST 72.10 TO 84.30 EB & WB
ITEM NO. 8–2019.00
GENERAL SUMMARY

ITEM NUMBER	ITEM		UNIT	QUANTITY
1	DGA BASE	①	TON	4,164
336	CLASS 3 ASPH. SURFACE 0.38A PG76-22	①	TON	34,781
214	CLASS 3 ASPH. BASE 1.0D PG64-22	①	TON	947
301	CLASS 2 ASPH. SURFACE 0.38D PG64-22	①	TON	25,228
2696	SHOULDER RUMBLE STRIPS - SAWED	①	LIN FT	292,071
100	ASPHALT SEAL AGGREGATE	①	TON	1,145
103	ASPHALT SEAL COAT	①	TON	137
2677	ASPHALT PAVEMENT MILLING & TEXTURING	①	TON	37,373
190	LEVELING & WEDGING PG 64-22	④ ①	TON	1,500
21802EN	GUARDRAIL - STEEL W BEAM - S FACE (7' POST)	②	LIN FT	16,725
2381	REMOVE GUARDRAIL	②	LIN FT	16,725
2367	GUARDRAIL END TREATMENT TYPE 1	②	EACH	1
2369	GUARDRAIL END TREATMENT TYPE 2A	②	EACH	1
1310	REMOVE PIPE	③	LIN FT	28
2625	REMOVE HEADWALL	③	EACH	4
461	CULVERT PIPE - 15 IN.	③	LIN FT	24
471	CULVERT PIPE - 54 IN.	③	LIN FT	4
1432	SLOPED BOX OUTLET TYPE 1 - 15 IN.	③	EACH	3
8100	CONCRETE CLASS A	③	CU YD	7.82
8150	STEEL REINFORCEMENT	③	LBS	583
22660EN	REPLACE GRATE	③	LBS	161
22883EN	CONCRETE WEDGE CURB		LIN FT	14,341
23143ED	KPDES PERMIT & TEMPORARY EROSION CONTROL		LP SUM	1
24189ER	DURABLE WATERBORNE MARKING - 6" W		LIN FT	171,652
24190ER	DURABLE WATERBORNE MARKING - 6" Y		LIN FT	134,453
24191ER	DURABLE WATERBORNE MARKING - 12" W		LIN FT	3,050
6549	PAVE STRIPING-TEMP REM TAPE-B (8 IN)		LIN FT	1,000
6550	PAVE STRIPING-TEMP REM TAPE-W (6 IN)		LIN FT	4,000
6551	PAVE STRIPING-TEMP REM TAPE-Y (6 IN)		LIN FT	4,000
6511	PAVEMENT STRIPING TEMPORARY PAINT - 6"		LIN FT	126,720
1982	DELINEATORS FOR GUARDRAIL (MW)		EACH	587
1983	DELINEATORS FOR GUARDRAIL (MY)		EACH	15
2483	CHANNEL LINING CLASS II	④	TON	1,200
2484	CHANNEL LINING CLASS III	④	TON	1,800
5950	EROSION CONTROL BLANKET	④	SQ YD	12,000

① CARRIED OVER FROM PAVING SUMMARY

② CARRIED OVER FROM GUARDRAIL SUMMARY

③ CARRIED OVER FROM PIPE SUMMARY

④ ESTIMATED QUANTITY TO BE USED AS DIRECTED BY THE ENGINEER

⑤ OLD TOLL BOOTH AREA - KY 80 RAMPS

CUMBERLAND PKWY
PULASKI COUNTY
PAVEMENT REHABILITATION, MILEPOST 72.10 TO 84.30 EB & WB
ITEM NO. 8–2019.00
GENERAL SUMMARY

ITEM NUMBER	ITEM	UNIT	QUANTITY
2058	REMOVE PCC PAVEMENT ⑤	SQ YD	580
2165	REMOVE PAVED DITCH	SQ YD	761
2469	CLEANING SINKHOLE	EACH	2
1691	FLUME INLET TYPE 2	EACH	3
6417	FLEXIBLE DELINEATOR POST - W	EACH	1,155
6418	FLEXIBLE DELINEATOR POST - Y	EACH	110
2575	DITCHING & SHOULDERING	LIN FT	64,473
2775	ARROW PANEL	EACH	2
2671	PORTABLE CHANGEABLE MESSAGE SIGN	EACH	4
2676	MOBILIZATION FOR MILLING & TEXTURING	LP SUM	1
2650	MAINTAIN AND CONTROL TRAFFIC	LP SUM	1
2230	EMBANKMENT IN PLACE	CU YD	2,058
2562	SIGNS	SQ FT	2,100
24489EC	INLAID PAVEMENT MARKERS	EACH	4,298
10020NS	FUEL ADJUSTMENT	DOLLAR	114,396
10030NS	ASPHALT ADJUSTMENT	DOLLAR	287,328
2568	MOBILIZATION	LP SUM	1
2569	DEMOBILIZATION	LP SUM	1

① CARRIED OVER FROM PAVING SUMMARY

② CARRIED OVER FROM GUARDRAIL SUMMARY

③ CARRIED OVER FROM PIPE SUMMARY

④ TO BE USED IN SLOPE REPAIRS AND OTHER AREAS AS DIRECTED BY THE ENGINEER.

⑤ OLD TOLL BOOTH AREA - KY 80 RAMPS

CUMBERLAND PKWY
PULASKI COUNTY
PAVEMENT REHABILITATION, MILEPOST 72.10 TO 84.30 EB & WB
ITEM NO. 8–2019.00
PAVING SUMMARY

PAVING AREAS		PAVING AREAS	
ITEM	**TOTAL**	**ITEM**	**TOTAL**
MAINLINE TRAFFIC LANES, INSIDE SHOULDERS (3)	**S.Y.**	**DOUBLE SEAL COAT ON SHOULDER DROP-OFF**	**S.Y.**
1 1/2" CL3 ASPH SURF 0.38A PG76-22	401,165	ASPHALT SEAL COAT (2) & AGGREGATE (1)	57,258
MAINLINE OUTSIDE SHOULDERS	**S.Y.**	**FULL DEPTH PVMT. REPLACEMENT (OLD TOLL BOOTH)**	**S.Y.**
1 1/2" CL2 ASPH SURF 0.38D PG64-22 (TOP)	142,525	6" DGA BASE	580
1 1/2" CL2 ASPH SURF 0.38D PG64-22 (BOTTOM)	154,740	9" CL3 ASPH BASE 1.0D PG64-22	580
KY 80 INTERCHANGE RAMPS & SHOULDERS	**S.Y.**		
1 1/2" CL3 ASPH SURF 0.38A PG76-22	20,419	**CONC. WEDGE CURB AREAS**	**S.Y.**
3" CL2 ASPH SURF 0.38D PG76-22	4,266	8" DGA BASE	7,312
ASPHALT PAVE MILLING & TEXTURING	**S.Y.**		
MAINLINE AND SHOULDERS (1 1/2" DEPTH)	429,820		
RAMPS - KY 80 INTERCHANGE (1 1/2" DEPTH)	15,191		
PAVEMENT REPAIR (ESTIMATED, 4" DEPTH)	3,000		
PAVEMENT REPAIR	**S.Y.**		
4" CL3 ASPH BASE 1.0D PG 64-22 (ESTIMATED)	(4) 3,000		

PAVING SUMMARY

CODE	ITEM	UNITS	PROJECT TOTAL
1	DGA BASE (6)	TON	4,164
336	CLASS 3 ASPHALT SURFACE 0.38A PG76-22	TON	34,781
214	CLASS 3 ASPHALT BASE 1.0D PG64-22 (3)	TON	947
301	CLASS 2 ASPHALT SURFACE 0.38D PG64-22	TON	25,228
2677	ASPHALT PAVEMENT MILLING & TEXTURING (5)	TON	37,373
2696	SHOULDER RUMBLE STRIPS - SAWED	LIN FT	292,071
100	ASPHALT SEAL AGGREGATE (1)	TON	1,145
103	ASPHALT SEAL COAT (2)	TON	137
190	LEVELING & WEDGING PG 64-22 (4)	TON	1,500

ALL QUANTITIES HAVE BEEN CARRIED OVER AND INCLUDED IN THE GENERAL SUMMARY

(1) ESTIMATED AT 20 LBS/S.Y. FOR ENTIRE AREA (ONE APPLICATION)
(2) ESTIMATED AT 2.4 LBS/S.Y. FOR ENTIRE AREA (ONE APPLICATION)
(3) FOR PAVEMENT REPAIR AREAS & TOLL BOOTH AREA
(4) ESTIMATED - TO BE USED AS DIRECTED BY THE ENGINEER
(5) INCLUDES 300 TONS TO BE USED AS DIRECTED BY THE ENGINEER
(6) INCLUDES 600 TONS TO BE USED AS DIRECTED BY THE ENGINEER

CUMBERLAND PKWY
PULASKI COUNTY
PAVEMENT REHABILITATION, MILEPOST 72.10 TO 84.30
ITEM NO. 8–2019.00
EASTBOUND GUARDRAIL SUMMARY

POINT NUMBERS	** FROM MILEPOST	** TO MILEPOST	GUARDRAIL–STEEL W BEAM–S FACE (7 FT POST) (LF)	REMOVE & REPLACE GUARDRAIL (LF)	REMOVE GUARDRAIL (LF)	GUARDRAIL END TREATMENT TYPE 1 (EACH)	GUARDRAIL END TREATMENT TYPE 2A (EACH)			DESCRIPTION
ITEM NO.			21802EN	2383	2381	2367	2369			
1265-1273	75.50	75.58	487.5		487.5					REMOVE & REPLACE GR (WEDGE CURB REPLACEMENT)
1263-1264	75.58	75.64	375		375					REMOVE & REPLACE GR (WEDGE CURB REPLACEMENT)
1252-1253	76.32	76.38	362.5		362.5					REMOVE & REPLACE GR (WEDGE CURB REPLACEMENT)
1247-1251	76.38	76.46	487.5		487.5					REMOVE & REPLACE GR (WEDGE CURB REPLACEMENT)
1235-1238	76.79	76.87	500		500					REMOVE & REPLACE GR (WEDGE CURB REPLACEMENT)
1232-1234	76.88	76.99	637.5		637.5					REMOVE & REPLACE GR (WEDGE CURB REPLACEMENT)
1221-1229	77.05	77.15	612.5		612.5					REMOVE & REPLACE GR (WEDGE CURB REPLACEMENT)
1162-1169	78.64	78.74	587.5		587.5					REMOVE & REPLACE GR (WEDGE CURB REPLACEMENT)
1113-1119	80.64	80.99	1900		1900	1				REMOVE & REPLACE GR (WEDGE CURB REPLACEMENT)
1090-1094	81.69	81.74	225		225					REMOVE & REPLACE GR (WEDGE CURB REPLACEMENT)
1087-1089	81.74	81.81	412.5		412.5					REMOVE & REPLACE GR (WEDGE CURB REPLACEMENT)
1071-1072	82.51	82.57	362.5		362.5					REMOVE & REPLACE GR (WEDGE CURB REPLACEMENT)
1009-1033	84.13	84.27	762.5		762.5					REMOVE & REPLACE GR (WEDGE CURB REPLACEMENT)
1005-1007	84.27	84.29	125		125					
1286-1287	74.86		50		50					REMOVE & REPLACE DAMAGED GUARDRAIL
1047-1048	83.90		100		100					REMOVE & REPLACE DAMAGED GUARDRAIL
1040-1041	83.95		12.5		12.5					REMOVE & REPLACE DAMAGED GUARDRAIL
1038-1039	83.96		12.5		12.5					REMOVE & REPLACE DAMAGED GUARDRAIL
	74.38		25		25					REMOVE & REPLACE GR (SHOULDER REPAIR AREA)
	74.59		50		50					REMOVE & REPLACE GR (SHOULDER REPAIR AREA)
	74.67		25		25					REMOVE & REPLACE GR (SHOULDER REPAIR AREA)
	76.49		200		200					REMOVE & REPLACE GR (SHOULDER REPAIR AREA)
	76.53		50		50					REMOVE & REPLACE GR (SHOULDER REPAIR AREA)
	78.42		25		25					REMOVE & REPLACE GR (SHOULDER REPAIR AREA)
	78.44		50		50					REMOVE & REPLACE GR (SHOULDER REPAIR AREA)
	78.76		25		25					REMOVE & REPLACE GR (SHOULDER REPAIR AREA)
	83.82		50		50					REMOVE & REPLACE GR (SHOULDER REPAIR AREA)
	84.12		37.5		37.5					REMOVE & REPLACE GR (SHOULDER REPAIR AREA)
SHEET TOTAL			8550		8550	1				

POINT NUMBER REFERS TO SURVEY SHOT NUMBER. THESE SHOT NUMBERS HAVE BEEN MARKED IN THE FIELD WITH PAINT.

* CARRIED OVER TO GENERAL SUMMARY
** FOR LOCATION INFORMATION ONLY

CUMBERLAND PKWY
PULASKI COUNTY
PAVEMENT REHABILITATION, MILEPOST 72.10 TO 84.30
ITEM NO. 8–2019.00
WESTBOUND GUARDRAIL SUMMARY

POINT NUMBERS	** FROM MILEPOST	** TO MILEPOST	GUARDRAIL–STEEL W BEAM–S FACE (7 FT POST) (LF)	REMOVE & REPLACE GUARDRAIL (LF)	REMOVE GUARDRAIL (LF)	GUARDRAIL END TREATMENT TYPE 1 (EACH)	GUARDRAIL END TREATMENT TYPE 2A (EACH)			DESCRIPTION
ITEM NO.			21802EN	2383	2381	2367	2369			
418-424	72.96	73.05	550		550					REMOVE & REPLACE GR (WEDGE CURB REPLACEMENT)
414-417	73.05	73.15	550		550					REMOVE & REPLACE GR (WEDGE CURB REPLACEMENT)
404-413	73.15	73.24	650		650					REMOVE & REPLACE GR (WEDGE CURB REPLACEMENT)
398-404	73.24	73.36	562.5		562.5					REMOVE & REPLACE GR (WEDGE CURB REPLACEMENT)
331-334	75.58	75.73	825		825					REMOVE & REPLACE GR (WEDGE CURB REPLACEMENT)
294-301	76.92	77.02	562.5		562.5					REMOVE & REPLACE GR (WEDGE CURB REPLACEMENT)
223-227	78.63	78.75	687.5		687.5					REMOVE & REPLACE GR (WEDGE CURB REPLACEMENT)
164-171	80.87	81.00	762.5		762.5					REMOVE & REPLACE GR (WEDGE CURB REPLACEMENT)
60-90	83.82	84.27	150		150		1			REMOVE & REPLACE GR (WEDGE CURB REPLACEMENT)
56-60	84.27	84.29	2525		2525					REMOVE & REPLACE GR (WEDGE CURB REPLACEMENT)
400-401	73.32		12.5		12.5					REMOVE & REPLACE DAMAGED GUARDRAIL
311-312	76.59		50		50					REMOVE & REPLACE DAMAGED GUARDRAIL
290-291	77.11		25		25					REMOVE & REPLACE DAMAGED GUARDRAIL
106-107	83.01		50		50					REMOVE & REPLACE DAMAGED GUARDRAIL
	72.93		25		25					REMOVE & REPLACE GR (SHOULDER REPAIR AREA)
	77.67		37.5		37.5					REMOVE & REPLACE GR (SHOULDER REPAIR AREA)
	77.80		37.5		37.5					REMOVE & REPLACE GR (SHOULDER REPAIR AREA)
	84.23		37.5		37.5					REMOVE & REPLACE GR (SHOULDER REPAIR AREA)
	84.24		37.5		37.5					REMOVE & REPLACE GR (SHOULDER REPAIR AREA)
	84.26		37.5		37.5					REMOVE & REPLACE GR (SHOULDER REPAIR AREA)
SHEET TOTAL			8175		8175					
PROJ. TOTAL			16725		16725	1	1			

POINT NUMBER REFERS TO SURVEY SHOT NUMBER. THESE SHOT NUMBERS HAVE BEEN MARKED IN THE FIELD WITH PAINT.

* CARRIED OVER TO GENERAL SUMMARY
** FOR LOCATION INFORMATION ONLY

CUMBERLAND PKWY.
PULASKI COUNTY
PAVEMENT REHABILITATION, MILEPOST 72.10 TO 84.30 EB & WB
ITEM NO. 8–2019.00
PIPE DRAINAGE SUMMARY

DIRECTION MILE POINT	CULVERT PIPE		SAFETY INLETS		MISCELLANEOUS					REMARKS
	CULVERT PIPE 15 IN.	CULVERT PIPE 54"		SLOPED BOX OUTLET TYPE 1 15 IN.	REMOVE HEADWALL	REMOVE PIPE	CONCRETE CLASS A	STEEL REINFORCEMENT	REPLACE GRATE	
ITEM CODE	461	471		1432	2625	1310	8100	8150	22660EN	
UNIT TO BID	FEET			EACH		FEET	CUYD	LBS	LBS	
WESTBOUND MP 78.76	16			1	1	16				
WESTBOUND MP 79.99		4			1	4	7.82	583		
WESTBOUND MP 78.24									161	REPLACE GRATE (SB OUTLET TY. 1 - 15")
WESTBOUND MP 83.67	4			1	1	4				
WESTBOUND MP 83.37	4			1	1	4				
TOTAL PROJECT	24	4		3	4	28	7.82	583	161	

QUANTITIES CARRIED TO GENERAL SUMMARY.

THE CONTRACTOR SHALL FIELD VERIFY ① TYPES AND DIMENSIONS PRIOR TO ORDERING PIPE, FRAMES & GRATES.

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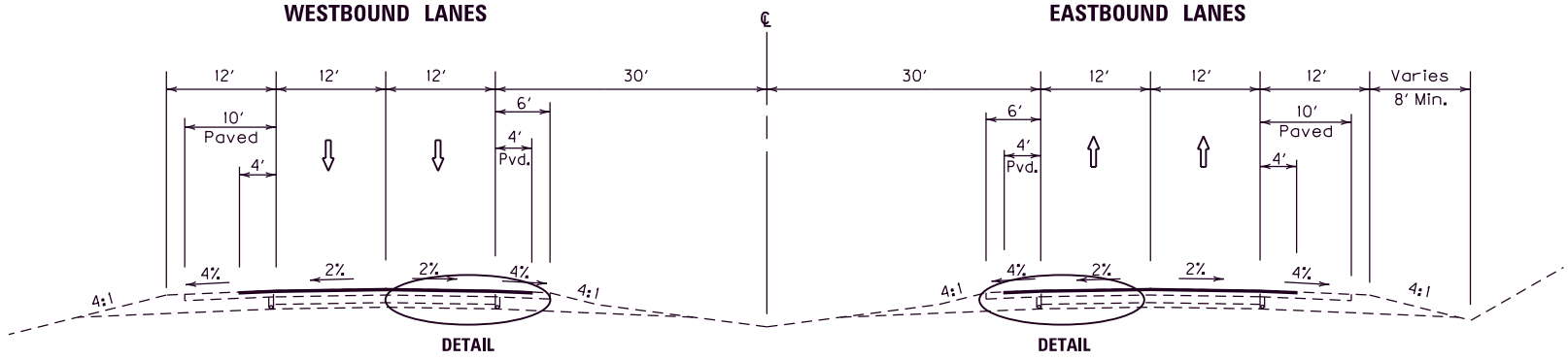
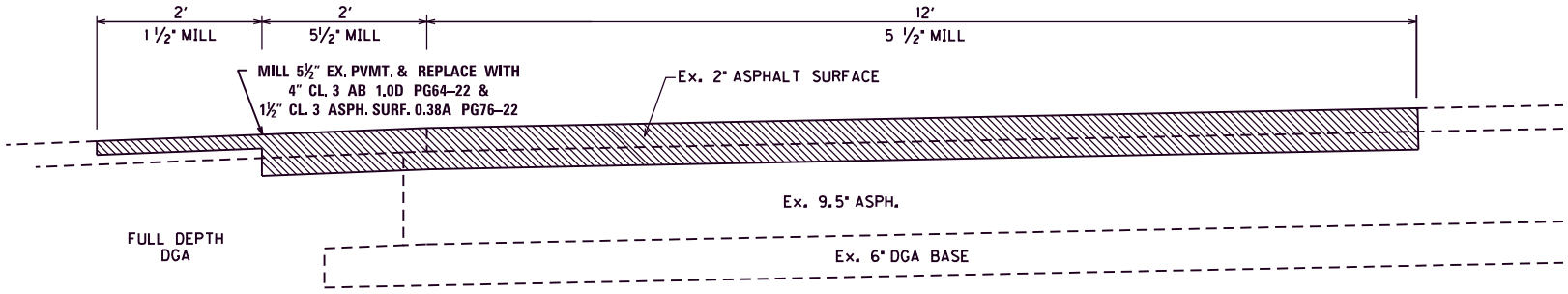
PROPOSED TYPICAL SECTION
CUMBERLAND PKWY
PAVEMENT REPAIR DETAIL



MAINLINE NORMAL SECTION



DETAIL

(SEE PROPOSAL NOTES FOR LOCATIONS)

NOTE : PVMT REPAIR AREAS OCCURING IN SUPERELEVATED SECTIONS SHALL CARRY ACROSS BOTH LANES OF TRAFFIC.

THESE PVMT REPAIR AREAS SHALL BE PHASE CONSTRUCTED.

NOT TO SCALE

PAVEMENT REPAIR DETAIL

PULASKI COUNTY
FD04 SPP 1D09008 072-085
REVISED: 8-11-14 Contract ID: 141042
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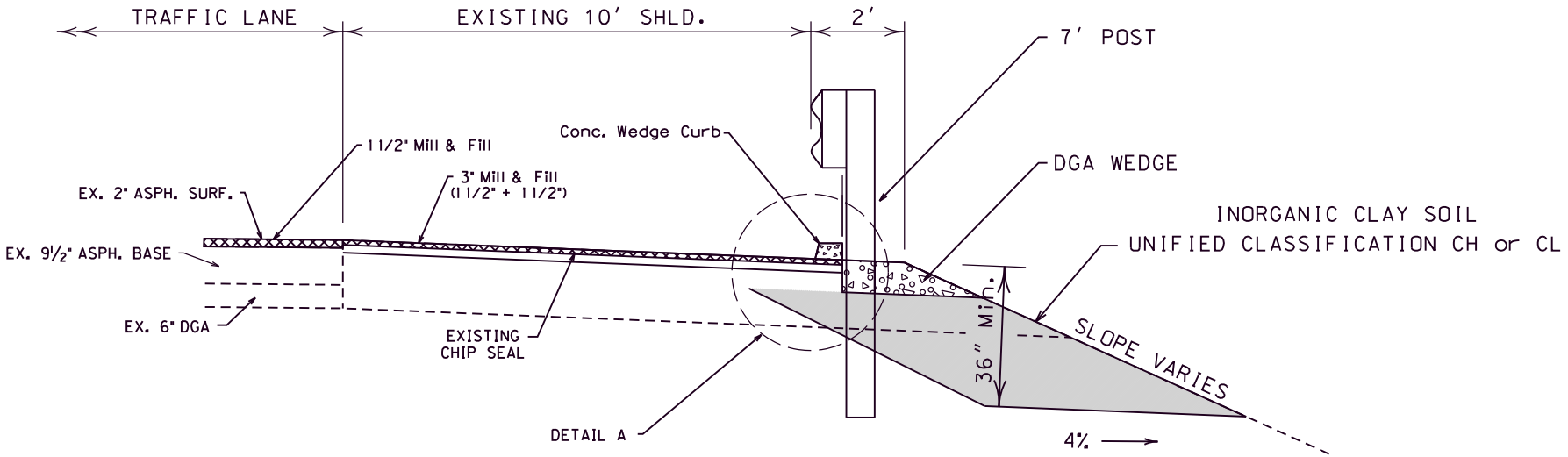
COUNTY OF	ITEM NO.	SHEET NO.
PULASKI	8-2019	

SHOULDER REPAIR DETAIL w/ CONC. WEDGE CURB CUMBERLAND PKWY.



SHOULDER REPAIR AREAS

LOCATIONS (WB)	EMB. IN PLACE (CU. YDS)	LOCATION (EB)	EMB. IN PLACE (CU. YDS)
72.93	13	74.38	12
72.98	30	74.59	30
73.21–73.23	56	74.67	12
73.24–73.27	64	75.58	30
73.36	18	76.46–76.49	115
76.94	30	76.53	30
76.96–77.02	168	76.99	12
77.67	18	77.08	15
77.80	18	77.10	12
78.75	18	77.11	12
80.92–80.95	111	78.42–78.43	12
81.00	20	78.44–78.45	26
83.87–84.08	660	78.66	12
84.15–84.19	123	78.67	24
84.19	18	78.76	12
84.23	18	81.73	30
84.24	18	81.75	18
84.26–84.27	18	83.82	30
		84.12	18
		84.18–84.21	106
		84.23–84.24	40
		84.25	12
		84.26	18
WB TOTAL	1419	EB TOTAL	639

SHOULDER REPAIR w/ MODIFIED CURB AND GUTTER NOTE :

EXCAVATION SHOWN IS INCLUDED IN THE BID ITEM "EMBANKMENT IN PLACE" SHOULDER REPAIR INCLUDES REMOVING THE EXISTING SHOULDER TO THE DEPTH SPECIFIED OR AS DIRECTED BY THE ENGINEER AND BACKFILLING WITH CLAY SOIL. EXCAVATED MATERIAL MAY BE WASTED WITHIN THE RIGHT OF WAY IN AREAS DESIGNATED BY THE ENGINEER.

THE INTENT OF THE SHOULDER REPAIR CONSTRUCTION IS TO BE DONE JUST PRIOR TO THE MILLING AND ASPHALT OVERLAY CONSTRUCTION PHASE. IF PROPOSED GUARDRAIL CAN NOT BE COMPLETED IN ONE PERIOD FROM SUNDAY TO FRIDAY SHOULDER CLOSURES WITH BARRELS SHALL BE INSTALLED.

NOT TO SCALE

CUMBERLAND PKWY.
SHOULDER REPAIR DETAIL
W/ MOD. CURB & GUTTER

PULASKI COUNTY
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COUNTY OF	ITEM NO.	SHEET NO.
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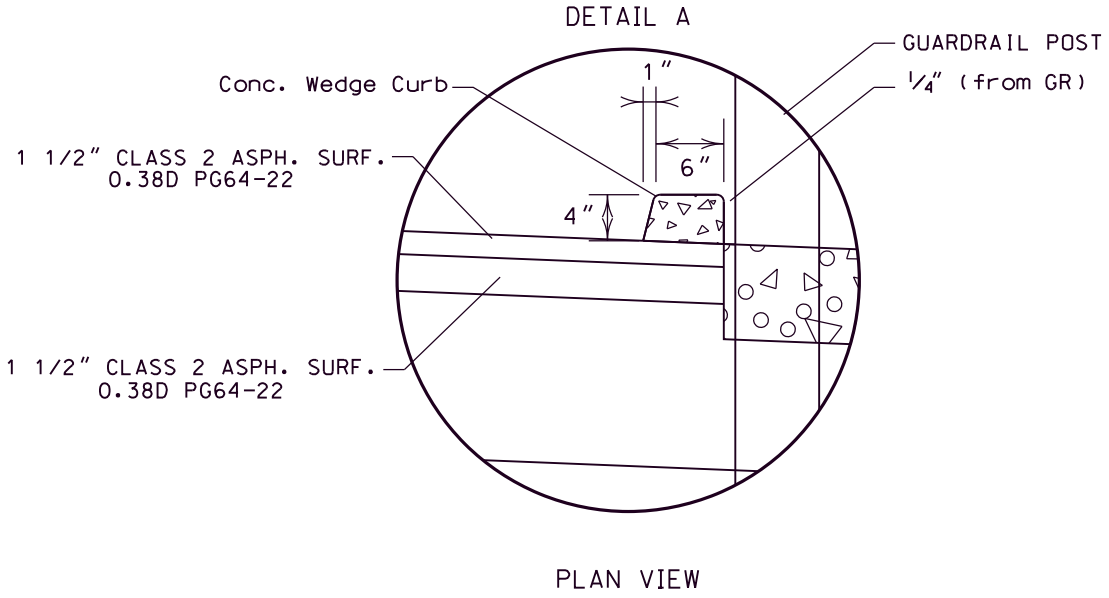
CONC. WEDGE CURB DETAIL
CUMBERLAND PKWY.

CONC. WEDGE CURB			
LOCATION	LENGTH (L.F.)	FLUME INLET TY 2	CONC. WEDGE CURB (L.F.)
WESTBOUND			
MP 72.96 – 73.05	491		491
MP 73.05 – 73.15	492		492
MP 73.15 – 73.24	592		491
MP 73.24 – 73.36	511		511
MP 75.58 – 75.73	765		765
MP 76.92 – 77.02	502		502
MP 78.63 – 78.75	632		632
MP 80.92 – 81.00	700		700
MP 83.82 – 84.27	2474	3	2474
MP 84.27 – 84.29	100		100
EASTBOUND			
MP 75.50 – 75.58	430		430
MP 75.58 – 75.64	320		320
MP 76.32 – 76.38	311		311
MP 76.38 – 76.46	428		428
MP 76.79 – 76.87	447		447
MP 76.88 – 76.99	585		585
MP 77.05 – 77.15	557		557
MP 78.64 – 78.74	529		529
MP 80.64 – 80.99	1850		1850
MP 81.69 – 81.74	173		173
MP 81.74 – 81.81	353		353
MP 82.51 – 82.57	313		313
MP 84.13 – 84.27	710		710
MP 84.27 – 84.29	74		74
TOTAL	14,341	3	14,341



NOT TO SCALE

CUMBERLAND PKWY.
MOD. CURB & GUTTER
DETAIL

PULASKI COUNTY
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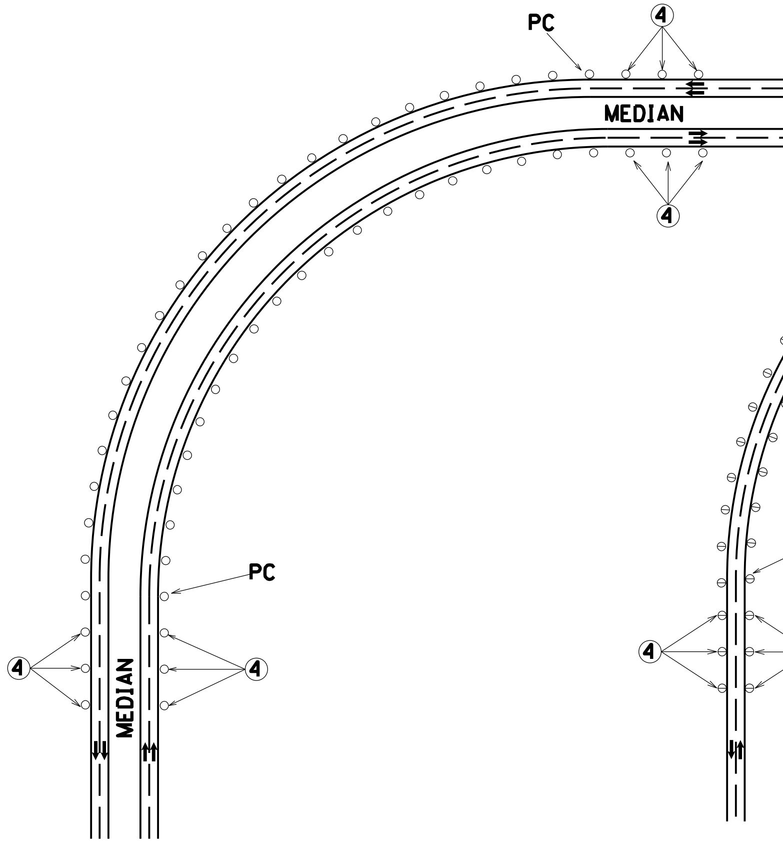
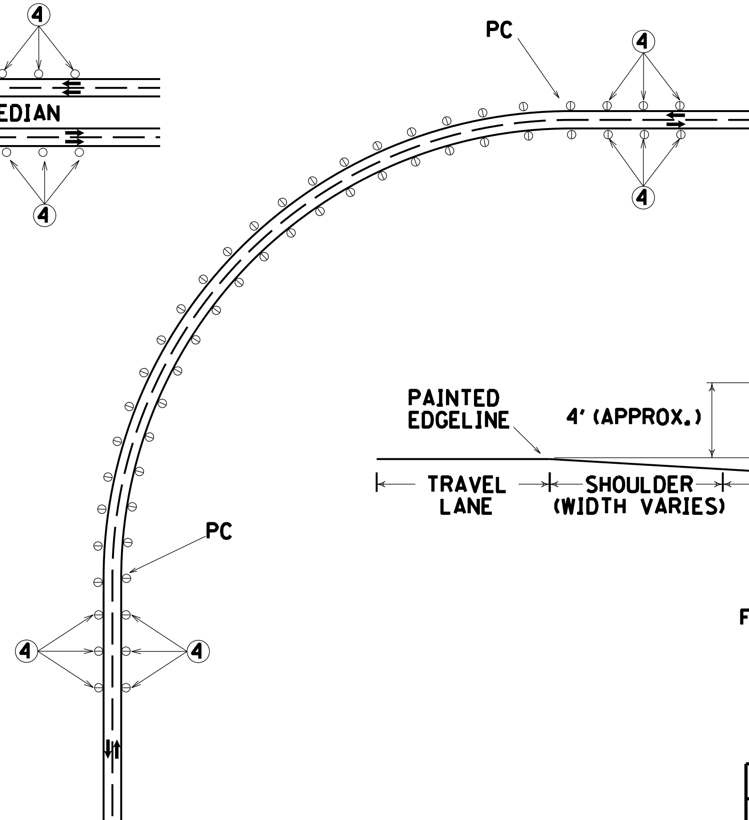
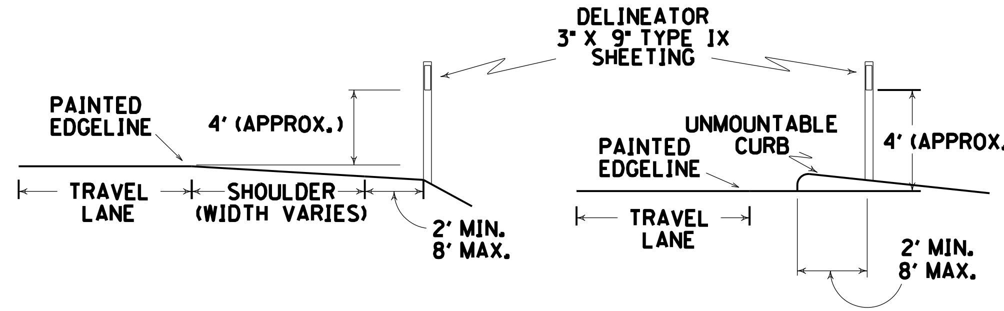


DELINEATION FOR HORIZONTAL CURVES
ON MULTI-LANE EXPRESSWAYS/FREEWAYS



DELINEATION FOR HORIZONTAL CURVES
ON TWO-LANE EXPRESSWAYS/FREEWAYS



FLEXIBLE DELINEATOR POST
MOUNTING DETAILS

LEGEND	
○	FLEXIBLE DELINEATOR POST - M/W (MONO-WHITE)
⊖	FLEXIBLE DELINEATOR POST - B/W (BI-WHITE)
APPROX. SPACING = 50 FEET	
UNIT BID = EACH	

GENERAL NOTES

1. DELINEATORS SHALL BE FROM THE LIST OF APPROVED MATERIALS AND SHALL BE IN ACCORDANCE WITH SECTION 838 OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, CURRENT EDITION.
2. DELINEATORS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.
3. THE DELINEATOR POST AND RETROREFLECTIVE SHEETING SHALL BE THE SAME COLOR AND SHALL MATCH THE COLOR OF THE EDGELINES THEY SUPPLEMENT.

(4) THREE DELINEATORS SHOULD BE INSTALLED IN ADVANCE OF THE BEGINNING AND PROCEEDING AWAY FROM THE END OF THE CURVE AT A SPACING OF APPROXIMATELY 50 FEET.

5. DELINEATORS SHALL BE PROVIDED ON THE RIGHT-HAND SIDE OF HORIZONTAL CURVES ON EXPRESSWAYS AND FREEWAYS. DELINEATORS ARE NOT REQUIRED ON TANGENT SECTIONS OF EXPRESSWAYS AND FREEWAYS.
6. A FREEWAY SHALL BE DEFINED AS A DIVIDED HIGHWAY WITH FULL CONTROL OF ACCESS. AN EXPRESSWAY SHALL BE DEFINED AS A DIVIDED HIGHWAY WITH PARTIAL CONTROL OF ACCESS.
7. DELINEATORS SHOULD BE PLACED AT A CONSTANT DISTANCE FROM THE ROADWAY EDGE. WHEN AN OBSTRUCTION EXISTS NEAR THE PAVEMENT EDGE, THE LINE OF DELINEATORS SHOULD BE TRANSITIONED TO THE INSIDE OF THE OBSTRUCTION OR TO THE BARRIER DELINEATION IF THE OBSTRUCTION IS GUARDRAIL OR BARRIER WALL. SUCH TRANSITIONS SHOULD BEGIN APPROXIMATELY 200 FT IN ADVANCE OF THE OBSTRUCTION/BARRIER.
8. DELINEATORS SHOULD BE INSTALLED AT AN APPROXIMATE RIGHT ANGLE TO APPROACHING TRAFFIC.
9. DELINEATORS MAY BE DISCONTINUED ALONG SECTIONS WITH BARRIER WALL OR GUARDRAIL DELINEATION.

DRAWING NOT TO SCALE

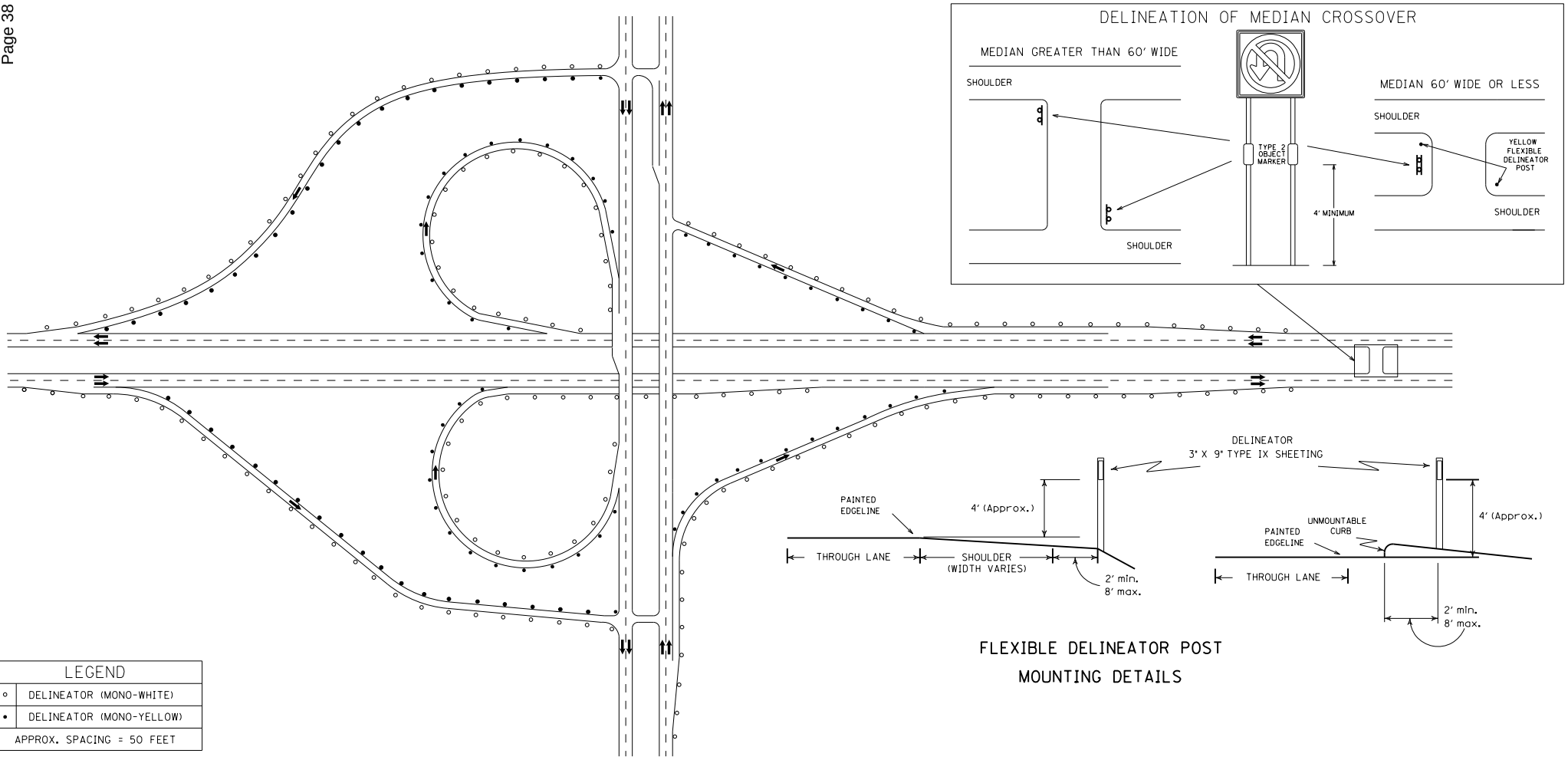
KENTUCKY
DEPARTMENT OF HIGHWAYS

FLEXIBLE DELINEATOR
POST ARRANGEMENTS
FOR
HORIZONTAL CURVES

SUBMITTED R. Jeffrey Wolfe 8-29-13
DATE

018

USER: phoward
DATE PLOTTED: May 13, 2014
E-SHEET NAME:
FILE NAME: C:\USERS\PHOWARD\APPDATA\LOCAL\MICROSOFT\WINDOWS\TEMPORARY INTERNET FILES\CONTENT.IE5\758HHP83\SEPIA_018.DGN



FLEXIBLE DELINEATOR POST
MOUNTING DETAILS

LEGEND	
○	DELINEATOR (MONO-WHITE)
•	DELINEATOR (MONO-YELLOW)
APPROX. SPACING = 50 FEET	

GENERAL NOTES

1. DELINEATORS SHALL BE FROM THE LIST OF APPROVED MATERIALS AND SHALL BE IN CONFORMANCE WITH SECTION 838 OF THE CURRENT STANDARD SPECIFICATIONS.
2. DELINEATORS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.
3. THE DELINEATOR POST AND RETROREFLECTIVE SHEETING SHALL BE THE SAME COLOR AND SHALL MATCH THE COLOR OF THE EDGELINES THEY SUPPLEMENT.
4. DELINEATORS SHALL BE PROVIDED ON BOTH THE RIGHT-HAND AND LEFT-HAND SIDE OF HORIZONTAL CURVES ON EXPRESSWAYS AND FREEWAYS. DELINEATORS ARE NOT REQUIRED ON TANGENT SECTIONS OF EXPRESSWAYS AND FREEWAYS.
5. A FREEWAY SHALL BE DEFINED AS A DIVIDED HIGHWAY WITH FULL CONTROL OF ACCESS. AN EXPRESSWAY SHALL BE DEFINED AS A DIVIDED HIGHWAY WITH PARTIAL CONTROL OF ACCESS.
6. DELINEATORS SHOULD BE PROVIDED ON BOTH SIDES OF INTERCHANGE RAMPS. DELINEATORS SHOULD BE ERECTED AT 50 FOOT INTERVALS ALONG RAMPS AND ACCLERATION AND DECELERATION LANES ON THE MAINLINE AND CROSSROAD.
7. DELINEATORS SHOULD BE PLACED AT A CONSTANT DISTANCE FROM THE ROADWAY EDGE. WHEN AN OBSTRUCTION EXISTS NEAR THE PAVEMENT EDGE, THE LINE OF DELINEATORS SHOULD BE TRANSITIONED TO THE INSIDE OF THE OBSTRUCTION OR TO THE BARRIER DELINEATION IF THE OBSTRUCTION IS GUARDRAIL OR BARRIER WALL. SUCH TRANSITIONS SHOULD BEGIN APPROXIMATELY 200 FEET IN ADVANCE OF THE OBSTRUCTION/BARRIER.
8. DELINEATORS SHOULD BE INSTALLED AT AN APPROXIMATE RIGHT ANGLE TO APPROACHING TRAFFIC.
9. DELINEATORS MAY BE DISCONTINUED ALONG SECTIONS WITH BARRIER WALL OR GUARDRAIL DELINEATION.

DRAWING NOT TO SCALE

FLEXIBLE DELINEATOR POST ARRANGEMENTS FOR INTERCHANGE RAMPS AND CROSSOVERS

COUNTY OF	ITEM NO.	SHEET NO.
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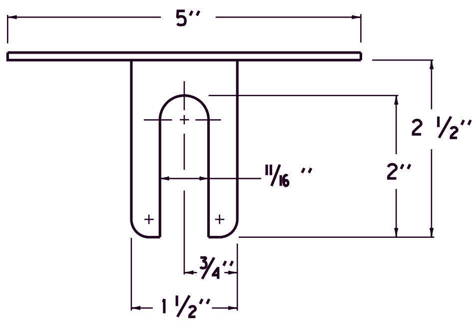


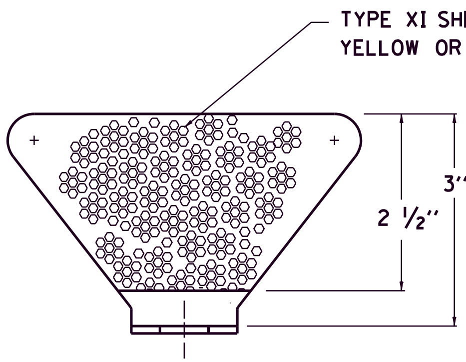
PLAN VIEW

NOTES

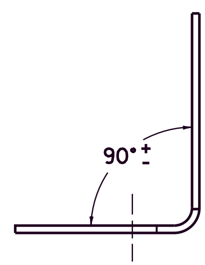
1. THE DELINEATOR'S SHAPE AND DIMENSIONS ARE SHOWN FOR ILLUSTRATION PURPOSES ONLY. TYPES OF DELINEATORS PERMITTED SHALL BE FROM THE LIST OF APPROVED MATERIALS.
2. DELINEATOR SHALL BE MEASURED AND PAID FOR AT THE CONTRACT UNIT PRICE EACH AND SHALL INCLUDE ALL MATERIALS AND LABOR NECESSARY FOR ONE COMPLETE INSTALLATION.
3. CODE / PAY ITEM / PAY UNIT

CODE	PAY ITEM	PAY UNIT
1982	DELINEATOR FOR GUARDRAIL - MONO DIRECTIONAL WHITE	EACH
1983	DELINEATOR FOR GUARDRAIL - MONO DIRECTIONAL YELLOW	EACH
1987	DELINEATOR FOR GUARDRAIL - BI-DIRECTIONAL WHITE	EACH

4. GUARDRAIL DELINEATORS SHALL BE REQUIRED ON ALL GUARDRAIL.
5. DELINEATORS SHALL BE MANUFACTURED FROM 12 GA. GALVANIZED STEEL.
6. DIMENSIONS SHOWN ARE APPROXIMATE AND ARE SUBJECT TO MANUFACTURER'S TOLERANCES.
7. WHEN CONCRETE BARRIERS EXTEND ACROSS BRIDGE STRUCTURES IN LIEU OF STEEL BEAM GUARDRAIL, DELINEATORS SHALL BE INSTALLED AT SAME VERTICAL ALIGNMENT AS ON THE GUARDRAIL, AND DELINEATORS SHALL COMPLY WITH CURRENT SEPIA DRAWING 004.
8. DELINEATORS SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.

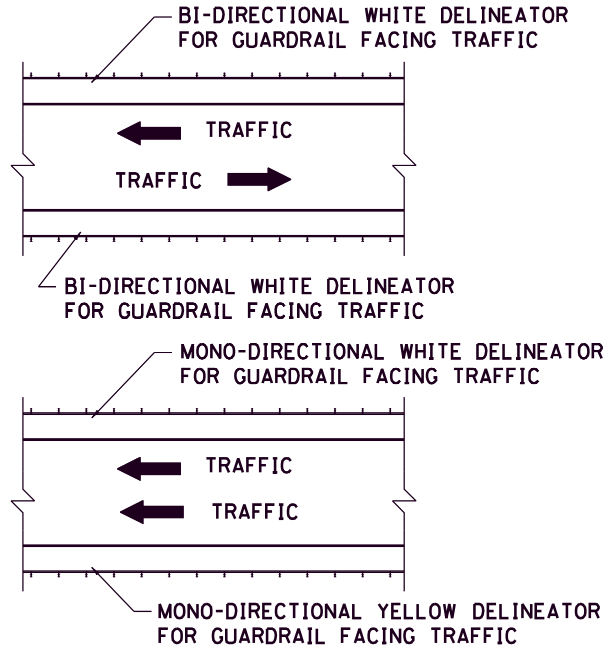


FRONT VIEW

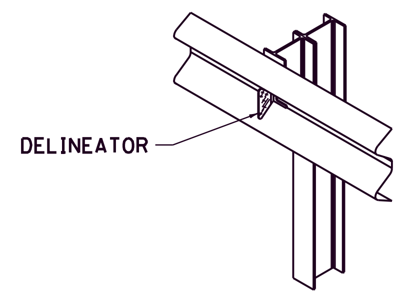


SIDE VIEW

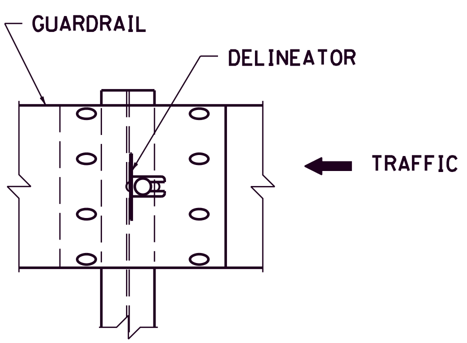
NOTE: DIMENSIONS SHOWN ARE FOR ONE VERSION OF A WEB-MOUNTED GUARDRAIL DELINEATOR. DELINEATORS WITH ALTERNATE DIMENSIONS MAY BE CONSIDERED FOR INCLUSION ON THE APPROVED PRODUCTS LIST.



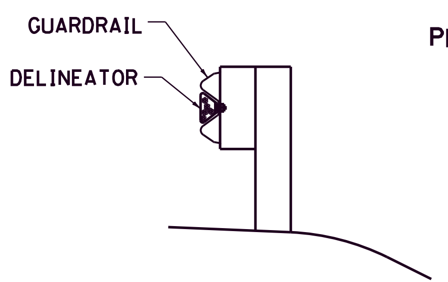
PLACEMENT OF DELINEATORS FOR GUARDRAIL



ISOMETRIC VIEW



FRONT VIEW



SIDE VIEW

APPROXIMATE DELINEATOR SPACING	
TANGENT	100'
CURVE	50'

SPACING SHOULD BE ADJUSTED IN CURVES SO THAT SEVERAL DELINEATORS ARE ALWAYS SIMULTANEOUSLY VISIBLE TO THE ROAD USER.

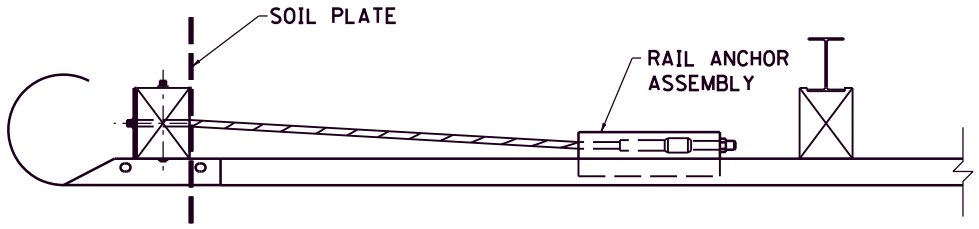
KENTUCKY
DEPARTMENT OF HIGHWAYS

DELINEATORS
FOR GUARDRAIL

SUBMITTED ______ DIRECTOR DIVISION OF DESIGN 6-15-2012 DATE

002

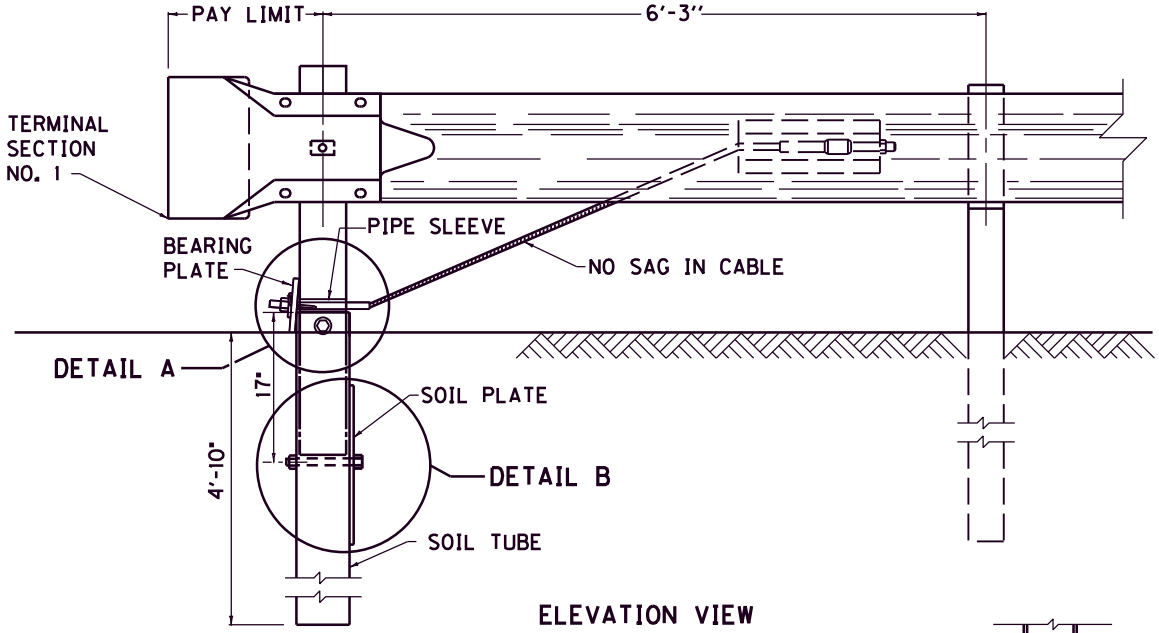
COUNTY OF	ITEM NO.	SHEET NO.
PULASKI	8-2019.00	



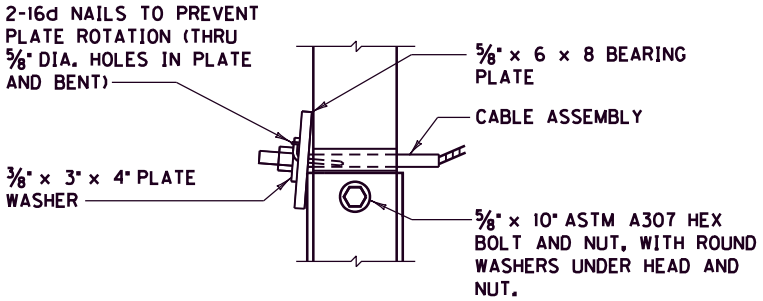
PLAN VIEW

NOTES

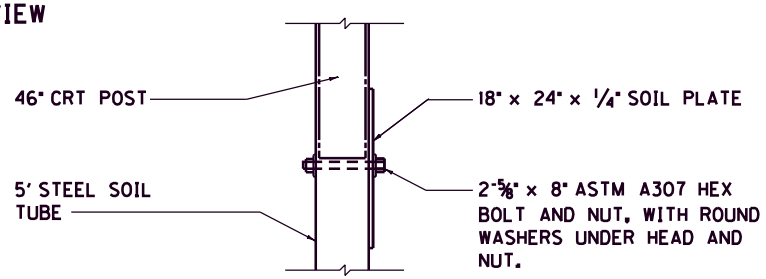
1. GUARDRAIL END TREATMENT TYPE 2A SHALL BE TO THE PAY LIMITS AS DETAILED. THE CONTRACT UNIT BID IS EACH AND SHALL INCLUDE A TERMINAL SECTION NO. 1, RAIL ANCHOR ASSEMBLY, CABLE ANCHOR ASSEMBLY AND ALL OTHER INCIDENTALS NECESSARY FOR A COMPLETE INSTALLATION AS DETAILED.
2. IN THE EVENT SOLID ROCK IS ENCOUNTERED, THE SOIL TUBE MAY BE SHORTENED, PROVIDED IT EXTENDS INTO THE SOLID GROUND A MINIMUM OF 3 FEET.
3. INSTALL BEARING PLATE SO THAT THE "V" OPENING IS AT THE TOP.



ELEVATION VIEW



DETAIL A



DETAIL B

USE WITH CUR. STD. DWGS.
RBR-010, RBI-001,
RBI-002, RBI-003

KENTUCKY
DEPARTMENT OF HIGHWAYS

GUARDRAIL
END TREATMENT
TYPE 2A

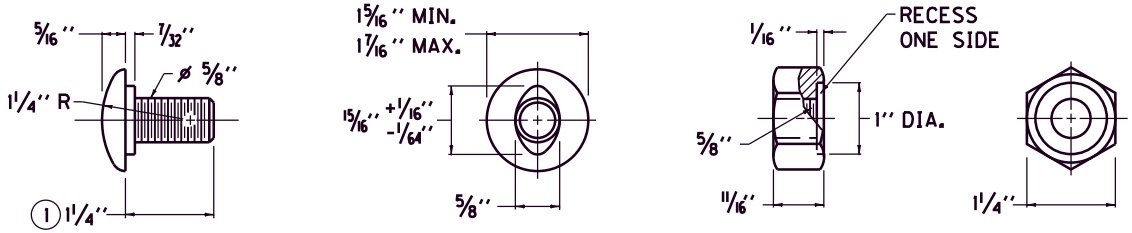
SUBMITTED Jeff Jagers 6-15-2012
TEBM DIVISION OF DESIGN DATE

007115

PULASKI COUNTY
FD04 SPP 100 9008 072-085

REVISED: 8-11-14 Contract ID: 141042

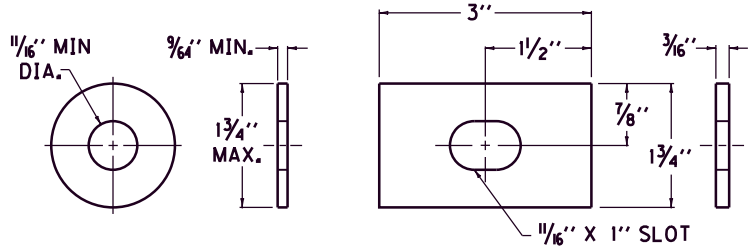
COUNTY OF	ITEM NO.	SHEET NO.
PULASKI	8-2019.00	



5/8" BUTTON HEAD BOLT AND RECESSED NUT

NOTES

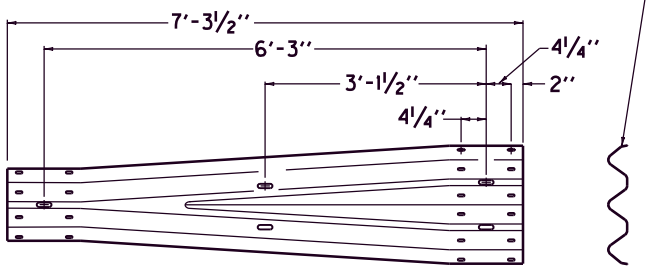
1. RAIL BOLT SIMILAR EXCEPT LENGTH.
2. THE THRIE BEAM TO "W" BEAM CONNECTOR SHALL COMPLY WITH AASHTO M-180 CLASS A, TYPE 2 EXCEPT WHERE IN CONFLICT WITH THIS DETAIL.



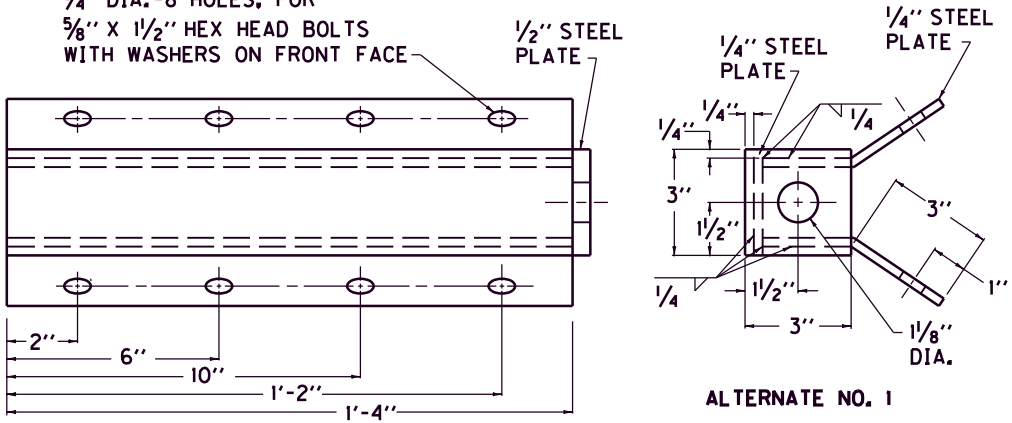
ROUND WASHER AND RECTANGULAR PLATE WASHER

SEE CUR. STD. DWG. RBR-001 FOR DIMENSIONS

SEE CUR. STD. DWG. RBR-100 FOR DIMENSIONS



THRIE BEAM TO "W" BEAM CONNECTOR (2)



ALTERNATE NO. 1

ALTERNATE NO. 2

RAIL ANCHOR ASSEMBLY

KENTUCKY DEPARTMENT OF HIGHWAYS

GUARDRAIL COMPONENTS

SUBMITTED _____ TEBM DIVISION OF DESIGN — 6-15-2012 DATE

PAGE 41 OF 115

008

PULASKI COUNTY
FD04 SPP 100 9008 072-085

REVISED: 8-11-14 Contract ID: 141042

TRAFFIC CONTROL PLAN

CUMBERLAND PARKWAY
MP 72.1 TO MP 84.3
FD04 SPP 100 9008 072-085

Item No. 8-2019

THIS PROJECT IS A FULLY CONTROLLED ACCESS HIGHWAY

TRAFFIC CONTROL GENERAL

Except as provided herein, “Maintain and Control Traffic” shall be in accordance with the 2012 Standard Specifications and the Standard Drawings, current editions. Except for the roadway and traffic control bid items listed, all items of work necessary to maintain and control traffic will be paid at the lump sum bid price to "Maintain and Control Traffic". All lane closures used on the Project will be in compliance with the appropriate Standard Drawings. Do NOT use cones for lane closures or shoulder closures.

Contrary to Section 106.01, traffic control devices used on this project may be new, or used in like new condition at the beginning of the work and maintained in like new condition until completion of the work. Traffic control devices will conform to current MUTCD.

Reduce the speed limit in work areas to 55 miles per hour and establish double fines for work zone speeding violations. The extent of these areas within the project limits will be restricted to the proximity of actual work areas as determined by the Engineer. Notify the Engineer a minimum of 12 hours prior to using the double fine signs. At the beginning of the work zone, the “WARNING FINE DOUBLED IN WORK ZONE” signs will be dual mounted. At the end of the work zone, the “END DOUBLE FINE” signs will be dual mounted as well. Remove or cover the signs when the highway work zone does not have workers present for more than a two-hour period of time. Payment for the signs will be at the unit bid price for signs erected. Any relocation or covering of the signs will be incidental to “Maintain and Control Traffic”, lump sum.

Night work will be allowed on this project. Obtain approval from the Engineer for the method of lighting prior to its use.

CONSTRUCTION PROCEDURES:

No work will be allowed on the project during the following days unless otherwise approved by the Engineer. Lane closures may be left in place.

Thanksgiving Weekend	Nov. 27th – Nov. 30th, 2014
Easter Weekend	April 3rd - April 6th, 2015
Memorial Day Weekend	May 22nd – May 26th, 2015
Independence Day Weekend	July 3rd – July 6th, 2015
Labor Day Weekend	Sept. 4th – Sept. 8th, 2015

At the discretion of the Engineer, additional days and hours may be specified when lane closures will not be allowed. Lane closures can remain in place during these dates.

Type III Barricades shall be placed immediately in front of the pavement repair areas after additional milling is done. Type III Barricades will not be measured for payment and will be considered incidental to "Maintain and Control Traffic", Lump Sum.

During the days and hours when a lane closure is allowed, maintain traffic as specified in the phasing notes and typical sections.

The contractor must notify the Engineer at least fourteen (14) days prior to the beginning of each construction phase in either direction.

SHOULDER PREPARATION AND RESTORATION

Shoulders used as temporary roadways will be inspected by the Engineer and if deemed necessary by the Engineer, repaired with asphalt mixture for leveling & wedging as directed prior to opening to traffic. Perform any maintenance of the shoulder as deemed necessary by the Engineer in order to maintain traffic. Remove failed materials and perform additional patching as directed by the Engineer prior to using the shoulder as a travel lane. Patch and remove any foreign debris on the shoulders as directed by the Engineer. Remove existing striping by water blasting.

LANE CLOSURES

At no time will more than one lane closure in each direction of travel be allowed at the same time. Maintain a minimum of one traffic lane (mainline) at all times during construction. The clear lane width shall be 11 feet; however, make provisions for passage of vehicles up to 16 feet in width. If traffic should be stopped due to construction operations, and a school bus or emergency vehicle on an official run arrives on the scene, make provisions for the passage of the bus or vehicle as quickly as possible. Traffic is not to be allowed on the milled sections until after the new asphalt binder course has been constructed.

Use a lane closure all times when work is performed in the lane or adjacent shoulder.
Limit the lengths of lane closures Eastbound and Westbound to only that needed for actual operations in accordance with the phasing specified herein, or as directed by the Engineer, up to a maximum of six miles in length. Once a lane closure has been installed all work within that lane closure shall be completed before moving ahead to the next lane closure area. Lane closures may be installed both Eastbound and Westbound simultaneously. Contrary to section 112, lane closures will **NOT** be measured for payment, but are considered incidental to "Maintain and Control Traffic," Lump Sum.

Traffic is not to be allowed on milled sections until the new asphalt surface and striping has been constructed.

Lane closures shall not be allowed during the winter shutdown period if applicable. All milled areas shall be refilled, guardrail removal areas replaced and temporary striping installed prior to winter shutdown. No additional payment shall be made for removal and resetting lane closures if winter shutdown periods are required for this project.

SIGNS

Additional traffic control signs in addition to normal lane closure signing detailed on the Standard Drawings may be required by the Engineer. Additional signs needed for lane closures may include, but are not limited to, dual mounted TRUCKS USE LEFT/RIGHT LANE, LEFT/RIGHT LANE CLOSED 1 MILE, LEFT/RIGHT LANE CLOSED 2 MILE, LEFT/RIGHT LANE CLOSED 3 MILE, SLOWED/STOPPED TRAFFIC AHEAD. Signage for reduced speed limits and double fine work zones will be furnished, relocated, and maintained by the Contractor.

Contrary to section 112, individual signs will be measured only once for payment, regardless of how many times they are set, reset, removed and relocated during the duration of the project. Replacements for damaged signs or signs directed to be replaced by the Engineer due to poor legibility or reflectivity will not be measured for payment.

A quantity of signs has been included for lane shifts, "Roadwork Ahead" signs on entrance ramps, extra double fine signs and speed limit signs between interchanges. These are to be paid for only once regardless of how many times they are moved or relocated.

FLASHING ARROWS

Flashing arrows will be paid for once (two each), regardless of how many times they are moved or relocated. The Department **WILL NOT** take possession of the flashing arrows upon completion of the work.

PORTABLE CHANGEABLE MESSAGE SIGNS

Provide portable changeable message signs (PCMS) in advance of and within the project at locations to be determined by the Engineer. If work is in progress concurrently in both directions, or if more than one lane closure is in place in the same direction of travel, provide additional PCMS. Place PCMS one mile in advance of the anticipated queue at each lane closure. As the actual queue lengthens and/or shortens relocate or provide additional PCMS so that traffic has warning of slowed or stopped traffic at least one mile but not more than two miles before reaching the end of the actual queue. The locations designated may vary as the work progresses. The messages required to be provided will be designated by the Engineer. The PCMS will be in operation at all times. In the event of damage or mechanical/electrical failure, the contractor will repair or replace the PCMS immediately. PCMS will be paid for once, no matter how many times they are moved or relocated. The Department **WILL NOT** take possession of the signs upon completion of the work.

TRUCK MOUNTED ATTENUATORS

Furnish and install MUTCD approved truck mounted attenuators (TMA) in advance of work areas when workers are present less than 12 feet from traffic. If there is less than 500 feet between work sites, only a single TMA will be required at a location directed by the Engineer. Locate the TMAs at the individual work sites and move them as the work zone moves within the project limits. All details of the TMA installations shall be approved by the Engineer. TMA will not be measured for payment, but are incidental to “Maintain and Control Traffic,” Lump Sum. The Department **WILL NOT** take possession of the TMAs upon completion of the work.

PAVEMENT MARKINGS

Remove or cover the lenses of raised pavement markers that do not conform to the traffic control scheme in use, or as directed by the Engineer. Replace or uncover lenses before a closed lane is reopened to traffic. No direct payment will be made for removing or covering and uncovering the lenses, but will be incidental to "Maintain and Control Traffic," lump sum.

Place temporary and permanent striping in accordance with Section 112, except that:

1. Temporary and permanent striping will be 6" in width
2. If the contractor's operations or phasing requires temporary markings which must be subsequently removed from the ultimate pavement, an approved removable lane tape will be used. Payment will be made for Pavement Markings Temporary Tape.
3. Edge lines will be required for temporary striping during the lane closures.
4. Existing, temporary, or permanent striping will be in place before a lane is opened to traffic
5. Place Durable Type 1 Pavement Markings on bridge decks within the project limits.
6. Permanent striping on the roadway will be Durable Waterborne Markings

Should the Contractor change the existing striping pattern, the Contractor is to restripe the roadway back to its original configuration if no work is anticipated for a period of time (i.e. Winter shutdown).

PAVEMENT EDGE DROP-OFFS

Pavement edge drop-offs will be protected by a lane or shoulder closure. Lane closures will be protected with plastic drums, vertical panels, or barricades as shown on the Standard Drawings.

Pavement edges that traffic is not expected to cross, except accidentally, shall be treated as follows:

Less than 2” – Protect with a lane closure.

2” to 4” – Protect with a lane closure. Place plastic drums, vertical panels, or barricades every 50 feet. Cones may not be used in place of plastic drums, panels, and barricades at any time. Construct a wedge with compacted cuttings from milling, trenching, or asphalt mixtures with a 3:1 or flatter slope, when work is not active in the drop-off area. Place Type III Barricades at the beginning of the lane closures, and place additional Type III Barricades spaced at 2,500 feet during the time the lane closure is in place.

Greater than 4” – Pavement Repair areas – In areas where pavement is to be removed, work should proceed continuously so that traffic is exposed to a drop-off for the minimum amount of time necessary to bring the pavement back up to existing grade. Barrel spacing should be 20 feet and appropriate lighting should be utilized to illuminate the area during nighttime operations.

TRAFFIC COORDINATOR

Designate an employee to be traffic coordinator. The designated Traffic Coordinator must be certified by the American Traffic Safety Services Association (ATSSA). The Traffic Coordinator will inspect the project maintenance of traffic once every two hours during the Contractor's operations and at any time a lane closure is in place. The Traffic Coordinator will report all incidents throughout the work zone to the Engineer on the project. The Contractor will furnish the name and telephone number where the Traffic Coordinator can be contacted at all times.

During any period when a lane closure is in place, the Traffic Coordinator will arrange for personnel to be present on the project at all times to inspect the traffic control, maintain the signing and devices, and relocate portable changeable message boards as queue lengths change. The personnel will have access on the project to a radio or telephone to be used in case of emergencies or accidents.

COORDINATION OF WORK

The Contractor is advised that other projects may be in progress within or in the near vicinity of this project. The traffic control of those projects may affect this project and the traffic control of this project may affect those projects. The Contractor will coordinate the work on this project with the work of the other contractors. In case of conflict, the Engineer will determine the relative priority to give to work phasing on the various projects.

CONTRACTOR’S AND CONTRACTOR’S EMPLOYEES’ VEHICLES

Do not use or allow employees to use median crossovers at any time except when inside lanes are closed for construction. In all other phases of construction, change vehicular direction of travel only at interchanges.

TRAFFIC CONTROL FOR INLAID PAVEMENT MARKER INSTALLATIONS

MULTI-LANE ROADWAYS:
On multi-lane roadway sections, all operations shall be performed behind stationary lane closures. Stationary lane closures shall be approved by the Engineer and shall be signed in accordance with Std Drawings for Multi-Lane Case I, Double Lane Closure or Interior Lane closure as applicable. Egress and ingress shall be provided to all ramps, side roads, and entrances at all times. A truck-mounted attenuator that complies with SP 13 shall be required on multi-lane roadways. Contrary to SP 13, the Contractor will retain ownership of the Crash Cushion Type VIII. The location of the TMA within the lane closure shall be as specified by the Engineer. No more than one lane of traffic plus 24 inches maximum of only one adjacent lane shall be closed per direction of travel. A minimum lane width of 11 feet should be maintained. The length of a lane closure shall not exceed 1 mile in urban areas or 3 miles in rural areas. Consecutive lane closures shall be permitted only if separated by a minimum of 2 miles and must be affecting the same lane. Provide for the installation of all necessary traffic control devices before beginning work and their immediate removal as soon as work is suspended or completed and the pavement markers are completely bonded to the pavement.

PROJECT PHASING

PHASE I

Construct outside lane closure per Standard Drawing TTC 115-02.
The lane closure shall be limited to six miles.
Close the outside lanes to traffic the entire length of the lane closure and divert one lane of traffic to the inside lane. Complete all shoulder repairs, shoulder grading, wedge curb, ditching and guardrail repair and replacement. Mill the outside lanes. Complete work as detailed for pavement repairs. Pave the outside lanes and shoulders, and stripe.

PHASE II

Construct inside lane closure per Standard Drawing TTC 115-02. The lane closure shall be limited to six miles in length. Close the inside lanes and divert one lane of traffic to the outside lane. Mill the inside lanes and shoulder. Complete work as detailed for pavement repairs. Pave the inside lane and shoulders, and stripe. Complete the milled rumble strips and permanent striping.

PHASE III

Shift traffic to the inside lanes and close the outside lanes to traffic. Complete the milled rumble strips for the outside lanes during this phase.

NOTE on Pavement Repair Asphalt Base Course: Once the pavement has been removed, the contractor must work continuously until the pavement has been replaced. Place Type III Barricades for protection of drop off.

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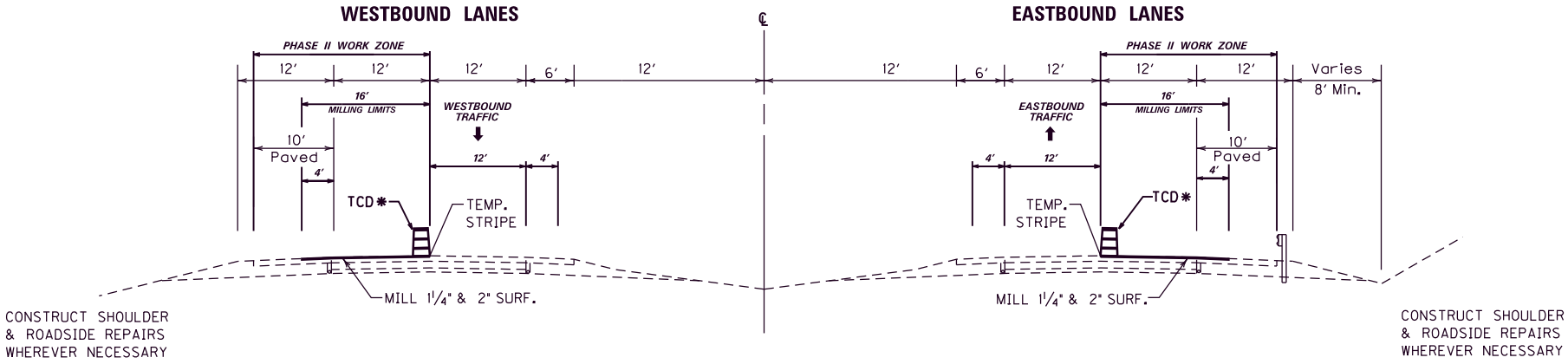
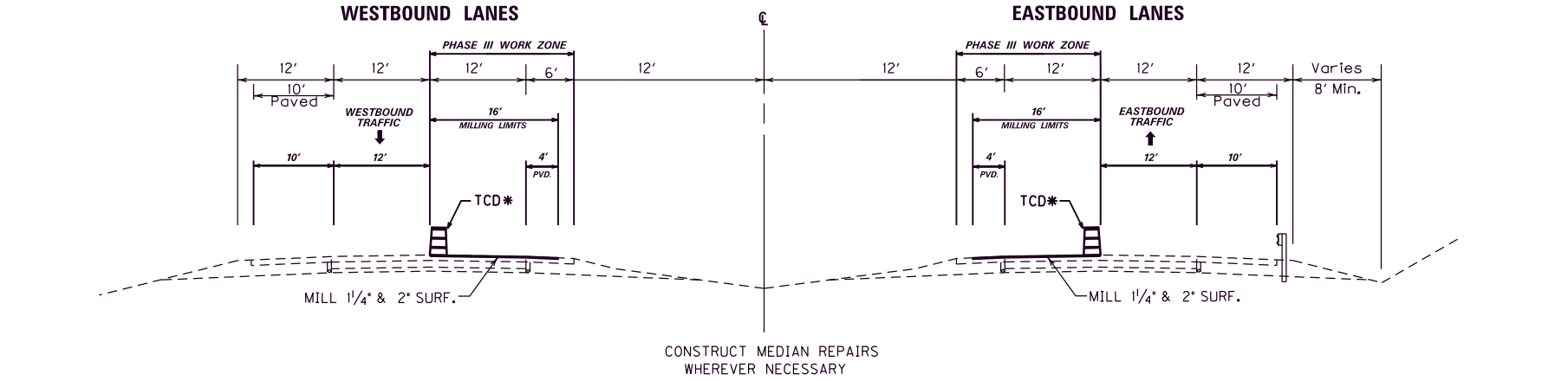
MAINTENANCE OF TRAFFIC
TYPICAL SECTIONS
CUMBERLAND PKWY



PHASE I



PHASE II

•BARRELS SHALL BE MOVED ALONG WITH THE MILLING & PAVING OPERATIONS TO MINIMIZE TRAFFIC ON SHOULDERS.

NOT TO SCALE

CUMBERLAND PKWY.
MAINTENANCE OF TRAFFIC
TYPICAL SECTIONS

PULASKI COUNTY
FD04 STP 100 9008 072-085
REVISED: 8-11-14 Contract ID: 141042
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CUMBERLAND PARKWAY
PULASKI COUNTY
FD04 SPP 100 9008 072-085
ITEM NO. 8-2019

THIS PROJECT IS A FULLY CONTROLLED ACCESS HIGHWAY

I. DESCRIPTION

Perform all work in accordance with the Department's 2012 Standard Specifications, Supplemental Specifications, Applicable Special Provisions, and Applicable Standard and Sepia Drawings, except as hereafter specified. Article references are to the Standard Specifications. Furnish all materials, labor, equipment, and incidentals for the following work:

(1) Maintain and Control Traffic; (2) Remove and replace Guardrail and Guardrail End treatments at the locations listed and/or as directed by the Engineer; (3) Pavement markers and markings; (4) Asphalt Pavement Milling and Texturing; (5) Asphalt Surface; (6) Asphalt Base; (7) Pipe Drainage work; and (8) All other work specified as part of this contract.

II. MATERIALS

Except as specified in these notes or on the drawings, all materials will be according to the Standard Specifications and applicable Special Provisions and Special Notes. The Department will sample and test all materials according to Department's Sampling Manual and the Contractor will have the materials available for sampling a sufficient time in advance of the use of the materials to allow for the necessary time for testing, unless otherwise specified in these notes.

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

B. **Dense Graded Aggregate.** Crushed Stone Base may not be furnished in lieu of DGA.

C. **Pavement Markings -6 inch.** Use Durable Waterborne Markings for permanent striping (12 inch at entrance and exit ramp tapers).

D. **Class II Channel Lining.** Class II Channel Lining will be limestone and is to be used to fill voids in broken paved ditches and as directed by the Engineer.

E. **Channel Lining Class III.** Channel lining will be limestone and is to be placed at pipe outlets with significant erosion and in ditch repair locations as directed by the Engineer.

F. **Erosion Control Blanket.** Erosion control blanket is to be placed in all ditching areas when ditching is complete, on slope stabilization areas, or as directed by the Engineer. Use Seed Mixture No. 1

III. CONSTRUCTION METHODS

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

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

C. **Disposal of Waste.** Dispose of all cuttings, debris, and other waste off the right-of-way at approved sites obtained by the Contractor at no additional cost to the Department. The contractor will be responsible for obtaining any necessary permits for this work. Temporary openings in the right of way fence for direct access to waste sites off the right of way or for access to other public roads will not be allowed. No separate payment will be made for the disposal of waste and debris from the project or obtaining the necessary permits, but will be incidental to the other items of the work.

D. **Final Dressing, Clean Up, and Seeding and Protection.** After all work is completed, completely remove all debris from the job site. Perform Class A Final Dressing on all disturbed areas. Sow disturbed earthen areas with Seed Mixture No. I. These items are incidental to other items in the contract.

E. **Guardrail.** Remove existing damaged guardrail as well as guardrail in areas of wedge curb replacement and/or shoulder repair. Construct new guardrail in these locations. These areas are listed in the Guardrail Summary. Any additional guardrail replacement will be as directed by the Engineer. Quantities are approximate only. Actual locations will be determined by the Engineer at the time of construction. Grade and reshape shoulders to proper template for new End Treatment. Utilize DGA for embankment when required for new end treatments. Remove any existing guardrail with a lane closure in place. Do not leave the area unprotected. After the guardrail is removed, a shoulder closure shall remain in place until the guardrail is replaced in that area. A maximum of seven calendar days will be allowed between the removal of a guardrail section adjacent to the traffic lane in operation and the installation of new guardrail at that same location unless otherwise approved by the Engineer.

F. **Pavement Striping and Pavement Markers.** Permanent striping will be in accordance with Section 112, except that:

(1). Striping will be 6" in width, except 12" in gore area;
(2). Permanent striping will be in place before a lane is opened to traffic; and
(3). Permanent striping will be Durable Waterborne Markings.
(4). Pavement Markers shall be installed per Standard Drawings TPM-105-02 (Arrangement C), TPM-125-02, TPM-130-02 and TPM-135-02.
(5). Inlaid Pavement Markers shall be used between the driving lanes and Ramps.

G. **On-Site Inspection.** Each Contractor submitting a bid for this work will make a thorough inspection of the site prior to submitting a bid and will thoroughly familiarize himself with existing conditions so that the work can be expeditiously performed after a contract is awarded. Submission of a bid will be considered evidence of this inspection having been made. Any claims resulting from site conditions will not be honored by the Department.

H. **Caution:** Information shown on the drawings and in this proposal and the types and quantities of work listed are not to be taken as an accurate or complete evaluation of the material and conditions to be encountered during construction. The bidder must draw his own conclusions as to the conditions encountered. The Department does not give any guarantee as to the accuracy of the data and no claim will be considered for additional compensation if the conditions encountered are not in accordance with the information above.

I. **Utility Clearance.** It is not anticipated that utility facilities will need to be relocated and/or adjusted; however, in the event that it is discovered that the work does require that utilities be relocated and/or adjusted, the utility companies will work concurrently with the Contractor while relocating their facilities.

IV. METHOD OF MEASUREMENT

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

B. **Site Preparation.** Other than the bid items listed, site preparation will not be measured for payment, but will be incidental to the other items of work.

C. **Class II Channel Lining.** Payment will be made per "ton" used around pipe inlets and outlets, washouts behind guardrail, shoulder repair areas and other areas as directed by the Engineer.

D. **Class III Channel Lining.** Payment will be made per "ton" used around pipe inlets and outlets, washouts behind guardrail, shoulder repair areas and other areas as directed by the Engineer.

E. **Pavement Markers and Permanent Striping.** Permanent striping Durable Waterborne Markings (6" and 12") is measured per linear foot. See Traffic Control Plan. Inlaid Pavement Markers (See Special Note) are measured as each. No direct payment will be made for the removal of the existing pavement markers prior to the milling operation and shall be considered incidental to milling and texturing.

F. **Erosion Control.** Erosion control items are not listed as bid items will not be measured for payment, but will be considered incidental to the "lump sum" price for the bid item "KPDES Permit & Temporary Erosion Control". This shall include all Erosion Control Items required by the KPDES Permit and BMP.

G. **Erosion Control Blanket.** Erosion Control Blanket is measured by square yard and is to be used in ditching areas and slope stabilization areas as directed by the Engineer.

H. **Pavement Repair.** Pavement repair areas shall be bid "milling and texturing per ton" and "Class 3 AB 1.0D PG 64-22 per ton" and consists of all labor, equipment and materials necessary to complete the repairs as shown in the detail provided in the proposal. Apparent areas to be repaired are EB MP78.36 and WB MP76.55. Additional quantities have been included for milling and texturing and asphalt base to be used as directed by the Engineer for areas where additional milling is required after the initial 11/2" milling depth is constructed.

I. **Shoulder Repair.** Shoulder repair areas are shown on the "Shoulder Repair Detail" and may be modified or additional areas repaired as directed by the Engineer. Shoulder Repairs shall be paid as "Embankment in Place per Cubic Yard" and shall include all excavation required to construct the shoulder repairs per detail or as directed by the Engineer. DGA in the top 8" shall be paid per "ton" of DGA Base.

J. **Remove Existing Paved Ditch.** Existing paved ditches designated to be removed shall be broken in place, shaped to fit the existing ditch geometrics and the voids filled with Class II Channel Lining to the satisfaction of the Engineer. Payment shall be made per "square yard" for remove existing paved ditch and per "ton" for Class II channel lining. Areas for paved ditch removal are as follows: EB 78.04, EB 75.10, EB 73.05, WB 78.93 and WB 78.20. Additional paved ditches may be removed as directed by the Engineer.

K. **Embankment in Place.** Borrow material, meeting the classification shown on the shoulder repair detail, shall be placed in excavated areas of shoulder repair. These areas are shown on the shoulder repair detail and are approximate. The Engineer shall make the final determination as to the width and depth of the excavation. Embankment in Place shall be paid in "Cubic Yards" as measured in the field and shall include all excavation required to meet the depths and widths of the repair area. DGA wedge will be paid separately per "ton".

V. BASIS OF PAYMENT

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

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

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

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

D. **Pavement Markers and Permanent Striping.** See Traffic Control Plan.

E. **Lane Closures.** Contrary to the specifications Lane Closures in operation for more than three days shall not be a bid item and shall be considered incidental to the bid item "Maintain and Control Traffic". Arrow boards and signs shall be paid for one time regardless of how many times they are moved.

F. **Ditching and Shouldering.** In addition to Section 209 of the Standard Specifications, the bid item "Ditching and Shouldering" shall include grading the existing chip seal shoulders to conform to the required cross slopes and elevations as shown on the typical sections and removal of existing wedge curb where applicable. Excess material resulting from the grading operations shall be disposed of off the project site or used in other areas as directed by the Engineer. If additional material is needed to bring the shoulder up to grade payment shall be made for DGA "per ton". Payment for ditching and shouldering shall be made per Section 209.04.06 of the Standard Specifications. The gross length of project shall include both eastbound and westbound shoulders and ditches as directed by the Engineer. "Ditching" shall include all ditches to be cleaned as directed by the Engineer.

G. **Remove Existing Paved Ditch.** The removal of the existing paved ditch shall be paid per square yard. Payment shall be made per "ton" for Class II Channel Lining used to fill the voided areas.

H. **Milling and Texturing.** Milling and texturing will be paid for per section 408.05 of the 2012 Standard Specifications. No direct payment will be made for stockpiling, reloading and placing the milled material in areas specified in the proposal.

I. **Class III Channel Lining.** Class III Channel Lining required to fill the existing washout areas below the detailed limits for shoulder repair shall be paid per unit bid price for "Class III Channel Lining". The bid price for Class III Channel Lining shall include all excavation and preparation of the existing channel or slope per Section 703 of the Current Standard Specifications. Contrary to the Standard Specifications Type 1 Geotextile Fabric shall be considered incidental to Class III Channel Lining. Channel Lining shall also be used to fill the existing sinkholes in the WB ditchline at MP 79.32 and MP 79.67.

J. **Cleaning Sinkhole.** Payment shall be made per "Each" for cleaning the existing sinkholes prior to filling with Class III Channel Lining.

NOTES APPLICABLE TO PROJECT
CUMBERLAND PARKWAY
FD04 SPP 100 9008 072-085
ITEM NO. 8-2019

The contractor is advised that the planned locations of work established by milepoints are referenced from the Kentucky Transportation Cabinet's Official Route Log. The existing reference markers may not correspond to the established work locations.

1. The dimensions shown on the typical section for pavement and shoulder widths and thickness are nominal or typical dimensions. The actual dimensions to be constructed may be varied to fit existing conditions as directed or approved by the Engineer. It is not intended that existing pavement or shoulders be widened unless otherwise specified in the Proposal.

2. The contractor is to be advised of the locations of overhead utility wires on the project. The following locations are approximate:

   MP73.99, MP74.33, MP74.55, MP74.83, MP74.86, MP75.46, MP77.48, MP78.26
   MP78.31, MP78.51, MP79.27, MP79.77, MP80.39, MP80.45, MP80.45, MP80.99
   MP81.09, MP82.01, MP82.03, MP82.65

CAUTION: Other overhead utility locations may exist. These and all other utilities should be avoided on this project. If any utility is impacted, it will be the contractor's responsibility to contact the affected utility and cover any costs associated with the impact.

3. All damaged Guardrail, and Guardrail in areas for wedge curb and shoulder repair construction are to be removed and replaced with this project. The location of new guardrail and end treatments are listed by direction and mile points. Exact placement is to be approved by the Engineer during construction. Guardrail installation is to take place one week after the general milling & filling paving operations are completed. Remove any existing guardrail with a lane closure in place. Do not leave the area unprotected. After the guardrail is removed, a shoulder closure shall remain in place until the guardrail is replaced in that area. A maximum of seven calendar days will be allowed between the removal of a guardrail section and the installation of new guardrail at that same location.
   The Contractor shall deliver existing salvaged guardrail system materials to the Central Sign Shop and Recycle center at 1224 Wilkinson Blvd in Frankfort, KY. Contact Section Supervisor at (502) 564-8187 to schedule the delivery of material. Deliver the material between the hours of 8:00AM and 3:30PM, Monday through Friday. There is a guardrail delivery verification sheet which must be completed and signed by the Contractor, Engineer and a representative of the Central Sign Shop and Recycle Center.

4. A quantity of Channel Lining Class II & Channel Lining Class III have been included to be used at eroded areas around drainage outlets / inlets, shoulder washouts behind the guardrail and other areas as directed by the Engineer. Geotextile Fabric Type I will not be measured for payment and will be considered incidental to channel lining.

5. The contractor is to take care not to damage any existing roadway signs. Any roadway signs that are damaged during construction are to be replaced at the contractor's expense in accordance with section 105.08 of the standard specifications.

6. The contractor is to take care not to damage any existing light poles and wiring. Any light poles or wiring that is damaged during construction is to be replaced at the contractor's expense in accordance with section 105.08 of the standard specifications.

7. Areas throughout the project have shoulders that are eroding significantly. These areas shall be repaired in accordance with the “Shoulder Repair Detail” as shown elsewhere in the proposal. The repair locations listed may be lengthened, shortened, or additional areas added by the Engineer. Approximate locations for this item of work are shown on the shoulder repair detail.

8. Delineators shall meet the requirements of Section 830 and 838 of the Standard Specifications, and be placed in accordance with Section 3D of the M.U.T.C.D., current edition.

9. The cleaning of existing pipe culvert inlets and outlets 36 inches or less in diameter are incidental to the bid item for "Ditching and Shouldering" in accordance with Section 209 of the 2012 Edition of the Standard Specifications for Road and Bridge Construction. This includes the cleaning of existing perforated pipe headwalls.

10. After the contractor has milled the project, or during the milling operation, the Engineer will make the final determination for areas to be repaired in accordance with the Pavement Repair Detail. The areas designated by the Engineer shall be milled an additional 4”or as directed and replaced with 4” Cl 3 Asphalt Base 1.0D PG 64-22.

11. Asphalt millings shall be used to fill existing drop-off areas at the outside paved shoulders on the mainline and ramps. The millings shall be covered with two courses of asphalt seal coat and asphalt seal aggregate. No direct payment will be made for stockpiling, re-handling, grading and shaping or compaction of this material and will consider it incidental to milling and texturing. Areas to be filled as directed by the Engineer.

12. Any embankment and backfill for the culvert pipes established to be repaired is incidental to the respective bid items.

13. Any tree or brush removal in order to repair the damaged culvert pipe is incidental to the pipe items. Removal and re-setting of any guardrail items is incidental to the culvert pipe items.

14. The existing PCC Pavement on Ramps B and C at the Ky.80 Interchange shall be removed to a depth of 16¼ inches and replaced with asphalt pavement per detail shown on the typical sections. The removal of the material beneath the concrete pavement shall be considered incidental to Remove PCC Pavement.

15. Existing sinkholes in the westbound ditchline at MP79.67 and MP79.32 shall be cleaned and filled with Class III Channel Lining. Payment will be made for the Channel Lining and cleaning the sinkholes.

REFERENCES

1. Kentucky Transportation Cabinet, Department of Highways, Standard Specifications for Road and Bridge Construction, Edition of 2012.

2. FHWA Manual on Uniform Traffic Control Devices – 2009 Edition.

3. Kentucky Department of Highways Standard Drawings, Edition 2012, as applicable:

RBI-001-09	TYPICAL GUARDRAIL INSTALLATIONS
RBI-002-06	TYPICAL GUARDRAIL INSTALLATIONS
RBR-001-11	STEEL BEAM GUARDRAIL (W-BEAM)
RBR-005-10	GUARDRAIL COMPONENTS
RBR-010-05	GUARDRAIL TERMINAL SECTIONS
RBR-015-04	GUARDRAIL POSTS
RBR-020-04	GUARDRAIL END TREATMENT TYPE 1
RDB-100-04	SLOPED BOX OUTLET TYPE 1
RDD-040-04	CHANNEL LINING CLASS II AND III
RDI- 001-09	CULVERT, ENTRANCE AND STORM SEWER PIPE TYPES AND COVER HEIGHTS
RDI-020-08	PIPE BEDDING FOR CULVERTS ENTRANCE AND STORM SEWER PIPE
RDI-026	PIPE BEDDING TRENCH CONDITION REINFORCED CONC. PIPE
RDX-210	TEMPORARY SILT FENCE
RDX-220-04	SILT TRAP - TYPE A
RDX-225	SILT TRAP - TYPE B
RDX-230	SILT TRAP - TYPE C
TPM-105-02	PAVEMENT MARKER ARRANGEMENTS MULTI-LANE ROADWAYS
TPM-125-02	PAVEMENT MARKER ARRANGEMENT EXIT-GORE AND OFF-RAMP
TPM-135-02	PAVEMENT MARKER ARRANGEMENT ON-RAMP WITH PARALLEL ACCELERATION LANE
TTC-115-02	LANE CLOSURE MULTI-LANE HIGHWAY CASE I
TTC-135-01	SHOULDER CLOSURE
TTD-110-01	POST SPLICING DETAIL
TTD-120	WORK ZONE SPEED LIMIT AND DOUBLE FINE SIGNS
TTD-125	PAVEMENT CONDITION WARNING SIGNS
TTS-110-01	MOBILE OPERATION FOR PAINT STRIPING CASE III
TTS-115-01	MOBILE OPERATION FOR PAINT STRIPING CASE IV
TTS-120-01	MOBILE OPERATION FOR DURABLE STRIPING CASE 1

4. Kentucky Transportation Cabinet, Department of Highways, Standard Specifications for Road and Bridge Construction, Edition of 2012, Appendix B - Supplemental Specifications, as applicable:

Special Note	Special Note for use of MTV
Special Note	Portable Changeable Message Signs *attached*
Special Note	Typical Section Dimensions *attached*
Special Note	Before You Dig *attached*
Special Note	Guardrail Delivery Verification Sheet *attached*
Special Note	Fixed Completion Date and Liquidated Damages *attached*
Special Note	Erosion Prevention and Sediment Control *attached*
General Note	Asphalt Pavement Ride Quality *attached*
General Note	Compaction of Asphalt Mixtures *attached*
Special Note	Asphalt Milling and Texturing *attached*
Special Note	Inlaid Pavement Markers *attached*

SPECIAL NOTE FOR MATERIAL TRANSFER VEHICLE (MTV)

CUMBERLAND PARKWAY
PULASKI COUNTY
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Provide and use a MTV in accordance with Sections 403.02.10 and 403.03.05. No payment shall be allowed for Asphalt Placement with MTV. Use the MTV for the Ky.80 Ramp work in addition to the mainline paving.

SPECIAL NOTE FOR PORTABLE CHANGEABLE MESSAGE SIGNS

CUMBERLAND PARKWAY
PULASKI COUNTY
ITEM NO. 8-2019

1.0 DESCRIPTION. Furnish, install, operate, and maintain variable message signs at the locations shown on the plans or designated by the Engineer. Remove and retain possession of variable message signs when they are no longer needed on the project.

2.0 MATERIALS.

2.1 General. Use LED Variable Message Signs Class I, II, or III, as appropriate, from the Department's List of Approved Materials.

Unclassified signs may be submitted for approval by the Engineer. The Engineer may require a daytime and nighttime demonstration. The Engineer will make a final decision within 30 days after all required information is received.

2.2 Sign and Controls. All signs must:

1) Provide 3-line messages with each line being 8 characters long and at least 18 inches tall. Each character comprises 35 pixels.
2) Provide at least 40 preprogrammed messages available for use at any time. Provide for quick and easy change of the displayed message; editing of the message; and additions of new messages.
3) Provide a controller consisting of:
   a) Keyboard or keypad.
   b) Readout that mimics the actual sign display. (When LCD or LCD type readout is used, include backlighting and heating or otherwise arrange for viewing in cold temperatures.)
   c) Non-volatile memory or suitable memory with battery backup for storing pre-programmed messages.
   d) Logic circuitry to control the sequence of messages and flash rate.
4) Provide a serial interface that is capable of supporting complete remote control ability through land line and cellular telephone operation. Include communication software capable of immediately updating the message, providing complete sign status, and allowing message library queries and updates.
5) Allow a single person easily to raise the sign to a satisfactory height above the pavement during use, and lower the sign during travel.
6) Be Highway Orange on all exterior surfaces of the trailer, supports, and controller cabinet.
7) Provide operation in ambient temperatures from -30 to + 120 degrees Fahrenheit during

snow, rain and other inclement weather.

8) Provide the driver board as part of a module. All modules are interchangeable, and have plug and socket arrangements for disconnection and reconnection. Printed circuit boards associated with driver boards have a conformable coating to protect against moisture.
9) Provide a sign case sealed against rain, snow, dust, insects, etc. The lens is UV stabilized clear plastic (polycarbonate, acrylic, or other approved material) angled to prevent glare.
10) Provide a flat black UV protected coating on the sign hardware, character PCB, and appropriate lens areas.
11) Provide a photocell control to provide automatic dimming.
12) Allow an on-off flashing sequence at an adjustable rate.
13) Provide a sight to aim the message.
14) Provide a LED display color of approximately 590 nm amber.
15) Provide a controller that is password protected.
16) Provide a security device that prevents unauthorized individuals from accessing the controller.
17) Provide the following 3-line messages preprogrammed and available for use when the sign unit begins operation:

/KEEP/RIGHT/⇒⇒⇒/
/KEEP/LEFT/⇐⇐⇐/
/LOOSE/GRAVEL/AHEAD/
/RD WORK/NEXT/**MILES/
/TWO WAY/TRAFFIC/AHEAD/
/PAINT/CREW/AHEAD/
/REDUCE/SPEED/**MPH/
/BRIDGE/WORK/***0 FT/
/MAX/SPEED/**MPH/
/SURVEY/PARTY/AHEAD/
/MIN/SPEED/**MPH/
/ICY/BRIDGE/AHEAD/ /ONE
LANE/BRIDGE/AHEAD/
/ROUGH/ROAD/AHEAD/
/MERGING/TRAFFIC/AHEAD/
/NEXT/***/MILES/
/HEAVY/TRAFFIC/AHEAD/
/SPEED/LIMIT/**MPH/
/BUMP/AHEAD/
/TWO/WAY/TRAFFIC/

*Insert numerals as directed by the Engineer.

Add other messages during the project when required by the Engineer.

2.3 Power.

1) Design solar panels to yield 10 percent or greater additional charge than sign consumption. Provide direct wiring for operation of the sign or arrow board from an external power source to provide energy backup for 21 days without sunlight and an on-board system charger with the ability to recharge completely discharged batteries in 24 hours.

3.0 CONSTRUCTION. Furnish and operate the variable message signs as designated on the plans or by the Engineer. Ensure the bottom of the message panel is a minimum of 7 feet above the roadway in urban areas and 5 feet above in rural areas when operating. Use Class I, II, or III signs on roads with a speed limit less than 55 mph. Use Class I or II signs on roads with speed limits 55 mph or greater.

Maintain the sign in proper working order, including repair of any damage done by others, until completion of the project. When the sign becomes inoperative, immediately repair or replace the sign. Repetitive problems with the same unit will be cause for rejection and replacement.

Use only project related messages and messages directed by the Engineer, unnecessary messages lessen the impact of the sign. Ensure the message is displayed in either one or 2 phases with each phase having no more than 3 lines of text. When no message is needed, but it is necessary to know if the sign is operable, flash only a pixel.

When the sign is not needed, move it outside the clear zone or where the Engineer directs.

Variable Message Signs are the property of the Contractor and shall be removed from the project when no longer needed. The Department will not assume ownership of these signs.

4.0 MEASUREMENT. The final quantity of Variable Message Sign will be the actual number of individual signs acceptably furnished and operated during the project. The Department will not measure signs replaced due to damage or rejection.

5.0 PAYMENT. The Department will pay for the Variable Message Signs at the unit price each. The Department will not pay for signs replaced due to damage or rejection. Payment is full compensation for furnishing all materials, labor, equipment, and service necessary to, operate, move, repair, and maintain or replace the variable message signs. The Department will make payment for the completed and accepted quantities under the following:

Code	Pay Item	Pay Unit
02671	Portable Changeable Message Sign	Each

SPECIAL NOTE FOR TYPICAL SECTION DIMENSIONS

CUMBERLAND PARKWAY
PULASKI COUNTY
ITEM NO. 8-2019

The dimensions shown on the typical sections for pavement and shoulder widths are nominal or typical dimensions. The actual dimensions to be constructed may be varied to fit existing conditions as directed or approved by the Engineer. It is not intended that existing pavement or shoulders be widened unless specified elsewhere in the Proposal.

SPECIAL NOTE FOR BEFORE YOU DIG

CUMBERLAND PARKWAY
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Call 1-800-752-6007 toll free a minimum of two and no more than ten business days prior to excavation for information on the location of existing under-ground utilities which subscribe to the before-u-dig (BUD) service. Coordinate excavation with all utility owners, including those who do not subscribe to BUD.

GUARDRAIL DELIVERY VERIFICATION SHEET

Contract Id: _____ **Contractor: _____**

Section Engineer: _____ **District & County: _____**

DESCRIPTION	UNIT	QTY LEAVING PROJECT	QTY RECEIVED@BB YARD
GUARDRAIL (Includes End treatments & crash cushions)	LF	_____	_____
STEEL POSTS	EACH	_____	_____
STEEL BLOCKS	EACH	_____	_____
WOOD OFFSET BLOCKS	EACH	_____	_____
BACK UP PLATES	EACH	_____	_____
CRASH CUSHION	EACH	_____	_____
NUTS, BOLTS, WASHERS	BAG/BCKT	_____	_____
DAMAGED RAIL TO MAINT. FACILITY	LF	_____	_____
DAMAGED POSTS TO MAINT. FACILITY	EACH	_____	_____

****Required Signatures before Leaving Project Site***

Printed Section Engineer's Representative_____ & Date_____

Signature Section Engineer's Representative_____& Date_____

Printed Contractor's Representative_____& Date_____

Signature Contractor's Representative_____& Date_____

****Required Signatures after Arrival at Bailey Bridge Yard (All material on truck must be counted & the quantity received column completed before signatures)***

Printed Bailey Bridge Yard Representative_____ & Date_____

Signature Bailey Bridge Yard Representative_____& Date_____

Printed Contractor's Representative_____& Date_____

Signature Contractor's Representative_____& Date_____

**Payment for the bid item remove guardrail will be based upon the quantities shown in the Bailey Bridge Yard received column. Payment will not be made for guardrail removal until the guardrail verification sheets are electronically submitted to the Section Engineer by the Bailey Bridge Yard Representative.

Completed Form Submitted to Section Engineer Date: _____ By: _____

Special Note for Fixed Completion Date and

Liquidated Damages

Cumberland Parkway
Pulaski County
Item No. 8-2019

Contrary to Section 108.09, Liquidated Damages of $5,000 per calendar day will be assessed for each day work remains uncompleted beyond the Specified Project Completion Date. This project has a Fixed Project Completion Date of Sept.1, 2015. No Lane Closures will be allowed during the winter closedown period.

Special Note For:
Erosion Prevention and Sediment Control

Cumberland Parkway
Pulaski County
Item No. 8-2019

The Contractor shall be responsible for filing the Kentucky Pollution Discharge Elimination System (KPDES) KYR10 permit Notice of Intent (NOI) with the Kentucky Division of Water (DOW) and any KPDES local Municipal Separate Storm Sewer System (MS4) program that has jurisdiction. The NOI shall name the contractor as the Facility Operator and include the KYTC Contract ID Number (CID) for reference.

The Contractor shall perform all temporary erosion/sediment control functions including: providing a Best Management Practice (BMP) Plan, conducting required inspections, modifying the BMP plan documents as construction progresses and documenting the installation and maintenance of BMPs in conformance with the KPDES KYR10 permit effective on August 1, 2009 or a permit re-issued to replace that KYR10 permit. This work shall be conducted in conformance with the requirements of Section 213 of KYTC 2008 Department of Highways, Standard Specifications for Road and Bridge Construction.

Contrary to Section 213.03.03, paragraph 2, the Engineer shall conduct inspections as needed to verify compliance with Section 213 of KYTC 2012 Department of Highways, Standard Specifications for Road and Bridge Construction. The Engineer's inspections shall be performed a minimum of once per month and within seven days after a storm of ½ inch or greater. Copies of the Engineer's inspections shall not be provided to the contractor unless improvements to the BMP's are required. The contractor shall initiate corrective action within 24 hours of any reported deficiency and complete the work within 5 days. The Engineer shall use Form TC 63-61 A for this report. Inspections performed by the Engineer do not relieve the Contractor of any responsibility for compliance with the KPDES permit.

Contrary to Section 213.05, bid items for temporary BMPs will not be listed and will be replaced with one lump sum item for the services. Payment will be pro-rated based on the Project Schedule as submitted by the Contractor and as agreed to by the Engineer.

The contractor shall be responsible for applying "good engineering practices" as required by the KPDES permit. The contractor may use any temporary BMPs with the approval of the KYTC Engineer.

The contractor shall provide the Engineer copies of all documents required by the KPDES permit at the time they are prepared.

The contractor shall be responsible for the examination of the soils to be encountered and make his own independent determination of the temporary BMPs that will be required to accomplish effective erosion prevention and sediment control.

The Contractor shall be responsible for filing the KPDES permit Notice of Termination (NOT) with the Kentucky DOW and any local MS4 program that has jurisdiction. The NOT shall be filed after the Engineer agrees that the project is stabilized or the project has been formally accepted.

Payment: Payment will be at the contract unit price for K.P.D.E.S Permit & Temporary Erosion Control: Lump Sum.

Asphalt Pavement Ride Quality

Cumberland Parkway
Pulaski County
Item No. 8-2019

Pavement Rideability Requirements, In accordance with Section 410 of the Standard Specifications, Current Edition, shall apply on this project. Category A shall apply.

Compaction of Asphalt Mixtures

Cumberland Parkway
Pulaski County
Item No. 8-2019

Will accept the compaction of asphalt mixtures furnished for the driving lanes and ramps at one inch or greater on this project by Option A according to subsections 402 and 403 of the standard specifications, current edition. Use joint cores as described in subsection 402.03.02 for surface mixtures only. Will accept the compaction of all other asphalt mixtures by option B.

SPECIAL NOTE FOR
ASPHALT MILLING AND TEXTURING
Cumberland Parkway
Item No. 8-2019

Begin paving operations immediately after the commencement of the asphalt milling operation. Continue paving operations continuously until completed. Do not allow public traffic to drive on the milled surface. If paving operations are not begun within this time period, liquidated damages will be assessed at the rate prescribed by Section 108.09 of the current Standard Specifications until such time as paving operations are begun.

After utilizing the asphalt millings in areas adjacent to the outside shoulder as directed by the Engineer the Contractor shall take possession of the remainder of the millings and recycle the millings or dispose of the millings off the Right-of-Way at sites obtained by the Contractor at no additional cost to the Department.

Removal of the existing pavement markers prior to the milling operation is considered incidental to the bid item “Asphalt Pavement Milling and Texturing”.

SPECIAL NOTE FOR INLAID PAVEMENT MARKERS

CUMBERLAND PARKWAY
PULASKI COUNTY
ITEM NO. 8-2019

I. DESCRIPTION.

Except as provided herein, perform all work in accordance with the Department's Standard and Supplemental Specifications and applicable Standard and Sepia Drawings, current editions. Article references are to the Standard Specifications. This work shall consist of:

Furnish and install Inlaid Pavement Markers (IPMs) in recessed grooves.

II. MATERIALS.

The Department will sample and all materials in accordance with the Department's Sampling Manual. Make the materials available for sampling a sufficient time in advance of the use of the materials to allow for the necessary time for testing unless otherwise specified in these Notes.

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

B. Markers. Use Marker One Model R-100 or approved equal, mono-directional white. Provide reflective lenses with depth control breakaway positioning tabs. Before furnishing the markers, provide to the Engineer the manufacturer's current recommendations for adhesives and installation procedures. Use one brand and design throughout the project.

C. Adhesives. Use adhesives that conform to the manufacturer's recommendations.

III. CONSTRUCTION.

A. Experimental Evaluation. The University of Kentucky Transportation Center will be evaluating this experimental installation of IPMs. Notify the Engineer a minimum of 14 calendar days prior to beginning work. The Engineer will coordinate the University's activities with the Contractor's work.

B. Maintain and Control Traffic. See Traffic Control Plan.

C. Installation. Install IPMs in recessed grooves cut into the final course of asphalt pavement according to the manufacturer's recommendations. Do not cut the grooves until the pavement has cured sufficiently to prevent tearing or raveling. Remove all dirt, grease, oil, loose or unsound layers, and any other material from the marker area which

would reduce the bond of the adhesive. Maintain pavement surfaces in a clean condition until placing markers.

Prepare the pavement surfaces, and install the markers in the recessed groove according to the manufacturer's recommendations. Ensure that the adhesive bed area is equal to the bottom area of the marker, and apply adhesive in sufficient quantity to force excess out around the entire perimeter of the marker. Use materials, equipment, and construction procedures that ensure proper adhesion of the markers to the pavement surface according to the manufacturer's recommendations. Remove all excess adhesive from in front of the reflective faces. If any adhesive or foreign matter cannot be removed from the reflective faces, or if any marker fails to properly adhere to the pavement surface, remove and replace the marker at no additional cost to the Department.

D. Location and Spacing. Install the markers in the pattern for High Reflectivity Option with two (2) IPMs per groove. Locate and space markers as shown on the drawing. Do not install markers on bridge decks. Do not install a marker on top of a pavement joint or crack. Offset the recessed groove a minimum of 2 inches from any longitudinal pavement joint or crack and at least one inch from the painted stripe, ensuring that the finished line of markers is straight with minimal lateral deviation. Give preference to maintaining the 2-inch offset between recessed groove and joint as opposed to keeping the line of markers straight.

Place inlaid markers as much in line with existing pavement striping as possible. Place markers installed along an edgeline or channelizing line so that the near edge of the plastic housing is no more than one inch from the near edge of the line. Place markers installed along a lane line between and in line with the dashes. Do not place markers over the lines except where the lines deviate visibly from their correct alignment, and then only after obtaining the Engineer's prior approval of the location.

If conflicts between recessed groove placement in relation to pavement joint and striping cannot be resolved, obtain the Engineer's approval to eliminate the marker or revise the alignment.

E. Disposal of Waste. Dispose of all removed asphalt pavement, debris, and other waste at sites off the right of way obtained by the Contractor at no additional cost to the Department. See Special Note for waste and Borrow.

F. Restoration. Be responsible for all damage to public and/or private property resulting from the work. Restore all damaged features in like kind materials and design at no additional cost to the Department.

G. On-Site Inspection. Make a thorough inspection of the site prior to submitting a bid and be thoroughly familiar with existing conditions so that the work can be expeditiously performed after a contract is awarded. The Department will consider submission of a bid as evidence of this inspection having been made and will not honor any claims for money or grant Contract time extensions resulting from site conditions.

H. Caution. Do not take information shown on the drawings and in this proposal and the types and quantities of work listed as an accurate or complete evaluation of the material and conditions to be encountered during construction, but consider the types and quantities of work listed as approximate only. The bidder must draw his own conclusion as to the conditions encountered. The Department does not give any guarantee as to the accuracy of the data and no claim will be considered for additional compensation or extension of Contract time if the conditions encountered are not in accordance with the information shown.

IV. MEASUREMENT.

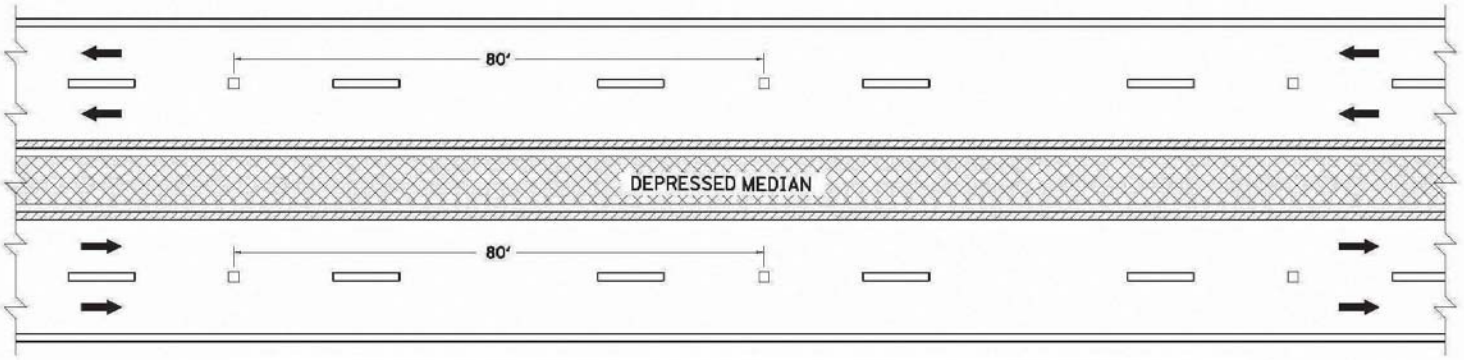
A. Maintain and Control Traffic. See Traffic Control Plan.

B. Inlaid Pavement Markers. The Department will measure only the bid items listed. The Department will measure the quantity of IPMs of each type by individual marker, Each. The Department will not measure grooving pavement, removal of asphalt cuttings and debris, preheating pavement to remove moisture, adhesives, or lenses, but shall be incidental to the Inlaid Pavement Markers.

V. PAYMENT.

A. Maintain and Control Traffic. The Lump Sum bid item for Maintain and Control Traffic shall include maintaining and controlling traffic during the IPM construction.

B. Inlaid Pavement Markers. The Department will make payment for the completed and accepted quantity of Inlaid Pavement Markers at the Contract unit price, Each. Accept payment as full compensation for all labor, equipment, materials, and incidentals to accomplish this work to the satisfaction of the Engineer.



(DIVIDED HIGHWAY WITH DEPRESSED OR RAISED MEDIAN LESS THAN 30' IN WIDTH)

GENERAL NOTES

1. MARKERS INSTALLED ALONG LANE LINES SHOULD BE PLACED BETWEEN AND IN LINE WITH THE SKIPS.
2. MARKERS SHOULD NOT BE INSTALLED ON TOP OF THE PAVEMENT JOINT. OFFSET MARKERS A MINIMUM OF 2" FROM THE PAVEMENT JOINT. ENSURE THAT THE FINISHED LINE OF MARKERS IS STRAIGHT WITH MINIMAL LATERAL DEVIATION. MARKERS MAY BE ELIMINATED AT THE DISCRETION OF THE ENGINEER.

LEGEND

- MONO-DIRECTIONAL (WHITE)
- MARKINGS (YELLOW)
- MARKINGS (WHITE)
- DEPRESSED OR RAISED MEDIAN

DRAWING NOT TO SCALE

KENTUCKY DEPARTMENT OF HIGHWAYS

PAVEMENT MARKER ARRANGEMENTS MULTI-LANE ROADWAYS

Fayette County
I-75
FD04 SPP 034 0075 105-108